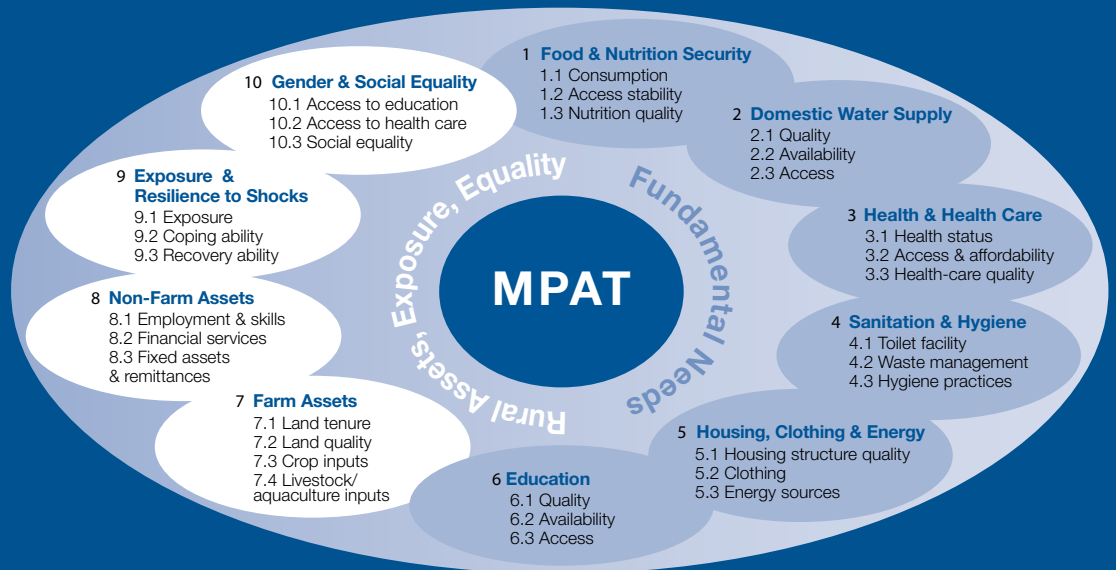


The Multidimensional Poverty Assessment Tool: User's Guide

**An innovative new tool for assessing, understanding
and addressing rural poverty**



Investing in rural people



The Multidimensional Poverty Assessment Tool: User's Guide

An innovative new tool for
assessing, understanding and
addressing rural poverty

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Note to the reader: *The Multidimensional Poverty Assessment Tool: User's Guide* is targeted towards practitioners, project management staff and researchers. It can be downloaded at www.ifad.org/mpat, together with *The Multidimensional Poverty Assessment Tool (MPAT): Design, development and application of a new framework for measuring rural poverty* (the MPAT Book), and supporting materials for MPAT, such as the MPAT Excel Spreadsheet.

Disclaimer: The Multidimensional Poverty Assessment Tool (MPAT) should be used according to the instructions in this User's Guide. It is recommended that users also consult the 2009 MPAT Book, which is available in hard copy as well. Please note, however, that the surveys presented in the 2009 publication have since been updated and improved for this version. Similarly, this publication replaces the now outdated 2009 working-paper User's Guide (Cohen 2009b).

Every effort has been made over the course of the project to ensure that MPAT provides an accurate overview of the dimensions measured. However, its efficacy is predicated on the instructions provided for the use of the Standardized MPAT. If the user decides to customize MPAT (which is appropriate and encouraged), the psychometric and statistical properties of the MPAT surveys and indicators will no longer necessarily remain, and the user is thus cautioned to make every effort to ensure that they develop a customized MPAT in accordance with the guidelines presented in this User's Guide (and to always present the customized results alongside standardized MPAT results).

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Abbreviations and acronyms

AA	administrative area
CSC	check-score-code
DFID	Department for International Development (United Kingdom)
FAO	Food and Agriculture Organization of the United Nations
ICC	intracluster correlation
IDPPE	National Institute for the Development of Small-Scale Fisheries
IFAD	International Fund for Agricultural Development
IIT	Indian Institute of Technology
IMI	Initiative for Mainstreaming Innovation
I-O-O-I	input, output, outcome, impact
JRC	Joint Research Centre (European Commission)
MD	missing data
M&E	monitoring and evaluation
MPAT	Multidimensional Poverty Assessment Tool
MPAT Book	<i>The Multidimensional Poverty Assessment Tool (MPAT): Design, development and application of a new framework for measuring rural poverty</i>
NGO	non-governmental organization
N/A	not applicable
PRA	participatory rural appraisal
ProPESCA	Artisanal Fisheries Promotion Project (Republic of Mozambique)
Q	question (surveys)
Q&A	question and answer
RIMS	Results and Impact Management System
SI	sampling interval

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To request a hard copy of the *MPAT User's Guide (2014)* or *The Multidimensional Poverty Assessment Tool: Design, development and application of a new framework for measuring rural poverty* (2009), please contact IFAD's Communications Division at: publications@ifad.org

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Foreword

The International Fund for Agricultural Development (IFAD), a specialized agency of the United Nations, has the mandate to reduce rural poverty and boost the nutrition and food security of poor rural people. IFAD has set out an ambitious target to assist governments in reducing poverty by 80 million people worldwide from 2010 to 2015 (six years), as its distinct institutional contribution to reaching the Millennium Development Goals.

The Multidimensional Poverty Assessment Tool (MPAT) is an initiative developed by IFAD staff to *simplify the complex challenge of measuring poverty* and the impact of poverty alleviation interventions. The updated *MPAT User's Guide* was made possible thanks to the many inputs received from rural development projects in Africa and Asia that have used MPAT. We are also grateful for the generous feedback of the numerous peer reviewers and technical experts. We are confident now that the updated *MPAT User's Guide* will assist governments and projects in measuring the complexity of poverty and in designing better and more effective poverty alleviation interventions that shape and influence national policies.

In developing MPAT, we aimed to build an easy, practical, rigorous tool that not only measures the various dimensions of poverty, but also provides insight into poverty's underlying causes. Hence, MPAT captures:

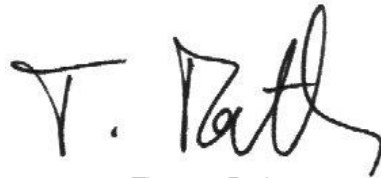
- Fundamental human needs
- Endowment with assets
- Exposure to risks, which helps in understanding sustainability aspects
- Social equality, including gender, which serves as a proxy for the social dimension of development

However, we believe MPAT's utility can go even further. The fact that MPAT's assessments are easily accessible contributes to increased transparency in how donors and governments invest in poverty alleviation activities. It also offers poor rural people the opportunity to be involved in the process and to become empowered.

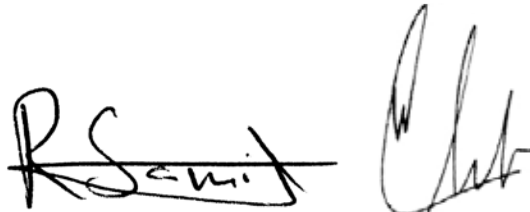
MPAT was developed jointly with national and international experts, and was tested in China and India during 2008-2009. Since then, various institutions such as universities in India, NGOs in Kenya and others have begun using MPAT and providing very useful feedback to the project team. In 2012, we realized it was time to finalize and optimize MPAT. We have improved the surveys and resources needed to use the tool and analyse the data, conducted iterative testing in additional pilot projects in Bangladesh and Mozambique, and received additional feedback on the use of MPAT in other countries as well.

We are confident that MPAT is a practical, simple and efficient tool for cost-effectively assessing the effects of poverty alleviation projects and policies on rural livelihoods. We believe MPAT will meet the requirement of government and donor agencies for designing poverty alleviation interventions and monitoring their impact to improve the lives of the more than 1.5 billion poor rural people.

This project would not have been realized without the great dedication of the project team, led by Alasdair Cohen and supported by country partners, IFAD staff and the project Sounding Board. The project team acknowledges generous support and funding from the DFID-supported Initiative for Mainstreaming Innovation (IMI), IFAD-funded projects and national partners.

A handwritten signature in black ink, appearing to read 'T. Rath'.

Thomas Rath

Two handwritten signatures in black ink. The one on the left is 'R Samii' and the one on the right is 'Rudolph Cleveringa'.

Roxanna Samii and Rudolph Cleveringa

Preface

The Multidimensional Poverty Assessment Tool (MPAT) provides a method for simplifying the complexity of rural poverty in order to support poverty alleviation efforts. MPAT uses thoroughly designed and tested purpose-built surveys to collect data on people's perceptions about fundamental and interconnected aspects of their lives, livelihoods and environments. Standardized indicators, developed through a comprehensive participatory process, are then employed to combine, distil and present these data in an accessible way.

The ultimate objective of this User's Guide and the accompanying Excel Spreadsheet is to make MPAT a truly free and open-source tool, so that any institution or agency, big or small, may implement MPAT on its own. Since the 2009 release of the 'beta' version, we have worked to upgrade and improve MPAT's methodology by integrating feedback and lessons learned from other users, and by incorporating the results of our own iterative testing in Bangladesh and Mozambique. In the pages that follow, we explain what MPAT is, how it works and how it is used, providing step-by-step instructions, training materials and other resources.

MPAT is the result of the combined knowledge, experience and work of a great many people, who generously gave of their time and energy over the past five years to help create, test and use this tool. Too numerous to thank individually here, their invaluable contributions are recognized in the Acknowledgements section of this volume (and in the 2009 MPAT Book). I extend special thanks to: Rudolph Cleveringa for his support since 2004 and for his help in initiating this project in 2007 when it was only an idea; to Roxanna Samii and Mattia Prayer Galletti for sustaining and pushing MPAT's development; and, most especially, to Thomas Rath, for his unwavering commitment to this project, and for granting me the privilege of directing MPAT's development based on an idealism we all share.

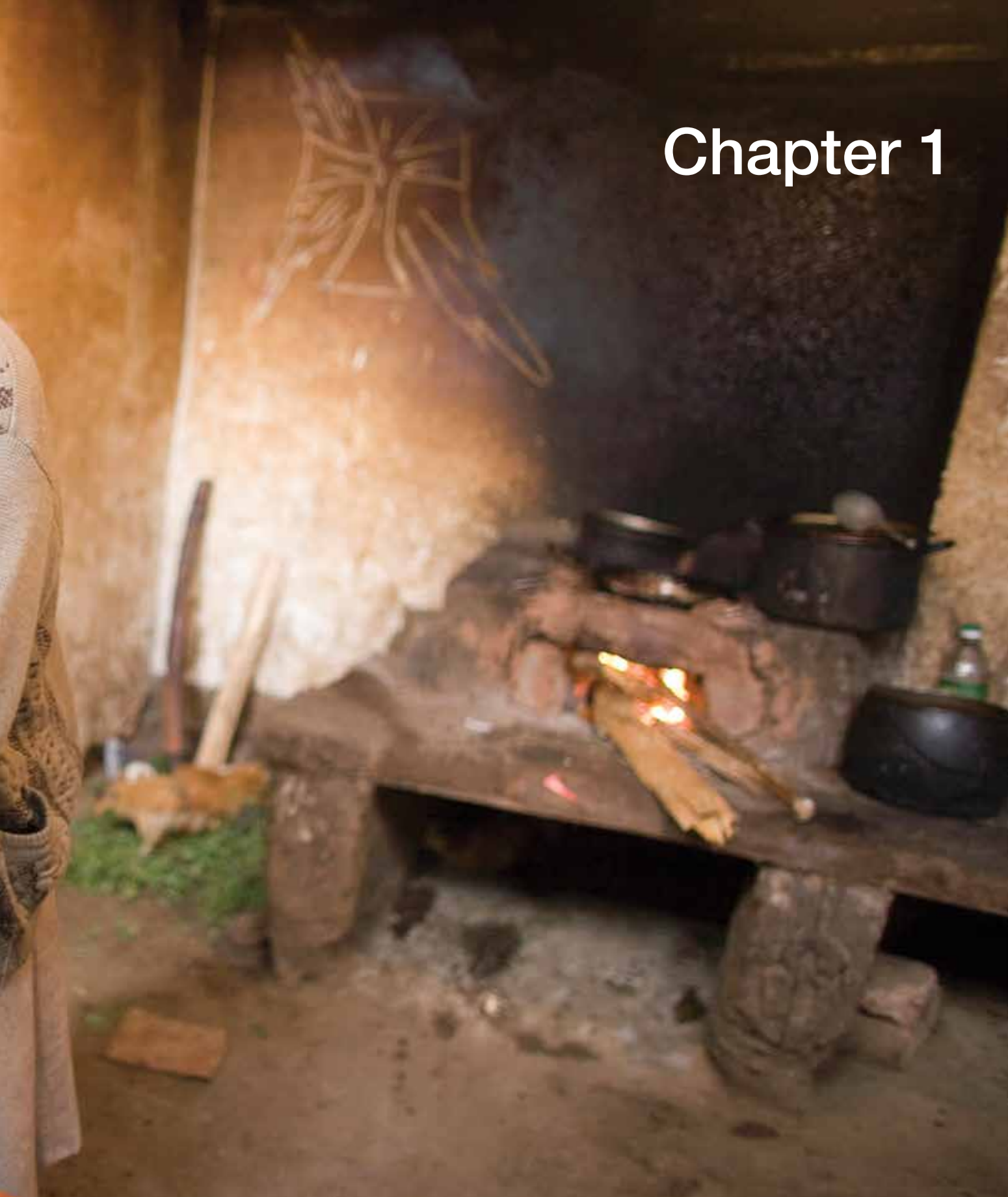
It is my hope that these many years of collaborative development and testing in various countries now culminate in a tool that others, too, will find useful for elucidating and improving the conditions and lives of rural people around the world.

A handwritten signature in blue ink, appearing to read 'Alasdair Cohen', followed by a smaller, less legible signature.

Alasdair Cohen
MPAT Project Manager



Chapter 1



MPAT does not try to define rural poverty per se; rather it takes a step back from assessment modalities that are overly focused on economic- and consumption-oriented indicators and strives to provide an overview of fundamental and relatively universal dimensions germane to rural livelihoods, rural life, and thus to rural poverty. By summarizing rural communities' perceptions about key dimensions of rural poverty and focusing them through a quantitative lens, MPAT transparently illuminates problem areas so that *all* stakeholders can see where deficiencies lie and can begin to discuss which interventions may be most appropriate to address them, based on the local context.

– Cohen 2009a, 10-11

The Multidimensional Poverty Assessment Project was a collaborative, international initiative led by the International Fund for Agricultural Development (IFAD).² Its mission was to develop, test and pilot a new tool for local-level rural poverty assessment: the Multidimensional Poverty Assessment Tool (MPAT). It was developed through a participatory, collaborative process based on expert feedback from dozens of international development experts from IFAD, other United Nations agencies, international and regional organizations, and universities from around the world. It was field-tested in countries in both Asia and Africa.³

In general, MPAT is designed to support rural poverty alleviation and rural development projects and research. It provides a means for standardized, comprehensive assessment of 10 dimensions central to rural livelihoods (see Figure 1). This overview highlights the strongest sectors and most pressing needs of households

and communities, which can then help identify areas where additional support or interventions may be most needed. MPAT can be used at multiple points in the project cycle: at the beginning, for baseline poverty studies, situation analysis and project design; during project implementation, to support mid-course correction; and at project end, to track long-term community outcomes and poverty alleviation. It is designed to be universal enough to be relevant to most rural contexts around the world, yet specific enough to provide useful data relevant to local poverty alleviation efforts. It is also designed to be user-friendly and easily implemented by local-level project staff, so that external consultants should not be needed unless desired.

MPAT offers the greatest range of benefits when implemented in the earliest stages of a project. For example, when entering a new region, it can be used by an organization to scope, plan and guide project design and decision-making, in order to determine whether or not a specific intervention is warranted in the area. In addition to MPAT's use as a tool for such needs assessment and information gathering in the early stages of project planning and design, it can serve as a focal point and discussion topic for participatory engagement.

MPAT can play a powerful role in a project's monitoring and evaluation (M&E) programme and has great value when implemented consistently in several key project phases – at baseline, midterm and project end. It provides quality data on outcomes that can be compared over time, and thus is a key tool in making informed decisions, improving strategic and tactical operations and decreasing rural poverty.

2/ The International Fund for Agricultural Development (IFAD) is an international financial institution and a specialized agency of the United Nations dedicated to rural poverty reduction.

3/ For further details of the MPAT development process, consult *The Multidimensional Poverty Assessment Tool: Design, development and application of a new framework for measuring rural poverty* (the MPAT Book) (available online at www.ifad.org/mpat). Whereas this User's Guide is structured as a manual, the MPAT Book provides further detail on the theoretical rationale for creating MPAT, a description of the MPAT Project, and the steps involved in MPAT's development and testing.

Overall, MPAT provides a data-rich experience that can inform all levels of decision-making. It supports a clearer understanding of rural poverty at the household and village level. In this way, MPAT can significantly strengthen the planning, design and M&E efforts of a project and contribute to rural poverty alleviation.

This User's Guide provides detailed information about the methodology of MPAT, along with specific instructions on MPAT implementation for development practitioners and others concerned with rural poverty and rural poverty alleviation.

1.1 Overview of MPAT's development, purpose and architecture

Many experts believe that income, or economic growth, does not provide a reliable proxy measure of poverty, because poverty is multifaceted, highly complex and difficult to define and measure.⁴ In most contexts, *multidimensional* measurement is a more responsible and reliable alternative than solely economic measures.

To effectively address poverty, governments, donor agencies and others must understand its principal underlying causes. In most situations, helping people help themselves – on their terms – is the best way to reduce poverty. Thus, anti-poverty initiatives must be equipped with accurate assessments of the constraints poor people face in their daily lives. Such an understanding is required to responsibly design and implement relevant, beneficial interventions that enable people to pursue meaningful and rewarding lives and livelihoods, and thus reduce poverty in a given region. MPAT strives to provide a clear and comprehensive picture of an area's overall poverty situation, while also capturing detailed information about those specific domains that are fundamental to human well-being and, by extension, to poverty alleviation in a twenty-first century rural context (Cohen 2010).

An overview of MPAT's architecture follows. The tool has been designed with the recognition that people's most fundamental and basic needs, as identified in MPAT components 1-6, must be met first, before they can effectively address long-term goals.

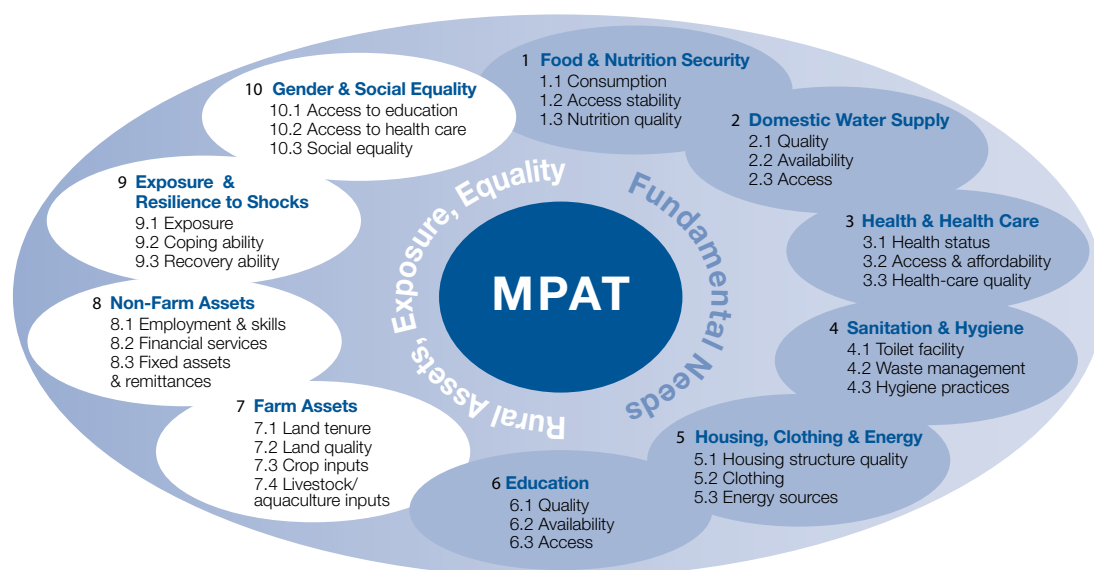
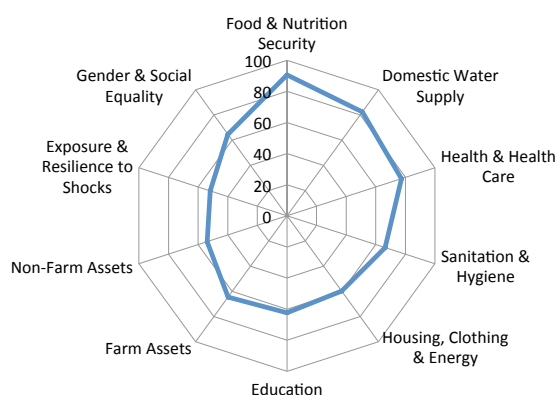


Figure 1.
MPAT's components and subcomponents

4/ For example, see: Streeten and Burki 1978, Roe 1998, Sen 2000, Bourguignon and Chakravarty 2003, Sullivan 2006, Bossert, Chakravarty and D'Ambrosio 2009, Narayan, Pritchett and Kapoor 2009, Alkire and Santos 2010, Alkire and Foster 2011.

Box 1. Iterative testing and development of MPAT in rural China (2008-2009)



Implementing agency: Gansu Provincial Project Management Office (Ministry of Finance).
Contacts: Qibin Duan (Director) and Dongqing Zhao (Project Officer).

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MPAT was originally developed in China and India. In China, iterative testing was conducted in 2008 in order to refine and improve the draft Household and Village Surveys. After five rounds of testing in China and India, the project team felt that the surveys and indicators were sufficiently developed to warrant a large-scale pilot in both countries.

In China, the pilot was conducted in the context of an ongoing IFAD-supported project in Gansu Province in China's arid north. The data from the pilots in China and India (see also Box 2 and Box 3) were then shared with the European Commission's Joint Research Centre so they could conduct an independent evaluation of MPAT. Results from a pilot village in China are presented, together with a photo of farmers planting seeds below.

At the same time, dimensions beyond fundamental human and physiological needs often constrain rural people's ability to move out of poverty. These dimensions may be thought of as part of the 'enabling environment' and are highlighted in MPAT components 7-10.⁵ Agriculture, for example, although no longer as central to rural livelihoods as it once was, remains paramount for most poor rural people and is captured by MPAT component 7 – Farm Assets. Farming systems are increasingly complemented by other livelihood opportunities and inputs, which are addressed by component 8 – Non-Farm Assets. There is also a range of potential shocks that poor rural people must cope with and recover from – not just natural shocks, but socio-economic ones as well (component 9 – Exposure & Resilience to Shocks). All these dimensions can be further examined through a cross-cutting lens of equality, both gender equality and social equality, as many people, particularly minority groups, are excluded from the benefits that an enabling environment may offer to others (component 10 – Gender and Social Equality). MPAT provides a mechanism for examining these 10 dimensions.

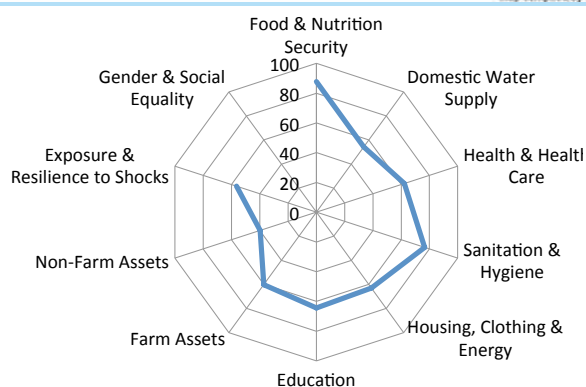
The tool collects a variety of data through the MPAT Household and Village Surveys and then organizes it using the 10 MPAT dimensions, or components. The survey questions are broad enough to be applicable in most rural contexts, but precise enough to act as quality proxy measures for the components they represent.

The vast majority of MPAT data are collected through the Household Survey, with additional data collected through the Village Survey. The Household Survey is implemented as an interview, although the actual form is structured as a questionnaire. This allows enumerators to engage respondents in a meaningful way and quickly record respondents' answers, which saves time and is one reason MPAT can be implemented in approximately 35 minutes per household. To ensure that quality data are collected, the MPAT surveys and implementation process have been standardized, so that survey questions and processes are completed the same way for each household.

Once the data are collected, survey responses are assigned numerical values. These are in turn aggregated into subcomponents, which are then given weightings and aggregated further into the 10 MPAT components (see Figure 2). The MPAT Excel Spreadsheet automatically creates 'radar' graphs to better visually present the data (with 100 being the best/high score). One key contribution of MPAT is that, as with the Household and Village Surveys themselves, the values and weights that are assigned to each response and subcomponent have been *standardized across countries and contexts, resulting in MPAT scores that permit cross-situation analysis and comparisons across projects, places and time.*

5/ Of course, there is more to an enabling environment than is captured in these components. For example, 'policies, processes and institutions' (discussed in the Sustainable Livelihoods framework) also play a role. However, these factors do not readily lend themselves to standardized assessment, but of course should be considered properly in the context of any rural poverty alleviation project.

Box 2. Developing and testing MPAT in India (2009)



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MPAT was developed and tested in China and India from 2008 to 2009. In May, June and July of 2009, a larger-scale pilot of MPAT was conducted in northeast India – in 182 households across 18 villages in rural Uttarakhand. These results, combined with the pilot data from China, were used to help validate and construct MPAT. Note that there were not enough data to calculate what was then called the Gender Equality component for the radar graph shown in this box. In part as a result of the testing in India, the Gender Equality component was expanded to address social inequality as well, resulting in the current MPAT indicator 10.

As detailed in *The Multidimensional Poverty Assessment Tool: Design, development and application of a new framework for measuring rural poverty* (the MPAT Book), as part of the tool's development, it was subjected to both in-field and statistical evaluation before the 2009 version was finalized. This early development and testing in India paved the way for the finalized MPAT described in this User's Guide.



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Implementing agency: Uttarakhand Livelihoods Improvement Project for the Himalayas (ULIPH) (IFAD-supported).
 Contacts: Arif Moqueem Akhtar (District Manager, Uttaranchal Parvatiya Aajeevika Sanvardhan Company [UPASaC])
 and H.B. Pant (Project Manager, ULIPH).

The standardized valuations for the survey items and weightings for subcomponent aggregation were arrived at through an extensive participatory process involving MPAT Sounding Board members, experts in the field and other stakeholders (see Cohen & Saisana 2013). Forty experts from

10 countries and 28 organizations provided weighting suggestions. Subsequently, a number of sensitivity tests were employed by the MPAT Design Team to assess cardinalization,⁶ weighting and aggregation, with a view to informing the final design of the tool (see Saisana and Saltelli 2010).



6/ Conversion of categorical data to cardinal data – in the case of MPAT, by assigning values to survey responses on a 1-10 scale.

Figure 2.
How MPAT works

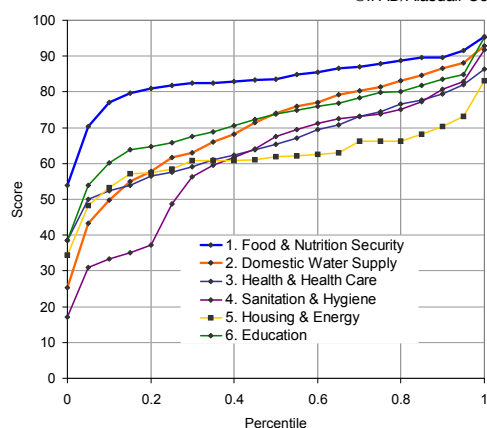
Many poverty-related indices are composite indicators, which means that many different indicator values are combined into a single value, or index, that seeks to represent those individual indicators. MPAT's creators and Sounding Board members decided that a thematic indicator, keeping the 10 components separate, would better present the multidimensional data that are useful to rural poverty programmes and their staff. Thus, the values for the 10 components – whether calculated for a household, a village, a higher administrative level or an entire project – are not aggregated into a single index. Rather, the components, which all centre on the shared theme of rural poverty, are presented together as a 'dashboard' of

sorts. To clarify further: each of MPAT's 10 components is itself a composite indicator composed of three or four subcomponents. Each subcomponent is in turn composed of multiple survey items from one or two data sources: the MPAT Household and Village Surveys. Thus, while MPAT components themselves are *composite indicators*, MPAT is a *thematic indicator* overall, because all 10 component scores stand alone and are not combined or averaged together. Conclusions from the 2009 independent analysis of MPAT pilot data also supported the suitability of using a thematic indicator as opposed to a composite indicator, as well as verifying the overall robustness of MPAT's architecture (Saisana and Saltelli 2010) (see Box 3).

Box 3. Independent evaluation of the MPAT beta version (2009) – results and impact



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MPAT was developed and tested in China and India. Data from a large-scale pilot in both countries were given to the European Commission's Joint Research Centre (JRC) for an independent evaluation of the tool. The evaluation results validated MPAT's structure and robustness and also helped identify areas in which the structure and methodology could be improved further. "The overall assessment of the MPAT v.6 Framework by means of multivariate analysis and uncertainty and sensitivity analyses reveals no particular shortcomings in the conceptual structure. In brief, the analyses demonstrate that the MPAT v.6 framework:

- Is internally consistent from a conceptual and statistical point of view,
- Is not double-counting information (very low correlations between the items),
- Has a well-balanced structure (not dominated by few subcomponents), and
- Is robust with respect to alternative weighting and aggregation rules at the subcomponents level."

(Saisana and Saltelli 2010, 5-6).

As a result of the JRC evaluation, minor modifications were made and final field-testing was conducted in 2009 to ensure that the modifications functioned properly.



Implementing agency: Joint Research Centre, Econometrics and Applied Statistics Unit, European Commission.
Contacts: Michaela Saisana (Senior Research Scientist) and Andrea Saltelli (Unit Director).

There are many challenges inherent in the use of surveys and indicators when attempting to measure poverty, and these challenges were addressed from the beginning of the MPAT Project. Indeed, great efforts were made to ensure that the MPAT surveys were developed as responsibly as possible, and both the Household and Village Surveys have been analysed and tested with respect to their psychometric properties. Selection of the indicators and values was arrived at through a highly participatory process involving the MPAT Sounding Board and a wide range of experts and stakeholders (Cohen and Saisana 2013).

Even with years of work, extensive field-testing and the contributions of a great number of people from a wide variety of backgrounds and regions, a few inevitable remaining shortcomings of MPAT should be acknowledged:

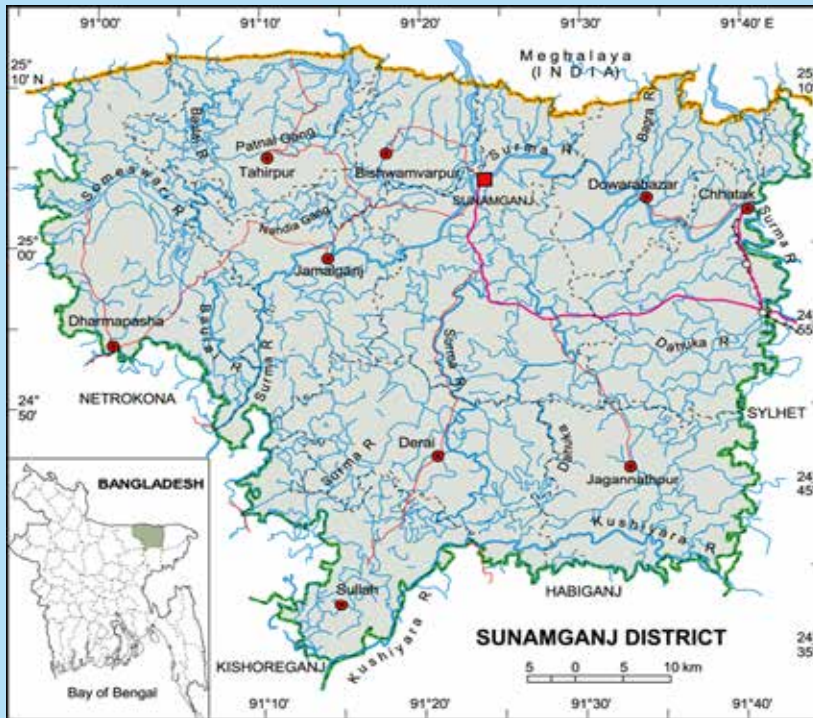
- The foundation of the MPAT structure presupposes certain types of approaches and strategies for rural poverty alleviation.
- Due to the vastness and complexity of the issue, some relevant topics and aspects of rural poverty were inevitably not

included in the Household and Village Survey questions. Additionally, some important issues relating to rural poverty cannot necessarily be measured through standardized quantitative indicators.

- As MPAT is primarily based on household surveys, it does not capture data for the transient poor.
- Ultimately, MPAT's valuations and weightings are subjective, based on the decisions of a body of international development experts from many countries and fields of expertise (for further details, see Cohen 2009a).

While the default values of the MPAT Excel Spreadsheet are those derived through the expert process touched on above (i.e. the Standardized MPAT), the cardinal scores and aggregation weights can all be changed by users, allowing them to create a context-specific MPAT that may better reflect local conditions or priorities. There are important considerations to bear in mind before diverging from the Standardized MPAT, and it is strongly recommended that users review Chapter 11 of this guide before doing so.

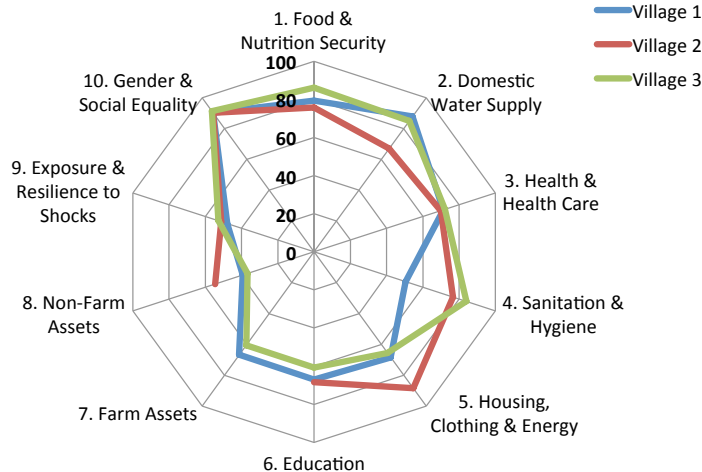
Box 4. Comparing MPAT component results for three villages in Bangladesh



MPAT was implemented in the northern Sunamganj region of Bangladesh in early 2013 in 18 villages. In the figure below, the results from three of these villages are overlapped in order to better understand how they differ. Immediately, we see that the situation for components 3, 9 and 10 are approximately the same in each village. We can also see that the Sanitation & Hygiene situation in Village 1 is significantly worse (lower value) than in Villages 2 and 3 (100 being the best/high/positive value). Also, we note that in Village 2, missing data prevented calculation of the Farm Assets component.

With just this glance, questions quickly arise (e.g. Should our project focus more resources in Village 2 for Domestic Water Supply? What can we do differently in Village 1 to improve the village Sanitation & Hygiene situation?). Project managers can better understand where additional analysis or action may be warranted by digging deeper into these numbers, and then following up with in-field investigations and, ideally, participatory discussions with local stakeholders.

How to: This radar graph was created by: (i) using the MPAT Excel Spreadsheet to display the results for each village; (ii) component values were cut-and-pasted to another Excel file; and (iii) values from the three villages were then used to create the radar graph.



Implementing agency: Local Government Engineering Department (LGED), Bangladesh.
Contacts: Sheik M. Mohsin (Project Director) and Nurul Amin (Senior M&E Officer).

1.2 An introduction to this User's Guide

The User's Guide is geared primarily to the project staff of rural poverty alleviation projects that wish to improve project management and decision-making, and thus enhance outcomes in their communities. MPAT is also relevant to all groups concerned with rural poverty alleviation: governments, donors, United Nations agencies, non-governmental organizations (NGOs), practitioners and academics.

A principal purpose of the guide is to ensure that readers understand the methodology of the tool: how the surveys have been developed and how they should be implemented; where the data come from and how they are valued and aggregated; how the subcomponents were created and how they are aggregated to yield component values; and how to collect and record quality data to calculate accurate MPAT results.

These issues, and more, are explained in detail in the interests of *transparency*, which helps ensure that MPAT will be fully understood and used responsibly.

One key feature of collecting quality data and using MPAT responsibly is standardization. 'Standardization' means that the same tool is used in the same way each time. This in turn means that if MPAT is used in the same project multiple times, then the indicators/results can be compared. The same holds true if MPAT is used in different countries. This is part of MPAT's value: the ability to make comparisons across space and time. It is also why this User's Guide is so important – to help ensure that all users, no matter where they are working, fully understand MPAT and are able to implement it correctly.

The User's Guide has been created with a significant level of – sometimes technical – detail, so that project staff will be able to implement MPAT on their own, without the need for an external, and sometimes expensive, consultant. All materials are available online (www.ifad.org/mpat) and in formats accessible to most organizations (Microsoft Word, Excel, PowerPoint). The guide also includes detailed training lesson plans – so that local staff are equipped to train data collectors and data-entry staff – as well as a data analysis spreadsheet in Excel that simplifies data entry and indicator calculation.

In this way, it is hoped that MPAT will be a useful tool for many rural poverty organizations, resulting in more informed decision-making and greater opportunities for actors in this field to learn from others to alleviate rural poverty.

1.3 What is the added value of MPAT?

As suggested, MPAT should be understood as a useful, but imperfect tool. It cannot serve all purposes for project planning and M&E, but it can serve many. To summarize what MPAT *cannot* do: as a stand-alone tool, MPAT cannot necessarily measure project inputs and outputs; it cannot single-handedly explain the 'whys' behind the data; and it cannot prove that a particular project or activity *caused* changes in MPAT scores. However, MPAT can be used in conjunction with other data-collection tools and analytical methods to largely address all these issues/questions.

MPAT's strengths and benefits are outlined in Table 1.

Table 1. A summary of MPAT's strengths and benefits for users and projects

Developed by an international group of rural development experts	MPAT's developers and contributors brought their rural development experience from around the globe to bear on MPAT's creation. The MPAT Book and this publication seek to transparently explain why and how MPAT was developed and how it works, allowing users to check developers' assumptions and better understand the process by which MPAT was created.
Professionally developed and field-tested data-collection tool created specifically for multidimensional poverty assessment	Well-developed, tested data-collection methodologies such as MPAT are important in avoiding biases, leading questions, inaccurate data and other information problems in programme planning and design and in M&E. Conversely, "newly designed data-collection strategies, proposed specifically for the intervention, add an additional burden and risk for the project or evaluation team and should be relied on only as a last resort" (World Bank 2012, 32).
Independently assessed and validated	During MPAT's development, data from China and India were given to the European Commission's Joint Research Centre (JRC) for an independent evaluation of MPAT. Their evaluation was highly positive and demonstrated that the indicator framework "is internally consistent, from a conceptual and statistical point of view, is not double-counting information ... has a well-balanced structure ... and is robust with respect to alternative weighting and aggregation rules ..." (Saisana and Saltelli 2010, 5-6). In-field validation exercises were also conducted, and from 2010 to 2013 the MPAT beta version was evaluated in other countries outside of Asia.
Much of the work is already done for the user ('off-the-shelf' tool)	This User's Guide provides: a robust data-collection tool tested by IFAD staff and partners; specific instructions on sampling in rural areas; a training guide for enumerators; a data-entry method to ensure accuracy; a data analysis spreadsheet that 'does the math' for you, and a visual way to display the data so that staff and community members alike can understand the results. The user's job is to understand and implement MPAT well, but there are many resources to aid them, so users need not start from scratch.
Field-tested training programmes for enumerators, supervisors and data entry	Collecting accurate data is extremely important, but not always easy. The enumerator and enumerator supervisor training programmes described here were developed over many years in multiple contexts and countries. Their purpose is to help ensure quality and standardized data collection. Similarly, the training programme for data checking (quality control) and entry was designed specifically for MPAT and iteratively improved over a number of years (see Section 9.1 Quality control and the check-score-code (CSC) system).
Uses locally collected data based on people's perceptions	MPAT's Household Survey collects a wealth of data from respondents based on their views and opinions with regard to their lives and livelihoods. Local people's perceptions as well as those of village health-care and education staff are the foundation of MPAT's indicators, helping to give voice to the community.
Standardized methodology, but also customizable	MPAT's surveys and indicators are standardized (based on expert input from MPAT's development). As a result, its results and indicators can be compared across households, villages, projects and countries. Comparisons can also be made across different time points, as the same tool and methodology are used, which can help facilitate the sharing and showcasing of successes in poverty alleviation. Standardization is a key strength of MPAT, yet it has also been designed to be flexible, allowing users to easily customize survey item valuations and indicator weights on the Excel Spreadsheet in order to better accommodate the local context.
MPAT indicators are automatically calculated and displayed in an easy-to-understand format	The MPAT Excel Spreadsheet automatically creates an MPAT profile for each village that quickly and clearly summarizes key indicators for the village. The data can also be viewed for each individual household using a colour-coding scheme that offers a 'quick glance' option for seeing the high and low scores for each MPAT component and subcomponent. This permits simple, rapid and effective comprehension and communication of rural poverty data, facilitating information-sharing among project staff and with donors, community members and others.
Designed for organizations of all sizes and budgets	Use of MPAT certainly involves time and effort, but it does not have to 'break the bank' of the organization, nor should it necessarily require outside expertise. Indeed, this User's Guide is designed to be self-standing, so that any agency, big or small, may use MPAT on its own.

Box 5. Using MPAT in coastal fishing regions – an example from Mozambique (2013)


In 2013, the National Institute for the Development of Small-Scale Fisheries (IDPPE) – a public institution under the Ministry of Fisheries in Mozambique – decided to pilot MPAT in an IFAD-supported project: the Artisanal Fisheries Promotion Project (ProPESCA – Republic of Mozambique). IDPPE's mandate is “to promote actions leading to the development of small-scale fisheries, with emphasis on artisanal fishing, contributing to the improvement of living and working fishing communities, and to increase national food protein”. While MPAT is not geared specifically towards the assessment of fishing communities, ProPESCA staff felt it would be useful to try MPAT in a few project regions to see how the data could help support their fisheries-centred work. Three ‘poles’ (administrative regions) in the project area were chosen: Nampula in the north (coastal), Sofala in the centre (coastal) and Gaza in the south (inland). One village in each pole was chosen to participate and a total of 106 households were surveyed in July 2013, with data entry conducted in August.

As ProPESCA is still in its initial phases, with the trial of MPAT completed, at this writing project staff are planning to scale MPAT implementation up to the larger project area in order to support the project's baseline data-collection and M&E efforts, with the expectation of using MPAT again for midterm and completion reporting.



Implementing agency: National Institute for the Development of Small-Scale Fisheries (IDPPE).
Contacts: Paulo Muchave (Senior M&E Officer), Fisheries Promotion Project (ProPESCA).

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1.4 MPAT Household Survey

The complete MPAT Household Survey is provided below. A Microsoft Word version can be downloaded from the MPAT website (www.ifad.org/mpat).

MPAT Household Survey				IFAD	
Enumerator: _____		Time _____:_____ to _____:_____		Date (YY/MM/DD): 20____/____/____	
AA1: ^a _____		AA2: _____		AA3: _____	
Household ethnic group (optional): _____		Household type (optional): _____		Village: _____	
Household code: _____		Consent: _____			
Respondent's age: _____ Gender: <i>M(1) F(2)</i>			Head of household's age: _____ Gender: <i>M(1) F(2) M&F(3)</i>		
Head of household's marital status: <i>Married(1) Single(2) Divorced(3) Widowed(4)</i>					
1		Can the head of the household read a newspaper? <input type="checkbox"/> No (1) <input type="checkbox"/> Yes, with difficulty (2) <input type="checkbox"/> Yes, without difficulty (3) <input type="checkbox"/> Don't know (4)			
2		During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months? Female adults <input type="text"/> Male adults <input type="text"/> Don't know (-1) <input type="text"/>			
3		During the last 12 months, how many adults lived and worked outside your home for 3 or more months? Adults <input type="text"/>			
4		During the last 12 months, how many children (age 14 and younger) lived and slept in your home for 9 or more months? Female <5 <input type="text"/> Male <5 <input type="text"/> Female 5-14 <input type="text"/> Male 5-14 <input type="text"/> Household has no children (-1) <i>[skip to question 9]</i>			
5		<i>[If there are no school-age children (age 5 to 14) in the household, skip to question 7]</i> During most of the year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one-way, by any means: for example, walking, bicycle, scooter, bus)? No. of minutes = <input type="text"/> <i>[If children attend more than 1 school, enumerator to record the average time]</i> Children usually live at school (-1) <input type="text"/> School-age children do not regularly attend school (-2) <input type="text"/> Don't know (-3) <input type="text"/>			
6		Can your household afford your children's school fees and school supplies? <input type="checkbox"/> No (1) <input type="checkbox"/> Rarely (2) <input type="checkbox"/> Sometimes (3) <input type="checkbox"/> Usually (4) <input type="checkbox"/> Yes (5) Household does not pay the fees and cannot afford supplies (6) <input type="text"/> Household does not pay fees, but can afford supplies (7) <input type="text"/> Household does not pay fees or supply costs (8) <input type="text"/>			
7		What is the highest level of schooling the female children (0 to 14) in your household will likely complete? <input type="checkbox"/> No female children (-1) <input type="checkbox"/> Don't know (-2) <input type="text"/> Highest likely level = <input type="text"/>		1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)	
8		What is the highest level of schooling the male children (0 to 14) in your household will likely complete? <input type="checkbox"/> No male children (-1) <input type="checkbox"/> Don't know (-2) <input type="text"/> Highest likely level = <input type="text"/>			
9		In the last 12 months, how often have members of your household had a non-serious illness (meaning they were sick, but not so sick they had to rest in bed a full day or more)? <input type="checkbox"/> Never (1) <input type="checkbox"/> Rarely (2) <input type="checkbox"/> Sometimes (3) <input type="checkbox"/> Often (4) <input type="checkbox"/> Always (5) <input type="checkbox"/> Don't know (6)			
10		In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)? <input type="checkbox"/> Never (1) <input type="checkbox"/> Rarely (2) <input type="checkbox"/> Sometimes (3) <input type="checkbox"/> Often (4) <input type="checkbox"/> Always (5) <input type="checkbox"/> Don't know (6)			
11		How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines? Household self-diagnoses, self-medicates for simple illnesses (-1) <input type="text"/> No health centre in the area, or centre is too far to travel to (-2) <i>[skip to question 14]</i> <input type="text"/> Minutes = <input type="text"/>			

12	How often does this health centre have enough medical supplies to provide adequate health care?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
13	How much time does it take for members of your household to reach the nearest health centre that can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?	No health centre for serious illness, or centre too far to reach easily (-1) Don't know (-2) Minutes = <input type="text"/>					
14	Can your household afford professional treatment for serious illness or injury?	No (1) Yes, if money is borrowed (2) Yes, with much difficulty (3) Yes, with some difficulty (4) Yes, because government or employer helps pay for treatment (5) Yes, household can afford it (6)					
15	For the majority of the households in your village/area, do you think there is a better chance for women or men to receive health care when needed?	Women (1) Men (2) About the same (3) Don't know (4)					
16	Are the health-care centres in your village/area (within 2 hours distance from your home) usually able to provide women with adequate health care if they seek it?	There are no health-care centres in our village/area (1) No (2) Rarely (3) Sometimes (4) Often (5) Always (6) Yes, but women prefer not to go (for whatever reason) (7) Don't know (8)					
17	<i>[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)]</i> What is the primary construction material of the housing unit's exterior walls?	Reinforced concrete (1) Stone & mortar (2) Cement blocks (3) Brick (fired/burned) (4) Metal sheeting (5) Logs or thick wood (6) Thin wood (7) Bamboo (8) Brick (mud or earth) (9) Mud & straw (10) Earth or adobe (11) Reeds/thatch (12) Thick plastic (13) Fabric or thin plastic (14) Other, specify: (15)					
18	<i>[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)]</i> What is the primary construction material of the housing unit's main roof?	Roofing shingles (1) Ceramic tiles (2) Synthetic roofing (3) Metal sheeting (4) Cement or concrete (5) Thin wood (6) Thick wood (7) Bamboo (8) Thick plastic (9) Thin plastic or fabric (10) Straw or reeds (11) Other, specify: (12)					
19	Can your home withstand strong winds, severe rain, snow or hail without significant damage?	No (1) Yes (2) Yes, with minor damage (3) Perhaps, but with significant damage likely (4) Little to no extreme weather in this region (5) Don't know (6)					
20	What is the primary source of light your home uses when it is dark?	1. None 8. Liquid fuel [petrol, kerosene] 2. Heat not needed in region 9. Coal or charcoal 3. Stable voltage electricity from grid [legal or illegal connection] 10. Vegetable- or animal-based fats or oils 4. Unstable voltage electricity from grid [legal or illegal connection] 11. Candle, paraffin wax or battery-powered source 5. Electricity from a generator 12. Wood, sawdust, grass or other natural material 6. Electricity from solar cells, wind turbine or small dam 13. Don't know 7. Gas fuel [from tank or biogas] 14. Other, specify:					
21	What is the primary fuel source your household uses for cooking?						
22	What is the primary fuel source your household uses for heat?						
23	What type of toilet facility does your household usually use?	None, open defecation (1) <i>[skip to question 25]</i> Open pit, communal (2) Open pit, private (8) Enclosed pit, communal (3) Enclosed pit, private (9) Enclosed improved-ventilation pit, communal (4) Enclosed improved-ventilation pit, private (10) Enclosed pour-flush, communal (5) Enclosed pour-flush toilet, private (11) Enclosed flush, communal (6) Enclosed flush, private (12) Compost or biogas, communal (7) Compost or biogas, private (13) Other, specify: (14) *Open* means there is no structure, or a structure with no roof. *Enclosed* means there is a structure with any sort of roof. *Communal* means the facility is shared by 3 or more households. *Private* means the facility is used by 1-2 households.					
24	<i>[If the household uses a toilet facility of any kind, ask:]</i> Over the last 12 months, how often was the toilet usable ? (meaning it was working properly or was available to use)	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)					

25	What does your household usually do with food waste/remains (any parts not consumed by people in the household)?	[Enumerator to remind respondent "all responses are anonymous"]																																		
26	What does your household usually do with non-food waste/garbage?	<table border="1"> <tr> <td>1. Discard close to a house [within 25 metres]</td> <td>10. Burn it</td> </tr> <tr> <td>2. Discard near a house [25 to 75 metres from the house]</td> <td>11. Compost it</td> </tr> <tr> <td>3. Discard far from a house [75 metres or more]</td> <td>12. Sell to vender</td> </tr> <tr> <td>4. Feed to livestock</td> <td>13. It is collected regularly further than 75 metres from house [organized garbage collection]</td> </tr> <tr> <td>5. Feed to pets or guard dogs</td> <td>14. Use to water crops grown for livestock fodder</td> </tr> <tr> <td>6. Use for biogas generation</td> <td>15. Discard into local waterway or irrigation canal</td> </tr> <tr> <td>7. It is collected regularly within 75 metres of a house [organized garbage collection]</td> <td>16. Other, specify:</td> </tr> </table>					1. Discard close to a house [within 25 metres]	10. Burn it	2. Discard near a house [25 to 75 metres from the house]	11. Compost it	3. Discard far from a house [75 metres or more]	12. Sell to vender	4. Feed to livestock	13. It is collected regularly further than 75 metres from house [organized garbage collection]	5. Feed to pets or guard dogs	14. Use to water crops grown for livestock fodder	6. Use for biogas generation	15. Discard into local waterway or irrigation canal	7. It is collected regularly within 75 metres of a house [organized garbage collection]	16. Other, specify:																
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27	What does your household usually do with wastewater (for example, from bathing, cleaning, the toilet)?																																			
28	How many times a week do most members (the majority) of your household clean their teeth?	<table border="1"> <tr> <td>Never (1)</td> <td>Rarely (2)</td> <td>1 or 2 days a week (3)</td> <td colspan="3">Most days of the week (4)</td> </tr> <tr> <td colspan="2">Usually once a day (5)</td> <td colspan="2">Usually 2 or 3 times a day (6)</td> <td colspan="2">Don't know (7)</td> </tr> </table>					Never (1)	Rarely (2)	1 or 2 days a week (3)	Most days of the week (4)			Usually once a day (5)		Usually 2 or 3 times a day (6)		Don't know (7)																			
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30	How often do the adults in your household clean their hands after defecating?	<table border="1"> <tr> <td>Never (1)</td> <td>Rarely (2)</td> <td>Sometimes (3)</td> <td>Often (4)</td> <td>Always (5)</td> <td>Don't know (6)</td> </tr> </table>					Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)																								
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31	Do the adults in your household use soap (any kind of soap) when they clean their hands?	<table border="1"> <tr> <td>No (1)</td> <td>Yes, but very rarely (2)</td> <td>Yes, but only when guests visit (3)</td> <td colspan="3">Yes, after defecating (4)</td> </tr> <tr> <td colspan="2">Yes, before meals (5)</td> <td colspan="2">Yes, after defecating and before meals (6)</td> <td colspan="2">Don't know (7) Other, specify: (8)</td> </tr> </table>					No (1)	Yes, but very rarely (2)	Yes, but only when guests visit (3)	Yes, after defecating (4)			Yes, before meals (5)		Yes, after defecating and before meals (6)		Don't know (7) Other, specify: (8)																			
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32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? [If the household uses different water sources for drinking and cooking, only record the drinking water source]	<table border="1"> <tr> <td>During the rainy season</td> <td>During the dry season</td> <td>During most of the year</td> </tr> <tr> <td>No rainy season in our area (-1)</td> <td>No dry season in our area (-2)</td> <td>Don't know (-3)</td> </tr> </table> <table border="1"> <tr> <td>1. Piped from water treatment plant (chlorinated)</td> <td>13. Water vender with tanker truck</td> </tr> <tr> <td>2. Piped from water treatment plant (not chlorinated)</td> <td>14. Water vender with cart or small tank</td> </tr> <tr> <td>3. Borehole (> 20m deep)</td> <td>15. Large dam (built & managed by government, company or collective)</td> </tr> <tr> <td>4. Borehole (< 20m deep)</td> <td>16. Small dam (built & managed by households, village or collective)</td> </tr> <tr> <td>5. Private well (> 20m deep)</td> <td>17. Stream</td> </tr> <tr> <td>6. Private well (< 20m deep)</td> <td>18. River</td> </tr> <tr> <td>7. Communal well (> 20m deep)</td> <td>19. Pond, lake (or other still water body)</td> </tr> <tr> <td>8. Communal well (< 20m deep)</td> <td>20. Irrigation canal</td> </tr> <tr> <td>9. Protected ('box') spring</td> <td>21. Bottled water (delivered by vender)</td> </tr> <tr> <td>10. Unprotected spring</td> <td>22. Bottled water (collected by household)</td> </tr> <tr> <td>11. Rainwater harvesting container (closed)</td> <td>23. Other (specify):</td> </tr> <tr> <td>12. Rainwater harvesting container (open)</td> <td></td> </tr> </table> <p>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means it is shared by 5 or more households.]</p>					During the rainy season	During the dry season	During most of the year	No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)	1. Piped from water treatment plant (chlorinated)	13. Water vender with tanker truck	2. Piped from water treatment plant (not chlorinated)	14. Water vender with cart or small tank	3. Borehole (> 20m deep)	15. Large dam (built & managed by government, company or collective)	4. Borehole (< 20m deep)	16. Small dam (built & managed by households, village or collective)	5. Private well (> 20m deep)	17. Stream	6. Private well (< 20m deep)	18. River	7. Communal well (> 20m deep)	19. Pond, lake (or other still water body)	8. Communal well (< 20m deep)	20. Irrigation canal	9. Protected ('box') spring	21. Bottled water (delivered by vender)	10. Unprotected spring	22. Bottled water (collected by household)	11. Rainwater harvesting container (closed)	23. Other (specify):	12. Rainwater harvesting container (open)	
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33	Approximately how much time (in minutes) does it take your household to collect enough water for your household's drinking and cooking needs for a normal (average) day? [Total time = there and back for each person and trip combined. If water is collected from inside the household or in the household's yard/compound, write '1' minute]	<table border="1"> <tr> <td>During the rainy season</td> <td>During the dry season</td> <td>During most of the year</td> </tr> <tr> <td>No rainy season in our area (-1)</td> <td>No dry season in our area (-2)</td> <td>Don't know (-3)</td> </tr> </table>					During the rainy season	During the dry season	During most of the year	No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)																								
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34	Does your household treat water before drinking it (any treatment method: boiling, allowing to settle, filter, chemical treatment, etc.)?	<table border="1"> <tr> <td>No, household does not believe treatment is necessary (1)</td> <td>Never (2)</td> <td>Rarely (3)</td> <td>Sometimes (4)</td> <td>Often (5)</td> <td>Always (6)</td> </tr> </table>					No, household does not believe treatment is necessary (1)	Never (2)	Rarely (3)	Sometimes (4)	Often (5)	Always (6)																								
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35	During the last 12 months, for how many months was your household's main source of water sufficient to meet your household's drinking and cooking needs? Months: <input type="text"/> Don't remember (-1)
36	How often do you worry there will not be enough water from your household's main water source to satisfy your household's drinking and cooking needs? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
37	Can your household usually afford to pay the fees (direct payments only, not maintenance fees) for using water from your household's main water source? No (1) Rarely (2) Sometimes (3) Often (4) Always (5) Household does not need to pay for water (6)
38	Generally, what do you think the quality of your household's drinking water is (before any treatment)? Don't know (1) Very bad (2) Poor (3) Satisfactory (4) Good (5) Very good (6)
39	Does your household have access to land for agriculture, orchards, livestock or aquaculture (meaning fish-farming)? Yes, have access and using the land (1) Yes, have access and leasing some land to others (2) No access to land because leasing to others (3) <i>[skip to question 51]</i> No access to land (4) <i>[skip to question 52]</i>
40	How much land does your household have for agriculture (for crops, grasses, trees, orchards, etc.)? Hectares: <input type="text"/> Don't know (-1) None, only access for livestock/aquaculture (-2) <i>[skip to question 46]</i>
41	Is the majority of your household's land flat, gently sloping, steep or terraced? Don't know (1) Steep (2) Gently sloping (3) Flat (4) Terraced (5) Mixed, specify: (6)
42	What kind of soil covers the majority of your household's land? Don't know (1) Stony-gravelly (2) Clay (3) Loamy [mixed clay, sand &/or silt] (4) Sandy-droughty (5) Wet [wetland/marsh] (6) Mixed, specify: (7) Other, specify: (8)
43	During the last 2 years, was your household able to make, or buy, enough compost/manure or artificial fertilizer for each growing season? Household does not think they need to use compost/manure or fertilizer (1) No (2) Rarely (3) Sometimes (4) Often (5) Always (6)
44	During the last 2 years, was your household able to afford enough seed for each growing season? Not necessary because household saved seed (1) No (2) Rarely (3) Sometimes (4) Often (5) Always (6) Other, specify: (7)
45	Is there generally enough water for your household's crops during the dry season/rest of the year? Dry season <input type="text"/> Never (1) Rarely (2) Sometimes (3) Often (4) Rest of the year <input type="text"/> Always (5) No dry season in our area (6) Few or no crops grown (7)
46	Is there generally enough water for your household's livestock during the dry season/rest of the year? Dry season <input type="text"/> Little or no livestock (1) <i>[skip to question 48]</i> Never (2) Rarely (3) Rest of the year <input type="text"/> Sometimes (4) Often (5) Always (6) No dry season in our area (7)
47	During the last 2 years, how often was your household able to grow, collect or buy enough fodder? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
48	Is there generally enough water for your household's aquaculture during the dry season/rest of the year? Dry season <input type="text"/> Little or no aquaculture (1) <i>[skip to question 50]</i> Never (2) Rarely (3) Rest of the year <input type="text"/> Sometimes (4) Often (5) Always (6) No dry season in our area (7)
49	During the last 2 years, how often was your household able to make or buy enough fish feed? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
50	Does your household usually have enough people to work/manage your farm? (crops, orchards, forestry, livestock and/or aquaculture) Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
51	What kind of ownership of your land does your household have? Illegal access, squatting (1) Leasehold less than 5 years (5) Leasehold 31-40 years (9) Share-cropping arrangement (2) Leasehold 5-10 years (6) Leasehold for > 40 years (10) Rented for less than 12 months (3) Leasehold 11-20 years (7) Freehold (legally owned) (11) Common-law ownership (4) Leasehold 21-30 years (8) Other, specify: (12)

52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) <i>[Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)]</i>																																								
53	For these events, how damaging would each be for your household? [<i>'Likely severity'</i>]																																								
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56	<p>If the worst of the negative events you just mentioned <i>[in question 52]</i> were to occur in the next 12 months, how long do you think it would take for your household to return to a satisfactory situation? <i>[Record answer in months (for example, 2 years = 24 months)]</i></p> <table border="1"> <tr> <td>Don't know (-1)</td> <td>Less than 1 month (-2)</td> <td>Months=</td> <td></td> <td>Our household could not recover (-3)</td> </tr> </table>	Don't know (-1)	Less than 1 month (-2)	Months=		Our household could not recover (-3)																																			
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57	<p>If in an extreme disaster (of any sort) your household's home was completely destroyed, but your family members were not injured, how long would it take for your household to rebuild your home?</p> <table border="1"> <tr> <td>Don't know (-1)</td> <td>We would move (-2)</td> <td>Months=</td> <td></td> <td>Our household could not rebuild (-3)</td> </tr> </table>	Don't know (-1)	We would move (-2)	Months=		Our household could not rebuild (-3)																																			
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Financial institution (5)	Local government (6)	National government (7)																																							
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59	<p>During the last 12 months, did any member of your household eat fewer meals, or smaller portions, than usual because there was not enough food? <i>[If 'Yes', for approximately how long?]</i></p> <table border="1"> <tr> <td>Never (1)</td> <td>Yes, once or twice (2)</td> <td>Yes, for about 1 week (3)</td> <td>Yes, for a few weeks (4)</td> </tr> <tr> <td>Yes, for about 1 month (5)</td> <td>Yes, for more than 1 month (6)</td> <td>Yes, most days (7)</td> <td>Don't know (8)</td> </tr> </table>	Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)	Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)																																
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Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)																																						
60	<p>During the last 12 months, did any member of your household go to sleep at night hungry? <i>[If 'Yes', how often did this occur?]</i></p> <table border="1"> <tr> <td>Never (1)</td> <td>Yes, once or twice (2)</td> <td>Yes, for about 1 week (3)</td> <td>Yes, for a few weeks (4)</td> </tr> <tr> <td>Yes, for about 1 month (5)</td> <td>Yes, for more than 1 month (6)</td> <td>Yes, most days (7)</td> <td>Don't know (8)</td> </tr> </table>	Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)	Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)																																
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Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)																																						


61	During the past 12 months, did your household experience a period of time longer than 2 weeks when there was not enough food? [If 'Yes', how many such periods?]	No (1)	Yes, 1 (2)	Yes, 2 (3)	Yes, 3 (4)	Yes, 4 (5)	Yes, more than 4 (6)	Don't remember (7)	Other, specify: (8)				
62	During the past 12 months, did your household ever experience 1 full day with no food to eat? [If 'Yes', how often did this occur?]	Never (1)	Once or twice (2)	Approximately once a month (3)	Approximately every 2 weeks (4)	Approximately every week (5)	Don't know (6)						
63	During the last 12 months, how often did the majority of your household eat the following foods?												
.1	Grains (cereals, bread, rice, pasta)	1. Never											
.2	Roots &/or tubers (potatoes, cassava, etc.)	2. Almost never											
.3	Vegetables/greens	3. Approximately once a month											
.4	Fruits	4. A few times a month											
.5	Dairy &/or eggs	5. About once a week											
.6	Meat &/or fish/seafood	6. A few times a week											
.7	Nuts &/or legumes (and/or derivatives, tofu, etc.)	7. Every day											
		8. Not eaten for religious or cultural reasons											
64	During the last 12 months, has anyone in your household managed/run their own business (other than selling agricultural products)? [If 'Yes', for how many months (out of the last 12 months)?]	No (1)	Yes, 1-2 months (2)	Yes, 3-4 months (3)	Yes, 5-6 months (4)	Yes, 7+ months (5)							
65	During the last 12 months, has anyone in your household provided others a skilled service (for example, equipment repair, tailoring, construction work) for money or barter? [If 'Yes', how often?]	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)							
66	If your household wanted to borrow money from a bank or other financial service provider (not including friends or relatives), would your household be able to borrow money?	No (1)	Probably not (2)	Probably yes (3)	Definitely yes (4)	Don't know (5)							
67	[Enumerator to remind respondent that all responses are anonymous] Is your household currently in debt?	No (1) [skip to question 69]	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)	Don't know, or don't want to discuss (5) [skip to question 69]							
68	To whom is the majority of this debt owed?	Relatives (1)	Friends (2)	Village fund (3)	Village government (4)	Rural credit cooperative (5)	Private money lender (6)	Microfinance institution (7)	Government bank (8)	Private bank (9)	Joint village & bank fund (10)	Joint development project & bank fund (11)	Other, specify: (12)
69	How many of the people (adults and children) in your household usually have adequate footwear?	None (1)	Less than half the household (2)	About half the household (3)	Most of the household (4)	All household members do (5)	Don't know (6)						
70	How many of the people (adults and children) in your household have sufficient clothing for severe weather (for example, very hot and sunny, very cold or very wet weather, depending on the area)?	None (1)	Less than half the household (2)	About half the household (3)	Most of the household (4)	All household members do (5)	Don't know (6)						
71	Does your household have a television? [If none write '0']	Number of televisions											
72	Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?	No (1) [skip question 73]	Yes, a few households (2)	Yes, less than half the households (3)	Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)						
73	In the last 2 years, how has this situation of inequality changed?	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)	No significant change (7)	Don't know (8)	Other, specify: (9)			

^a AA = administrative area.

Survey completion time: _____:_____

1.5 MPAT Village Survey

The complete MPAT Village Survey is provided below. A Microsoft Word version can be downloaded from the MPAT website (www.ifad.org/mpat).

MPAT Village Survey											
Enumerator supervisor: _____			Date (YY/MM/DD): 20____/____/____								
AA1: _____		AA2: _____		AA3: _____							
Village: _____											
<i>Information to be collected from interview with village/area leader (elder, chief, official, etc.)</i>											
v1	What are the approximate population and number of households in your village/area? <table border="1"> <tr> <td>Population</td> <td>_____</td> <td>Number of households</td> <td>_____</td> <td>Don't know (-1)</td> <td>_____</td> </tr> </table>					Population	_____	Number of households	_____	Don't know (-1)	_____
Population	_____	Number of households	_____	Don't know (-1)	_____						
v2	Of all the negative events , natural or socio-economic, that occurred in the region over the last 5 years , which were the most damaging to people in your area (as far as negative impacts on their households, livelihoods and/or agriculture/livestock)? <i>Record pertinent details about each negative event (for up to 5 events), such as when it occurred, its duration, the impact on households and any recovery efforts.</i>										
Event:	write in			Details:							
Event:	write in			Details:							
Event:	write in			Details:							
Event:	write in			Details:							
Event:	write in			Details:							

Information to be collected from interview with village/area's head teacher (or the most senior teacher available).				
v3	How many schools (for students age 5 to 14, public and private) are there in your village/area? Schools <input type="text"/>			
v4	What are their names? [fill in table below]			
v5	What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school?			
v6	How many full-time (work almost every school day) and part-time (work roughly half the school days) teachers are there at each school?			
[Enumerator supervisor to fill in the table below with the responses to questions v4, v5 and v6]				
	v4 School name	v5.1 Female students	v5.2 Male students	v6.1 FT teachers
	a.			
	b.			
	c.			
	d.			
	e.			
For all these schools combined:				
v7	Are full-time teachers provided subsidized, or free, housing? If so, what is the quality of the housing? No (1) Yes, provided poor-quality housing (2) Yes, provided adequate-quality housing (3) Yes, provided high-quality housing (4) Don't know (5)			
v8	Do the teachers have adequate teaching supplies to teach effectively? (for example: chalk, teacher's books, maps, posters) No (1) A few teachers do (2) About half the teachers do (3) Most teachers do (4) Yes, all teachers do (5) Don't know (6)			
v9	Do the students have adequate school supplies to learn/study effectively? (for example: notebooks, pencils, textbooks, chairs, uniforms [if required], desks) No (1) A few students do (2) About half the students do (3) Most students do (4) Yes, all students do (5) Don't know (6)			
v10	In the last 2 school years, how has the overall performance of the majority of the students changed? Improved slightly (1) Improved moderately (2) Improved a lot (3) Worsened slightly (4) Worsened moderately (5) Worsened a lot (6) No significant change (7) Don't know (8) Other, specify: (9)			
v11	How many students was the school(s) unable to accept due to limited places (or sleeping space in the school dorms) and/or limited school supplies? None, able to accommodate all students (-1) Number of students unable to accept <input type="text"/> None, accepted all students regardless of crowding (-2) Don't know (-3)			
v12	[Tell respondent that the next 2 questions are not about education, but we want their general opinion about the community] Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group? No (1) [If 'No', do not ask v13] Yes, a few households (2) Yes, less than half the households (3) Yes, about half the households (4) Yes, more than half the households (5) Don't know (6)			
v13	In the last 2 years, how has this situation of inequality changed? Improved slightly (1) Improved moderately (2) Improved a lot (3) Worsened slightly (4) Worsened moderately (5) Worsened a lot (6) No significant change (7) Don't know (8) Other, specify: (9)			

Information to be collected from interview with village/area's senior health-care staff (or most senior available)					
v14	How many health-care centres (public & private) are there within approximately 5 km of your village/area's centre? <div>Health-care centres</div>				
v15	What are their names? [fill in table below]				
v16	How many patients can be treated (attended to) in 1 day (maximum capacity) at each centre?				
v17	How often does each centre usually have enough medical supplies to provide adequate health care?				
v18	How many full-time (work most days a week) and part-time (work 1 to 3 days a week) health-care staff work in this/these health centre(s)?				
[Enumerator supervisor to fill in the table below with the responses to questions v15, v16, v17 and v18]					
	v15 Health centre name	v16 Max. daily patient capacity	v17 Enough medical supplies*	v18.1 FT health-care staff	v18.2 PT health-care staff
	a.				
	b.				
	c.				
	d.				
	e.				
*Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)					
For all health centres combined:					
v19	How many years has each staff person been working as a health-care professional (in total, at this health centre and elsewhere)?				
v20	How many years of formal medical training has each staff person completed?				
		v19.1 years' working	v20.1 years of training		v19.2 years' working
	Full-time staff -a-			Part-time staff -a-	
	Full-time staff -b-			Part-time staff -b-	
	Full-time staff -c-			Part-time staff -c-	
	Full-time staff -d-			Part-time staff -d-	
	Full-time staff -e-			Part-time staff -e-	

v21	In the last 2 years, how has the overall health of the majority of the people in your village/area changed?				
	Improved slightly (1)		Improved moderately (2)	Improved a lot (3)	
	Worsened slightly (4)		Worsened moderately (5)	Worsened a lot (6)	
	No significant change (7)		Don't know (8)	Other, specify: (9)	
v22	[Tell respondent that the next 2 questions are not about health care, but we want their general opinion about the community] Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?				
	No (1) [If 'No', do not ask v23]		Yes, a few households (2)	Yes, less than half the households (3)	
	Yes, about half the households (4)		Yes, more than half the households (5)	Don't know (6)	
v23	In the last 2 years, how has this situation of inequality changed?				
	Improved slightly (1)		Improved moderately (2)	Improved a lot (3)	
	Worsened slightly (4)		Worsened moderately (5)	Worsened a lot (6)	
	No significant change (7)		Don't know (8)	Other, specify: (9)	

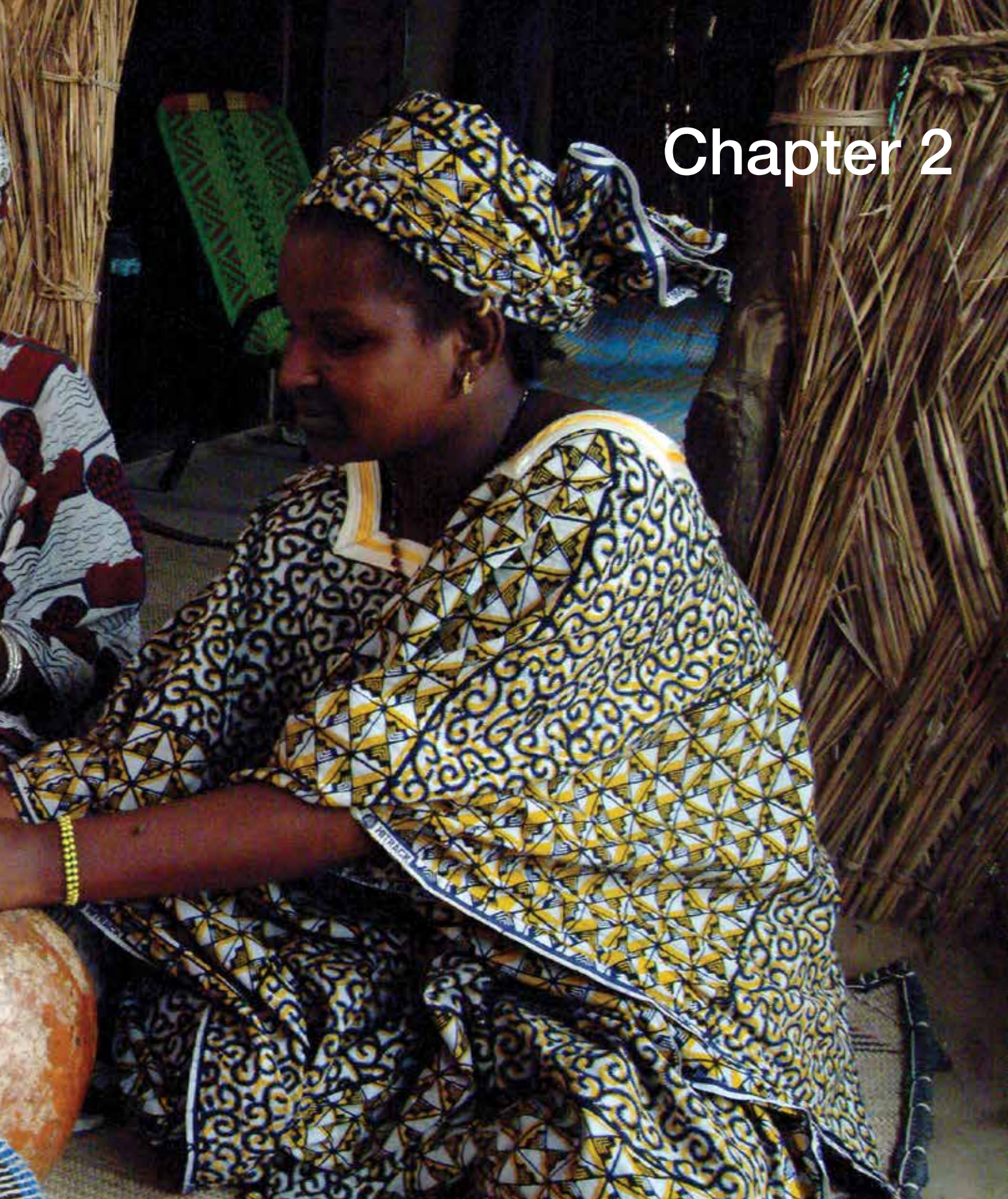


Key points from this chapter

- ✓ MPAT is a tool designed to support rural poverty alleviation and rural development projects and research. It provides a comprehensive overview of 10 dimensions central to rural livelihoods, while also providing detailed data that can help identify areas where additional support or interventions are most needed.
- ✓ The tool was developed through a participatory, collaborative process based on expert feedback from development experts from IFAD, other United Nations agencies, international and regional organizations, and universities from around the world. It was originally piloted in China and India and field-tested in countries in Asia and Africa.
- ✓ MPAT is designed to be user-friendly and easily implemented by local-level project staff (as a result, in most situations it is expected that external consultants should not be needed, unless desired).
- ✓ MPAT collects data through the MPAT Household and Village Surveys and then organizes it using the 10 MPAT dimensions, or components. The survey questions are broad enough to be applicable in most rural contexts, but precise enough to act as quality proxy measures for the components they represent.
- ✓ One key feature of collecting quality MPAT data and using MPAT responsibly is standardization – the same tool is used in the same way each time. This gives users the ability to make comparisons across space and time. It is also why this User's Guide is so important – to help ensure that users fully understand MPAT and are able to implement it correctly.



Chapter 2



Chapter 2

Using MPAT to support rural development projects

The multi-dimensional poverty assessment tool (MPAT) funded by the IFAD IMI grant was tested in the project to assess the project's impact in March 2013 by sampling 480 households from the project area and 128 households from nearby districts, Netrokona and Habiganj, as a control for comparison. Out of 10 groups of indicators used for all three districts (Sunamganj, Netrokona and Habiganj), the project showed its positive impact on four groups of indicators, namely (i) domestic water supply, (ii) education, (iii) housing, clothing & energy, and (iv) gender and social equality.

– Aide memoir of 2013 supervision mission headed by Qibin He (Bangladesh)

MPAT is a flexible tool that can be used in many ways to support rural development projects; this chapter outlines some of the key ways. In particular, the chapter highlights the use of MPAT in project planning and design, as well as in M&E. Section 2.1 explains *what* MPAT can provide in the early stages of the planning and design process for rural development projects, as well as *how* MPAT data can strengthen the planning process. Section 2.2 discusses the myriad ways in which MPAT can support M&E. These can range from using individual MPAT survey questions to measure specific programme outcomes to tracking changes in livelihoods over time via MPAT component results.

What MPAT can provide during planning and design:

- Opportunity for stakeholders to get involved
- Baseline data for monitoring changes over time
- Basic demographic information useful to many rural development projects

(number of adults and children per household, percentage of households headed by women, etc.)

- Snapshot of the poverty situation at a single point in time
- Data-driven diagram of a community's needs, each relative to the others
- Picture of community strengths and weaknesses, in terms of both local infrastructure and community behaviour
- Additional tool in a project's participatory rural appraisal (PRA) toolkit
- Method of needs assessment that can later be used in M&E
- Way to confirm or question previously held perceptions about poverty in the region

Each project team must decide how to best use MPAT data based on its distinct project situation and needs. A few possibilities for *how* to use MPAT data follow.

How MPAT data can strengthen the planning and design process:

- Determining optimal resource allocation among sectors and advocating increased funding in certain areas, based on identified needs
- Improving stakeholder discussion and participatory decision-making, based on accurate information about a community's poverty situation
- Facilitating decisions on project focus/ type of project and type of interventions needed to address specific needs
- Offering a ready-made tool, so that a project team may decide to use MPAT when planning and designing its primary M&E system

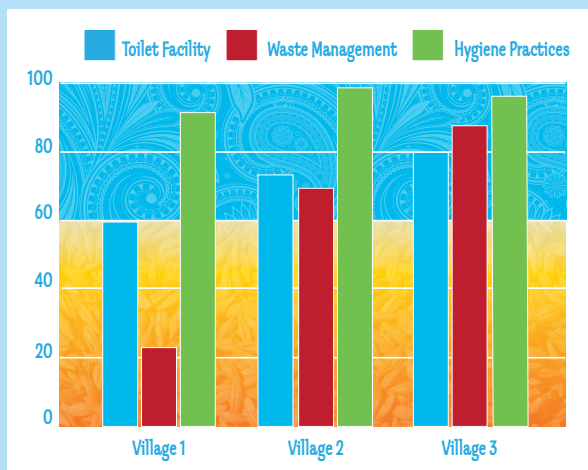
Much of the discussion in this chapter explains how to use MPAT to make better, more informed decisions that will result in greater benefits to the communities involved.

Box 6. Zooming in on Sanitation & Hygiene in Bangladesh (subcomponent comparisons)

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In Box 4 above, we saw significant differences in the Sanitation & Hygiene subcomponent results in Villages 1, 2 and 3 (2013 data). To better examine these differences, we can also use graphs – radar, bar graphs or other types – to more closely examine the source of these differences. In the bar graph below, we see the subcomponent results for each village. This allows us to see quickly that while Hygiene Practices are quite good in all villages, the household Waste Management practices (subcomponent 4.2) appear to be very poor in Village 1. This, in addition to the relatively poor state of the Toilet Facility subcomponent, brings down that village's overall Sanitation & Hygiene component score.

With just a few minutes of work to organize and present MPAT results from these three villages, project staff can now investigate further to understand the Sanitation & Hygiene situation in Village 1 and then work to determine how best to employ project resources to improve it.



How to: This was done by: (i) using the MPAT Excel Spreadsheet to display the results for each village; (ii) the subcomponent values for Sanitation & Hygiene were cut-and-pasted to another Excel file; and (iii) these values were then used to create the bar graph.

Implementing agency: Local Government Engineering Department (LGED), Bangladesh.
 Contacts: Sheik M. Mohsin (Project Director) and Nurul Amin (Senior M&E Officer).

2.1 Using MPAT for planning and design

To accomplish the goals of a poverty alleviation project,⁷ a strong planning and design process and the resulting project design document⁸ require accurate information on the target area and the population's poverty situation. This information should be collected in multiple ways and from multiple sources. In the field, reliable, accurate information is not always easy to come by. This is one of the places where MPAT can help.

In the planning and design stages of a project, MPAT can be a useful tool to provide many types of information.

Using MPAT to gain an overview of the poverty situation

MPAT was specifically designed to measure rural poverty broadly, but also to provide specific information along 10 core dimensions (across countries, cultures and time). It can thus be useful in planning and design, as well as in M&E, for projects and programmes whose overall goal is to decrease rural poverty.

Simply put, MPAT can provide a quick and useful overview of an area's poverty situation. *Even projects that focus on only a few of MPAT's 10 dimensions can benefit from an accurate understanding and overview of the target area's poverty situation as a whole, as elements of rural poverty are typically highly interconnected.* Indeed, it is intended that MPAT be an 'off-the-shelf', ready-to-use tool to measure and obtain a preliminary, but comprehensive, understanding of rural poverty for a wide range of purposes and projects.

That said, each project must consider its particular situation when determining if this strategy fits with its overall goals and activities.

Decision-making in resource allocation

MPAT data can help all stakeholders – donor organizations, government officials, local project staff and community members – make difficult decisions on resource allocations among sectors, based on data that show needs in each of the 10 MPAT dimensions *relative to one another*. Decisions about allocating limited resources are potentially contentious. MPAT data can help make them more analytical, standardized and objective, and less tied to personal opinions and/or local power structures.

With data showing the relative strengths and weaknesses of sectors, "...donors can then use these data in their initial dialogue with governments with respect to targeting and prioritization by sector. In this way, MPAT provides a framework for starting dialogue with all stakeholders before the project is designed. This in turn may awaken stakeholders to the importance of multiple domains beyond those that they may have initially envisioned as being important. By stimulating awareness and cognizance of multiple dimensions of rural poverty, it may be easier to work together towards goals that are now understood to be *common* goals" (Cohen 2009a, 112).

Similarly, MPAT's subcomponents can reveal specific, useful information about the different aspects of a community's poverty situation. For example, when consulted in preparation for the initiation of a community development project, community leaders might report that there are problems with the water supply in their area, but the nature of the primary water issue might be unclear to staff and/or vary depending on various factors. Through the MPAT Village and Household Surveys, project staff can obtain a much clearer idea of specific needs in relation to water Access, Quality and/or Availability. This clearer understanding in turn allows for targeted technical investigations to understand the underlying causes of problems in different sectors. In this

7/ Various organizations may use different definitions for the terms 'project' and 'programme'. The terms are used interchangeably throughout this User's Guide.

8/ A guiding strategy, captured in a project design document, will often be developed during project planning and design. Organizations may use variations with diverse names (for example, theory of change, results chains, logical frameworks [logframes], logic models), but the purpose of the document is largely the same: to define and stay focused on a goal(s); to develop activities and interventions that should positively impact that goal(s); and to have specific ways to measure progress towards it (them).

way, MPAT data can help project staff and community members make project planning and design decisions that will have the greatest impact on the community as a whole.

One indirect but potentially important use of MPAT data is that they can move planning and design conversations away from issues that sometimes slow down or misdirect a project, including influential stakeholders' personal opinions, local power structures, individual comfort zones, the specific expertise involved in the conversation, and political interests. Using local data to drive discussion and decision-making increases the likelihood that projects will focus on the actual needs of communities, rather than the potentially misguided opinions of those with power or influence. Thus, MPAT can support the identification and development of programme solutions that can best assist the majority of local community members.

These uses of MPAT require that project staff and local stakeholders understand and trust the tool and its data. In order to achieve such trust, it is important that key people be involved in the MPAT process from the beginning (see Section 3.2 Involving key people from the beginning).

Sharing initial results with community members through participatory processes is an ideal way to include the community early on and to ensure the responsible identification of issues of concern.

Using MPAT to engage with local institutions and community stakeholders

Stakeholder engagement is an important aspect of the utility of MPAT, and some discussion on using the tool for participatory programme planning and design is provided below. Before data are even collected, "stakeholders and/or beneficiaries can be asked to rank MPAT's components and subcomponents from their point of view. In this way, one can quickly see the concerns and priorities of different groups and begin

to discuss how they might be addressed.

As such, MPAT provides a tool for starting dialogue with would-be beneficiaries to understand their perceptions and concerns *before* project design" (Cohen 2009a, 112). One simple method is to ask stakeholders to rank MPAT components in terms of best-to-worst in their perception of the current situation. They can then be asked to rank them again according to their perception of where funding priorities should be – often the two may not match completely. These rankings can later be compared with actual MPAT results.

A stakeholder discussion can also take place after compiling MPAT results. Project staff, whether they are responsible for planning and design only or also for project implementation, may focus on the data points that are most surprising, relevant or interesting to the community as a whole. When planning the community discussion, the discussion leader should look for surprises in the data and invite community leaders (or participants in a general community meeting or smaller group meetings) to discuss MPAT results and/or compare the results to their initially held perceptions. Using MPAT in this way also provides valuable qualitative data to help explain the community situation.

Types of questions one can ask during discussions with stakeholders:

- Is this piece of information surprising?
Why is it this way?
- Given these data, what should be our primary goal in this community?
- To what extent do these results reflect your priorities and needs?
- What specific activities can be implemented to improve the situation?
- How might we work together to accomplish this?

Once MPAT has been implemented, the data it has produced become accessible and understandable to local community members, who can use them to support new

community-led projects, as well as donor-funded activities. For example, communities themselves can use MPAT data and findings as an advocacy tool to highlight and lobby for increased government or other support to specific sectors in their area. This can help stakeholders compare community priorities with those of existing government or project plans and thereby advocate on their own behalf.

Planning and designing a project's M&E system

Depending on the nature of the project, staff should consider how MPAT can be a useful part of a project's M&E system. For example, the results of one MPAT component (or perhaps a specific MPAT survey question) may be well suited to be an indicator of a specific project outcome as part of a project's M&E system. In essence, MPAT may serve as a ready-made piece of the M&E system, complete with survey methodology and analysis tools. The next section discusses this in more detail.

2.2 Using MPAT to support monitoring and evaluation

M&E systems can vary across organizations and programmes, and there are a variety of philosophies concerning the 'best' approach to M&E (IFAD 2002). For example, there are both quantitative and qualitative approaches to M&E, and both types of data are important for different purposes. One is not better than the other, and they are best understood as complementary. Quantitative data are typically used to provide a broad overview of an issue or problem, or to provide specific information about a large area or population. Qualitative data, conversely, are often used to provide a deeper understanding as to why

and how an issue or problem exists as such, or to clarify or explain information that has become evident through quantitative data.

MPAT is both qualitative and quantitative in that largely qualitative data (the perceptions of respondents) are organized and presented through a quantitative lens. This allows local voices to be heard, albeit through a structured, quantitative process.

Open-ended discussions or focus groups dealing with the MPAT framework or results can yield a deeper and more qualitative understanding of the community context. Indeed, it is recommended that MPAT be used to support M&E by combining MPAT's quantitative data/results with a participatory, qualitative interpretation and other M&E tools as appropriate.

Purpose of M&E and MPAT

Though there are many different ways to evaluate a project, the overall purpose and goals of M&E remain the same:

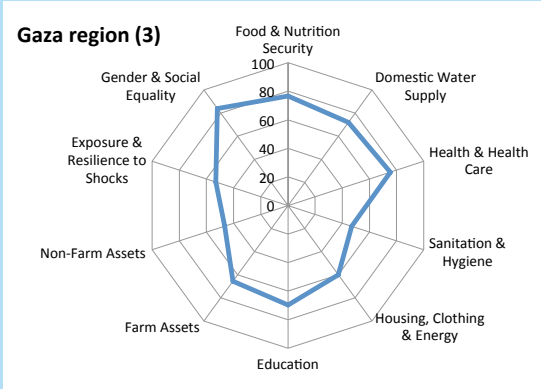
- To keep project work focused on goals, strategy and programme efficiency
- To identify whether activities are having their intended effect, and make changes if necessary
- To hold projects accountable for results
- To provide solid information for sound decision-making at all levels
- To generate learning for the diverse stakeholders involved

MPAT can support the M&E efforts of rural development organizations by providing the information necessary to achieve these critical M&E goals. In essence, MPAT is able to make M&E efforts more streamlined, efficient and accurate as part of a comprehensive M&E system.

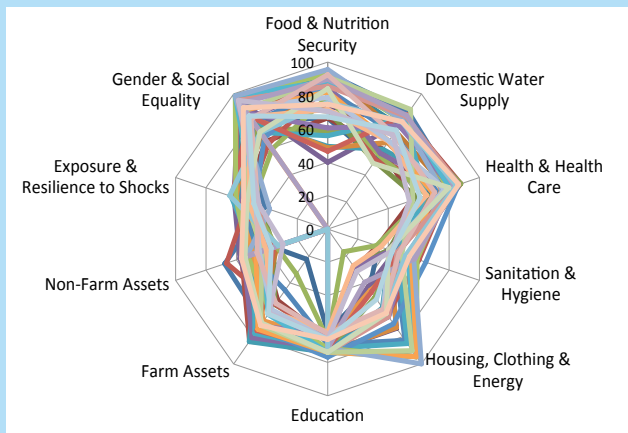
The following sections discuss ways that MPAT can be used to support the design and implementation of an M&E system.

Box 7. Looking at variability in MPAT scores across households – Mozambique (2013)

MPAT results are often presented at the village level. For project staff, this is an especially relevant scale of analysis, but MPAT results are also calculated for each individual household. It is important to remember that the village summaries produced by the MPAT Excel Spreadsheet are averaging MPAT scores across all households in a specific village. Thus, in the same way that the component scores for a given area are ‘averaging’ their subcomponent scores, similarly these village summaries hide the variation in the underlying data – the household level scores in this case. To take a concrete example, consider first the figure providing MPAT results for the Gaza region in Mozambique.



There are many approaches to better understanding the variability behind the average scores for a village. A good starting point would be to look at the All Results tab on the Excel Spreadsheet. One could then take those data and calculate a mean (average) score for each subcomponent as well as the standard deviation; this would quickly demonstrate how much variation there is in the village. To illustrate this point, the second figure also uses a radar graph, but in this case each line represents one of the 36 households surveyed in the Gaza region. Of course, this is too ‘messy’ to provide actionable information for any individual household, but it clearly shows the extent of variation for each component score. For example, there is relatively little variation for the Education component, but a great deal for the Housing, Clothing and Energy component.



How to: Use the MPAT Excel Spreadsheet (Household Results tab) to cut-and-paste the component scores for each household in the village into a new file and then create a radar graph giving each household its own line/colour.

Implementing agency: National Institute for the Development of Small Scale Fisheries (IDPPE).
Contact: Paulo Muchave (Senior M&E Officer), Fisheries Promotion Project (ProPESCA).

Box 8. Organizing MPAT country-level training workshops – India (2011)



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For larger agencies interested in using MPAT, it may make sense to gather M&E staff from multiple projects in the same country to conduct a joint MPAT training programme. This approach has a number of benefits. For one, depending on travel and lodging costs, it may be more cost-effective than conducting sessions in each project, especially for projects in the same region. In addition, as M&E staff for different projects will learn together, they can act as a support network for each other after the training – helping each other solve issues related to MPAT's implementation and/or data analysis. What is more, by bringing multiple projects together before MPAT is used, it will likely

be easier to encourage data-sharing and cross-project knowledge-sharing. Once the training is completed, M&E staff can confidently return to their projects and train enumerators themselves.

Such a training workshop was organized in early 2011 in Jodhpur, Rajasthan. Comfortable training facilities were provided and organizers worked with local government to ensure that trainees could also have a day of field practice (in accordance with MPAT training guidelines).



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Implementing agency: State Project Management Unit-MPOWER, Jodhpur (IFAD-supported).
Contacts: Sanjiv Soni (Project Manager, MPOWER) and Vincent Darlong (IFAD Country Programme Officer).

Using MPAT in a project M&E system

Comprehensive M&E systems are often thought of in terms of the classic input-output-outcome-impact framework (I-O-O-I) that outlines four main categories of measurement. These categories have important distinctions and are defined as follows for the purpose of this Users' Guide:

Inputs are ... what is used to do the work of a programme, such as personnel, training curricula, transport, funding, etc.

Outputs are ... what the programme provides or delivers, such as the number of teacher training activities, or the number of polio vaccinations, or the number of health clinics constructed, or the number of bags of fertilizer distributed. Outputs are often thought of as 'units of service', but can also be represented by physical infrastructure.

Outcomes are ... what the programme hopes to achieve based on its activities, such as behaviour change in teachers/students, decrease in incidence of disease or illness, or increase in agricultural productivity. They are often related to knowledge, skills, attitude or behaviour change, and describe the benefits for participants during or after their involvement in the programme. Outcomes are often thought of as a progression over time and tend to be characterized in terms of short-term, intermediate and long-term outcomes.

Impacts are ... the long-term and typically broader changes that can be shown to be caused by the programme itself (attribution).

Example: An NGO was working hard to improve community health by addressing sanitation and hygiene issues in five villages in a remote area. Through in-depth discussions with the local community, project staff learned that most households used 'the bush' to relieve themselves. Very few homes had latrines. Equipped with this information, the staff designed a project that provided

training in latrine construction and the required building materials.

For this hypothetical project:

Inputs included the training curriculum, services of a trainer in latrine construction, a training venue, latrine construction materials, transportation of materials, etc.

Outputs included 16 hours of latrine construction training provided to 50 households, and 50 latrine construction kits delivered to training participants.

A short-term outcome was an increase in the number of households that used the training to build their own latrines; an intermediate outcome was an increase in the number of households that used their latrines on a regular basis; and a long-term outcome was a decrease in incidence of diarrhoea in these households.

A long-term impact of this latrine training and material distribution programme was a decrease in child mortality *caused by* the increased use of latrines in this area. A special evaluation design would need to be used to demonstrate that the latrine programme was, indeed, the cause of the reduction in childhood mortality. More information on such evaluation designs and the challenges of identifying causal impact is provided in Section 2.3 of this User's Guide.

In general, inputs and outputs are the components of a project that are most easily measured and thus most often reported for monitoring. For example, four staff trainers (input) provided 100 hours of training on the topic of proper hand washing (output). Such information provides only a limited understanding of whether project activities were implemented as planned; it does not tell whether the training was effective, if people understood what they learned, or if they changed their behaviour accordingly (in line with programme goals).

Input and output data are not part of the Standardized MPAT, as inputs and outputs are

specific to each project's activities and cannot be generalized across programmes. Input data cannot be derived from MPAT, and output data will be derived directly from MPAT *if and only if* project indicators are directly aligned with MPAT survey questions. This will be rare, but may occur in certain instances. For example, an infrastructure project focused on building housing for teachers may possibly be able to use the results from question v7 of the MPAT Village Survey as an indicator of project output:

v7	Are full-time teachers provided subsidized, or free, housing? If so, what is the quality of the housing?		
	No (1)	Yes, provided poor-quality housing (2)	Yes, provided adequate-quality housing (3)
	Yes, provided high-quality housing (4)		Don't know (5)

Similarly, staff from a borehole project will already track the number of boreholes installed as its output data, but staff can use MPAT data from Q32 to see what percentage of households, over time, shift from the use of rivers or wells to boreholes as their primary source of drinking water.

on the ground relative to the specific intervention (see Section 11.3 Adding survey questions to the end of MPAT surveys).

Using MPAT to measure outcomes

MPAT focuses on the outcomes area of the M&E framework. Outcome data are typically more difficult for organizations to capture accurately, yet they are the data that best illuminate where progress is being made in addressing poverty and/or where it is stalled. With this information, project staff and local stakeholders are better equipped to make

appropriate decisions on how to modify or continue poverty alleviation projects.

As mentioned

previously, when planning and designing a project's M&E system, staff should consider whether MPAT data can be used 'off-the-shelf', that is, directly, as indicators of project outcomes. There are two levels of MPAT data that could be appropriate in this regard:

- (i) Responses to specific MPAT survey questions, which are more likely to reflect short-term and intermediate outcomes, and
- (ii) MPAT component scores, which may better reflect long-term outcomes related to the poverty condition of a community

For example, if one of the primary activities of a

32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? <i>[If the household uses different water sources for drinking and cooking, only record the drinking water source]</i>																									
	During the rainy season	During the dry season	During most of the year																							
	No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)																							
	<table border="1"> <tr> <td>1. Piped from water treatment plant (chlorinated)</td> <td>13. Water vender with tanker truck</td> </tr> <tr> <td>2. Piped from water treatment plant (not chlorinated)</td> <td>14. Water vender with cart or small tank</td> </tr> <tr> <td>3. Borehole (> 20m deep)</td> <td>15. Large dam (built & managed by government, company or collective)</td> </tr> <tr> <td>4. Borehole (< 20m deep)</td> <td>16. Small dam (built & managed by households, village or collective)</td> </tr> <tr> <td>5. Private well (> 20m deep)</td> <td>17. Stream</td> </tr> <tr> <td>6. Private well (< 20m deep)</td> <td>18. River</td> </tr> <tr> <td>7. Communal well (> 20m deep)</td> <td>19. Pond, lake (or other still water body)</td> </tr> <tr> <td>8. Communal well (< 20m deep)</td> <td>20. Irrigation canal</td> </tr> <tr> <td>9. Protected ('box') spring</td> <td>21. Bottled water (delivered by vender)</td> </tr> <tr> <td>10. Unprotected spring</td> <td>22. Bottled water (collected by household)</td> </tr> <tr> <td>11. Rainwater harvesting container (closed)</td> <td>23. Other (specify):</td> </tr> <tr> <td>12. Rainwater harvesting container (open)</td> <td></td> </tr> </table>			1. Piped from water treatment plant (chlorinated)	13. Water vender with tanker truck	2. Piped from water treatment plant (not chlorinated)	14. Water vender with cart or small tank	3. Borehole (> 20m deep)	15. Large dam (built & managed by government, company or collective)	4. Borehole (< 20m deep)	16. Small dam (built & managed by households, village or collective)	5. Private well (> 20m deep)	17. Stream	6. Private well (< 20m deep)	18. River	7. Communal well (> 20m deep)	19. Pond, lake (or other still water body)	8. Communal well (< 20m deep)	20. Irrigation canal	9. Protected ('box') spring	21. Bottled water (delivered by vender)	10. Unprotected spring	22. Bottled water (collected by household)	11. Rainwater harvesting container (closed)	23. Other (specify):	12. Rainwater harvesting container (open)
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11. Rainwater harvesting container (closed)	23. Other (specify):																									
12. Rainwater harvesting container (open)																										
<i>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means shared by 5 or more households]</i>																										

However, as mentioned, inputs and outputs are specific to each project's activities and thus, for more comprehensive measurement, project staff should collect internal data and/or add project-specific questions at the end of the MPAT surveys to better understand what is being implemented

sanitation and hygiene project is to promote hand washing, a suitable indicator of the project's outcomes and effectiveness would be to compare survey responses to the following MPAT questions before and after the project (refer to Section 4.6):

29		How often do the adults in your household clean their hands before eating a meal?				
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5) Don't know (6)
30		How often do the adults in your household clean their hands after defecating?				
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5) Don't know (6)
31		Do the adults in your household use soap (any kind of soap) when they clean their hands?				
		No (1)	Yes, but very rarely (2)	Yes, but only when guests visit (3)	Yes, after defecating (4)	
		Yes, before meals (5)	Yes, after defecating and before meals (6)	Don't know (7)	Other, specify: (8)	

In this way, MPAT survey questions can be used directly to measure specific project outcomes. This sanitation and hygiene project may also consider the overall MPAT component score for Sanitation & Hygiene as a longer-term outcome to track over time as part of its comprehensive M&E system.

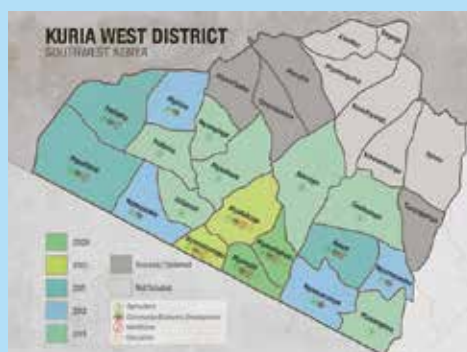
The final element of the I-O-O-I framework is impact. As mentioned earlier, there is potential for MPAT's use in measuring impact as part of a larger impact evaluation design, but doing so is somewhat complex and requires secondary analysis (see Section 2.3 Impact evaluation and MPAT for more information).

Using MPAT to track poverty/livelihood changes over time for programme improvement

If collected/measured over time, MPAT data can demonstrate where improvements to the state of rural poverty have occurred and/or where expected improvements have not occurred. MPAT implementation at project baseline, midterm and end (and, ideally, years after the project concludes) can provide very useful M&E data, helping to track and visualize changes over time by sector in project communities.

MPAT implementation at project baseline was discussed in Section 2.1. The usefulness of MPAT implementation at midterm (during the midterm review if there is one) and at project end is discussed below.

Box 9. Comparing baseline and midterm MPAT results – Kenya (2011 and 2013)



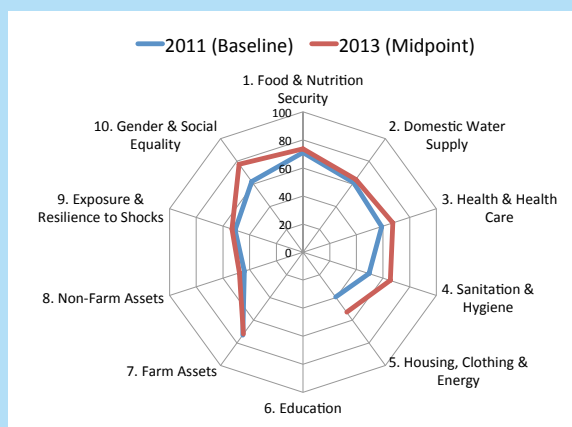
©Nuru International

One of the benefits of using a standardized tool such as MPAT is that results for the same location can be overlaid and compared for different time points. In the context of many poverty reduction projects, one can use MPAT to overlay data from project baseline, midterm and completion (or follow-up). In 2011, Nuru International implemented MPAT to gather baseline information on a total of 480 households in two locations in West Kuria District, Kenya. Nuru then began its work in the district with capacity-building programmes in agriculture, community economic development, health care and education.

At project midterm, in 2013, Nuru again implemented MPAT. By comparing baseline and project midterm data from the community where it was working, Nuru aimed to obtain a better idea of the changes that had occurred as a window into the potential impact of its programmes. The figure presented below compares baseline (2011) and midpoint (2013) MPAT results averaged across all 480 households.

MPAT results clearly demonstrate that from baseline to Nuru project midterm, there is a positive trend overall (i.e. improved component scores), indicating lower poverty levels in the project area (the Education component was not fully calculated due to a lack of schools and/or data). In general, it is often the case that the Farm Assets component score will not change drastically over time, as much of the data feeding into this component are based on relatively fixed phenomenon (e.g. soil quality and topography).

When collected over time (e.g. at project baseline, midterm and completion), MPAT data can quickly illustrate changes in a region by sector.



How to: Use the MPAT Excel Spreadsheet to calculate the project/village summary for two or more time points (using separate Excel files for each year of data), then cut-and-paste the summary component scores into a new file and create a radar graph to display the overlaid MPAT results.

Implementing agency: Nuru International, Kenya.

Contacts: Veronica Olazabal (M&E Director) and Jamie Frederick (M&E Senior Program Manager).

The implementation of MPAT at midterm can provide important information to project staff and community leaders, helping to identify which programmes appear to be meeting goals and which programmes or sectors may require improvement and/or additional attention or resources. Midterm data can also signal that the state of a community is worse than expected and that project management needs to refocus or get the project back on track if necessary. In essence, midterm monitoring can highlight issues in project implementation and offer an important opportunity for mid-course correction to improve long-term community outcomes. This is one of the primary purposes of M&E, and this type of information is crucial to informed decision-making and managing for positive impact. It is recommended that MPAT be implemented at project midterm (and that the data be compared to baseline information), when there is still the opportunity (and time and resources) for modifications and correction.

At the end of a project, MPAT results may show that the community situation has improved and that there are lessons to be learned and shared with others. Alternatively, MPAT results may also show

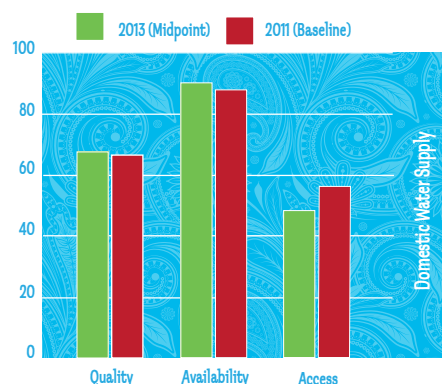
that the community situation has not improved as much as hoped or anticipated. In this scenario, there are still valuable lessons to be learned and shared with others. Ideally, MPAT would also be implemented years after project completion, in order to help determine the longer-term impact. Monitoring the sustainability and longer-term impact of development interventions is key to long-term success (although, unfortunately, funds are rarely allocated for this type of follow-up).

However, even when used to measure changes or progress over time, *MPAT as a stand-alone tool cannot prove causality without a control group (and random allocation)*. That is, while MPAT results can show the direction and degree of change along each of its 10 rural poverty dimensions, proving the cause of a change in outcomes requires a specific evaluation method designed to determine causality. In essence, MPAT can show improvement (or lack thereof) in a community over time, but it cannot prove that the project's operations were the definitive reason for any improvements identified. See Section 2.3 Impact evaluation and MPAT for more information on this topic.

Box 10. Additional analysis of baseline and midterm MPAT results – Kenya (2011 and 2013)



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How to: Users can cut-and-paste the village-average/project results from the MPAT Excel Spreadsheet, with the data from the first time point, and put them into a new Excel document. Then cut-and-paste the same data from the other file at the other time point. Of course, this can also be done for three time points to compare baseline, midterm and completion (and perhaps a fourth for follow-up).

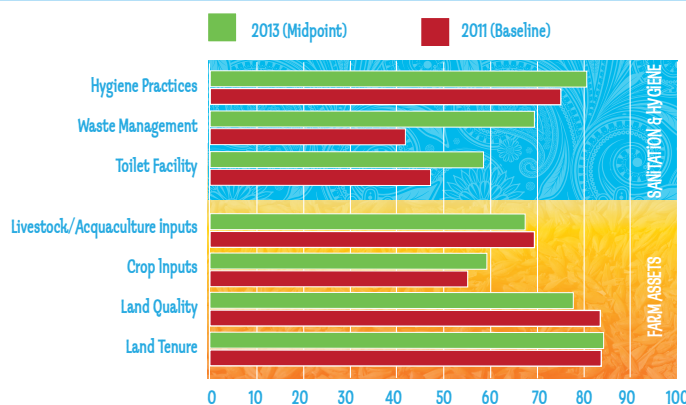
Implementing agency: Nuru International, Kenya.

Contacts: Veronica Olazabal (M&E Director) and Jamie Frederick (M&E Senior Program Manager).

As we saw in Box 9, by overlaying the MPAT component results from 2011 and 2013, we can quickly see which components, which sectors, evidence higher or lower scores. In order to better understand these results, it is necessary to look behind the component values to the subcomponent values (and then in turn to the data on which the subcomponents are based). For example, the figure in Box 9 shows that there is only a small increase in the Domestic Water Supply score. To understand that further, one can look at the values for the three subcomponents, as shown in the figure below for 2011 and 2013. We see that there are, essentially, no changes to the water Quality or Availability scores, but Access has increased (from an average of 44.4 to 52.1 [t-tests can be used to determine if the changes are statistically significant]). This is useful in that it helps confirm the quality of data collection, as the intervention did not address water quality directly.

Shifting to another example, if we examine the subcomponent scores for Sanitation & Hygiene, we can better understand the roots of the large increase in scores from 2011 to 2013. As can be seen below, the scores for all three subcomponents increased, with the largest in household Waste Management (42.2 to 69.7).

In addition to examining data from two time points to better understand which sectors have changed, data can also be used to help determine the quality of survey data (and thus, by extension, the quality of survey training, supervision and data entry). For example, in the figure below, we would expect that the Land Tenure situation would not change drastically from 2011 to 2013, unless there were land reform policy shifts (here it has changed from 84.6 to 85.0, which may be statistically equivalent [again t-tests can be used to help determine this]). We do see an increase in the Crop Inputs subcomponent, which may reflect Nuru International's work in the region, given its focus on improving agricultural production.



Using MPAT data for shared learning, informed decisions and improved operations

MPAT can help build a body of both quantitative and qualitative data that can be used and analysed to provide an important foundation, depth and context to poverty alleviation efforts – kick-starting the creation of a project’s learning environment. By using the data for shared analysis and critical reflection, a project team and/or community stakeholders can make more informed decisions for effective operations and strategic management.

Additionally, the intentional cross-country, cross-sector capacities of MPAT expand the potential for project staff working in poverty alleviation to effectively communicate with and learn from others in this field. MPAT users in different regions, working for different organizations, on programmes in different sectors will have the capability to speak the same ‘MPAT language’, making it far easier to notice trends or successes in other projects, share best practices and reach out to one another on common M&E ground. Because MPAT data are standardized, the potential for knowledge-sharing and organizational learning is increased.

For example, one MPAT user, a nutrition NGO in Bangladesh, might discover that another MPAT-using NGO, with a programme in Ghana, raised an area’s Food & Nutrition Security score from 47 to 85 over a five-year project cycle. The NGO in Bangladesh

may be interested in learning more from the Ghanaian project and its implementing organization, and would now have a common measurement system to guide and focus conversations about what may have brought about this positive change.

Similarly, MPAT scores can be used to make relative comparisons between villages or regions, or even between the average conditions for the entire area surveyed against one particular village. MPAT thus makes it relatively straightforward to obtain a comprehensive understanding of both the comparative and absolute context of rural poverty.

But to obtain a truly usable understanding of MPAT’s values, users must look behind the numbers, using additional qualitative tools and approaches. After gathering data, it is strongly recommended that MPAT users and project staff hold an open discussion or focus group with community members from diverse backgrounds (e.g. village leaders, teachers, health-care workers, women’s groups) to share MPAT results, listen to the community’s perceptions of key findings, and most importantly, drive the discussion deeper to identify and understand why certain components resulted in particularly high or particularly low MPAT scores.

Ultimately, to benefit from MPAT data collection (and ensuing participatory discussions of key findings), project staff and community members must truly listen to the body of data, ask probing and analytical questions about it, and learn from it (i.e. use it to inform decision-making).

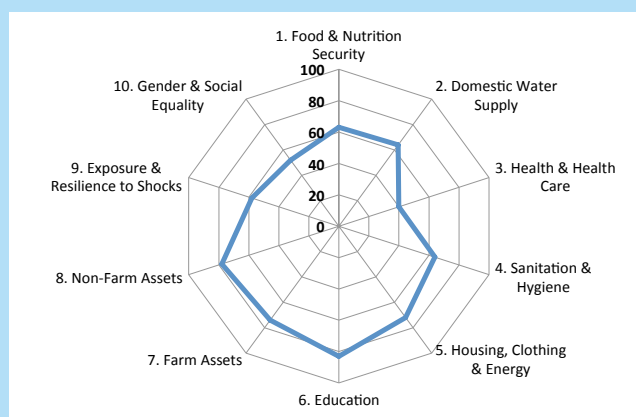
Box 11. Using MPAT to facilitate participatory discussion with local stakeholders in Sikkim, India (2011)



©Indian Institute of Technology

Researchers from the Indian Institute of Technology (IIT), Guwahati, Department of Humanities and Social Sciences, used MPAT in 2010-2011 to support several studies related to climate change, water and poverty in Sikkim, in the north-eastern region of India. They prioritized engagement with the local community throughout MPAT implementation, and especially in the post-survey analysis phase. Focus group discussions with community members and key government agency staff were used to validate and probe MPAT findings. The researchers emphasized a bottom-up approach to development in the area; they reported that analysing MPAT data through close interaction with the villages surveyed and with government officials was important in bridging the communication gap between the communities and the implementing agencies. Discussing MPAT findings in depth with stakeholders was seen to support a more informed and demand-driven approach to the area's development and poverty reduction programmes.

The most effective means of engaging local stakeholders using MPAT data will ultimately depend on the context of implementation. Here, a successful approach involved examining MPAT results through qualitative focus groups with the local community and government officials. Easily shared and highly portable hand-drawn radar graphs of MPAT results, seen above, helped facilitate and guide these focus group discussions.

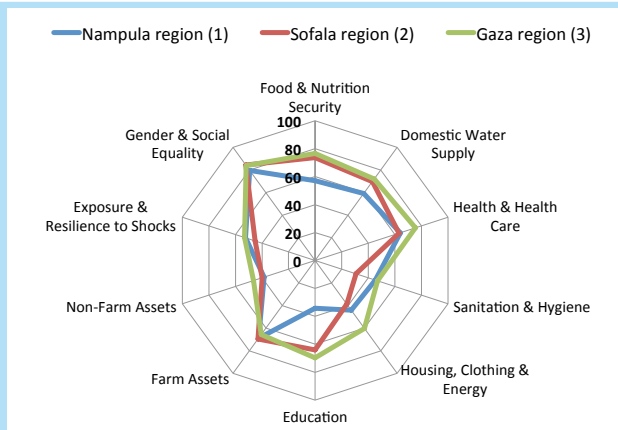


Implementing agency: Indian Institute of Technology (IIT), Guwahati, Ministry of Human Resource Development.

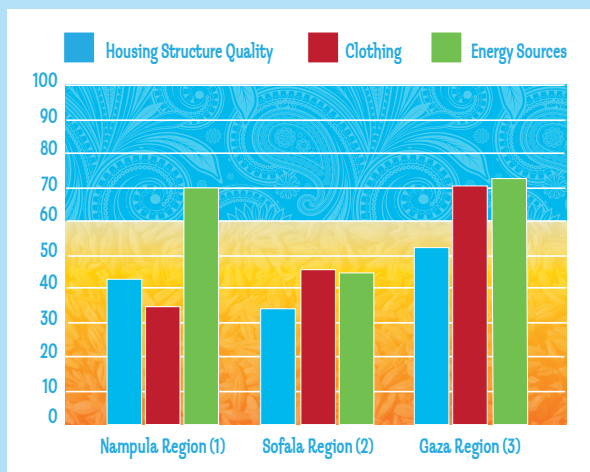
Contacts: Dr Anamika Barua (Assistant Professor), Suparana Katyaini (Research Scholar) and Bhupen Mili (Research Scholar).

Box 12. Comparing MPAT village results and analysing their subcomponents – Mozambique (2013)

MPAT village results can easily be overlaid in order to compare villages in the same region or country. This is also useful in quickly understanding disparities between components, relative to the area in question. This information can then be used to guide deeper analysis of subcomponent results. For example, let us compare data from three regions in Mozambique (from 106 households). We quickly see that there is a relatively large disparity in scores for the Housing, Clothing & Energy component.



The scores for Nampula and Sofala look quite similar, but when we examine the subcomponent scores, we see that the situation with regard to adequate clothing and footwear is worse in Nampula (35.6) compared with Sofala (46.4). It is Nampula's relatively high Energy Sources score that helps make its overall component score slightly higher than Sofala's, but this averaging hides the relatively poor situation with regard to clothing. The point here is that only by looking behind MPAT indicator values can project staff better understand the situation on the ground. However, as this case highlights, even with this added step we are still unclear as to the reason for this relatively low score on the Clothing subcomponent. Is it due to insufficient footwear? Or lack of clothing for extreme weather? By taking yet another step and looking at the data behind this subcomponent score, project staff can better understand the situation and how it might be addressed.



How to: Use the MPAT Excel Spreadsheet to cut-and-paste the component scores for each village into a new file and then create a radar graph giving each village its own line/colour. For the second graph, cut-and-paste the subcomponent results for each village (again using the Village Data tab) and use a new file to create a bar graph comparing the three villages' subcomponents.

Implementing agency: National Institute for the Development of Small Scale Fisheries (IDPPE).
Contacts: Paulo Muchave (Senior M&E Officer), Fisheries Promotion Project (ProPESCA).

2.3 Impact evaluation and MPAT

MPAT is particularly useful in measuring rural poverty outcomes (i.e. what has changed since the project was undertaken). But, as mentioned earlier, outcomes alone are not impacts; that is, changes seen in outcome data are not necessarily the result of a given project. In each of its 10 dimensions, MPAT data can show whether or not a specific population's situation has improved, and by how much, but the data cannot tell us what caused the change. For example, the staff of a health-care project may find that MPAT data show a drastic improvement in their community's Health & Health Care component scores between the baseline and project end. But these data will only tell part of the story. Was the improvement caused by the project itself, or could it be due to a new hospital built in the area by the government, an unusually mild rainy season or something else entirely?

Some organizations will deem it acceptable and sufficient for their programme M&E to use outcome data to demonstrate that the level of poverty in a rural community has decreased. Yet other organizations might require their M&E approach to 'take the next step' and demonstrate impact, that is, that their specific interventions were *the cause* of the decrease in poverty.

MPAT has been designed so that it may be used in conjunction with an impact evaluation design if a project so chooses. Once implemented, MPAT data and outcome measurements can be used to help demonstrate the causality of a project's impacts (attribution). If impact evaluation techniques such as random sampling, creation of a counterfactual and robust statistical analyses are undertaken in conjunction with and applied to MPAT implementation and data, then MPAT data can effectively be used to show that a programme intervention is the reason, *the cause*, of a change in rural poverty. The strengths of MPAT as a data-collection tool, especially for capturing poverty outcomes, complement such impact evaluation approaches.

Recommendations on how to design and implement an impact evaluation design (with or without MPAT) are beyond the scope of this User's Guide. There is extensive literature on the topic that should be consulted by organizations deciding to pursue impact evaluation as part of their M&E strategies. In such a context, MPAT can be the metric at the core of the data collection efforts.



Key points from this chapter

MPAT can strengthen the planning and design process by providing:

- An overview of the poverty situation along 10 dimensions
- Easily communicated data to help engage stakeholders
- Solid information to help make resource allocation decisions less subjective.

- ✓ MPAT is largely focused on outcomes; the Standardized MPAT does not collect data on project inputs and outputs directly.
- ✓ MPAT can highlight implementation issues at project midterm, providing an opportunity for mid-course correction to ensure effective operations. This is potentially more valuable than collecting data at project-end, because there is still time for action and improvement.
- ✓ To obtain a truly usable understanding of MPAT's values, users must look behind the numbers, using qualitative tools and approaches. It is strongly recommended that MPAT users and project staff hold an open discussion or focus group with community members from diverse backgrounds (e.g. village leaders, teachers, health-care workers, women's groups) to share MPAT results, listen to the community's perceptions of key findings, and most importantly, drive the discussion deeper to identify and understand why certain components resulted in particularly high or particularly low MPAT scores.
- ✓ To derive the greatest benefit from MPAT data collection, project staff and community members must truly listen to the body of data, ask probing and analytical questions about it, learn from it, and use it to improve their programmes.
- ✓ To summarize what MPAT cannot do: as a stand-alone tool, MPAT cannot necessarily measure project inputs and outputs, it cannot single-handedly explain the 'whys' behind the data, and it cannot prove that a particular project or activity caused changes in MPAT scores. However, MPAT can be used in conjunction with other data-collection tools and analytical methods to address these M&E issues.



Chapter 3



Chapter 3 Preparing for MPAT

This User's Guide provides: a robust data-collection tool tested by IFAD staff and partners; specific instructions on sampling in rural areas; a training guide for enumerators; a data-entry method to ensure accuracy; a data analysis spreadsheet that 'does the math' for you; and a visual way to display the data so that staff and community members alike can understand the results.



Figure 3.
How to use MPAT

3.1 MPAT preparation checklist

The checklist in Annex I provides an overview of steps required for successful MPAT implementation, including general preparation, training, data collection, data entry and MPAT results.

3.2 Involving key people from the beginning

As with any project in rural development, 'buy-in' from local leaders and staff members is a crucial aspect of the viability, impact and success of MPAT. Local leaders' influence and roles in community decision-making will vary widely among regions, but providing appropriate local officials (from government officials to traditional village leaders) with basic information on the aims and scope of MPAT *well before* actual survey implementation will likely serve to gain acceptance of the tool, eliminating potentially costly bureaucratic obstacles down the line. It should be noted that traditional leaders, in particular, should be engaged as part of this process, as they still hold important roles in many rural areas throughout the less developed world and are a vital part of the decision-making process. Including such key people from the beginning of MPAT implementation can also provide project staff with otherwise difficult to obtain 'insider' information for understanding and assessing poverty in the target community.

Thus, any project planning for implementing MPAT should also involve a series of brief discussions with key local leaders, community members and staff members to explain MPAT's purpose and value. These discussions can be informal meetings over a meal or more formal workshops, depending on the local context and priorities of the community. Information from this User's Guide (particularly Chapters 1-3), as well as the MPAT website, can provide helpful resources towards this end. Such an

approach will ultimately serve to ensure a smoother implementation process, greater cooperation from local community members and a greater willingness to accept the data as a solid basis for making programme decisions.

3.3 Timing of MPAT implementation

- It should be clear from the earlier discussion on MPAT's usefulness (see Chapter 2) that MPAT offers the greatest range of benefits when implemented in the earliest stages of a project. For example, when entering a new region, the tool can be used by an organization to scope, plan and guide project design and decision-making to determine whether or not a specific intervention is warranted in the area. In addition to its use as a tool for such early needs assessment and information gathering, MPAT can serve as a discussion topic for participatory engagement and as a tool for gathering baseline data for comparison over time (as discussed previously, MPAT has great value when implemented consistently in several key project phases – at baseline, midterm and project end). For these reasons, it is highly recommended that MPAT be implemented before the start of a project.

That said, it is possible to begin MPAT implementation midway through an ongoing project. Changes over time can still be tracked from the point in time of MPAT implementation, but prior changes will of course not be captured in the MPAT data. However, in an ongoing project, MPAT implementation will still provide value as a 'snapshot' of the poverty situation, and may help an organization think about what type of project may be most needed and appropriate in the near future given that snapshot.

3.4 Translating MPAT surveys and training materials

Before translating any MPAT materials, it is suggested that users first closely review the following items:

- MPAT Household Survey
- Notes and definitions for the Household Survey (see page 98)
- MPAT Village Survey
- Notes and definitions for the Village Survey (see page 126)
- MPAT consent statement
- Enumerator training programme

If a professional translation service is to be used, ideally it should have some experience in translating development-related surveys. Every effort should be made to stay true to the language and meaning of the survey questions as originally devised. Because responses will often vary depending on the way in which a question is asked, it should be kept in mind that these questions were developed so that they could be asked precisely as they are written in the Standardized MPAT. Also, as MPAT is standardized, it is crucial that the same questions are asked in the same way wherever MPAT is implemented.

There are three primary ways to help ensure that translations are accurate:

- (i) Collaboration between translators and MPAT trainers/staff.** Translators will need to work with staff that fully understand the MPAT questions, so they can learn the correct meaning and intent of the questions in order to translate them clearly and accurately. Word-for-word translation directly from the survey page will not necessarily provide an accurate translation of the correct meaning; close collaboration with someone familiar with the purpose of the MPAT questions is necessary.
- (ii) Double-blind translations, especially for the surveys.** Ideally, the MPAT Household and Village Surveys should

be translated into the local language; then a second translator (who hasn't seen the original MPAT surveys before) should translate the local language version back into English (or one of the other languages already available). This is often called back-translation or double-blind translation. The original English and back-translated versions should then be compared to identify discrepancies and, ultimately, to arrive at the most accurate translation.

- (iii) Field-testing survey translations.** Once the surveys and supporting training materials are translated, they should be thoroughly reviewed by project staff that have a full understanding of the MPAT surveys. However, even if every effort is made to translate the items accurately, discrepancies and errors may still remain. These may be due to a misunderstanding of a question's intent or simple human error. For this reason, project staff, who at this point are very familiar with MPAT and have read through all the training materials, should field-test the translation in households. This should take from half to a full day and should occur before enumerator training begins. This is a crucial step, because not only will it provide a way of identifying errors in the translation, but it will also ensure that project staff (especially those that will implement enumerator training) do indeed have an intimate understanding of the MPAT surveys and the intent of the questions.

MPAT materials to be translated into the local language and distributed to trainees include:

- MPAT consent statement
- MPAT Household Survey
- MPAT Village Survey
- Notes and definitions for the Household Survey

- Notes and definitions for the Village Survey
- Handouts, visual aids (PowerPoint) and/or training materials specified in the training lesson plans
- *(Optional)* Training lesson plans

While these steps will minimize translation errors, there is still a chance that issues will remain. To further minimize the chance of errors, enumerators should be encouraged to examine the wording and meaning of the survey questions during the enumerator training programme, comparing the translations to the English (or another pre-translated language) where possible and looking for discrepancies. This will also show enumerators that their input is important and can be used to further strengthen the quality of the translation and the implementation of the tool itself. Thus, when planning MPAT's implementation, one should only print all needed surveys *after* the enumerator training programme is completed.

3.5 MPAT budget and staffing needs

In addition to the size of the sampling frame (see Chapter 4) and the scope of the

poverty alleviation project at hand, key decisions pertaining to the specifics of MPAT implementation will largely depend on the implementing organization's available budget. MPAT has been designed to be as cost-effective and efficient as possible, but implementation of the tool still requires project funding/budget resources. The budget for MPAT implementation will largely depend on the number of enumerators, enumerator supervisors and data-entry staff required, given the number of households to be surveyed.

To understand data-collection budget needs, one should estimate the number of enumerators needed and the time it will take to collect the data. Enumerators work in pairs when visiting households to implement the MPAT Household Survey, and it is recommended that enumerator teams (multiple teams can work simultaneously in different villages) be no fewer than six to no more than 14 enumerators (below this number, data collection will be somewhat inefficient, and beyond this, it will be difficult for the enumerator supervisors to manage the teams). These options are illustrated in Table 2.

Table 2. Time estimates for enumerator teams to complete surveys

Number of enumerator pairs in the team	Total work hours per day (6 hours per pair – conservative estimate)	Total households surveyed per day (total of 70 min./household – conservative estimate, including travel time)	Approximate number of days needed to survey one village of 30 households
3 (6 people per team)	18	15	1.9
4 (8 people per team)	24	21	1.5
5 (10 people per team)	30	26	1.2
6 (12 people per team)	36	31	1.0
7 (14 people per team)	42	36	0.8

Another option for estimating potential costs is to consult Table 3, which provides a breakdown of costs for each item/task involved in MPAT's implementation. Data are taken from four different countries and average costs are provided, scaled to a sample size of 480 households. In addition, the standard deviation for each item/task is also

given, because for some of these costs, there was a great deal of variation among agencies and countries. Data are also provided scaled to a sample of 900 households (note that the translation and training costs⁹ are not adjusted upwards for these estimates at 900 households).

Table 3. MPAT implementation cost estimates based on field experience (by item/task)

Cost data from use in 1,540 households in: Bangladesh (2013), China (2013), India (2011) and Kenya (2011 and 2013)	Scaled to 480 households		Scaled to 900 households
	Average cost	Standard deviation	Average cost
Item/task			
Translating surveys to local language(s)	227	150	227
Training enumerators, supervisors and data-entry staff (CSC)	3 133	2 775	3 133
Printing surveys, consent statements; misc. (pens, clipboards, etc.)	487	199	913
Creating lists of households and maps (if not available)	N/A	N/A	N/A
Compensating enumerators for survey implementation	3 756	1 739	7 042
Compensating village leaders for their support/assistance (if needed)	753	675	1 412
Transporting enumerators and supervisors	2 836	1 772	5 317
Staff for data entry (CSC) (if need to hire)	1 000	751	1 875
Trainer (if need to hire)	1 285	728	2 410
Other/miscellaneous	435	161	816
Totals	13 912	~3 900	23 146

Note: in US\$.

Based on these data, users could expect to spend approximately US\$14,000 to use MPAT in 480 households (keeping in mind that, based on the standard deviation for the total costs, the range of +/- one standard deviation is ~US\$10,000 to ~US\$17,800). According to the data presented in Table 3, the costs per survey for each country (total costs divided by 480) were: US\$28.5 for Bangladesh, US\$30.6 for China, US\$36.6 for India and US\$17 for

Kenya. Across all four countries, the average cost per survey was US\$28.2 (standard deviation = US\$8.1).

Of course, users should keep in mind that costs will vary greatly based on each agencies' circumstances, and that these costs were based on implementation of the MPAT beta version. *It is hoped that the resources and materials in this User's Guide will help bring down implementation costs further.*

9/ The assumption here is that the same number of staff work more days to survey more households.

Key points from this chapter

- ✓ The checklist in Annex I provides an overview of the steps required for successful MPAT implementation, including general preparation, training, data collection, data entry and MPAT results.
- ✓ 'Buy-in' from local leaders and staff is an important consideration in the viability, impact and success of MPAT. Project staff should plan a series of brief discussions with key local leaders, community members and staff members to explain the purpose and value of the tool.
- ✓ MPAT offers the greatest benefits when implemented in the earliest stages of a project. In addition to its use as a tool for early needs assessment, information gathering and design, it can serve as a discussion topic for participatory engagement and as a tool for gathering baseline data for comparison over time.
- ✓ Translating MPAT materials accurately and correctly is crucial, especially for the Household and Village Surveys, as the survey questions were developed to be asked precisely as written.
- ✓ There are four primary ways to help ensure that translations are accurate: use a professional translation service experienced in surveys; have close collaboration between translators and MPAT trainers/staff; use double-blind translations; and field-test the consent statement and survey translations.
- ✓ MPAT implementation requires project funding/budget resources. Costs will largely depend on the number of enumerators, enumerator supervisors and data-entry staff required, given the number of households to be surveyed. The total cost to date, adjusted for implementing the beta version of MPAT with a sample size of 480 households, is estimated at US\$14,000 on average (ranging from US\$10,000 to US\$17,800). It is expected that, thanks to the additional resources provided in this User's Guide, these costs will come down in future MPAT implementation.



Chapter 4



Chapter 4

Random sampling to select MPAT villages and households

Selecting the households and villages to be included in MPAT surveys is a crucial aspect of MPAT's implementation and one that must be done carefully – this chapter provides specific and practical guidance towards that end.

4.1 How many households to sample?

MPAT employs a standardized 16-30 x 30 sampling approach (16 to 30 villages and 30 households per village), using a geographically stratified, multistage sampling approach to ensure a random sample, acceptable minimum sample size (i.e. the number of households to be surveyed) and good geographical coverage.

The overarching goal of using a random sampling approach is to collect data representative of the population in question. Much like other multivariable surveys used in the context of development projects, MPAT employs a two-stage sampling approach, which ensures that each household in the region in question has a chance to be included in the survey and that geographical coverage is balanced.

This geographically stratified random sampling procedure is the same methodology IFAD currently uses for its Results and Impact Management System (RIMS)¹⁰ and is also used by agencies such as UNICEF (for its Multiple Indicator Cluster Surveys [MICS])¹¹ and ICF International (for its Demographic and Health Surveys).

While there are many considerations involved in determining an appropriate sample size, in practice the sample used in a study is largely based on practical considerations of data collection and the need to have sufficient statistical power and validity. MPAT surveys are essentially cross-

sectional surveys that provide the user with an understanding of the current situation in an area – an understanding that can responsibly be generalized to the population from which the sample is taken.

With an eye to controlling costs while maintaining the quality and usability of data, MPAT uses a standardized cluster size of 30 households per village.¹² Given the sampling assumptions needed for a basic cross-sectional study (in which the prevalence/proportion of a given indicator is the primary variable to be measured), and accounting for the effect of clustering, a conservative minimum sample size would be in the range of ~500 households (assuming 30 households per cluster). *Thus, it is recommended that MPAT users sample a minimum of 16 clusters (i.e. 480 households) and up to 30 clusters (900 households) based on project size, needs and budget.* For relatively large projects (such as IFAD's and those of other donors), the recommendation would be to carefully calculate a sample size specific to the project; failing that, the recommendation is to use the 30 x 30 design – see Box 13 below for a discussion of the merits and limitations of this approach..

Where villages are very small (less than 30 households), MPAT users should try to sample all households in the village. For exceptionally large villages (400+ households), users should geographically stratify the village into multiple units and then sample households. Specifically, for villages between 400-799 households, two areas should be defined, and one of the two newly defined areas should be randomly selected (e.g. by a coin toss) – 30 households should then also be randomly selected from that 'half' of the village, as if it were an independent village. For villages with more

10/ The RIMS sampling methodology, in turn, is very similar to that used by other donors and governments conducting rural household surveys. The interested reader can find the original version of the IFAD RIMS guidelines at www.ifad.org/operations/rims/guide/e/part1_e.pdf.

11/ Note that MPAT's sampling guidelines are in line with those of UNICEF's MICS national survey recommendations, which suggest a minimum of 30 clusters per subnational domain, and 15-30 households per cluster. Further information is available at www.childinfo.org/mics4_ws1.html.

12/ With regard to limiting the impacts of clustering, it is generally preferable to have smaller cluster sizes, as this helps keep the 'design effect' lower (this effect is a calculation that increases the effective sample size in order to account for the impact of homogeneity within clusters). Using 10 or 20 households per cluster would thus be more efficient (because there tends to be much more homogeneity within clusters as compared with between clusters), but this would entail higher logistical costs, as enumerators would have to travel to more villages. That said, there are also statistical benefits to having at least 30 households per cluster/village.

than 800 households, four areas should be defined and then two of those four areas should be randomly selected for surveying 30 households each, as if they were two

independent villages (for a total of 60 households). The following section discusses how to randomly select clusters/villages.

Box 13. Notes and caveats on the MPAT sampling approach



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For any quantitative study, ideally, one would conduct a specific sample size calculation to determine the desired sample. The variables needed for such a calculation would depend on what was to be measured and how. Thus, determining an appropriate sample size is unfortunately not as simple as consulting a table with proportions for different-sized populations. Indeed, for all intents and purposes, if one were interested in measuring a given proportion in a large population (e.g. the percentage of households that treat their drinking water), then a sample of 500 would

likely provide essentially the same levels of precision in a population of 5,000 as it would in a population of 100,000.

Calculating a suitable sample size when using a tool such as MPAT, which is based on surveys that capture data on many multiple variables, is not straightforward. Preferably, one would select the MPAT variables that have the most variation in the population to be surveyed and then calculate a sample size based on that variation, with the assumption that it will then be sufficiently large to allow for statistically valid estimates of the other variables (whose variability is less than that of the indicators in question). This, however, requires one to already have some idea of the variation of different indicators in the target population – data that can be estimated through a pilot.

Another important consideration in calculating sample size regards sampling multiple households in each cluster/village. As there is a higher level of similarity, of correlation, among households in the same village than among households in different villages, this intracluster correlation (ICC) should be factored into sample size calculations as well (the resulting design effect will increase the effective sample size).

Ideally, and capacity allowing, users should calculate a specific sample size before using MPAT. However, many projects may not have the time or capacity to conduct pilots to understand which indicators are most variable and to then calculate the needed sample size. Consequently, in spite of the inherent shortcomings of this one-size-fits-all approach, it is recommended that resource-constrained (including time-constrained) MPAT users implement the 16-30 x 30 sampling approach discussed in this section. (Sampling error calculations and ICC can and should be calculated after the survey data are collected).

4.2 Organizing population data to create a sampling frame

Randomly selecting villages and then households helps enable the collection of data representative of the population in question. This cannot be easily accomplished by deliberately screening and selecting villages and households in an effort to create a representative sample manually. While one may try to control for observable characteristics of interest, one cannot control for all the *unobservable* characteristics that also influence behaviours and opinions. Random sampling allows us to create a sample that, statistically speaking, avoids this issue of bias and represents the population of interest with a high degree of confidence.

In order to select random, representative villages for MPAT's implementation, a sampling frame is constructed. The frame is a collection of all population units (the 'sampling universe'), from which a very limited number of population units will be randomly selected. The important thing to note here is that, in creating the sampling frame, all population units from the area of interest (project area or other geographically bounded area) must be included, so that each population unit has an (ideally) equal probability of being randomly selected. For example, if one is limiting the sampling universe only to villages participating in a project, then this must be stated in any MPAT reports, because in this case, one is only

collecting a representative sample from the project villages, not from the entire region/ population in question (unless, of course, every village in the region is participating in the project).

A table is used to create the sampling frame. The first step is to list all the subregions (or other administrative areas), and then within each to list all villages belonging to that region. A hypothetical example is shown in Table 4; of course, in a project context, this list/table would be much longer.

One convention is to list the administrative areas alphabetically, and then within each area list the clusters/villages alphabetically as well. With the villages so organized, their respective populations (i.e. total number of people) should also be listed using up-to-date data (ideally from within the last two years). The population data are then used to calculate the cumulative total population line-by-line, as shown in the right-hand column in Table 4. This is done by adding each village's population to the cumulative total that precedes it (e.g. subregion AAA, village B's population [342] is added to village A's population [543] to yield the cumulative line tally for village B [885] and so on).

Lastly, calculate the total population and compare that with the last line of the cumulative population tally; the two figures should be equal.

Table 4. Hypothetical population data for 25 clusters organized to derive a random sample

Subregion	Cluster/village	Population ^a	Cumulative population
AAA	A	543	543
	B	342	885
	C	559	1 444
	D	2 478	3 922
DDD	A	346	4 268
	B	2 357	6 625
	C	1 789	8 414
	D	234	8 648
	E	689	9 337
GGG	A	124	9 461
	B	457	9 918
	C	2 356	12 274
MMM	A	267	12 541
	B	457	12 998
	C	357	13 355
	D	478	13 833
TTT	A	1 246	15 079
	B	550	15 629
WWW	A	459	16 088
	B	1 459	17 547
	C	478	18 025
	D	2 467	20 492
ZZZ	A	373	20 865
	B	110	20 975
	C	593	21 568
TOTAL		21 568	

^a Note that this is the total population, not the total number of households per village.

4.3 Using probability proportionate to size to randomly select clusters

Once the sampling frame is created, the next step is to randomly select a predetermined number of clusters using a random sampling technique based on population size (i.e. probability proportionate to size¹³).

For the sake of this example, it is assumed that only five clusters/villages will be sampled (out of a total of 25 villages in the sampling universe in Table 4). Again, for the sake of conveniently explaining the technique used, a very small hypothetical dataset has been created; however, these same steps should be used to randomly select between 16 and 30 clusters/villages from the total population to be surveyed.

The first step is to divide the total population (21,568 in this example) by the number of clusters to be sampled (five, in this example). This results in a sampling interval (also known as a selection interval) of 4,313.6 ($21,568/5 = 4,313.6$).

Next, one needs to determine where – at what value – to start selecting the clusters. To do this one must choose a number

between 0.1 and the sampling interval of 4,313.6. There are many ways to select a random number; one easy option is to use the 'RANDBETWEEN' function in Microsoft Excel. In this case, one sets the 'bottom' value at 0.1 and the 'top' value at 4,313.6 and Excel provides a random number of 701. This is the value to be used for the random start. Random number tables are another option for obtaining a random number, as are websites such as www.random.org.

Now one looks for the first village whose cumulative population is equal to, or greater than, the random start number of 701. The first cluster/village that fits this criterion is cluster/village B in subregion AAA. Once the first cluster/village is so selected, one simply adds the sampling interval (4,313.6) to the random start number in order to determine the next cluster to be sampled, and then one adds the sampling interval to the resulting number to determine the next cluster, and so on. To make this clearer, the calculations for the current example are shown in Table 5, and the randomly selected clusters/villages that result are shown in italics in Table 6.

Table 5. Calculations to identify randomly selected clusters/villages

Calculation to select village	Cumulative population cut-off	Corresponding village
701 (random start)	885	Subregion AAA, village B
$701 + 4\,313.6 = 5\,014.6$	6 625	Subregion DDD, village B
$5\,014.6 + 4\,313.6 = 9\,328.2$	9 337	Subregion DDD, village E
$9\,328.2 + 4\,313.6 = 13\,641.8$	13 833	Subregion MMM, village D
$13\,833 + 4\,313.6 = 17\,955.4$	18 025	Subregion WWW, village C

13/ Users should be aware of one shortcoming of this approach (i.e. sampling based on probability proportionate to cluster/village size): it invariably favours larger clusters/villages because it is population-based. Thus there is a higher probability of selecting a larger village over a smaller one.

Table 6. Using the sampling interval and random start number to select clusters

Subregion	Cluster/village	Population ^a	Cumulative population	Sample selection (clusters/villages)
AAA	A	543	543	
	B	342	885	1
	C	559	1 444	
	D	2 478	3 922	
DDD	A	346	4 268	
	B	2 357	6 625	2
	C	1 789	8 414	
	D	234	8 648	
	E	689	9 337	3
GGG	A	124	9 461	
	B	457	9 918	
	C	2 356	12 274	
MMM	A	267	12 541	
	B	457	12 998	
	C	357	13 355	
	D	478	13 833	4
TTT	A	1 246	15 079	
	B	550	15 629	
WWW	A	459	16 088	
	B	1 459	17 547	
	C	478	18 025	5
	D	2 467	20 492	
ZZZ	A	373	20 865	
	B	110	20 975	
	C	593	21 568	
TOTAL		21 568		

^a Note that this is the total population, not the total number of households per village.

As can be seen in Table 6, this method of randomly selecting villages also helps ensure that the resulting villages are relatively well-distributed geographically across the various subregions of the project area.

Note that in this hypothetical example, several villages have populations that are quite large. Assuming an average household size of five members, Village D in subregion AAA, Village B in subregion DDD, Village C in subregion GGG, and Village D in subregion WWW all have more than 400 households and would warrant geographical stratification into multiple units if randomly selected. In the current example, Village B in subregion DDD *was* randomly selected and has a total population of 2,357, or approximately 470 households (again, assuming five people per household). Thus, in accordance with the instructions above, the village should be geographically divided into two halves, *only one of which should then be randomly selected for household sampling* (the random selection can be done either by the methods described above or by a simple coin toss, given that there are only two options).

4.4 Notes on randomly selecting households in each cluster/village and additional clusters/villages

The step-by-step instructions for randomly selecting households in each village are explained in detail in Chapter 7, Section 7.2. This section discusses the preparations needed for this task and explains how to address different situations that may arise in setting the MPAT sample.

To begin with, supervisors will need a list of all households in the village in order to create the random sample of households. Using 'random walk' or other non-random sampling approaches is not recommended.¹⁴ Lists of households should, ideally, be no more than two years old. If the list was last compiled more than two years prior to MPAT

implementation, project staff should work with village leaders to update the household lists before conducting the random sampling.

If there is no existing list of households in a given village, then project staff should work with local government and/or village officials to create these lists, in order to make random sampling of households possible for the MPAT Household Survey. Another option in this case is to consult with partners and/or other agencies already working in the area that may already have household lists and/or maps. In this case, if another agency has lists and maps that are more than two years old, it may be worth offering to update these lists by consulting with village leaders and/or other officials in return for being able to use them.

While the standard MPAT sampling methodology is a sample size of 30 households per village, it will *not always* be appropriate to use this size, especially in areas where the average number of households per village is around, or even less than, 30. In cases where it is less than 30, every available household should be sampled and the remaining non-sampled households (i.e. the difference between 30 and the number actually sampled) should be sampled elsewhere in the project area. Such planning arrangements should be made at the beginning of the sampling process, as it is often the case that, after creating the sampling frame (as described above), there may be a few unusually large villages as well as small ones. The households not sampled in the small village(s) can be reallocated to the especially large villages where geographical stratification and the sampling of two resulting clusters of 30 each is required.

Alternatively, if after the sampling frame is completed, it is apparent that one or more additional villages will be needed (as some of the randomly selected villages are less than 30 households in size), the same sampling frame should be used to select additional clusters (keeping the villages already randomly sampled). To do this, the existing

14/ Seemingly random approaches such as 'random walk' are not recommended as a substitute for randomly selecting households based on lists, because such approaches are rarely truly random in practice. Indeed, under such circumstances, it is human nature to tend towards readily available households (whether because they are close to the village centre or because someone is already sitting outside the home). Adhering to a household-list-based sampling approach helps ensure that the village sampling is truly random, and therefore representative.

sampling frame should be kept, and a new random start number should be calculated based on the number of excess clusters needed. For example, assume that initial sampling resulted in three small villages with populations of less than 30, and it is thus estimated that two more villages must be sampled (to make up for the households that won't be sampled across the three small villages). Selecting these two additional villages can be done using the same steps as above, but, instead, calculating a sampling interval by dividing the total population by two, and then using that interval to come up with a new random start number. In the case of only one additional village, no sampling interval is needed, and one can simply come up with a random start number between 0.1 and the total cumulative population. In both cases, if the newly selected village is one of the same villages already selected, then the procedure should be repeated until a new village is randomly selected.

Staying with the above example: dividing the total population by two ($21,568/2$) yields a new sampling interval of 10,784. Next, a new random number between 0.1 and 10,784 must be found; using the RANDBETWEEN function in Microsoft Excel, the number provided is 3,265. The same approach as above can be used to select the first village cluster to be randomly sampled (i.e. the village for which the cumulative population is greater than or equal to 3,265), which in this example is Village D in subregion AAA. Then 10,784 (the sampling interval) is added to 3,265 ($3,265 + 10,784 = 14,049$) to find the next village to sample. Village A in subregion TTT is the first village in which the cumulative population is equal to or larger than this sum (14,049). Thus, Village A in subregion TTT should be sampled to make up for the small populations of the other villages sampled in this example – see Table 7.

Table 7. Using the sampling procedure to select additional clusters when needed

Subregion	Cluster/village	Population ^a	Cumulative population	Sample selection (clusters/villages)
AAA	A	543	543	
	B	342	885	1
	C	559	1 444	
	D	2 478	3 922	6 (extra)
DDD	A	346	4 268	
	B	2 357	6 625	2
	C	1 789	8 414	
	D	234	8 648	
	E	689	9 337	3
GGG	A	124	9 461	
	B	457	9 918	
	C	2 356	12 274	
MMM	A	267	12 541	
	B	457	12 998	
	C	357	13 355	
	D	478	13 833	4
TTT	A	1 246	15 079	7 (extra)
	B	550	15 629	
WWW	A	459	16 088	
	B	1 459	17 547	
	C	478	18 025	5
	D	2 467	20 492	
ZZZ	A	373	20 865	
	B	110	20 975	
	C	593	21 568	
TOTAL		21 568		

^a Note that this is the total population, not the total number of households per village.

Non-response, a common problem in survey administration, is often addressed by intentionally oversampling at the onset of the survey. While the MPAT sampling approach does not explicitly oversample for the entire sample, *it does oversample at the village level in order to account for non-responses*. The procedure for doing so is straightforward. At the village level, when enumerator supervisors create the random sample of households for a given village, they will first randomly select 30 households, *followed by an additional five or more households* (if one expects high rates of non-response). It is almost always the case that some of the sampled households will not have a suitable adult willing/able/available to participate in the MPAT survey when enumerators visit. Sampling the five or more additional households will help ensure that if one or more households is not available to participate in the survey, the sample will not be below the recommended minimum of 30 households.

In the event that these additional households need to be surveyed, they should be visited only one at a time in the order in which they were randomly selected (and *not* based on location or convenience). In the rare instances in which many additional households need to be surveyed, due to non-response in the original randomly selected sample, the enumerator supervisor will once again meet with the village leader to select additional households. In this scenario, the enumerator supervisor is responsible for working with the village leader to learn about the socio-economic characteristics of the ‘missing’ households, so that *households with similar characteristics can then be selected and visited*. Should this occur, it must be mentioned in any MPAT reports. To this end, it is the responsibility of the enumerator supervisors to note the number of households that are not willing/able/available to participate in the MPAT survey for each village, and to take notes on

the characteristics of these households. This is also discussed in the enumerator supervisor training section.

If it is found that the non-response rate is particularly high for a region, then an additional 10 or more households per village should be randomly sampled from the beginning.

4.5 Sampling guidelines for the repeated use of MPAT in a region

MPAT is designed to be used repeatedly in the context of a given project or area. The data and indicator values obtained after MPAT’s initial use set the baseline for poverty assessment in the area. With subsequent use of MPAT in the same region, one can better understand the change in indicator values over time.

When the use of MPAT in a given area is repeated, for example, done at the beginning of the project (baseline), and then again perhaps for a midterm review, *the same sampling frame should be used – that is the same villages should be sampled again, but the household selection must be redone in each village*. In this way, the same clusters are visited, but a different mix of households within each cluster is surveyed.

In areas where the average village size is very small, some households will inevitably be re-sampled in later MPAT surveys. Of course, given the anonymous nature of MPAT, it should not be possible to know which specific households were already surveyed, unless, of course, the village size is less than 30 households, in which case all the available households should have been surveyed the first time around. In such cases, this should be documented in any reports.

The repeated use of any survey can introduce additional bias, which may impact the quality of the data collected. Depending on the amount of time between surveys, in relatively small villages – where some of the households that participated previously will, by chance, be randomly selected to

participate again – respondent fatigue can be a concern, and with it higher rates of non-response. Given this, it is recommended that when using MPAT for a second or third time, enumerator supervisors randomly select an additional 10 households after the required 30 have been selected, in order to address the possible higher rates of non-response (especially in smaller villages). In addition, for those households randomly selected to participate a second, third or even fourth time, there may be a deliberate adjustment of responses based on perceived changes following the first MPAT survey, which respondents may attribute to their initial responses (i.e. if respondents feel that their responses, one way or another, influence resource allocation or other policies, they may deliberately alter their responses when MPAT is used again).

4.6 Sampling recommendations for small projects (and those wishing to use comparison/control groups)

This chapter discusses how to create a survey sample of villages and households that will likely be representative of the population in question. However, for users with relatively small projects, or research objectives, the chapter's standard sampling recommendation of a minimum of 16 clusters/villages may be more than is needed, and more of an expense than is warranted. In such situations, users may opt to use MPAT to collect data from villages or households on a smaller scale, so that the resulting data will provide sufficient coverage of the project area to support M&E, but will not necessarily be representative of the population from which it is taken. That is, the distinction is between a potentially representative sample of the population and a representative sample of the project area – sometimes the latter will be adequate for small-scale projects and/or resource-limited users.

For example, if a small NGO was planning to expand its operations to a new area and wished to collect baseline data for planning purposes (and for future M&E), but only had funding/capacity to work in a region covering a total of 20 villages, with an average of 20 households per village, it could use a sample smaller than 16 villages for implementing the MPAT surveys. It is recommended that in such cases, every effort be made to determine what minimum sample size will still provide representative data about the project population, but it is recognized that this may not always be feasible due to budget or logistical limitations. If such an approach is adopted, users should still calculate the sampling error once the survey data are collected to better understand the extent to which it is representative of their project area and even of the larger population.

Another project-relevant issue that will have important implications for MPAT sampling is the creation of comparison groups. In certain contexts, users may wish to compare project/beneficiary villages with others not participating in a given initiative. Such comparisons can help provide an understanding of the difference in conditions between project and non-project villages, and are typically central in impact evaluation efforts (creating a valid counterfactual). Certainly, users may choose to employ MPAT in their project area and also in nearby non-project villages (that is, comparison or control groups). If only some villages in an area are participating in a project, then using the prescribed sampling method will inevitably sample both 'treatment' and 'control' villages. If done effectively (in line with the recommendations of this User's Guide) at multiple time points, the results from the two different samples can be compared and MPAT data can be used to demonstrate how the situation has changed – or not changed – in project villages in comparison with non-project villages.

However, if the initial decision as to which villages were included in the intervention, and which were not, was not made based on randomized assignment, then it will be very challenging to determine that observable changes were due to the intervention in question, even with a comparison group. This is because the use of comparison groups is most effective when the intervention can be randomly assigned to villages/households (to create treatment and control groups). Other options, such as trying to 'match' project villages with similar villages that do not participate in the project (so-called 'natural control groups'), will not provide the same level of reliability as the randomized approach, as bias is introduced in the selection process. This is an issue

avoided through random assignment, but this will not always be feasible or ethical (as in cases where some villages would be denied a beneficial intervention for the sake of experimentation).

Some additional information that may be useful towards this end was provided in the discussion of impact evaluation in Section 2.3. However, it is beyond the scope of this User's Guide to describe how to plan for and undertake an impact evaluation. Users wishing to sample for and use comparison groups in their MPAT implementation and analysis will need to consult the relevant literature and/or perhaps recruit a consultant to assist them with evaluation design and data analysis.

Key points from this chapter

- ✓ The overarching goal of using a random sampling approach is to collect data representative of the population in question. MPAT employs a two-stage sampling approach, which ensures that each household in the region in question has a chance to be included in the survey and that geographical coverage is balanced.
- ✓ Calculating a suitable sample size (i.e. the number of households to be surveyed) when using a tool such as MPAT is not straightforward. Ideally, users should calculate a sample size based on data from a pilot implementation of the MPAT surveys. In cases where this is not feasible or convenient, for most projects a minimum sample size of 16 x 30 (16 villages with 30 households in each village) will likely be appropriate. Larger projects may use a 30 x 30 design.
- ✓ In cases where the villages are very small (less than 30 households), users should attempt to sample all households in the village. Exceptionally large villages (400+ households) should be geographically stratified into multiple units, and then one or more units (depending on the village size) can be randomly selected and treated as a 'normal' village for sampling purposes.
- ✓ Users may opt to use MPAT to collect data from villages or households on a smaller scale, so that the resulting data will provide sufficient coverage of the project area to support M&E, but will not necessarily be representative of the population from which it is taken.
- ✓ In certain contexts, users may wish to compare project/beneficiary villages with others not participating in a given initiative through the creation of comparison/control groups. Such comparisons can help provide an understanding of the difference in conditions between project and non-project villages.





Chapter 5

Chapter 5

Preparing to train the MPAT data-collection team

Detailed lesson plans and other materials for the various MPAT training programmes are presented in the following chapters and in Annexes I through IX, XIV and XV. This chapter presents an overview of the training and related key considerations.

Quality training is necessary to ensure that MPAT's results are accurate, and accurate results are necessary to ensure that programmes can act responsibly based on the data collected. Thus, MPAT training must be prioritized and carefully undertaken before implementation. This chapter provides a general overview of full MPAT training and sets the stage for the following chapters, which provide detailed explanations and guidance for undertaking each of these activities: enumerator training, enumerator supervisor training, field practice/piloting and data-entry training.

After conducting many MPAT training programmes, the design team has found that there is no one training timetable or schedule

that is appropriate for every context. Some steps of training will inevitably take longer than expected, while others will be completed more quickly. That said, this section strives to provide time estimates for completing each training component based on pilot implementations and MPAT field-testing during the 2008-2013 design period. MPAT users should see these estimates as a rough guide only.

It is recommended that users allocate a total of two weeks to full MPAT training (though, of course, it could be completed in less time), including classroom training, field practice/piloting and data-entry training. The first week is dedicated to enumerator training (days 1-4) and enumerator supervisor training (days 5-6). The second week allows both enumerators and supervisors to practise in the field (days 7-8) and to train data-entry staff (days 9-10). The structure of this schedule allows data-entry trainees to use actual practice surveys from the already-undertaken field practice for more hands-on, realistic data-entry training.

Box 14. MPAT training in Bangladesh (2012)



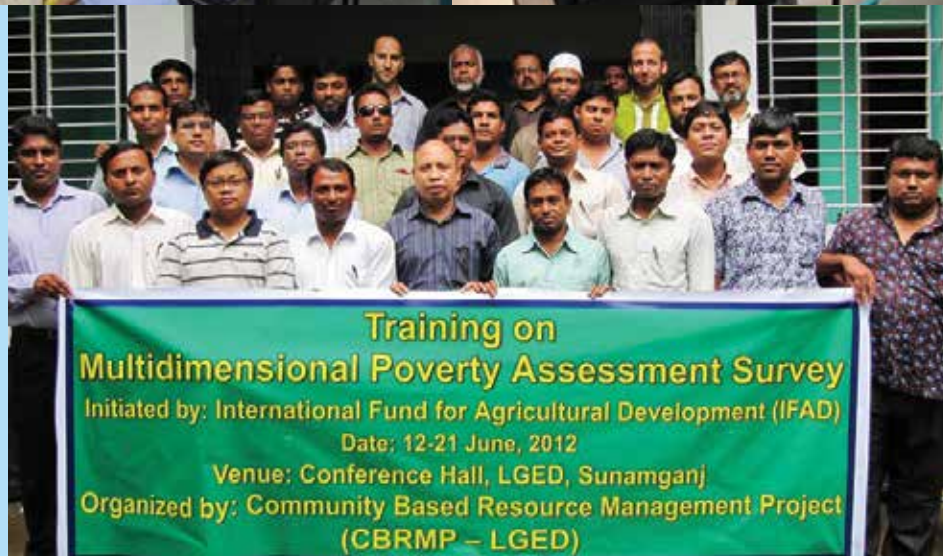
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The return on investment in high-quality training is reliable data. Conversely, poor-quality training results in data that are also of poor quality, filled with missing data and errors. IFAD partners in Bangladesh understood the need for high-quality training and planned appropriately to ensure sufficient facilities and supplies, and that breaks were regularly scheduled so participants did not become fatigued. Encouraging lively discussion and participation by trainees is also essential in keeping people motivated and engaged. The role play exercises in the MPAT training programme provide an excellent means of practice and of breaking the monotony of classroom-style training.

High-quality data require high-quality, well-organized, interesting training.



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Implementing agency: Local Government Engineering Department (LGED), Bangladesh.
Contacts: Sheik M. Mohsin (Project Director) and Nurul Amin (Senior M&E Officer).

5.1 MPAT training – an overview

Full MPAT training includes the following:

- An introduction to MPAT
- Enumerator training (focused on the Household Survey)
- Enumerator supervisor training (focused on sampling, management and the Village Survey)
- Field practice for enumerators and enumerator supervisors
- Data-entry training (focused on MPAT's data quality-control method of check-score-code)
- Household Survey: Practising in pairs and small group discussions
- Household Survey: Survey practice – role play in pairs
- Household Survey: Feedback loop, review common errors, scoring issues and difficult questions
- Household Survey: Role of enumerators and enumerator supervisors (also possible to insert at other times in the training schedule)
- Household Survey: Field practice
- Household Survey: Final review and wrap-up

Each of these items is discussed below.

MPAT enumerator training overview

Due to their central role and many responsibilities in MPAT implementation, the training of MPAT enumerators is the most time-intensive element of full MPAT training. Suggested topics for MPAT enumerator training follow. This training is designed to include role play and practice time, as MPAT is best learned through practice and feedback. It is recommended that four days be allocated for enumerator training and one to two days for enumerator field practice, but this is a conservative estimate and the training and field practice can be accomplished in less time.

- Introductions, training schedule and objectives, and MPAT overview
- Becoming familiar with the MPAT survey materials: Reviewing the consent statement and Household Survey
- Household Survey: How to ask the survey questions/importance of standardization
- Household Survey: Question-by-question review of survey and notes [on addressing atypical situations]
- Household Survey: How to record answers on the survey
- Household Survey: Stop-and-go role play for observation and discussion
- Household Survey: Survey practice – real-time role play, with trainees marking survey responses

MPAT enumerator supervisor training overview

Enumerator supervisors play an important oversight role to ensure smooth MPAT facilitation, including thorough communication with stakeholders and project staff. Enumerator supervisor trainees should be selected from among those participants who have already successfully completed MPAT enumerator training and have additional management skills and leadership ability. Because enumerator supervisors have already completed the more extensive enumerator training, the enumerator supervisor training typically requires only one or two days, plus a day or two of field practice (which are undertaken together with enumerator team field practice).

- Enumerator supervisor training: Overview and objectives, responsibilities of enumerator supervisors
- Random sampling of households/ assigning enumerators
- Village Survey: Question-by-question review of survey and notes
- Village Survey role play: Observation and in pairs
- Enumerator supervisor/Village Survey field practice (to be conducted with enumerator teams): one to two days
- Village Survey and supervisor responsibilities: Final review and wrap-up

Field practice for enumerators and supervisors, feedback

Field practice is one of the most important elements of MPAT training. It should follow real MPAT data collection/implementation

as much as possible. Field practice should be undertaken as the actual MPAT implementation would be, with adequate time allocated afterwards for questions, answers and specific feedback.



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Box 15. Importance of classroom training and field practice before using MPAT – Kenya (2011)



The MPAT enumerator training programme (see Annex III) is a classroom-based experience designed to familiarize enumerators with the Household Survey and to allow them time to role play and practice while still receiving detailed feedback from trainers. The images to the left and below show Nuru International M&E Officer, Rogonga Augustine, leading a training session and then providing feedback as enumerators role play.

After classroom-based training and practice are completed, at least one day of field practice should be organized. This practice session (pilot) is a crucial component of training because it is the closest an MPAT user can get to the full experience of implementation, while still allowing room for errors and mistakes. It is the last and most realistic training experience and the first main opportunity for all implementation staff to work together as a team. This last point is crucial, because this field practice ties together the enumerator training and the enumerator supervisor training, allowing everyone to see and understand a typical work day. While enumerators get to practise using the surveys with 'real' households, and encountering the real-world complications that come with such use, supervisors similarly have the opportunity to help village leaders/officials randomly select the households and then work with them to understand where the households are located.



©Nuru International

Implementing agency: Nuru International, Kenya.

Contacts: Veronica Olazabal (M&E Director) and Jamie Frederick (M&E Senior Program Manager).

Data-entry training overview

The reliability of data is a central concern in MPAT implementation. This is evidenced by the rigorous MPAT method of data entry, called check-score-code (CSC) (this method is discussed in much greater detail in Chapter 9: Data entry and quality control). In CSC, there are multiple steps and multiple staff roles dedicated to checking and double-checking the logic and accuracy of collected survey data before they are entered into the MPAT Excel Spreadsheet. Each of these steps and roles are covered in data-entry training.

CSC data-entry training can take place either at the end of full MPAT training or immediately before actual MPAT implementation begins.

The general training outline is as follows:

- Introductions, training schedule and objectives, and MPAT overview
- Overview of check-score-code, practice using dummy household survey
- Practise CSC with dummy village surveys
- CSC game: “What should you do when?”
- CSC practice using field-practice surveys/pilot surveys
- Final review and wrap-up

Review and wrap-up, communicating an implementation plan

The final day of MPAT training should be relatively flexible in terms of materials covered, and should be reserved for discussion of topics and issues that trainees

found difficult during field practice.

The trainer should be prepared to address any remaining questions or concerns.

Ideally, at the conclusion of the MPAT training programme, project staff should communicate the MPAT implementation plan and next steps. At a minimum, dates and the general project area for the intended MPAT data collection should be communicated to training participants.

5.2 Recruiting enumerators

Again, enumerators are key MPAT staff members. Project staff should carry out careful screening and selection based on the following criteria in order to ensure quality recruitment:

- Fluency in the country’s official language
- Fluency in the local language/dialect (in many cases, enumerators will be required to verbally ‘translate as they go’, as communities in rural areas may speak a variety of local dialects)
- Completion of a high-school-level education, at a minimum
- Gender balance within the enumerator team (ideally a 50-50 proportion of women to men)
- No previous survey experience is necessary (in fact, it is preferable that enumerators have no such experience, as poor survey practices from past implementation may be hard to correct).

Box 16. General training tips for MPAT

- All necessary materials should be prepared **before** training:
 - Consent statement in local language (one copy for each trainee)
 - Household Survey in local language
 - Village Survey in local language
- Note:** Final versions of both surveys will be printed and copied after training, but training versions will need to be translated and copied for use during the training itself.
 - Notes and definitions for Household Survey (see page 98)
 - Notes and definitions for Village Survey (see page 126)
 - Training materials, handouts, etc. (as requested by trainer)
- Set a clear timetable for training and follow it. Do not expect trainees to be able to stay after normal work hours, which can have a negative impact on the outcome of the training.
- Allow extra time if the trainer is not able to speak a language in which trainees are proficient. Activities and discussions will take longer to complete if real-time translation is needed.
- Watch your audience/read the crowd. If people look tired or bored, take a break or start a more active exercise. In general, ***short breaks should be taken at least every two hours and/or as needed.***
- ***If the trainer is an external, third-party trainer and not part of project staff:*** prepare detailed notes on the place, culture and special requirements of the training session, to be sent to the trainer well before training begins. Suggested types of information that will help the trainer plan are found in Annex II Useful information for an external trainer.

Project staff should determine how many enumerators the data-collection project will need and, if feasible, should recruit more enumerators than needed (to prepare for the likelihood that some individuals will not complete training or will underperform during training and thus will not be hired/selected). See the relevant table in Section 3.5

of this User's Guide for rough estimates for calculating staffing needs.

Enumerators showing the most promise (before and/or during enumerator training) and with some management experience or leadership ability can be selected and trained as enumerator supervisors.



Key points from this chapter

- ✓ High-quality data require high-quality, well-organized training. MPAT training must be prioritized and carefully undertaken before implementation.
- ✓ Full MPAT training includes: an introduction to MPAT, enumerator training (focused on the Household Survey), enumerator supervisor training (focused on sampling, management and the Village Survey), and data-entry training (focused on MPAT's data quality-control method of check-score-code).
- ✓ Enumerator supervisor trainees must have completed enumerator training.
- ✓ A clear timetable for training should be set well before its beginning. Similarly, all necessary materials (printed surveys, writing materials, etc.) should be obtained before the start of training.
- ✓ It is recommended that users allocate a total of two weeks to carry out full MPAT training, including classroom training, field practice/piloting and data-entry training. A suggested schedule is: days 1-4 enumerator training, days 5-6 enumerator supervisor training, days 7-8 field practice and days 9-10 data-entry training.
- ✓ Field practice is one of the most important elements of MPAT training and should be undertaken as the actual MPAT implementation would be.





Chapter 6

Chapter 6 Training MPAT enumerators

At first it seemed very difficult with so many questions to learn, but now it seems not so difficult after this training.

– MPAT enumerator trainee feedback,
June 2012, Bangladesh

A more detailed description of the recommended enumerator training agenda follows. This is intended as a general guide and can be revised as necessary for each individual context, programme and training team. Detailed training lesson plans based on this outline can be found in Annex III MPAT enumerator training – detailed lesson plans.

Lesson plans include descriptions of all training activities, as well as overviews of their objectives and rationales, materials required and time estimates. Users should keep in mind that these are just estimates of the time required, that is, suggestions of how much time to allocate. Trainers should select the sessions most appropriate to their situation based on the participants, the time available and training styles that may or may not work in their context.

1. **Introductions, training schedule and objectives, and MPAT overview** (2-2.5 hours)
 - Includes a PowerPoint presentation providing a 'big picture' description of MPAT, its purpose, development and structure.
2. **Becoming familiar with the MPAT survey materials: Reviewing the consent statement and Household Survey** (2 hours)
 - Allows trainees to spend time reviewing and asking questions about the MPAT consent statement and

Household Survey. This is the first step towards enumerators obtaining the needed depth of understanding of the purpose behind each of the MPAT survey questions.

3. **Household Survey: How to ask the survey questions/importance of standardization** (1 hour)
 - Demonstrates seven important elements for asking the MPAT survey questions correctly.
 - Explains the importance of asking the same question in the same way every time (i.e. reading the question exactly as it is written).
4. **Household Survey: Question-by-question review of the survey and notes** (4 hours)
 - Includes a systematic review of the Household Survey and notes and definitions for the survey that encourage group discussion to determine how best to respond to varying respondent answers and/or situations in the field.
5. **Household Survey: How to record answers on the survey** (may also be combined with session 4) (1 hour)
 - Teaches the correct way to mark survey responses on the MPAT survey form.
6. **Household Survey: Stop-and-go role play for observation and discussion** (1.5 hours)
 - Demonstrates the in-field procedure – from beginning to end, or 'from hello to thank you'.
 - Trainers role play, with periodic stops to raise issues and answer questions.
 - Trainees follow the survey role play, and practise marking the correct survey responses.

7. **Household Survey: Survey practice – real-time role play, with trainees marking survey responses (2 hours)**
 - Project-staff role play, start to finish.
 - Trainees record answers as if they were enumerators.
 - Short break for trainers to analyse survey markings by trainees.
 - Correct answer marking is reviewed and discussed.
8. **Household Survey: Practising in pairs and small group discussions (3-3.5 hours)**
 - Small groups discuss the survey questions as they see fit, consulting the notes and definitions.
 - Small groups will then share unanswered questions or remaining issues with the large group and the trainer will provide clarification.
9. **Household Survey: Survey practice – role play in pairs (2.5 hours)**
 - Each trainee practises performing the Household Survey as both enumerator and respondent.
 - Completed surveys are checked by the trainer and group.
 - Common errors are discussed.
10. **Household Survey: Feedback loop, review common errors, scoring issues and difficult questions (1 hour)**
 - Additional time is allowed for feedback from previous sessions and reviewing difficult questions on the Household Survey.
11. **Household Survey: Role of enumerators and enumerator supervisors (also possible to insert at other times in the training schedule) (1 hour)**
 - The distinct roles of enumerators and enumerator supervisors are thoroughly explained and discussed.

12. **Household Survey: Field practice (1-2 days)**
 - Field practice provides an opportunity to experience real, diverse situations that arise in the field during MPAT data collection and to receive direct feedback from the trainer.
13. **Household Survey: Final review and wrap-up (1 hour)**
 - Training completion certificates are awarded (see Annex XIV of this User's Guide).
 - The plan for actual MPAT implementation is discussed, including survey dates and locations.

6.1 Important considerations for enumerator training

The training team should ensure that enumerators understand the following general points about MPAT implementation and data use. *It is up to the trainers to decide the most appropriate time to incorporate these points, as this may depend on the country/culture in which the surveys are being implemented:*

- It is important that respondents are not misled by the purpose of the MPAT surveys or by the potential impact that the surveys may or may not have on their lives or livelihoods. In particular, every effort should be made to ensure that respondents do not believe that by altering their survey responses, their village will receive any additional attention from government or donor agencies. This is an especially challenging aspect of implementing such a survey. Thus, the project staff and trainers should discuss this at length in order to determine the best way of training the enumerators (and the best way for enumerators to introduce themselves to households) so that they do not, intentionally or unintentionally, lead respondents to believe that their answers may have such effects.

- Similarly, there should be no potential conflict of interest with regard to the enumerators and the results of the MPAT surveys. For example, enumerators should not be led to believe that they will receive more work in the future should MPAT results be worse than they actually are, or vice versa.
- The consent statement is a very important part of the MPAT process:
 - It explains that the survey is *voluntary*. Household members do not have to give their time to participate if they do not want to.
 - It explains that the household was chosen *randomly*. They were not selected for any specific reason – good or bad.
 - The surveys are *anonymous*. Names are not written anywhere on the survey and no one will know what answers specific households provided.¹⁵
 - It gives the household the name and *contact information* of the local implementing organization in case survey respondents or other stakeholders have any questions or concerns about MPAT or the larger project it is supporting. See Annex V Contact information cards, template.
- In some cultures, the need for the consent statement may not be apparent. However, for the sake of ethical standards and bias reduction, it is crucial that enumerators gain consent by reading the consent statement before beginning survey implementation.
- Confidentiality is another vital part of the data-collection process. Enumerators must never discuss information they obtain from household members with anyone other than the enumerator supervisor. Household names must not be shared with anyone nor can they be written on the survey form, and great care must be taken that the list of names of households to be sampled is returned

to the enumerator supervisor for proper and complete disposal. (Do not throw this sheet away in the village, where it might easily be found by another village resident.)

- Within the enumerator pairs, at each household only one enumerator should ask the questions and record the responses. While they are doing so, the other enumerator should listen attentively and only interrupt if they believe there is a serious problem. Otherwise, the ‘second’ enumerator should save any comments or questions until after the enumerator pair has left the household.
- Ideally, enumerator pairs should consist of one woman and one man.
- In the event that a respondent needs to stop participating in the survey (but wishes to finish), enumerators should schedule a time to return and complete the survey. In this case, they should record the survey duration at each point, so that the total survey duration can be calculated later.
- Average Household Survey completion time is 35 minutes, but it will likely take longer for enumerators at first. As enumerators practise and become more familiar with the survey tool, the amount of time to complete it will decrease over the first and second week of implementation.

6.2 Notes and definitions for the MPAT Household Survey

This section should be translated and provided to each enumerator trainee.

Given the large number of notes highlighted below, it is highly recommended that enumerators keep these notes and guidelines with them in the first few weeks of implementing the MPAT surveys so they can refer to them as needed.

^{15/} Though the surveys are anonymous, there may be cases in which the household is so distinctive that someone is able to figure out which household gave which answers (for example, a woman-headed household with 13 children, or a head of household who is 99 years old). This would not be easy to do and would require access to the full dataset or the survey forms. Thus, staff should take great care to keep this information securely protected. Similarly, in most cases, data will be presented at the village level, not the household level, so individual responses will not be apparent.

DEFINITIONS

(in the context of the MPAT survey)

An *'adult'* is anyone 15 years or older. (However, in cases where consent to participate can only be received from people 18 or older, that law/statute should be followed, but it should be mentioned in all reports.)

A *'child'* is anyone up to age 14.

A *'school-age'* child is anyone from 5 to 14 years old.

The *'head of the household'* is the adult or those adults that make decisions affecting the household (both on a day-to-day basis and for larger, more important decisions). This is usually the husband or wife or both.

An appropriate person to answer the Household Survey, called an *'adult of the household'*, is a person 15 years or older who spends at least nine months of the year living in the household.

A *'household'* is defined as a housing unit in which a group of people reside. If adult children are married and live in the same housing unit with their parents, they are considered part of the same household.

Another way of understanding the definition of a household is based on joint cooking and eating. That is, if two families almost always cook and eat together, then they can be considered one household, even if they do not sleep in the same physical structure. Similarly, in cases where people have multiple spouses and children, if all spouses and their children live in the same physical structure or structures built closely together, or all cook and share food together, then they are considered a single household.

A *'household member'* is someone who belongs to the household (usually due to familial relations). For the purposes of the MPAT survey, household members may also include people who spend nine or more months of the year living and working outside of the household, have the potential to send money back to support the household, and still consider themselves part

of the household and that area/village to be their home.

For the purposes of the MPAT survey, household members do *not* include people who are living outside the household/village (more than nine months per year) for the purpose of studying *full-time* (university, trade school, etc.). This is because they are likely not currently contributing to the household financially, even though there may be future remittance potential, nor are they residing there or consuming household resources. Students away at boarding school full-time (and thus not contributing to the household financially, and not using household food resources for most of the year, with perhaps only one or two visits home per year) are also *not* considered members of the household for the purposes of the MPAT survey.

People hired to work in the home are only considered household members if they both sleep and eat in the household.

'Affordable' means that the fee/payment in question can be paid in a relatively short period of time with little or no assistance from people outside the household. There is no precise definition; it is the opinion of the respondent. This term is found in questions (hereafter 'Q') 6, Q14, Q37 and Q44.

'Never-rarely-sometimes-often-always'.

A time frame is not specified for the terms *never*, *rarely*, *sometimes*, *often* and *always*, and the enumerator should understand that *never* and *always* are the two extremes of the scale. *Rarely* is close to *never*, and *often* is close to *always*. *Sometimes* lies in the middle. The specific timescales or quantities involved depend on the behaviour in question, which in turn is contextually specific. For example, in Q29, *cleaning hands before eating*, the response will depend on the culture. Thus, if hand washing occurs only once every few days in a culture where people usually eat three meals a day, this is *rarely*. If some days respondents wash their hands before one, two or three meals, and other days they do not, this would be *sometimes*. If respondents

Never		Rarely				Sometimes								Often								Always	
0	5	6	10	15	24	25	29	30	35	40	45	50	59	60	65	70	75	80	85	94	95	100	
Percentage of time behaviour occurs																							

usually wash their hands, but not *always* (e.g. two times a day out of three meals) this is *often*.

For further clarification, the choices can be thought of in terms of percentages (frequencies of the behaviour, as far as the percentage of time that the behaviour occurs). Thus, *never* would be 0 to 5 per cent of the time, *rarely* 6 to 24 per cent, *sometimes* 25 to 59 per cent, *often* 60 to 94 per cent and *always* 95 to 100 per cent – as depicted in the figure above. Again, these are not firm definitions, but are to be used as approximations when the enumerator does not otherwise understand which is the appropriate scale (based on the behaviour or action).

GENERAL NOTES ON MPAT SURVEY USE

Enumerator teams

- (i) Ideally, cultural norms permitting, enumerator pairs should consist of one woman and one man. This may often prove useful when the available adult respondent is more comfortable talking with a woman or a man.
- (ii) MPAT should be implemented in teams of *two enumerators per household*. One enumerator should *ask questions and write answers*; the second enumerator should watch and listen. There are a few reasons for this arrangement:
 - Rapport. The person writing should be the one speaking, to ensure that they understand the answers (and follow the correct format – i.e. repeat questions, elaborate as necessary). This requires that one enumerator develop some rapport with the respondent, and that the second enumerator remain outside the conversation for the most part.

- Safety. This is not anticipated to be a major issue, but it is important to be cautious.
- Gender balance and respondents' comfort. When there is a woman respondent, then the woman enumerator could ask the questions if the respondent would be more comfortable or more willing to speak with another woman (with the same applying to men).
- Energy level. Household to household, each individual enumerator gets a break, so one person does not get overly tired.
- Accuracy. The second enumerator can watch for mistakes or misunderstandings.
- If the second enumerator sees major errors (a question is skipped or a question is asked incorrectly), they can correct the 'first' enumerator immediately.
- If the second enumerator sees minor errors, they can correct the 'first' enumerator after the survey is completed.

Beginning the survey

- (iii) The enumerator should *not* write the respondent's name, or any actual household code, anywhere on the questionnaire.
- (iv) The enumerator should *not* write anything in the box marked 'household code'. (Project staff will assign a household code to each survey during the data-entry process.)
- (v) The enumerator should introduce themselves, read the consent statement as practised during training, and give the respondent the contact information card.

- (vi) If the respondent agrees to the consent statement, the enumerator must sign (or otherwise mark) the box marked 'Consent' at the top of the household survey. The consent statement is important not only to conduct survey work with participants in an ethical manner, but also because it helps ensure that participants have a general understanding of MPAT (which will often make respondents more willing to participate).
- (vii) The enumerator should ensure that this is a convenient time for the respondent.
 - If the respondent is obviously busy (e.g. cooking, taking care of small children or engaged in some other activity that will distract them), the enumerator should ask when would be a more convenient time for them to talk and should plan to come back at that time.
 - The enumerator should not implement the survey if the respondents are obviously occupied, even if they consent to participate and wish to respond immediately.
 - If the would-be respondent is engaged in a simple task (sweeping, sewing, husking corn, etc.) but wants to participate, the enumerator can proceed if the activity is not demanding too much of the respondent's attention.
- (viii) The enumerator should *write* down the *time* the interview starts *after* the respondent has read and agreed to the consent statement (if the respondent has agreed).
- (ix) For all questions, the enumerator should *not* rush respondents; instead, they should let them settle on an answer or change an answer as needed. The enumerator should not write down the respondent's response immediately, but should instead pause a moment to be sure they do not want to revise their answer.
- (x) The enumerator should stay motivated and energetic when asking the questions. If the enumerator appears tired or bored, then the respondent will likely not put as much energy into thinking about and answering the questions as they would otherwise, and might provide inaccurate information.

Household situations/respondents

- (xi) To reduce potential bias, ideally, no more than two adults in the household should respond to survey questions (for example, a husband and wife sitting together may respond together). Before beginning the survey, the enumerator can politely ask/confirm that those adults who are about to respond are in fact members of the household. If they are not, the enumerator can politely ask them to go to another area until the survey is completed. Similarly, if members of neighbouring households come by during the survey, the enumerator should politely ask them to return after the survey is completed, providing an approximate time to completion. If they insist on remaining, then the enumerator should stop conducting the survey and make note of the situation – the enumerator may try to return later to complete the survey with only the original respondent(s) present.
- (xii) If, after the first few questions, it becomes clear that the respondent will not be able to provide information for the survey, the enumerator should politely see if there is another adult available in the household, and if not, politely thank the respondent for their time and leave (making sure to inform their enumerator supervisor and possibly revisiting the household later). If a suitable adult is found, the enumerator should restart the survey with them.

- (xiii) Similarly, enumerators should be sure to start and finish the survey with the same respondent(s). If, after starting the survey, another adult in the household insists on participating, the enumerator should tell them that they can do so, but that this will require starting again at the beginning of the survey, which will take more time. If the survey is almost completed and this newly arrived household member is insistent on participating, then the enumerator should try again to explain that they only need a few minutes to finish with the original respondent. If the newly arrived household member continues to insist, then the enumerator can politely thank the original respondent for their time and leave (again, this should only be done in cases where almost all the survey was completed – the remaining questions will be considered missing data).
- (xiv) Many questions ask the respondent to recall information from the last 12 months. It is, of course, understandable that they will not be able to remember perfectly, but their best estimate/recollection is desired. If a respondent has difficulty remembering, the enumerator may help by asking them to recall important relevant events that occurred over the last 12 months, as this may help jog respondents' memories regarding the MPAT survey item in question.

Asking the survey questions

- (xv) The enumerator should read the questions as they are written and should not reword them.
- (xvi) If the respondent still does not understand after reading the question twice, the enumerator may carefully reword the question, but should try to do so as little as possible. If questions must be reworded, the enumerator

should *not* reword them as a 'leading question' (that is, the enumerator should *not* reword questions in a way that makes it seem as if one type of answer is more desirable than another).

- (xvii) Throughout the survey, information in both square brackets '[]' and *italics* [*such as this*] is provided to assist the enumerator when implementing the questionnaire. The enumerator should not read these aloud.
- (xviii) Enumerators should *not* read the answer choices to respondents. It is the job of the enumerator to listen to the response from the household member and choose the answer on the survey form that best fits the response.
- (xix) Information in parentheses '()' is provided to help make the questions clearer, and can be read to the respondent as needed.

Deciding on the correct answer choice

- (xx) For some MPAT survey items, there will not be a perfect answer for the enumerator to circle/mark. In these cases, the enumerator should use their own judgement to choose the best possible answer. If the respondent's answer is not close to any of the possible answers, the enumerator should make a note of the respondent's answer in the margin of the survey and allow the enumerator supervisor to decide the appropriate answer.
- (xxi) Enumerators should keep in mind that most household survey questions are about *the majority of the household* and the situation of the majority, not just about the respondents' situation or the head of the household's situation.
- (xxii) In general, when the question applies to more than one person, the enumerator should attempt to record the response that best fits the *average* situation. For example, if asking about the time it takes to travel to school (Q5) and

the household's children attend two different schools, then the enumerator should record the average of the time it takes for *both* schools.

Marking answers on the survey form

(xxiii) Where there is no dark-bordered box, enumerators should *circle* the appropriate answer; they should *not* use a check (✓) symbol (see the response to Q10 in the figure below).

(xxiv) Wherever there is a box () in the questionnaire, the enumerator should *clearly write* the appropriate number inside the box. Numbers should be written like this:

1 2 3 4 5 6 7 8 9

as in the figure below.

(xxv) Wherever there are numbers listed

before answer choices

(for example, Q7 and Q8 answer choice '3.

Junior school (age 11 or 12 until age 14 or 15)'), the enumerator should

write the answer choice number ('3' using this same example from Q7 and Q8) in the box

(see figure). If the number is listed *after*

the answer choices

in parentheses (for example, Q6 'Usually (4)'), then the

enumerator should

just circle the answer

as in Q6 (and the data-

entry team will record

the number, '4' in this

example, to the Excel

Spreadsheet).

(xxvi) Enumerators should

not write anything

in the shaded boxes

immediately to the right of the question numbers.

(xxvii) When the respondent's answer triggers instructions to the enumerator to skip to Q69, for example (see figure below), the enumerator is to draw a vertical line through the question numbers on the left-hand side of the survey up to the question number skipped to. This makes it clear to the enumerator, the enumerator supervisor and data-entry staff that the enumerator has intentionally skipped those questions based on the respondent's answer and the survey instructions. In the following example, the next question the enumerator will ask the respondent is Q69.

10	In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
11	How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines?	Household self-diagnoses, self-medicates for simple illnesses (-1)					
	No health centre in the area, or centre is too far to travel to (-2) [skip to question 14]	Minutes = 20					
6	Can your household afford your children's school fees and school supplies?	No (1)	Rarely (2)	Sometimes (3)	Usually (4)	Household does not pay the fees and cannot afford supplies (6)	
	Household does not pay fees, but can afford supplies (7)	Household does not pay fees or supply costs (8)					
7	What is the highest level of schooling the female children (0 to 14) in your household will likely complete?	No female children (-1)	Don't know (-2)				
	Highest likely level = 3						
8	What is the highest level of schooling the male children (0 to 14) in your household will likely complete?	No male children (-1)	Don't know (-2)				
	Highest likely level = 4						
	1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)						
67	[Enumerator to remind respondent that all responses are anonymous] Is your household currently in debt?	No (1) [skip to question 69]	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)	Don't know, or don't want to discuss (5) [skip to question 69]	
68	To whom is the majority of this debt owed?	Relatives (1)	Friends (2)	Village fund (3)	Village government (4)		
		Rural credit cooperative (5)	Private money lender (6)	Microfinance institution (7)			
		Government bank (8)	Private bank (9)	Joint village & bank fund (10)			
		Joint development project & bank fund (11)	Other, specify: (12)				
69	How many of the people (adults and children) in your household usually have adequate footwear?	None (1)	Less than half the household (2)	About half the household (3)	Most of the household (4)		
		All household members do (5)	Don't know (6)				

- (xxviii) If ever unsure about a response, enumerators should write notes in the margin to the right of the question indicating the issue they are having (i.e. what is unclear, or why they are unsure how to mark the question). Enumerators should write the note immediately, to avoid forgetting the specific details of the issue. Enumerator supervisors can later assist in determining how the response should be marked.
- (xxix) Similarly, if the respondent intentionally brings up something that is important to them or the household (a concern, fear, problem, etc.), the enumerator should politely acknowledge what they are saying and make a note of it in the margin (this too will be shared with enumerator supervisors).

NOTES ON SPECIFIC QUESTIONS

In this section, specific notes are provided to help guide enumerators in understanding both the intent of specific questions and how to mark responses given atypical situations. For survey questions for which no note exists, the question and correct marking of the response are thought to be straightforward; in answering those questions, enumerators and enumerator supervisors should use their best judgement and common sense, and should be consistent in doing so. This section proceeds through the survey from top-to-bottom (start to finish).

Location/AA1, AA2, AA3, Village. The MPAT Household Survey has four spaces for enumerators to record the location of the household. As each country has different

terms for administrative regions (e.g. provinces, districts, subdistricts, townships, sub-locations), it is up to project staff to decide which three administrative regions are most relevant to record, in addition to the name of the village. Thus, 'AA1' is the blank space reserved for the largest/highest administrative region (usually the province or district), and 'AA2' is the blank for the next smallest administrative unit. 'AA3' may or may not be used, as appropriate. The enumerator supervisor or project staff will instruct enumerators how to fill in AA1, AA2 and/or AA3 using the place's actual names/words or codes. In any case, the administrative units will be assigned numerical codes during the data-entry process.

Household ethnic group (optional).

As the number and types of ethnic groups will vary by region, enumerators should write out the name of the household's predominant ethnic group (to be coded later by data-entry/project staff).

Household type (optional).

Different projects may need to categorize household data in different ways. For example, a fisheries project may want to be able to analyse data for fishing households, non-fishing households, fish-sellers, fish-marketers, etc. Another project may wish to identify a household as being a member of a certain organization or not (for example, a local credit cooperative). Project staff will need to decide how/if to use this field and subsequently identify the question to be asked, the possible answer choices, and codes for data entry.

Household code. This should be left blank. It will be filled in later by data-entry/project staff.

Enumerator: _____		Time ____:____ to ____:____		Date (YY/MM/DD): 20 ____/____/____	
AA1: _____		AA2: _____		AA3: _____	
Household ethnic group (optional): _____		Household type (optional): _____		Household code: _____	
Respondent's age: _____		Gender: <i>M(1) F(2)</i>		Head of household's age: _____	
Head of household's marital status: <i>married(1) single(2) divorced(3) widowed(4)</i>		Gender: <i>M(1) F(2) M&F(3)</i>		Consent: _____	

Consent. The enumerator will sign this blank after reading the consent statement to the respondent and receiving their consent.

Respondent's age/head of household age. In many rural areas, people may not know their exact age. In these cases, best estimates are fine and the enumerator can work with the respondent, referencing historic events, to help estimate ages as needed. Similarly, in instances where a respondent is not comfortable giving their age, enumerators should remind them that their responses are anonymous and gently ask again.

If there are two heads of the household (for example, a married couple), record their *average age*.

Head of household gender. If a household is managed by one or two women, the enumerator should circle 'F', and in the case of one or two men, 'M'. If a man and a woman are joint heads of household, the enumerator should circle 'M&F'.

Head of household status. 'Single' means someone who has not married. An adult who is separated from their spouse (but still technically married) and is in the process of getting a divorce can be marked 'Divorced'. If they are separated, but not planning to get divorced, then for the purposes of this survey they are still considered 'Married'.

1 This question on head of household literacy asks about a newspaper because the level of reading ability required to read a newspaper is usually similar across countries (whereas the ability to read a book would be much more ambiguous).

When a household has two heads of household, the enumerator should mark the higher of the two reading levels.


For example, if one head of household can read a newspaper easily and the other head of household can read a newspaper 'with difficulty', then the enumerator would mark 'Yes, without difficulty (3)' because it is the higher/better of the two responses.


2 The number of adults in the household includes the respondent(s). Once the respondent gives you an answer, you may need to ask for further information to get the number of female adults and male adults.

If the answer is zero for either male adults or female adults, please write '0' in the appropriate box. Do not leave it blank; do not put a dash (an empty box will be treated as missing data).

Students, age 15 and older, who are away at boarding school full-time (i.e. not home for 9+ months of the year and not home on weekends) should *not* be included in this question. Also, people hired to help in the household should only be included if they sleep and eat in the home at least nine months each year.

If the household is large (over five individuals), enumerators should sketch out the household structure (parents, children, aunts, uncles, etc.) at the top of the first page of the survey, so they can easily remember information about the individual members of the household (for example, the number of children, their genders and ages). This can be done while asking the first few survey questions, as the enumerators will need to understand who is in the household (and most of the time this will require an understanding of familial relationships). It is also a polite way to begin the dialogue with the respondent, and enumerators should not rush this stage unnecessarily.

1		Can the head of the household read a newspaper?			
		No (1)	Yes, with difficulty (2)	Yes, without difficulty (3)	Don't know (4)

2		During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months?			
		Female adults		Male adults	

Note: On this and other similar survey questions that have answer choices for questions that seek a numeric answer, the minus sign is used as a negative symbol to delineate them from other responses, such as 'Don't know (-1)' in this question. The reason is that, for the eventual data entry, if '1' were entered (instead of '-1') this could mean one woman, or 'Household has no children'. Thus, in questions that seek a number (number of adults, number of minutes, months, etc.), during data entry negative codes are used for other possible answers to avoid any confusion.

3 This question only asks for the number of *adults* (age 15 and older) who *live and work* outside the household and outside the village/area (usually in cities or factories in other parts of the country, or in other countries). The purpose of the question is to learn how many adults are in a position to send money back to the household if they choose to. Thus, the enumerator should *not* include adults who are outside the household studying full-time (for example, at a boarding school, trade school, technical school or university). However, if an adult is living outside the household, and is working *and* studying and possibly sending money home (not just working to support themselves and fund their studies), they should be included in the number of adults for this question.

If the answer is zero, please write '0' in the appropriate box. Do not leave it blank; do not put a dash.

4 As above, if the answer is zero for any of the four categories, please write '0' in the appropriate box. If there are no children (up to age 14), then circle 'Household has no children' and skip to question 9 (rather than putting a zero in all four boxes).

5 Do not forget that Q5 and Q6 concern only children living in the household that are between the ages of 5 and 14; they do not include 'children' 15 and older or those already studying at university. The purpose of this question is to understand the average/majority of the household children's school commute. Please note that the question is asking for *one-way* travel time for children to get to school.

If there is more than one school-age child in the household, with some children living at their school (that is, they sleep there most school nights) and the others travelling to school, the enumerator should record the time (in minutes) that it takes those children travelling to school to arrive at school.

If there are two school-age children in the household, and one goes to school and the other does not, then the enumerator should record the travel time needed for the child that does go to school. If there are three school-age children, then the enumerator should mark the appropriate answer based on the *majority* behaviour (that

is, the behaviour of two of the children), so if two children don't go to school (but are of school age) and one does go to school, then the enumerator should mark the response 'School-age children do not regularly attend school (-2)', as the majority of the

3		During the last 12 months, how many adults lived and worked outside your home for 3 or more months?							
		Adults							
4		During the last 12 months, how many children (age 14 and younger) lived and slept in your home for 9 or more months?							
		Female <5		Male <5		Female 5-14		Male 5-14	
		Household has no children (-1) [skip to question 9]							
5		[If there are no school-age children (age 5 to 14) in the household, skip to question 7] During most of the year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one-way, by any means: for example, walking, bicycle, scooter, bus)?							
		No. of minutes =		[If children attend more than 1 school, enumerator to record the average time]				Children usually live at school (-1)	
		School-age children do not regularly attend school (-2)				Don't know (-3)			

school-age children are not regularly attending school.

If there are multiple children in the household and they attend different schools, then enumerators should calculate the average amount of travel time needed, or if this is too complicated, or will

take too much time, then enumerators should write the amount of travel time needed for each school-age child in the margins of the survey. The enumerator supervisor can later take a simple average in those cases with more than two children attending more than two schools.

If no one in the household has any children, the enumerator should not ask this question, because the Q4 response, 'Household has no children (-1)' provides instructions to skip to Q9.

Lastly, if there are seasonal differences (for example, more time needed during the rainy seasons because some roads are washed out), take the average time needed over the entire school year.

6 If there are multiple children in the household, the enumerator should attempt to record the response that best fits the average situation across these children (note that this is a common approach for answering MPAT questions that apply to more than one person).

The response 'Household does not pay fees or supply costs (8)' means that the household does not need to pay the fees or supply costs because they are already paid (by government, an aid agency, scholarship, etc.).

7 & 8 Q7 and Q8 apply to all children in the household between the ages of 0 to 14 (they do not apply to children 15 or older or already studying at university). These questions ask for the *likely* level of

6		Can your household afford your children's school fees and school supplies?			
		No (1)	Rarely (2)	Sometimes (3)	Usually (4)
		Yes (5)	Household does not pay the fees and cannot afford supplies (6)		
		Household does not pay fees, but can afford supplies (7)		Household does not pay fees or supply costs (8)	

7		What is the highest level of schooling the female children (0 to 14) in your household will likely complete?		1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)
		No female children (-1)	Don't know (-2)	
		Highest likely level = <input type="text"/>		
8		What is the highest level of schooling the male children (0 to 14) in your household will likely complete?		
		No male children (-1)	Don't know (-2)	
		Highest likely level = <input type="text"/>		

education the children in the household will complete, *not* the *ideal* or *desired* level of education, but the *probable* level of education the child/children will complete. This is, of course, determined by multiple factors: the household's circumstances (socio-economic), the educational opportunities available, the intellectual capacity of the children, the need for the children to assist with farm/non-farm work, etc. Enumerators should ensure that respondents understand this notion of *likely/probable*.

If a daughter or son is 15+ years old, then the enumerator should select 'No female/male children (-1)'.

If there are two or more girls, or boys, in the household, then the *average* highest level of education they will likely complete should be recorded. For example, if there are two male children, and the respondent expects that one will eventually attend junior school and the other technical school, then the average would be 'High school' (answer code 4). If two children are expected to achieve two different levels of schooling that are ranked next to each other, such as junior school and high school, then the more advanced level of schooling should be used as the average ('High school' in this example).

The answer choices in the table to the right of the questions provide standard levels of education. The ages provided after each answer choice (in parentheses) are intended only as a guide to help understand the typical ages of students at each educational level.

9 & 10 These questions measure the frequency of illness, ‘averaged’ together for all members of the household.

For Q9, a ‘non-serious illness’ is one where the person is clearly ill (i.e. they have symptoms that make it obvious to others that they are ill), but they do not have to remain lying down during the day. ‘Serious illness’, in Q10, by contrast, is defined as an illness that is so severe that the person must remain lying down for two days or more.

For example, in Q9, assume that there is a household with two people: if one of these people is always suffering from a minor illness and the other person is almost never ill (over the last 12 months), then the best answer choice for this household would be ‘Sometimes (3)’ because this is, roughly speaking, the average of the two situations (i.e. ‘Always’ and ‘Never’). It should be kept in mind from the ‘Definitions’ in Section 6.2 that ‘Sometimes’ means roughly 25-59 per cent of the time. In the case of this question referring to the last 12 months, ‘Sometimes’ means roughly three-to-seven months. Anything more than that is ‘Often’ or ‘Always’ and anything less than that is ‘Rarely’ or ‘Never’.

For large households, it may also help to visually mark the category of each household member along the scale in order to visually

see the ‘average’ along that scale. In the figure below, the enumerator has marked the Q9 response for each household member with a blue checkmark in order to more easily ‘see’ that the average answer choice is ‘Rarely’.

The MPAT Design Team recognizes that this approach sacrifices some precision and accuracy, and that different enumerators will inevitably come to slightly different answers in households where the health situation is more complicated. But by following these guidelines, enumerators should arrive at similar answers across similar households.

11 & 13 These questions are asking for the *one-way* travel time to the health centre by whatever means of transport would usually be used (walking, bicycle, motorcycle, bus, etc.). The enumerator should record the number of *minutes*. For example, if a respondent answers ‘two hours’, the enumerator should record 120 minutes.

If the respondents use the same health centre for both simple and serious illnesses (Q11 and Q13), then the number of minutes should be the same.

In Q11, it is assumed that if there is no health centre in the area, or the health centre is ‘Too far to travel to’, then this applies also to a health centre that could treat serious illness or injury (as such a centre should also be able to treat the simple illnesses that are the focus of Q11).

The enumerator is thus instructed to skip Q12 and Q13 and go directly to Q14. Clearly, the notion of ‘too far’ is subjective and each household will have a different conception of how far is ‘too far’. This is acceptable, as MPAT is designed to identify issues surrounding physical access and perceptions of access.

9	In the last 12 months, how often have members of your household had a non-serious illness (meaning they were sick, but not so sick they had to rest in bed a full day or more)?
	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)
10	In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)?
	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)

Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
✓	✓✓✓				

11	How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines?
	Household self-diagnoses, self-medicates for simple illnesses (-1)
	No health centre in the area, or centre is too far to travel to (-2) [skip to question 14] Minutes =
13	How much time does it take for members of your household to reach the nearest health centre that can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?
	No health centre for serious illness, or centre too far to reach easily (-1) Don't know (-2) Minutes =

12 'This health centre' refers to the health centre discussed in Q11. 'Supplies' means anything the health-care staff need to be able to work (such as medicine, bandages, crutches, beds, etc.).

The term 'adequate' is subjective, that is, what is adequate for one person may not be for another. Again, this is acceptable, as the purpose of the question is to get the opinion of the respondent.

14 If the respondent verbally responds with a simple 'yes', the enumerator should then discuss the question with them further in order to understand which 'Yes' response is most appropriate.

The definition of 'professional treatment' is not specifically defined here and is up to the respondent to define (professional treatment might include traditional medicines or medicines from other sources).

16 This question seeks the opinion of the respondent in order to better understand gender and social equality in the village relative to access to health care. It asks about the health-care services for women at the health-care centre 'if they seek it'. That said, the answer choice, 'Yes, but women prefer not to go' tries to capture the idea that, even though a health-care centre may provide reasonable health care, there may be other reasons that prevent women from accessing it (e.g. that the doctor is a man and the women are uncomfortable using his services due to personal discomfort, mistrust or prevailing gender norms in the area).

17 and 18 For both these questions, the enumerator should ask the respondent only if it is not obvious from looking around.

12	How often does this health centre have enough medical supplies to provide adequate health care?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
14	Can your household afford professional treatment for serious illness or injury?	No (1)	Yes, if money is borrowed (2)	Yes, with much difficulty (3)	Yes, with some difficulty (4)	Yes, because government or employer helps pay for treatment (5)	
		Yes, household can afford it (6)					
16	Are the health-care centres in your village/area (within 2 hours distance from your home) usually able to provide women with adequate health care if they seek it?	There are no health-care centres in our village/area (1)	No (2)	Rarely (3)	Sometimes (4)		
		Often (5)	Always (6)	Yes, but women prefer not to go (for whatever reason) (7)		Don't know (8)	
17	[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)] What is the primary construction material of the housing unit's exterior walls?						
	Reinforced concrete (1)	Stone & mortar (2)	Cement blocks (3)	Brick (fired/burned) (4)			
	Metal sheeting (5)	Logs or thick wood (6)	Thin wood (7)	Bamboo (8)			
	Brick (mud or earth) (9)	Mud & straw (10)	Earth or adobe (11)	Reeds/thatch (12)			
	Thick plastic (13)	Fabric or thin plastic (14)	Other, specify: (15)				
18	[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)] What is the primary construction material of the housing unit's main roof?						
	Roofing shingles (1)	Ceramic tiles (2)	Synthetic roofing (3)	Metal sheeting (4)			
	Cement or concrete (5)	Thin wood (6)	Thick wood (7)	Bamboo (8)			
	Thick plastic (9)	Thin plastic or fabric (10)	Straw or reeds (11)	Other, specify: (12)			

The answer should be the *primary* construction material. For exterior walls, this would be the material that bears the load of the house (upper floors and/or ceiling) and protects the interior of the house from weather.

In areas where households have multiple structures (e.g. in small compounds), these questions refer to the *primary* housing structure. The 'housing unit' is the structure that people sleep in, the 'main house'.

If either the exterior walls or roof are made of multiple materials and it is not clear which is the primary material, then select 'Other' and specify the materials in the margin (using the answer codes if desired).

Answer choice 'Brick (fired/burned) (4)' refers to fired/burned permanent bricks, which may come from a large commercial brick company or a small-scale brick-firing operation (i.e. a local kiln). Answer choice 'Metal sheeting' (response 5 in Q17 and 4 in Q18) refers to any kind of metal sheeting – zinc, iron, corrugated iron sheets, etc.

19 This question refers to the current housing structure as described in Q17 and Q18. 'Severe rain' can, of course, cause flooding, so this question also applies to the home's ability to withstand flooding (or wave action in some areas).

20, 21 and 22 For all three questions, the energy/fuel source is the *primary* source; that is, the source that is used the majority of the time or in most of the housing unit. For example, in Q20, if the housing unit is lit by candles and light bulbs, but more rooms are usually lit by light bulbs, then light bulbs are the primary source, and the enumerator should determine the source of electricity of those light bulbs and mark that as the response.

Concerning answer choices '3' and '4', the enumerator can talk with the respondent to determine if the electrical supply is stable or not. For example, if the lights dim or brighten randomly, or when other electrical devices in the home are turned on (such as a water kettle), this suggests that the electrical supply is not stable.

'Electricity from a generator (5)' refers to generators powered by any fuel/energy source (including human/animal power).

'None (1)' suggests that the household would use an energy source were it available (but that no energy source is available). This is different than, for example, 'Heat not needed in the region (2)' because, in such instances, respondents could heat their home if necessary, but they do not need to.

For households using peat or animal dung (e.g. cow dung) as a fuel source, the answer code 'Wood, sawdust, grass or other natural material (12)' should be used.

23 For this question, it is not important where the household's human waste (fecal matter) goes after defecation (e.g. a private pour-flush toilet that flushes into a river or into a septic tank are, for this question, the same, and the answer would be 'Enclosed pour-flush toilet, private [11]'). The only exception is for 'Compost or biogas', as it is useful to learn if a toilet facility converts waste into compost or biogas fuel (answer codes 7 and 13). Also, for this survey, a

hanging latrine toilet (usually hanging over surface water) is considered to be a 'pit' toilet.

MPAT trainers should provide enumerator trainees with pictures of the most relevant toilet facilities in the region, so that everyone is in agreement as to what is meant by these terms.

19		Can your home withstand strong winds, severe rain, snow or hail without significant damage?			
		No (1)	Yes (2)	Yes, with minor damage (3)	Perhaps, but with significant damage likely (4)
		Little to no extreme weather in this region (5)		Don't know (6)	

20		What is the primary source of light your home uses when it is dark?		1. None	8. Liquid fuel [petrol, kerosene]
				2. Heat not needed in region	9. Coal or charcoal
21		What is the primary fuel source your household uses for cooking?		3. Stable voltage electricity from grid [legal or illegal connection]	10. Vegetable- or animal-based fats or oils
				4. Unstable voltage electricity from grid [legal or illegal connection]	11. Candle, paraffin wax or battery-powered source
22		What is the primary fuel source your household uses for heat?		5. Electricity from a generator	12. Wood, sawdust, grass or other natural material
				6. Electricity from solar cells, wind turbine or small dam	13. Don't know
				7. Gas fuel [from tank or biogas]	14. Other, specify:

23		What type of toilet facility does your household usually use?	
		None, open defecation (1) /skip to question 25/	
		Open pit, communal (2)	Open pit, private (8)
		Enclosed pit, communal (3)	Enclosed pit, private (9)
		Enclosed improved-ventilation pit, communal (4)	Enclosed improved-ventilation pit, private (10)
		Enclosed pour-flush, communal (5)	Enclosed pour-flush toilet, private (11)
		Enclosed flush, communal (6)	Enclosed flush, private (12)
		Compost or biogas, communal (7)	Compost or biogas, private (13)
		Other, specify: (14)	
		'Open' means there is no structure, or a structure with no roof. 'Enclosed' means there is a structure with any sort of roof. 'Communal' means the facility is shared by 3 or more households. 'Private' means the facility is used by 1-2 households.	

24 This question refers to any type of toilet facility. Only those households that answered 'None, open defecation (1)' in Q23 will not answer Q24, as the enumerator is instructed to skip to Q25.

25, 26 and 27

Q25 refers to non-edible food waste (e.g. orange peels, corn cobs, bones, etc.).

If the respondent answers that they discard waste in a 'dust bin', 'garbage can' or 'hole in the ground', the enumerator should ask further questions to determine what happens to the waste afterwards. Is it discarded near the house, far from the house, collected or burned? These follow-up questions will help the enumerator determine the most appropriate answer choice for this question.

The answer choice 'Discard near a house (2)' means that waste is discarded near *any* house, either the house of the respondent or someone else's house.

'Feed to livestock (4)' refers to chickens, ducks, goats, cows, etc. (but not 'pets or guard dogs' as they are not considered livestock because they are not raised to augment food consumption).

In Q27, wastewater from 'the toilet' refers to water used for any type of toilet, and which is then also used for another purpose, such as irrigating plants near the toilet or collected to irrigate fodder crops, etc.

If the wastewater is put down a drain that drains under the house, the enumerator

24		[If the household uses a toilet facility of any kind, ask:] Over the last 12 months, how often was the toilet usable ? (meaning it was working properly or was available to use)					
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)

25		What does your household usually do with food waste/remains (any parts not consumed by people in the household)?		[Enumerator to remind respondent 'all responses are anonymous']							
				1. Discard close to a house [within 25 metres] 2. Discard near a house [25 to 75 metres from the house] 3. Discard far from a house [75 metres or more] 4. Feed to livestock 5. Feed to pets or guard dogs 6. Use for biogas generation 7. It is collected regularly within 75 metres of a house [organized garbage collection] 8. Put down the drain [piped sewage network] 9. Use to water vegetable garden 10. Burn it 11. Compost it 12. Sell to vender 13. It is collected regularly further than 75 metres from house [organized garbage collection] 14. Use to water crops grown for livestock fodder 15. Discard into local waterway or irrigation canal 16. Other, specify:							

26		What does your household usually do with non-food waste/garbage?									

27		What does your household usually do with wastewater (for example, from bathing, cleaning, the toilet)?									

28		How many times a week do most members (the majority) of your household clean their teeth?				
		Never (1)	Rarely (2)	1 or 2 days a week (3)	Most days of the week (4)	
		Usually once a day (5)	Usually 2 or 3 times a day (6)		Don't know (7)	

should select 'Discard close to a house (1)' as wastewater is not being disposed of in a drain that leads to a piped sewage network (in the case that it is, mark 'Put down the drain [piped sewage network] (8)').

28 This question asks for the frequency with which the *majority* of household members clean their teeth (by any means, with or without toothpaste, using a wild-growing root, etc.). Thus, if there are three people in the household and one cleans their teeth every day, but the other two never clean their teeth, the answer should be 'Never'. If there is an even number of people in the household, the enumerator should choose the answer that represents the better behaviour. For example, if two people 'Rarely' clean their teeth and two people clean their teeth 'Most days of the week', then 'Most days of the week' should be chosen as the answer.

Please note that questions 29, 30 and 31 are asking about the adults in the household, whereas 28 refers to most members of the household.

29	How often do the adults in your household clean their hands before eating a meal?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
30	How often do the adults in your household clean their hands after defecating?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
31	Do the adults in your household use soap (any kind of soap) when they clean their hands?	No (1)	Yes, but very rarely (2)	Yes, but only when guests visit (3)	Yes, after defecating (4)	Yes, before meals (5)	Yes, after defecating and before meals (6)
				Don't know (7)	Other, specify: (8)		

32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home?
	<i>[If the household uses different water sources for drinking and cooking, only record the drinking water source]</i>
	During the rainy season <input type="text"/> During the dry season <input type="text"/> During most of the year <input type="text"/>
	No rainy season in our area (-1) No dry season in our area (-2) Don't know (-3)
	1. Piped from water treatment plant (chlorinated)
	2. Piped from water treatment plant (not chlorinated)
	3. Borehole (> 20m deep)
	4. Borehole (< 20m deep)
	5. Private well (> 20m deep)
	6. Private well (< 20m deep)
7. Communal well (> 20m deep)	
8. Communal well (< 20m deep)	
9. Protected ('box') spring	
10. Unprotected spring	
11. Rainwater harvesting container (closed)	
12. Rainwater harvesting container (open)	
13. Water vender with tanker truck	
14. Water vender with cart or small tank	
15. Large dam (built & managed by government, company or collective)	
16. Small dam (built & managed by households, village or collective)	
17. Stream	
18. River	
19. Pond, lake (or other still water body)	
20. Irrigation canal	
21. Bottled water (delivered by vender)	
22. Bottled water (collected by household)	
23. Other (specify):	
<i>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means it is shared by 5 or more households]</i>	

meant by these terms. Simple/common definitions should also be used when possible; for example, a 'River' is a flowing body of water too wide to jump over, whereas a 'Stream' is a smaller body of water that may be narrow enough that an adult could leap over it.

In the answer choices, 'Private' means used primarily by the household, but may also be shared with two to four other households, and is located within 100 metres of the household.

29 and 30 'Cleaning' signifies employing any means to sanitize the hands (for example, with or without soap, with sand).

31 'Soap' refers to any kind of cleaning agent designed for washing hands, dishes or clothing. It can be in a solid form (as in a bar of soap), a liquid form (as in detergent) or in a powder form (as in laundry detergent). This question refers only to using soap to clean hands, not the body (as when bathing).

32 The enumerator should first ask the question as written, then ask follow-up questions to be sure of the identification of the source, and then ask the question again, prefacing it with: 'During the rainy season ...', 'During the dry season' and 'During most of the year'.

In cases where it may not be clear what is meant by these types of water sources, enumerator trainers should provide enumerator trainees with pictures of the most relevant water sources in the region, so that everyone is in agreement as to what is

'Communal' means shared by five or more households. These definitions are, in this case, not about ownership, but about how many households use a given water source.

The purpose of this question is to learn about the quality of the water, based on the water source type. 'Primary source' indicates the source from which the water comes immediately before being used. The answer choice 'Piped from water treatment plant (chlorinated) (1)' should only be used when the water comes through pipes from a water treatment plant that uses chlorine (any form). If the water is piped from a water treatment plant that does not chlorinate the water (for any reason, such as broken equipment, lack of supplies, etc.), the answer choice 'Piped from water treatment plant (not chlorinated) (2)' should be selected.

As rain is, ultimately, the source of all freshwater, 'Rainwater harvesting container' would only be an appropriate response if the household collected water from a rainwater harvesting tank or other container, such as

buckets placed under a metal roof. Rainwater that falls into an irrigation canal and is then collected from the irrigation canal would be marked as 'Irrigation canal (20)'.

If the household uses multiple water sources for drinking and cooking (e.g. from the well for drinking and from the river for cooking), the enumerator should only record the drinking water source, *but should make a note of this in the margin, so it is clear what the drinking and cooking water sources are.*

As Q32 is concerned with the source the water comes from immediately before being used, if, for example, water is piped from a deep borehole to the household, then for Q32 the answer choice '3' should be selected. In Q33, the response will be recorded as '1' minute, so it will then be clear that, while the source is a borehole, it must be piped to the household or located next to the household, as Q33 is marked '1' minute (see notes for Q33).

33 to 38 For Q33-38, 'water' refers to the water the household uses for drinking and cooking.

33 This is the total time needed to collect water for one day. Thus, it is found by *adding together the round-trip time for each trip for each person in the household.* For example, if a mother and daughter both make one trip to the water source and it takes 30 minutes to get there, the recorded response should be 120 minutes (30 minutes to get there, 30 minutes to get back = 60 minutes round trip for one person. Because there are two people, mother and daughter, $60 + 60 = 120$ minutes total). Also, if respondents spend a significant amount of time (more than 10 minutes) waiting to collect water once they reach the water source, this amount of time (in minutes) should be added to the total time needed (i.e. travel time to the water source + waiting time + travel time back home).

If one person collects water for the household but does so in the course of multiple trips taken in one day, the enumerator should add up the total number of minutes used for all trips. Similarly, if two people make multiple trips together, the enumerator should take the total number of minutes for the multiple trips for each individual and add them together.


If the household collects water from within the household or yard compound, the enumerator should write '1' minute. This form of collection can be from any within-household source – for example, a rainwater container, a well within the household compound or a piped water supply.


If the household collects water from two sources (e.g. for drinking and cooking), then the enumerator should add the time together and use the *total time* for both sources.

Again, the enumerator should record the time in minutes (one hour is 60 minutes, two hours is 120 minutes, etc.).

If the respondent is having difficulty providing an answer (after the question is read twice), the enumerator can provide them with broader ranges of time to make answering easier. That is, the enumerator can suggest: 'less than 10 minutes, 10 minutes to 20 minutes, 30 minutes, one hour,' and so on.

34 If the respondent says that the household does not treat its water, the enumerator should attempt to understand whether this is because the respondent believes that the water source is of good quality and therefore does not need to be treated, or if the water should probably be treated, but is not. In the first case, the enumerator should mark answer choice 'No

33		Approximately how much time (in minutes) does it take your household to collect enough water for your household's drinking and cooking needs for a normal (average) day?					
		<i>[Total time = there and back for each person and trip combined.]</i>					
		<i>If water is collected from inside the household or in the household's yard/compound, write '1' minute</i>					
		During the rainy season	<input type="text"/>	During the dry season	<input type="text"/>	During most of the year	<input type="text"/>
		No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)			

34		Does your household treat water before drinking it (any treatment method: boiling, allowing to settle, filter, chemical treatment, etc.)?					
		No, household does not believe treatment is necessary (1)	Never (2)	Rarely (3)	Sometimes (4)	Often (5)	Always (6)

38	Generally, what do you think the quality of your household's drinking water is (before any treatment)?
	Don't know (1) Very bad (2) Poor (3) Satisfactory (4) Good (5) Very good (6)

39	Does your household have access to land for agriculture, orchards, livestock or aquaculture (meaning fish-farming)?
	Yes, have access and using the land (1) Yes, have access and leasing some land to others (2)
	No access to land because leasing to others (3) <i>[skip to question 51]</i> No access to land (4) <i>[skip to question 52]</i>

40	How much land does your household have for agriculture (for crops, grasses, trees, orchards, etc.)?
	Hectares: <input type="text"/> Don't know (-1) None, only access for livestock/aquaculture (-2) <i>[skip to question 46]</i>

purposes ('Yes, have access and leasing some land to others [2]').

For aquaculture (fish-farming), if most of the area is covered in water, this is still considered land for the sake of

treatment is necessary (1)', in the second case, they should mark answer choice 'Never (2)'.

38 This question asks for the respondent's opinion to get an understanding of the household's subjective assessment of its water's quality. These perceptions may be based on water colour or smell, local rumours, public health information campaigns, etc.

39 This refers to land that the household can *reliably* use for any agricultural purpose (crops, grasses, trees/orchards and so on), for livestock and/or for aquaculture (fish-farming). This is any kind of reliable access, whether the land is owned outright, leased, squatted on or shared with a few other households.

If the adults in the household work as wage-labourers, then, for the purposes of this question, they are considered *not* to have access and the response should be marked 'No access to land (4)'. If, on the other hand, the household has a share-cropping arrangement with the landowners, then this is considered access and the response should be marked 'Yes, have access and using the land (1)'. [Note: land-tenure is addressed specifically in Q50.]

If the household is the landowner and is leasing out land to others, then the enumerator must first determine if the landowner is leasing out all their land and thus has no access to land ('No access to land because leasing to others (3), skip to question 51') or if the landowner is leasing some land to others, but also has access to their own land for the household's agricultural

this question. If a household practises fish-farming in a common-access body of water, then the respondent can still answer 'Yes', that the household has access to land, but the enumerator should not attempt to record the size of the common-access water body in hectares, as is asked for in Q40.

To clarify the difference between fisheries and aquaculture: aquaculture, or fish-farming, entails the intentional rearing of fish by providing, at a minimum, fish feed (which is why it is somewhat akin to agriculture, wherein one intentionally cultivates crops – rather than harvesting wild plants or plant products). Fisheries, on the other hand, entails the catching of fish that have not been reared/fed by people. See the note for Q48 and Q49 as well.

40 The enumerator should ask for the unit of land area using *local units*. Next to the question, the enumerator should write both the number and unit (for example, in Nepal, an enumerator might write '30 bigha'). Data-entry staff will later convert this response to hectares, so it is very important for the enumerator to write both the number AND the unit.

This question is focused on the land the household uses regularly for agriculture, orchards or forestry (legally or illegally, leasehold or not). It also includes land that the household could use for agricultural purposes, but may not be using in that way at the current time.

If the household practises shifting cultivation, then the size of the average plot they have under cultivation at one time should be recorded.

This question does not include common-access land that is used for grazing livestock or for aquaculture, in which case the enumerator should mark 'None, only access for livestock/aquaculture' and skip to Q46. *Note:* in this case, Q51 should also be skipped if it is not relevant, because (in accordance with the note for Q51) the land tenure only applies to land used for agriculture.

41 and 42 For both these questions, 'majority' is meant to designate the spatial majority of the land in question (so if the household has 100 square metres of land, the enumerator is asking what the slope/soil type is for 50+ square metres of the household's property). If no one slope or soil type represents a majority, then the answer is 'Mixed'. If possible, the enumerator should specify the particular mixture by writing it in the margin of the survey. For example, they might use the answer codes, 'Mixed (4) and (5)' or, better still, '40% (4), 40% (5) and 20% (3)'. (It should be noted that in instances of mixed land types, if the enumerator does not attempt to determine specific mixtures, the MPAT Excel Spreadsheet will view the question's answers as missing data and they will be omitted.)

If the respondent is not able to communicate the kind of soil clearly, the enumerator can help them understand the different options, as farmers will know their soils well, but may not always be able to articulate this (sandy, clay or wet, etc.).

43 If the respondent says that their household does not use compost/manure/fertilizer, the enumerator should first clarify the reason they do not use it before marking the response. If the respondent feels they do not need it, then the enumerator

should mark 'Household does not think they need to use compost/manure or fertilizer (1)'. If the respondent suggests that they might like to use it, but cannot afford it or were not able to make it, then the enumerator should mark 'No (2)'.

45 and 46 Each of these questions should be asked by the enumerator twice, first by ending the question with 'during the dry season', and second by ending the question with 'during the rest of the year'.

'Enough water' is water from any and all sources and combinations of sources needed/used for crops/livestock. For example, a household may not usually have enough rainwater to support livestock, but when rainwater is combined with water from a borehole, that household usually has enough water to do so. These questions are not about the ease or difficulty of collecting water, but rather if there *is or is not enough water for crops/livestock* (however it is collected/acquired).

'Livestock' is considered to be the ownership of more than a few animals. Owning a few chickens or one or two sheep, for example, would not qualify as livestock. However, the local context and the specific animals owned by the household can affect this definition: for example, owning one cow in some regions might indeed be considered owning livestock, as cattle tend to be highly valued animals. Thus, it is important to *consider the local context and local conception of*

41	Is the majority of your household's land flat, gently sloping, steep or terraced?	Don't know (1)	Steep (2)	Gently sloping (3)	Flat (4)	Terraced (5)	Mixed, specify: (6)
42	What kind of soil covers the majority of your household's land?	Don't know (1)	Stony-gravelly (2)	Clay (3)	Loamy [mixed clay, sand &/or silt] (4)	Sandy-droughty (5)	Wet [wetland/marsh] (6)
					Mixed, specify: (7)	Other, specify: (8)	
43	During the last 2 years, was your household able to make, or buy, enough compost/manure or artificial fertilizer for each growing season?	Household does not think they need to use compost/manure or fertilizer (1)					
		No (2)	Rarely (3)	Sometimes (4)	Often (5)	Always (6)	
45	Is there generally enough water for your household's crops during the dry season/rest of the year?	Dry season	Rest of the year	Never (1)	Rarely (2)	Sometimes (3)	Often (4)
				Always (5)	No dry season in our area (6)	Few or no crops grown (7)	
46	Is there generally enough water for your household's livestock during the dry season/rest of the year?	Dry season	Rest of the year	Little or no livestock (1) [skip to question 48]	Never (2)	Rarely (3)	
				Sometimes (4)	Often (5)	Always (6)	No dry season in our area (7)

48	Is there generally enough water for your household's aquaculture during the dry season/rest of the year?				
	Dry season		Little or no aquaculture (1) <i>[skip to question 50]</i>	Never (2)	Rarely (3)
	Rest of the year		Sometimes (4)	Often (5)	Always (6)
49	During the last 2 years, how often was your household able to make or buy enough fish feed?				
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
50	Does your household usually have enough people to work/manage your farm? (crops, orchards, forestry, livestock and/or aquaculture)				
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
51	What kind of ownership of your land does your household have?				
	Illegal access, squatting (1)	Leasehold less than 5 years (5)	Leasehold 31-40 years (9)		
	Share-cropping arrangement (2)	Leasehold 5-10 years (6)	Leasehold for > 40 years (10)		
	Rented for less than 12 months (3)	Leasehold 11-20 years (7)	Freehold (legally owned) (11)		
	Common-law ownership (4)	Leasehold 21-30 years (8)	Other, specify: (12)		
52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...)				
	<i>[Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)]</i>				

use the land). The distinction between answer choice 'Illegal access, squatting (1)' and 'Common-law ownership (4)' is that in the former, people using the land will likely face the threat of eviction by the landowners, police or government. In the case of common-law ownership, the land users know that there is not a legal arrangement, but they are not worried

what it means to own livestock when asking this question.

48 and 49 MPAT uses the FAO definition of aquaculture,¹⁶ which essentially defines it as being an intentional activity of raising fish, as opposed to fisheries, which are areas where people may go to fish. The lines between aquaculture and fisheries can be blurry in cases where there is management of a body of water; however, if fish are not intentionally raised, fed and/or protected, then for the purposes of MPAT, the source of fish is considered a fishery – and not aquaculture.

50 'Farm' refers to any farm-related activities that the household is engaged in, such as agriculture (crops), orchards, forestry, livestock-rearing and aquaculture.

51 This question refers to the same land described in Q39. If a household does not have access to nor own any land, except for the land that the house is on, this question should be skipped.

The answer choice 'Common-law ownership (4)' is basically a freehold arrangement, but without a title or deed to prove legal ownership (i.e. it is not technically legal, but it is expected that the government will likely continue allowing people to

about eviction anytime in the near future.

In a country such as China, where the government technically owns the land, answer choice 10 would be most appropriate.

52 This series of questions asks respondents to think about possible negative events (not to be confused with *outcomes* of these events). This is a potentially confusing question, so detailed instructions are provided below.

First, the enumerator should read Q52 aloud exactly as it is written. Then the enumerator should read it aloud a second time if it was not easily understood the first time. If the respondent is still not clear on the meaning of the question, the enumerator should break the question into two parts:

(i) The enumerator should ask the respondent to 'Please think about all the possible negative events that could occur in the next 12 months'. They should allow the respondent to list as many potential events as they like. Allowing the respondent to talk freely makes it more likely that they will identify multiple events. The enumerator should ensure that it is understood that the events in question are *negative*, meaning that they would harm or limit the well-being of the household,

16/ According to the Food and Agriculture Organization of the United Nations (FAO), "Aquaculture is the farming of aquatic organisms: fish, molluscs, crustaceans, aquatic plants, crocodiles, alligators, turtles and amphibians. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated" (www.fao.org/fishery/cwp/handbook/J/en).

the household members' livelihoods, the household's agriculture, livestock or aquaculture, and so on.

If the respondent has difficulty understanding this question (its hypothetical nature may be challenging in some contexts), and the enumerator has already repeated the question and it is still not understood, then the enumerator may use examples to help the respondent understand the question's intention. However, these examples should *not be of negative events (disasters) that are relevant to the area in question*, so as to avoid the risk of influencing the respondent's thinking and answer. Thus, for an inland area the enumerator might suggest a hurricane, for a tropical area they might suggest a blizzard, etc.

(ii) Once the respondent has finished talking, the enumerator should ask the respondent 'Which of the negative events *you* just mentioned are *you most* worried about?' They should write the answer in the box for 52.1. The enumerator should continue with the second most-worried-about event (52.2) and third (52.3), and should only record the first three events.

It is acceptable if the respondent mentions only one or two events.

In the event that the respondent answers this question by saying that it is impossible to determine, that 'only God knows' or some variant of this, the enumerator may politely continue to pursue an appropriate line of questioning, such as asking the respondent to think about what God might expect them to reasonably prepare for or expect as far as negative events.

It should be noted that the answer choices 'Don't know (-1)' and 'Not very worried about any negative events (-2)' have two distinct meanings. If a respondent does not have an answer for Q52, the enumerator

should try to determine which of these is the most appropriate answer choice through additional follow-up questions.

53 and 54 After the enumerator has received answers for Q52 and filled in the boxes for 52.1, 52.2 and 52.3, they should then ask Q53 (likely severity of the most-worried-about event) and Q54 (likely frequency for the most-worried-about event) for the negative events recorded in Q52 (either one, two or three events). The enumerator should record the responses in the boxes for 53.1 and 54.1 using the codes provided. Then they should repeat questions Q53 and Q54 for the remaining events.

For example, assume that the respondent has said they are most worried about crop pests (52.1), followed by flood (52.2), and then local conflict (52.3).

The enumerator would ask, 'How damaging would crop pests be for your household?' Based on the respondent's answer, the enumerator would mark either 1, 2 or 3 in the box marked 53.1 likely severity, using the following codes: low-minor (1), medium-moderate (2) or high-major (3).

The enumerator would then ask, 'How likely is it that there will be significant crop pests in the next 12 months?' Based on the respondent's answer, the enumerator would mark either 1, 2 or 3 in the box marked 54.1 likely frequency, also using the following codes: unlikely (1), likely (2) or very likely (3).

This same process would then be continued for flood (52.2) and local conflict (52.3).

53	For these events, how damaging would each be for your household? [<i>'Likely severity'</i>]															
54	For these events, how likely is it that the event will occur in the next 12 months? [<i>'Likely frequency'</i>]															
<table border="1"> <tr> <td colspan="2">Don't know (-1) [<i>skip to question 59</i>]</td> <td colspan="2">Not very worried about any negative events (-2) [<i>skip to question 59</i>]</td> </tr> <tr> <td>Likely severity (53) =</td> <td>Low-minor (1)</td> <td>Medium-moderate (2)</td> <td>High-major (3)</td> </tr> <tr> <td>Likely frequency (54) =</td> <td>Unlikely (1)</td> <td>Likely (2)</td> <td>Very likely (3)</td> </tr> </table>					Don't know (-1) [<i>skip to question 59</i>]		Not very worried about any negative events (-2) [<i>skip to question 59</i>]		Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)	Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)
Don't know (-1) [<i>skip to question 59</i>]		Not very worried about any negative events (-2) [<i>skip to question 59</i>]														
Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)													
Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)													
1 st		52.1) write in	53.1) Likely severity=	54.1) Likely frequency=												
2 nd		52.2) write in	53.2) Likely severity=	54.2) Likely frequency=												
3 rd		52.3) write in	53.3) Likely severity=	54.3) Likely frequency=												

55	If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, what are the 3 main ways your household would likely react (cope)?			
	Don't know (-1)	Primary strategy	Secondary strategy	Tertiary strategy

1. Seek off-farm work	10. Children help more than usual with household work	19. Sell stored grain	28. Postpone payment of debts
2. Work more hours or take on other jobs	11. Ask friends to help with farm labour or business	20. Sell livestock	29. Borrow money from relatives
3. Start a business	12. Ask family to help with farm labour or business	21. Use savings or sell jewellery	30. Borrow money from friends
4. Reduce health-care spending	13. Rely on local government	22. Sell durable goods	31. Borrow money from cooperative or village fund (community source)
5. Reduce alcohol consumption	14. Rely on national government	23. Sell farmland	32. Borrow money from bank or other financial service provider
6. Reduce meat consumption	15. Rely on aid organizations	24. Sell business	33. Borrow money from private lender
7. Reduce fuel consumption	16. Rely on group insurance	25. Sell/leave home (live with relatives in area)	34. Send children to work outside the household
8. Plant fewer crops next growing season	17. Rely on private insurance	26. Sell/leave home (move to another area)	35. Take children out of school so they can work
9. Lease out farmland	18. Seek technical assistance	27. Seek medical treatment	36. Beg for money/food
37. Other, specify:			

56	If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, how long do you think it would take for your household to return to a satisfactory situation? [Record answer in months (for example, 2 years = 24 months)]			
	Don't know (-1)	Less than 1 month (-2)	Months=	Our household could not recover (-3)

57	If in an extreme disaster (of any sort) your household's home was completely destroyed, but your family members were not injured, how long would it take for your household to rebuild your home? [Record answer in months (for example, 2 years = 24 months)]			
	Don't know (-1)	We would move (-2)	Months=	Our household could not rebuild (-3)

58	If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, who do you think would be most likely to assist your household?			
	No one (1)	Family/relatives (2)	Friends (3)	Insurance company (4)
	Financial institution (5)	Local government (6)	National government (7)	
	Government (general) (8)	Aid organizations (9)	Don't know (10)	Other, specify: (11)

55-58 These questions are designed to gain an understanding of how the household would likely react to the occurrence of one or more of the negative events that the respondent mentioned in question Q52.

55 The respondent should be given time to think about this and consider different possible responses. This will make it easier for the enumerator to then ask the respondent to identify their primary, secondary and tertiary coping mechanisms in the case of such an event (the respondent may list more than three coping mechanisms). If the respondent can only think of one likely coping mechanism, the enumerator should leave the other boxes blank (secondary strategy and tertiary strategy), making an appropriate note in the margin.

56 and 57 As with the other questions that ask for an estimated time period, the

enumerator should convert the time into months (e.g. three years would be 36 months). For Q57, if the response is less than one month, the enumerator should just write '1' in the box and a note in the margin explaining that the actual answer is less than one month.

Q56 asks about returning to a 'satisfactory situation', meaning a situation similar to (or better than) before the disaster or shock occurred. Similarly, Q57 asks about rebuilding the home to something that is similar to the condition/type of home before the

shock/disaster (as opposed to an ideal type of home).

For Q57, the response choice 'We would move (-2)' means that the household would move *outside* its current village. Meanwhile, the response 'Our household could not rebuild (-3)' means that the household would try to stay in the village but would have to find a new home or move in with friends/relatives.

58 In some countries many respondents may answer 'God' for Q58. In such instances, the enumerator should politely continue to pursue an appropriate line of questioning, asking, for example, 'Who do you think God would have help you?' If the answer is 'neighbours', this should be marked as friends, as unfriendly neighbours would likely not help.

60 'Hungry' means hungry not by choice, but due to a food-limited situation.

63.5 'Dairy' refers to the consumption of even small quantities of dairy products (such as milk in tea/coffee).

64 This question asks about a business in which someone in the household made an initial and/or continued investment of money, equipment or other. There are many types of possible 'non-agricultural businesses' in rural areas, but some examples might be a small retail shop, a tea house, a battery-charging station, transport (bike taxi, motorcycle taxi, etc.).

65 This question refers to people in the household (not people living away from the household several months of the year and working) and specifically to skills outside the basic agricultural sector, that is, skills other than sowing/planting, harvesting, etc. Special processing of crops for eventual sale at market is *considered a skill* in Q65 (i.e. processing that requires skills or special equipment, such as making sunflower seed oil, harvesting honey or grinding groundnut flour, but not simply putting crops in the sun to dry).

Bookkeeping services, basic accounting services, carpentry, metalworking and crafts are other examples of skilled service provision.

66 If the respondent simply answers 'yes', then the enumerator should ask additional questions to clarify which response is most appropriate.

67 The severity of the household's debt – a little, a moderate amount or a lot – is to be determined by the respondent. That is, the amount of debt that the household owes is *not* determined by the actual amount of monies in question, but rather by the household's *perception of that sum* and its perception of how difficult it will be to repay the amount. This is because the same amount of money will be perceived differently by different households – what is considered to be an extreme amount of debt by one household may be seen as a small amount of debt by a more-financially secure household.

60		During the last 12 months, did any member of your household go to sleep at night hungry? [If 'Yes', how often did this occur?]				
		Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)	
		Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)	

63	During the last 12 months, how often did the majority of your household eat the following foods?				
.1	Grains (cereals, bread, rice, pasta)		1. Never		
.2	Roots &/or tubers (potatoes, cassava, etc.)		2. Almost never		
.3	Vegetables/greens		3. Approximately once a month		
.4	Fruits		4. A few times a month		
.5	Dairy &/or eggs		5. About once a week		
.6	Meat &/or fish/seafood		6. A few times a week		
.7	Nuts &/or legumes (and/or derivatives, tofu, etc.)		7. Every day		
			8. Not eaten for religious or cultural reasons		

64		During the last 12 months, has anyone in your household managed/run their own business (other than selling agricultural products)? [If 'Yes', for how many months (out of the last 12 months)?]				
		No (1)	Yes, 1-2 months (2)	Yes, 3-4 months (3)	Yes, 5-6 months (4)	Yes, 7+ months (5)

65		During the last 12 months, has anyone in your household provided others a skilled service (for example, equipment repair, tailoring, construction work) for money or barter? [If 'Yes', how often?]				
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)

66		If your household wanted to borrow money from a bank or other financial service provider (not including friends or relatives), would your household be able to borrow money?				
		No (1)	Probably not (2)	Probably yes (3)	Definitely yes (4)	Don't know (5)

67		[Enumerator to remind respondent that all responses are anonymous] Is your household currently in debt?				
		No (1) [skip to question 69]	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)	
		Don't know, or don't want to discuss (5) [skip to question 69]				

68	To whom is the majority of this debt owed?		
	Relatives (1)	Friends (2)	Village fund (3)
	Village government (4)	Rural credit cooperative (5)	Private money lender (6)
	Microfinance institution (7)	Government bank (8)	Private bank (9)
	Joint village & bank fund (10)	Joint development project & bank fund (11)	Other, specify: (12)

69	How many of the people (adults and children) in your household usually have adequate footwear?		
	None (1)	Less than half the household (2)	About half the household (3)
	Most of the household (4)	All household members do (5)	Don't know (6)

70	How many of the people (adults and children) in your household have sufficient clothing for severe weather (for example, very hot and sunny, very cold or very wet weather, depending on the area)?		
	None (1)	Less than half the household (2)	About half the household (3)
	Most of the household (4)	All household members do (5)	Don't know (6)

71	Does your household have a television? [If none write '0']	
	Number of televisions	<input type="text"/>

72	Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?			
	No (1) [skip question 73]	Yes, a few households (2)	Yes, less than half the households (3)	
	Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)	

73	In the last 2 years, how has this situation of inequality changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)

68 If the 'majority' of the household debt is owed to two or more different sources, then the enumerator should select 'Other' and make a note of the situation in the margin.

69 'Adequate footwear' refers to any kind of footwear (for example, sandals, boots, cloth shoes) that is appropriate for the climate and weather of the region in question, sufficiently protecting the individual's foot from injury and local weather (sun, rain, wind and so on, in accordance with the region).

70 'Sufficient clothing' refers to clothing that will keep the individual warm if the weather is cold, or dry if the weather is very wet, or provide sufficient protection to the skin in areas with strong sunlight. 'Severe weather' may range from a blizzard to a sandstorm; thus, the enumerator should understand that 'sufficient' for 'severe weather' depends on the area and climate in question.

71 Q71 refers to working televisions of any size (colour or black-and-white) that the household owns, or that are regularly used by the household and stored in its housing unit. If the answer is 'Yes', the enumerator should ask if the household has more than one television and write the number (0, 1, 2, etc.) in the box. If the household has a television that is broken but is currently being repaired (and will likely be usable after repairs), that

television should be included in the answer to this question.

72 Depending on the particulars of the village, the enumerator may find it helpful to remind the respondent that there are some minority households in their village (whether based on ethnicity, religion, caste or other minority group status), as it may be that a majority (e.g. ethnic majority) household may not consider these issues to be related to minority status.

If the answer choice 'Don't know' is selected, the enumerator can ask Q73 and, most likely, the respondent will also reply that they do not know, in which case 'Don't know' should also be selected for Q73.

73 The three answer choices for 'Improved' indicate that the situation has become *more equitable*, and thus it has improved in this sense. Meanwhile, the situation of inequality has 'Worsened' if it has become *increasingly inequitable*.



Key points from this chapter

- ✓ The MPAT User's Guide and annexes include most training resources in a ready-to-use format.
- ✓ The training team should ensure that enumerators understand the importance of consent and confidentiality in the data-collection process.
- ✓ An especially challenging aspect of implementing such a survey is to ensure that respondents do not believe that by altering their survey responses, their village will receive any additional attention from government or donor agencies.
- ✓ In this chapter, specific notes for many potentially confusing situations related to survey questions are provided to help guide enumerators in understanding both the intent of specific questions and how to mark responses.
- ✓ Given the large number of notes highlighted throughout this section, it is highly recommended that copies of Section 6.2 Notes and definitions for the MPAT Household Survey be provided to each enumerator to carry with them in the field, to refer to as needed.



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Chapter 7



If agency/project staff are not available to act as supervisors, then those enumerator trainees who excelled during MPAT enumerator training and who demonstrate leadership and management potential can be recruited to participate in enumerator supervisor training. In any case, potential enumerator supervisors must have attended the MPAT enumerator training programme and should be very familiar with the MPAT Household Survey, as enumerators will look to them for advice and guidance during the first few weeks of implementation.

As in the previous chapter, a more detailed description follows of the main topics covered in the MPAT supervisor training programme. Full training lesson plans can be found in Annex VI MPAT enumerator supervisor training – detailed lesson plans.

7.1 Primary enumerator supervisor responsibilities

Enumerator supervisors have a very important role in facilitating MPAT, and their specific responsibilities should be discussed in detail with recruits and potential recruits. This chapter should be read carefully before recruiting and training supervisors. An overview follows of their primary responsibilities during MPAT implementation. It is up to the trainers to decide the most appropriate time to incorporate these points, as this may vary depending on the country/culture in which the surveys are being implemented.

Enumerator supervisor responsibilities

- Work with village leaders to select a random sample of households.
- Help enumerators understand how to get to those households (i.e. by drawing

a map, potentially in cooperation with village leaders).

- Assign enumerator teams:
 - (a) Change enumerator teams/assign new partners in each new village to ensure that enumerators learn from one another and don't overlook and repeat errors.
 - (b) Do not assign enumerators to villages where they have close relatives/friends.
- Thoroughly understand the MPAT Household Survey and procedure (including through participation in the MPAT enumerator training programme).
- Maintain familiarity with the Household Survey and assist team when needed:
 - (a) Plan to conduct a few Household Surveys per week if possible or necessary, partnering with an enumerator.
 - (b) Help enumerators when they have problems implementing the Household Survey.
- Summarize Household Survey margin notes from enumerators to share with project staff.
- Conduct spot checks to ensure that enumerators are visiting the correct households and performing their work correctly.
- Complete Village Surveys with village leader, head teacher (or the most senior teacher available) and senior health-care staff:
 - (a) If necessary, visit multiple schools or health centres in order to combine information for a single village.
- Provide general management and support for enumerator teams.
- Serve as an intermediary, providing enumerators with feedback from project staff/data-entry teams on errors in survey marking, in order to make corrections

early and prevent future data-collection mistakes.

- If more than five households in the village are not able/willing to participate, discuss this with the village leader:
 - (a) Verify if those five households are relatively poorer or wealthier than the average household in the village and/or if the size of those five households is relatively smaller or larger than the average household.
 - (b) Carefully document the information for project staff.
- Lead debriefing sessions with enumerators at the end of each day:
 - (a) Identify common problems, village issues, etc.
 - (b) Report back to project staff.
- After completing surveys in each village, give household lists to project staff to destroy in order to preserve anonymity.
- Stay in the field during data collection in order to:
 - (a) Be available if enumerators have problems.
 - (b) Monitor the work of enumerators.
 - (c) Complete Village Surveys (visit schools and health-care centres to collect data).
 - (d) Assist with Household Surveys when needed.

7.2 Overview of the in-village sampling procedure

One of the most important responsibilities of the enumerator supervisor is to create the random sample of households in each assigned village. A summary of the sampling process follows. Additional detail can be found in Chapter 4 of this User's Guide, as well as in Annex VI, session 2.

- Project staff will tell enumerator supervisors which village(s) to visit:
 - *Project staff will inform the supervisor of which village(s) to visit, but will not give them the list of all villages to be sampled, so as to reduce potential bias (for example, in the case that supervisors*

or enumerators have friends or relatives in villages yet to be sampled). That is, the entire sampling frame should remain with project staff and they should inform enumerator teams and supervisors of the next village or two to be visited so they can plan accordingly.

- Project staff will provide a list of all households in the village, numbered 1 to n .
- Project staff should ensure that the village leader/elder/chief will be available to help create the random sample with the enumerator supervisor and generally assist as needed on the day that enumerator teams will start work in their village.
- Enumerator supervisors will show the household list to the village leader and then cut out numbers 1 to n (see Annex XV Number tabs (to be cut) for random sampling of households).
- Village leaders will randomly select 30 numbers, as the supervisor marks the name of the households from the numbered household list.
- Village leaders will randomly select an additional *five* numbers (or more as appropriate), as the supervisor marks the name of the households *and* the order in which they were randomly selected (these will serve as backup/extra households if some of the 30 households are unavailable or unwilling to participate in the survey):
 - It is important to note that the first group of 30 households selected is the random sample, and that *all of these households should be visited*.
 - Only if some of these households are unwilling or unavailable should the five or more extra sampled households be used *in the order in which they were sampled* – not based on location or convenience – in order to preserve the randomness and integrity of the sample.

- Enumerator supervisors will then use an existing map or create a new map (which may be a time-consuming process) identifying the 30 households, in order to show the enumerator teams which households to visit once they arrive in the village/area. See Figure 4.
- For especially large villages, enumerator supervisors will likely wish to split the work into two or more sections and only use/draw maps for a limited number of households at a time. This will most easily be done by working with the village leader to divide the randomly sampled households among zones of the village/area – for example, the enumerator supervisor should start mapping the 15 randomly sampled households on the east side of the village, and should then create a map for those on the west side at a later time.



Figure 4.
PRA map from Bangladesh (2012) with village households and locations

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In many parts of the world, a crowd of people from the community may form while the enumerator supervisor is meeting with the village leader/chief/elder because of their understandable interest in this unusual event. These interested people can be allowed to observe the MPAT random sampling process (a benefit is that they can later tell randomly selected households that they witnessed the random selection process). Additionally, the MPAT Village Survey is deliberately structured so as not to ask for any sensitive information from the village official, and thus the process need not be restricted or covert.

Every effort should be made, however, to meet with and interview the village educator and health-care staff member in private to help ensure unbiased and candid responses.

7.3 Notes and definitions for the MPAT Village Survey

This section should be translated and photocopied for each enumerator supervisor trainee.

GENERAL NOTES

- (i) The MPAT Village Survey should be conducted by trained enumerator supervisors.
- (ii) Village/area refers to the area in which MPAT will be implemented.
In the event that the village leader (or head teacher [or the most senior teacher available] or senior health-care staff member) is responsible for a larger geographical area, please ask the respondent to answer questions about the MPAT area only.
- (iii) Before beginning a conversation with the teachers or health-care staff, the enumerator supervisor should explain that the data will be reported as village-level data *and will not include their individual name or position*. However, as this is at the village level, it will not be possible to

ensure confidentiality of responses, as others will be aware of their position in the community and may thus be able to infer their participation in the Village Survey (especially if there are only very few teaching or health-care staff). That said, wherever possible, enumerators should explain to the Village Survey respondents that every effort will be made to maintain anonymity. As mentioned, they will not be identified by name and their names will not be recorded anywhere on the MPAT Village Survey, so hopefully they should feel free to answer questions truthfully.

- (iv) Ideally, the interview should be conducted between the enumerator supervisor and the teacher or health-care staff person only, with no additional people present during the interview. If a translator is needed, this is, of course, acceptable. Every effort should be made to discourage the attendance of other people during the interviews with the teacher or health-care staff member (especially higher-level government officials). To this end, the enumerator supervisor should show the survey to such interested parties and explain the questions and general purpose of MPAT *after* conducting the interviews that day. However, if this is not convenient or feasible, the enumerator supervisor can share the MPAT Village Survey with such officials before implementing it.
- (v) Sometimes, especially in large villages with multiple schools, the head or most senior teacher may not be sufficiently familiar with other schools to answer detailed survey

questions about all the schools in the area. *If this is the case, the enumerator supervisor should seek out teachers at the other schools for this information, and should then make notes indicating where the information came from and provide the totals or aggregate/average responses on the survey form.*

- (vi) *Important:* For interviews with the teacher or school principal, the enumerator supervisor should start the discussion by explaining that this is *not* an evaluation of the teacher or teachers, but rather an effort to collect basic information about the educational situation, much of which is not directly related to the teachers themselves. The same applies to the interview with the health-care staff or lead doctor; i.e. emphasizing that the survey will be used to conduct a general situational analysis in support of a poverty alleviation project, and not a personal analysis or performance evaluation.

NOTES ON SPECIFIC QUESTIONS

In this section, specific notes for many survey questions are provided to help guide enumerator supervisors in understanding both the intent of specific questions and how to mark responses. No notes exist for those questions that should be straightforward as written – enumerator supervisors should use their best judgement and be consistent in asking such questions and in marking respondents' answers.

Questions for village leader

v1 This question is asked for comparison with the household list by project staff. If the village leader provides the enumerator supervisor with a number

v1	What are the approximate population and number of households in your village/area?			
	Population	<input type="text"/>	Number of households	<input type="text"/> Don't know (-1)

of households that is different from the number on the sampling list, the enumerator supervisor should not try to correct it. Instead, they should accept that answer and write it down in the correct box – project staff can address noteworthy discrepancies at a later time.

v2 The ‘details’ to be listed about each event should at a minimum include: when the event occurred; its duration; its impact on households in the village/area; and any recovery efforts organized by local, provincial or national government, aid organizations, etc. If there is not enough room for this information in the boxes provided, the enumerator supervisor should use the margins or back of the interview form.

Note: This information is *not* used to calculate MPAT indicators, rather it is collected so that project staff can compare it with relevant data from the MPAT Household Survey. This will help them better understand the extent to which recent negative events may have influenced MPAT Household Survey respondents’ answers about future/perceived events.

The village leader portion of the Village Survey is complete.

Questions for village head teacher (or the most senior teacher available)

v3-v11 The ‘schools’ referred to are those for students age 5 to 14 approximately in the village/area being surveyed (exact names, such as elementary, primary, secondary, junior school, will vary by country). If there is only one school, then only that school should be listed in v3 and v4.

If ‘high school’ starts at age 13, then the enumerator supervisor should only consider lower levels of schools (as the target of these questions are children age 5 to 14).

v4 Spaces are provided on the survey (and in the Excel Spreadsheet) for up to five schools. If there are more than five schools in the village/area, combine the results using row ‘e’.

v5 If the exact number of female and male students is not known, use the best possible estimate for each school.

If the head or senior teacher is not familiar enough with all schools in the area to know the number of male and female students at each school, the enumerator supervisor should record what information the head teacher does know and then seek out teachers at other schools to collect additional, accurate information. The enumerator supervisor should note the source of each piece of information in the margin.

The criterion of ‘at least 4 days a week’ is based on an average five-day school week.

v2	Of all the negative events , natural or socio-economic, that occurred in the region over the last 5 years , which were the most damaging to people in your area (as far as negative impacts on their households, livelihoods and/or agriculture/livestock)? <i>Record pertinent details about each negative event (for up to 5 events), such as when it occurred, its duration, the impact on households and any recovery efforts.</i>	
Event:	write in	Details:

v3	How many schools (for students age 5 to 14, public and private) are there in your village/area? Schools <input type="text"/>	
v4	What are their names? <i>[fill in table below]</i>	
v5	What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school?	

v6 If some teachers only work a few hours per day (but work on most school days), this can be considered 'part-time', because it is roughly equivalent to working a few full days each week.

This question includes 'informal' teachers as well, as the criterion (for MPAT) is based on the time/ days spent teaching in school, not a person's official employment status.

v7-v11 These questions refer to all schools listed in v4 *combined*. In villages where there is more than one school and the situations at the schools are very different (as far as quality or resources), enumerator supervisors should try to determine what the *average conditions are across all schools in the village*.

v7 This only applies to full-time teachers. If teachers are offered a substantial 'housing stipend' that covers more than 50 per cent of their housing/rental costs, then one of the three 'Yes' answers should be marked. The enumerator supervisor should try to discern from the respondent the quality of housing attained by teachers with housing stipends in order to select the most accurate answer choice.

v8 and v9

'Adequate' does not mean 'ideal', it simply means 'acceptable' for teaching and learning.

Remember that this question is asking about all schools, not just the school of the head or senior teacher. Thus, the enumerator supervisor should try to get an understanding

of the *average* situation across all teachers and students in the village area in order to mark the most accurate response.

v10 The enumerator supervisor should clarify that this is not an evaluation of the teacher or the school, but rather a more general evaluation of the learning environment, much of which is outside the teacher's control/influence.

v11 If the head or senior teacher(s) responded that they accepted all students, then the enumerator supervisor should try to determine whether the school had enough places and supplies to serve them all. If it did not have enough places and/or supplies, but accepted all students anyway, the enumerator supervisor should mark answer choice 'None, accepted all students regardless of crowding (-2)'.

v6	How many full-time (work almost every school day) and part-time (work roughly half the school days) teachers are there at each school?			
[Enumerator supervisor to fill in the table below with the responses to questions v4, v5 and v6]				
	v4 School name	v5.1 Female students	v5.2 Male students	v6.1 FT teachers
	a.			
	b.			
	c.			
	d.			
	e.			

v7	Are full-time teachers provided subsidized, or free, housing? If so, what is the quality of the housing?	
	No (1)	Yes, provided poor-quality housing (2)
	Yes, provided adequate-quality housing (3)	Yes, provided high-quality housing (4)
	Don't know (5)	

v8	Do the teachers have adequate teaching supplies to teach effectively? (for example: chalk, teacher's books, maps, posters)	
	No (1)	A few teachers do (2)
	Most teachers do (4)	About half the teachers do (3)
	Yes, all teachers do (5)	
	Don't know (6)	

v9	Do the students have adequate school supplies to learn/study effectively? (for example: notebooks, pencils, textbooks, chairs, uniforms [if required], desks)	
	No (1)	A few students do (2)
	Most students do (4)	About half the students do (3)
	Yes, all students do (5)	
	Don't know (6)	

v10	In the last 2 school years, how has the overall performance of the majority of the students changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)

v11	How many students was the school(s) unable to accept due to limited places (or sleeping space in the school dorms) and/or limited school supplies?	
	None, able to accommodate all students (-1)	Number of students unable to accept
	None, accepted all students regardless of crowding (-2)	Don't know (-3)

v12	[Tell respondent that the next 2 questions are not about education, but we want their general opinion about the community]		
	Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?		
	No (1) [If 'No', do not ask v13]	Yes, a few households (2)	Yes, less than half the households (3)
	Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)

v13	In the last 2 years, how has this situation of inequality changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)

if there is a clinic relatively close to the village in question and the villagers regularly use that clinic (even though it may technically be located in another village), it should be included in the response.

The time frame for this question is the current school year or, if it has recently ended and the next one has not yet begun, the school year that has just ended.

v12 and v13 As written in the survey form, the enumerator supervisor should preface these questions by saying that while they are not about education, the teacher's opinion on them matters because, as educators and important/connected figures in the community, they have a good understanding of the community as a whole.

Note: These questions are asked three times in the course of the MPAT surveys – once to each household surveyed (in the MPAT Household Survey), once to the teacher(s), and once to the health-care staff (v22 and v23). This is done intentionally. The village leader(s) are not asked this question because, as the people partially responsible for the well-being of the entire community, they may be more likely than teachers or health-care staff to misrepresent the situation in their village/area.

When the teacher portion of the Village Survey is complete, the enumerator supervisor should thank the respondent and hand them a contact information card.

Questions for village health-care staff

v14-v18 The answers to all the questions should be entered in the boxes provided in the table under v18, with the exception of v14, which has a separate answer box.

These questions are about the village/area in which the MPAT survey is being conducted. The guideline of '5 km' is approximate. Thus,

If households in this village rarely use one of the health centres within the 5-km range, then the enumerator supervisor should make note of it in the margin (e.g. 'rarely used, too far, so data not collected').

These questions ask about primary health care. Thus, a 'specialty clinic' (for example, an eye clinic) would not be included in the responses.

As with schools, if there are more than five health centres in a village/area, the data for those five and up should be combined and listed on row 'e'.

v16 'Maximum capacity' refers to the total number of people that could be treated – to the best standard of care the clinic is able to provide – for both in- and out-of-bed patients (i.e. inpatients and outpatients). This question does not ask about the clinic's original or intended capacity (e.g. initially built with a bed capacity of 25), but its *actual, day-to-day, current capacity* (e.g. if there are broken beds, or dirty beds that are never used, then they should not be factored into the hospital's capacity).

v17 For 'enough medical supplies', use a number (1, 2, 3, 4 or 5) as indicated in the numbered answer choices at the bottom of the table. 'Medical supplies' means anything that health-care staff need in order to do their work (e.g. medicines, bandages, crutches, beds, etc.). For example, in the figure on page 131, Oxbow Health Clinic has a maximum daily patient capacity of six and 'Often' has enough medical supplies (answer code 4).

v18 This question is only concerned with the health-care staff providing health

services at each health centre. It does not ask about administrators, custodians, groundskeepers, etc.

In general, this question asks about full-time staff, as well as part-time staff that work at least two to three days per week. However, in some cases, one doctor or nurse may work at multiple clinics. In such cases, for example if a doctor works one day per week at each of five clinics, then they are considered part-time staff (one day) at each of the five clinics.

v19 and v20

These questions ask for information about those health-care staff listed in v18 that work at health centres for which data are being collected.

Do *not* write down the names of the health-care staff; instead use the boxes provided (staff 1, 2, etc.).

The MPAT Excel Spreadsheet is only equipped to use data from up to five full-time and up to five part-time staff. Thus, if the MPAT project area includes a hospital with a large number of health-care staff (for example, 30), the enumerator supervisor should record the data for full-time and part-time staff in v18 and then make a note in the margin to enable project staff to follow up. They will then select the five most representative staff and enter only this data into the MPAT Excel Spreadsheet in the columns allocated for v19 and v20.

v19 'Years' working' includes years worked at both the health centre in question

v14	How many health-care centres (public & private) are there within approximately 5 km of your village/area's centre? Health-care centres <input type="text"/>			
v15	What are their names? <i>[[fill in table below]]</i>			
v16	How many patients can be treated (attended to) in 1 day (maximum capacity) at each centre?			
v17	How often does each centre usually have enough medical supplies to provide adequate health care?			
v18	How many full-time (work most days a week) and part-time (work 1 to 3 days a week) health-care staff work in this/these health centre(s)?			
<i>[[Enumerator supervisor to fill in the table below with the responses to questions v15, v16, v17 and v18]]</i>				
v15 Health centre name	v16 Max. daily patient capacity	v17 Enough medical supplies*	v18.1 FT health-care staff	v18.2 PT health-care staff
a. Oxbow Health Clinic	6	4	1	0
b. Gukihuru Health Centre	20	5	1	1
c.				
d.				
e.				
*Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)				

v19	How many years has each staff person been working as a health-care professional (in total, at this health centre and elsewhere)?					
v20	How many years of formal medical training has each staff person completed?					
		v19.1 years' working	v20.1 years of training		v19.2 years' working	v20.2 years of training
	Full-time staff -a-	8	4	Part-time staff -a-	3	2
	Full-time staff -b-	2	4	Part-time staff -b-		
	Full-time staff -c-			Part-time staff -c-		
	Full-time staff -d-			Part-time staff -d-		
	Full-time staff -e-			Part-time staff -e-		

and any other health-care-related work prior to this. Enumerator supervisors should round to the nearest half year as needed. For example, if someone has just finished medical training and has only been working for one or two months, this should be marked as zero years; if they have been working for four or five months, it can be marked as half a year, '0.5' years.

v20 Years of formal training completed refers to the total years of medical training that staff have received (any kind of formal, classroom-based training). 'Traditional training' can be counted as 'formal training' provided it was of high quality from a reputable school and/or healer (that is, where the health-care staff person learned both preventive and curative treatment techniques). Residencies and internships

count as training experience and should be included in the years of training.

Please note that the response should *only include the staff member's years of medical training*, not general education or other training/education. In most cases, those health-care staff with medical training will have received their training *after* high school or after their university studies.

See the figure above for an example of how to fill out the table (where there are two full-time and one part-time staff members).

v21 Enumerator supervisors should preface this question by telling the health-care staff that the question only asks for their general observations/overall opinion of changes in people's health. The enumerator supervisor should stress that whether the situation has improved or worsened is not a direct reflection on the local health centre(s) or health-care staff.

v22 and v23 As with Village Survey v12 and v13 for the head or senior teacher, the enumerator supervisor is reminded to preface these questions by stating that they are not about health care. The respondent's opinions are valued as they, being health professionals, have a good understanding of the community situation as a whole.

When the health-care portion of the Village Survey is complete, the enumerator supervisor should thank the respondent and hand them a contact information card.

v21	In the last 2 years, how has the overall health of the majority of the people in your village/area changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)
v22	[Tell respondent that the next 2 questions are not about health care, but we want their general opinion about the community] Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?		
	No (1) [If 'No', do not ask v23]	Yes, a few households (2)	Yes, less than half the households (3)
	Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)
v23	In the last 2 years, how has this situation of inequality changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)



Key points from this chapter

- ✓ This chapter provides a general description of the main topics covered in the MPAT supervisor training programme. Full training lesson plans can be found in Annex VI MPAT enumerator supervisor training – detailed lesson plans.
- ✓ Specific notes for many potentially confusing situations related to Village Survey questions are provided to help guide enumerator supervisors in understanding both the intent of specific questions and how to mark responses in cases of atypical situations.
- ✓ Enumerator trainees who excelled during MPAT enumerator training and who demonstrate leadership and management potential can and should be recruited to participate in enumerator supervisor training.
- ✓ Enumerator supervisors play an important coordination role in MPAT implementation and should be excellent communicators.
- ✓ Potential enumerator supervisors must have attended the MPAT enumerator training programme and should be very familiar with the MPAT Household Survey, as enumerators will look to them for advice and guidance during the first few weeks of implementation.
- ✓ The training team should ensure that enumerator supervisors understand the importance of consent and confidentiality in the data-collection process.
- ✓ The full list of villages to be sampled remains with project staff so as to reduce potential bias (for example, in the case that supervisors or enumerators have friends or relatives in villages to be sampled at a later date).



Chapter 8



8.1 Conducting field practice before survey implementation

After the enumerators and enumerator supervisors are trained and the survey translations and supporting documents have been thoroughly reviewed by project and MPAT implementation staff, revised where necessary and tested, it is highly advisable that MPAT users conduct a one to two day field practice/pilot with all enumerators and supervisors. The pilot is an important opportunity to obtain realistic experience in MPAT implementation in a 'low-stakes' setting. It takes place in randomly sampled households, but in a village that is *not* part of the sampling frame. This pilot should be undertaken as if it were the real MPAT survey exercise, with the exception that, when enumerators first arrive at households and read the consent statement to household residents, they should make it clear that the exercise is for practice only, and that the data will not be used.¹⁷

Once the field practice is completed, and *each* enumerator has had the opportunity to visit *at least four households*, the entire group should reconvene and review the MPAT Household Survey question by question, so that any challenges and issues with respect to a given question may be discussed.¹⁸ This will allow enumerator supervisors and project staff to ensure that enumerators are comfortable with implementing the Household Survey, and will offer an additional chance to check that there are no remaining problems with the survey translation. Staff should visually check all the surveys as well to identify common errors, which can then be shared/discussed with the entire group.

17/ Small gifts may be offered to households after the survey to thank them for their time. The appropriateness of this should be determined by local staff, as it may not always be advisable, and one may also run the potential risk that other non-participating villages will hear about the gifts and expect them (which may introduce bias, whether a given agency is planning to give gifts to other households/villages or not).

18/ If it is not logistically possible for the entire group to meet, they should convene in smaller groups to discuss the field practice/MPAT pilot.

The pilot should not only focus on enumerators and the Household Survey, but should also include the opportunity for enumerator supervisors to practise implementing the MPAT Village Survey. Once enumerators have started implementing the Household Surveys, trainers/project staff should accompany the enumerator supervisors as they meet with village officials, health-care staff and teachers to implement the MPAT Village Survey. Trainers/project staff should take notes while enumerator supervisors are practising Village Survey implementation and should review any problems/issues with them afterwards. As with the Household Surveys in the field test, those who participate in the Village Survey field test should be informed that the data will not be used.

Trainers/project staff should then use these field-practice Household and Village Surveys to help train data-entry staff and ensure that they are comfortable with the MPAT data quality-control process before they begin entering data from actual surveys. Once the field practice has been successfully undertaken and evaluated, full MPAT implementation can begin. Specific details and general information on MPAT implementation are provided throughout this chapter.

8.2 Recommendations for enumerator teams

The MPAT Team recommends that, in implementing MPAT, teams of approximately four to five enumerator pairs be assigned to each enumerator supervisor. Thus, each enumerator supervisor manages eight to 10 people (ideally, teams should not exceed six

pairs, or 12 enumerators, per supervisor). Each enumerator pair should consist of one man and one woman, if possible, for reasons discussed in Chapter 6. Also, as mentioned earlier, if an enumerator has relationships in a particular village (family, friends, work contacts), they should not be assigned to work there.

The total time needed to finish implementing the MPAT surveys for a specific project will depend on the number of enumerator teams available, the topography, and transportation times between and within villages. Once the sampling frame has been defined (as discussed in Chapter 4), project staff will delegate responsibility for each village to a specific enumerator supervisor. Local conditions, weather, road quality and other factors will play a major role in

determining the number of villages that can be surveyed per day. As this is specific to local conditions, overall time management and prioritization are to be left to the discretion of project staff.

Similarly, the dress code for the MPAT field team depends on the country and context in question. That said, it is suggested that enumerators do *not* dress in overly formal/professional clothing when doing Household Surveys, so that respondents feel comfortable and at ease in answering the survey questions. For this reason, and also because they may have to walk long distances between households, enumerators should be explicitly told to wear simple, comfortable clothing when in the field and during MPAT implementation.



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Box 17. Working with village leaders to randomly sample households in Bangladesh (2013)



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Planning with and working with local authorities and village leaders is a necessary ingredient for the successful implementation of MPAT. Before enumerator teams arrive at a village, the village leader should be aware of the upcoming survey work and its purpose. Once in the village, the enumerator supervisor will work with the leader to randomly select participant households. This is done by inviting them to choose cut-out numbers that align with the total number of households in the village. Maps are then used so supervisors can explain to enumerators which households to survey and where the households are located. Often, the village leader will also need to help explain how to reach some households. With this accomplished, enumerators may then carry out the MPAT surveys with local residents.



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8.3 Addressing non-participation

As discussed previously, it is highly likely that fewer than all 30 of the original randomly sampled households will actually be able to be surveyed. *For this reason, five or more alternate households are selected per village.* Enumerators must note which households they are unable to survey and inform enumerator supervisors at the end of the day.

If more than five households per village do not participate in the Household Survey (for any reason), enumerator supervisors should discuss this with village leaders and collect general information on these non-respondent households. Non-respondent households may simply occur because no one was at home at the time of the survey administration (even after a return visit) or because the household did not wish to participate. Regardless of why households do not participate, the enumerator supervisors should consult with the village leader(s) to obtain general information about the households in question. This might reveal, for example, that the households were among the poorest in the village (or the richest), or the largest (or the smallest), or that the household members are all sick or working outside the village.¹⁹ By collecting these data, project staff can report on the general nature of non-respondents and understand how this may affect the data collected. Any such observations should be considered and addressed in any analysis based on MPAT results, and they should be noted in the final MPAT reports.²⁰

8.4 'A day in the life of an MPAT team' (chronology of a typical day of survey implementation)

In order to help further explain the role of enumerators and enumerator supervisors, the following is a breakdown of a first hypothetical work day in a village. The specifics will, of course, depend on the country and context:

8-10 a.m. The enumerator supervisor arrives in the village and meets with the village leader at the agreed place and time, as arranged by project staff. The enumerator supervisor introduces themselves and the organization they are working for, and the scope and objectives of MPAT. The enumerator supervisor then explains the need for a random sample of households for the survey, in a way that is clear to the villager leader. This can be done by explaining, first, how random sampling will be done, pulling numbers from a hat, for example. The enumerator supervisor should explain that random sampling is important because it ensures that: (i) every household in the village has the same chance of being selected for the survey; (ii) it is fairer than one person arbitrarily deciding which households to sample; and, lastly, (iii) it is needed to ensure the quality of the survey (that is, ensuring a representative sample).

Next, the enumerator supervisor shows the village leader the numbered list of households in the village and the numbered pieces of paper equal to the number of households. For example, if the village list includes 85 households, then the enumerator supervisor must have 85 small pieces of paper, numbered 1-85 ready to cut out or already cut out. The enumerator supervisor explains that they are using these small pieces of paper with numbers on them to randomly select the needed number of households to be surveyed (30 households according to MPAT sampling instructions, plus five or more extra households in case some households are unavailable or unwilling to participate). The enumerator supervisor should invite the village leader to actually pick out the pieces of paper – as is shown in Figure 5. The numbers thus selected are then matched to the numbered village list. For example, if a village leader selects the small piece of paper with '57' written on it, the enumerator supervisor then looks at the village household list to find household

19/ One possible way of obtaining this information is to ask village leaders to indicate where a given household ranks compared with other households in the village with respect to overall household wealth. This will not be exact, but a generalized assessment is still suitable for this purpose.

20/ For example, if it is found that the poorest households tend not to participate in the survey, this information should certainly be addressed in any analysis based on MPAT results.

no. 57 on the list. Then the enumerator supervisor writes down the name of that household and any helpful information about its location. This continues until all 30 households are randomly selected, at which time the enumerator supervisor then randomly selects an additional five or more numbers and records the five or more matching household names *in the order* in which they were selected. These are the 'extra' sampled households.

Now that the households have been randomly selected, the enumerator supervisor works with the village leader to understand the precise locations of the selected households. This usually means using (or drawing) a map of the village and marking the location of the 30 sampled households, as well as the extra households (in case they are needed). Depending on the size of the village, or how spread out the households are, this may also entail walking around the village (or riding around on a motorcycle) so the village leader can show the enumerator supervisor where certain households are. The enumerator supervisor should also use this opportunity to ask where the school(s) and health-care centre(s) are. Before the enumerators arrive, the enumerator supervisor can use the map to plan out efficient routes for each of the enumerator pairs. Depending on the size of

the enumerator team, it may be sensible to only identify half the household locations on the first day, and then meet with the village leader on the morning of the second day to identify the remaining half.

Lastly, the enumerator supervisor implements the first part of the MPAT Village Survey with the village leader (they may choose to do this earlier or later, as time permits).

10 a.m. The enumerators arrive at the village centre and meet with the enumerator supervisor who explains which households they are responsible for surveying and suggests routes they might take (ideally by showing them a map). Enumerators should write down the list of household names and the identifying information for each household so they can ask others in the community how to find these households should they get lost. This information should be recorded *on a separate piece of paper* (see template on page 214) and should *not* be written on the survey forms. This paper is also useful to allow enumerators to note which households, if any, did not participate in the survey for any reason (this paper must be turned in to the enumerator supervisor and then properly discarded).

The enumerator supervisor confirms that their team of enumerators has everything they need for a successful day of data collection



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Figure 5. Random sampling of MPAT households in rural Kenya

Preparing numbers for a village with 75 households (left), village elder selecting households (centre) and supervisor informing enumerators of which households to visit (right)

Source: Courtesy of Nuru International, 2011

and sets the meeting time and place for the end of the day.

The enumerator supervisor will then monitor the team's work over the course of the day and should be available to answer any questions that may come up as the enumerators are working.

As the schedule permits, the enumerator supervisor can seek out the head teacher (or the most senior teacher available) and a health-care centre worker to conduct those parts of the Village Survey. There is often time to implement this survey once the enumerators have gone to their first household of the day.

~4 or 5 p.m. At the end of the day, the enumerators and enumerator supervisor come together at a predetermined location in the village to have a debriefing and wrap-up meeting. This allows the enumerators to discuss any problems they encountered (perhaps specific to the village), ask any questions they had about filling out the surveys, and raise any common issues that respondents brought up.

To ensure that this information is communicated to project staff, enumerator

supervisors should take clear and detailed notes and provide a short report on these four points:

- (i) Problems encountered (logistical or otherwise)
- (ii) Questions that came up (from respondents or enumerators)
- (iii) Concerns raised by respondents
- (iv) General information about households that did not participate.

Finally and most importantly, the enumerator supervisor collects the completed surveys and the separate page of household names, and the team leaves the village.

The next day, the enumerators can begin working earlier (as appropriate), as the enumerator supervisor has already determined which households to visit and where they are located. The supervisor and their team of enumerators meet in the morning to retrieve their household list from the enumerator supervisor and to confirm that everyone knows the plan for the day. Data collection continues each day until the required number of households have been surveyed in each of the assigned villages.



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Key points from this chapter

- ✓ The MPAT survey field test/pilot allows enumerator teams to obtain realistic experience in MPAT implementation in a 'low-stakes' setting. It should be conducted as if it were the real MPAT survey exercise, with the exception that the data will not be used and enumerators will explain to households that this survey exercise is for practice only.
- ✓ It is recommended that teams of four to five enumerator pairs be assigned to each enumerator supervisor (resulting in each supervisor managing eight to 10 people). Each enumerator pair should consist of one man and one woman, and if an enumerator has relationships in a particular village (family, friends, work contacts), they should not be assigned to work there.
- ✓ At the end of the day, the enumerators and enumerator supervisor will reconvene at a predetermined location in the village to have a debriefing and wrap-up meeting. Enumerator supervisors should take clear and detailed notes on the progress of implementation and should be prepared to provide a short report towards that end. At this meeting, enumerator supervisors collect the completed surveys and the separate page of household names, and the team leaves the village.
- ✓ Data collection continues each day until the required number of households have been surveyed in each of the assigned villages.



Chapter 9



Chapter 9 Data entry and quality control

9.1 Quality control and the check-score-code (CSC) system

The quality-control process for MPAT survey data is a relatively simple, multistage process involving three key stages:

- (i) Checking
- (ii) Scoring
- (iii) Coding

This system, named the check-score-code (CSC) method, ensures that data are accurately, reliably and responsibly transferred from surveys to spreadsheets. To summarize the process: the first stage is a check of whether the data recorded are accurate, clear and logical. The second stage is a double-checking and scoring of this data, so that the numerical codes and values are transferred to the shaded

column on the left of the survey. The last stage is simply coding the data, that is, reading the numbers from the column on the left of the survey and entering them into the MPAT Excel Spreadsheet.

This spreadsheet can be downloaded at www.ifad.org/mpat. It is preprogrammed to do the math for the user; however, the data may not be of much use unless a motivated and well-trained data-entry team takes the time to go through surveys and identify problems and address them prior to data entry – this is indeed a key part of the CSC method's value, and why the 'check' and 'score' stages are so important.

The CSC method requires that a different person complete each stage of the process, ensuring that at least three different people

have reviewed each survey – a checker, a scorer and a coder. To ensure reliability of data and a high degree of quality control, no one data-entry staff member should ever complete more than one stage of CSC per survey. In addition, different colour pens are used by each of the three data-entry people, so that the issues identified by each data-entry staff person can be traced back to that person for clarification or correction if needed. For example, the first data-entry staff member writes their name in blue on the top before starting the 'checking' stage. Later, the second data-entry staff member writes their name in red under the first name before starting the 'score' stage. Lastly, the third data-entry staff member writes their name in green below the other two names before 'coding' the data into the computer. See Figure 6.

Paulo
Lenor
Makuri

MPAT Household Survey 34 min IFAD

Enumerator: Sarah Abukari Time 9:43 to 10:17 Date (YY/MM/DD): 20 13/ 08 / 30

AA1: 1 AA2: 3 AA3: 2 Village: Kibura

Household ethnic group (optional): 2 Household type (optional): C Household code: 00000000

Respondent's age: 35 Gender: M(1) F(2) Head of household's age: 68 Gender: M(1) F(2) M&F(3)

Head of household's marital status: Married(1) Single(2) Divorced(3) Widowed(4)

1 Can the head of the household read a newspaper?
No (1) Yes, with difficulty (2) Yes, without difficulty (3) Don't know (4)

2 During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months?
Female adults 3 Male adults 2 Don't know (-1)

3 During the last 12 months, how many adults lived and worked outside your home for 3 or more months?
Adults 1

4 During the last 12 months, how many children (age 14 and younger) lived and slept in your home for 9 or more months?
Female <5 0 Male <5 0 Female 5-14 2 Male 5-14 1
Household has no children (-1) [skip to question 9]

5 If there are no school-age children (age 5 to 14) in the household, skip to question 7
During most of the year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one-way, by any means: for example, walking, bicycle, scooter, bus)?
No. of minutes = 25 [If children attend more than 1 school, enumerator to record the average time] Children usually live at school (-1)
School-age children do not regularly attend school (-2) Don't know (-3)

6 Can your household afford your children's school fees and school supplies?
No (1) Rarely (2) Sometimes (3) Usually (4)

Two responses selected, mark MD

Figure 6.
Using CSC on an MPAT Household Survey

The CSC data-entry process should start one to two days after the start of MPAT data collection. In this way, the CSC process can identify errors made by enumerators in the field early on in the data-collection timeline, so they can be corrected and improved in subsequent surveys. Surveys should not be 'saved up' to start data entry at a later date, because this does not allow immediate feedback to enumerators and enumerator supervisors, and so enumerator mistakes will inevitably be repeated.

9.2 Training data-entry staff on the CSC system

When recruiting data-entry staff, project staff should consider the following criteria: computer literacy, college education (ideally), fluency in local language and attention to detail. As with enumerators and enumerator supervisors, detailed training lesson plans have been developed to help train data-entry staff on the CSC method. See Annex VII MPAT data-entry training (check-score-code) for these training materials.

A brief overview of the activities included in the data-entry training lesson plans is provided below. It should be noted that the times assigned to each training item are estimates based on the previous experience of the MPAT design team, but that they will vary for each trainer and each training group.

1. Introductions, training schedule and objectives, and MPAT overview (2 hours)

- Provides an overview of MPAT so that data-entry staff understand the importance of their role within the MPAT implementation process.

2. Overview of check-score-code, practice using dummy household survey (3-3.5 hours)

- Explains the mechanics of the CSC process in detail.
- Allows trainees to work with 'dummy' surveys so they can practise with issues they will inevitably encounter when

going through the actual surveys, such as: unclearly written responses, two responses circled for one question, missing data, logical inconsistencies (e.g. some questions about children have answers, while others suggest that there are no children in the household), etc.

- Discusses differences among various types of missing data.

3. Practise CSC with dummy village surveys (1-1.5 hours)

- Prepares trainees to use the CSC process with Village Surveys.

4. CSC game: "What should you do when?" (1 hour)

5. CSC practice using field-practice surveys/pilot surveys (2-4 hours)

- Provides opportunity to experience real data-entry situations from field-practice surveys, ask questions and receive feedback from the trainer.

6. Final review and wrap-up (1 hour)

As seen in the outline above, the CSC training includes both 'dummy' surveys and field-practice surveys to help the data-entry team gain hands-on experience in a 'low-stakes' setting (i.e. with data that will not be used to inform project decision-making). By training data-entry staff on the CSC method with the realistic errors found in such surveys, their performance during real MPAT data collection will be of higher quality.

The key steps of the CSC process covered in the data-entry training lesson plans are provided below, starting from organizing the data and concluding with entering MPAT data into the Excel Spreadsheet.

Organizing data

A useful method of organizing the surveys for the CSC quality-control process is to group incoming Household and Village Surveys by village in chronological order of completion. That is, all the MPAT Household Surveys from one village should be grouped in a pile and

ordered chronologically from the most recent (on the bottom) to the oldest (on top), and with the corresponding MPAT Village Survey on top of the pile. The piles can then be arranged by the relevant administrative units.

One of the main reasons for keeping the villages organized under their administrative regions is that, once the data are entered into the spreadsheets, it will be much easier to analyse and organize the data logically and appropriately by corresponding clusters. For example, in a typical Project X, one might find that households '1' through '30' are in Village A, households '31' through '60' are in Village B, and both Village A and Village B are in Township H. Thus, households '1' through '60' are in Township H.

CSC – check

Once the surveys are organized as described above, project staff should then take a quick look through all completed MPAT Household Surveys and note the survey dates and durations, flagging any that appear immediately problematic.²¹ Once this is accomplished, project staff should give data-entry staff one entire village's surveys to work on at a time.

The primary purpose of the *'check' stage* is to allow data-entry staff to review each question and ensure that the enumerator recorded a response (as appropriate), and that these responses were clearly written (intelligible). When the data-entry staff discover problems at this first stage (for example, *'unintelligible responses'*, *'multiple responses selected for one question'*, *'no response selected'* or *'logical contradictions with other data in the survey'*), they should circle the appropriate problem/issue, circle the question number and then make a note in the margin of the survey next to that question, describing the problem encountered and a suggested solution. The data-entry staff member should become very familiar with the household in question, which will allow them to identify logical inconsistencies. This can only be done if they go through the surveys slowly.

During training for this part of the CSC process, trainees should be *encouraged to 'think and act like detectives'*. That is, when going through the surveys, they should not simply carry out a cursory overview of the surveys question-by-question, but should also be *thinking more critically about the household as a whole, getting a sense of the household*. In this way, they can more easily identify potential inconsistencies (such as a household reporting having no children, but then providing responses to questions about children), which can serve as a 'red flag' for enumerators that may not have implemented the survey properly.

After going through the entire survey, the data-entry 'checker' then returns to the circled questions to try to determine what the intended answer was. They then write the likely answer alongside the unintelligible, missing or otherwise problematic answer. As they are using a different coloured pen than the enumerator, it will always be clear which data-entry staff member has made which markings and which are the original markings from the enumerator. Often, it will not be possible to discern with a very high degree of certainty what the intended answer should be. In these cases, data-entry staff should mark the response as missing data (MD).²² It is always better to err on the side of caution, and MD will affect MPAT results less than false data would, so if the likely response cannot be determined with a *very* high degree of certainty, the item should always be marked 'MD'.

When data-entry staff encounter issues that have not been covered in this User's Guide or the data-entry training programme, or when they are not certain whether they should mark a response as MD, they should always ask one of their supervisors (project staff) for assistance.

As a general rule, the data-entry team should trust enumerators. If there are generally no issues with a survey, then the data-entry team should accept the responses 'as is'. However, if the survey is filled with

21/ This is a good way to determine if any surveys may have been falsified (for example, if the recorded survey durations for a given village are all the same, or if one enumerator completed more surveys than possible on one day).

22/ Missing data are recorded as '-99' in the Excel Spreadsheet.

errors, then data-entry staff, in consultation with project staff, should

2		During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months?			
		Female adults	2	Male adults	3

be more inclined to question what is written on the survey form and should have project staff speak with the relevant enumerator supervisor, and/or the enumerator who worked on the survey, to resolve the issue(s).

If a given MPAT Household Survey has too many problems and errors, it is recommended that project staff discard it and not use the data (this is discussed in greater detail shortly). In such cases, project staff should also note which enumerator worked on the survey, and data-entry staff should review other surveys completed by that enumerator, checking to see if the same sorts of mistakes were made repeatedly. In some cases, it might be decided that a given enumerator's work is of poor quality, and thus none of the surveys they completed should be used for MPAT. The goal is to catch these enumerator mistakes early on so as to correct them, minimize the loss of data, and/or end employment of the specific enumerator so as to prevent further loss of data as the MPAT data-collection process continues (which, again, is why CSC starts shortly after survey implementation).

CSC – score

During the 'score' stage, a different data-entry staff member than the one who completed the checking stage handles each survey. During this stage, the 'scorer' goes through the survey and writes down the appropriate numerical response to each question in the designated box in the shaded column (on the left side of the survey). These boxes will be blank, as enumerators will have been trained not to make any markings in this shaded column.

In cases where there is more than one possible answer per question (for example in Q2 of the Household Survey), the general rule for the Household Survey is that, as one

reads across the survey question from left-to-right, the corresponding answers should be written in the corresponding shaded column top-to-bottom. For example, in the figure above there are two female adults and three male adults:

The scoring stage is extremely useful in identifying any remaining errors that may have been missed during the checking stage. Any errors identified should be marked as in the checking stage – that is, the problem/error and question number should be circled (recall again that the scoring data-entry staff are using different coloured pens than those who have previously marked the survey) and an explanation of the problem written in the margin. If the data-entry staff member can identify the correct answer, they should write it next to the shaded box; if not it should be marked 'MD'.

The other key purpose of the scoring stage is to make data entry in the 'coding' stage as straightforward and efficient as possible. After completing the scoring stage of a given survey, data-entry staff should double-check that they have entered the scores in the shaded boxes correctly.

Most responses to MPAT survey questions either have a numerical code assigned to them, or collect numerical data directly (such as the number of months or number of minutes). However, there are a few questions for which MPAT cannot preassign codes or numerical data that lend themselves easily to entry in the MPAT Excel Spreadsheet. In these cases, the following procedure is to be undertaken: *enumerators will record the respondent's answer in words, project staff will provide a code list for each answer category, and data-entry staff will consult that list during the scoring stage to insert the correct code for the response/enumerator's answer.* Examples of these types of questions include household

ethnic group, household type, and names of geographical or administrative areas.

For administrative areas, determining these (be it a village, township, county or other) and assigning a code to each is a means of keeping the data organized in spreadsheets and makes analysis of specific administrative regions much easier. If needed, it also allows project staff to render the data anonymous so they cannot be traced to specific areas, and can then potentially be shared without compromising the anonymity promised to MPAT respondents.

Either a project staff member, or a different person as appropriate, may create a *one-page code sheet* with all the codes and conversions needed by the scorer. The sheet should include the following information:

- (i) Names of enumerators and codes
- (ii) Names of enumerator supervisors and codes
- (iii) Names of data-entry staff and codes
- (iv) Names of ethnic groups and codes
- (v) Names of household types and codes
- (vi) Names of AA1, AA2 and AA3 and codes
- (vii) Conversion from local land unit to hectares

Lastly, the scorer should calculate the survey duration by using the start and completion times and writing the total time, in minutes, above the word 'to' on the MPAT survey between the two times, as is done in the figure below:

Assigning the household code

Once the scoring stage is completed, project staff should assign a household code to each Household Survey (writing it in the appropriate box at the top of the first page of the survey). The numbering for coding households should start at '1' and continue

in sequence until all the Household Surveys are numbered. The reason this is not done at the first stage of CSC is because, during the checking and scoring stages, it is likely that some surveys will have to be discarded (due to data problems). Numbering Household Surveys at the last stage in the CSC process thus avoids 'holes' in the final numbering. The household code thus serves as the unique identifier for each household (and allows one to examine the data in the spreadsheet and easily find/identify the hard copies of surveys as needed).

CSC – code

During the last '*code*' stage of CSC, the '*coder*' first enters the data from the top section of each survey and then from the left column into the provided Excel Spreadsheet. *The data should be entered slowly and carefully, and coders should get into the habit of regularly checking to ensure that they are entering the data in the appropriate columns.* It is very easy for data-entry staff to attempt to quickly race through the coding phase; however, this must be discouraged, as missing a data point for one column will place all the data that follow in the wrong columns.

For survey questions with multiple boxes for answers, as in Q32 below, the logic for data entry is always that *as one moves across (left to right) and down the survey, one moves from left to right on the Excel Spreadsheet.*

For example, in Q32, data are collected for the water source 'During the rainy season' (the first box on the left), 'During the dry season' (in the middle) and 'During most of the year' (on the right). During the scoring stage described above, the data from these three boxes will have been transcribed into the column on the left side of the MPAT

Household Survey, transcribing the values that are left-to-right now in a top-to-bottom fashion, so the value for the left-most

MPAT Household Survey		35 min	IFAD
Enumerator: Sarah Abukari	Time 9:36 to 10:11	Date (YY/MM/DD): 2013 / 08 / 30	
AA1: ^a 2	AA2: 1	AA3: 4	Village: Kihuru

32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? <i>[If the household uses different water sources for drinking and cooking, only record the drinking water source]</i>																										
	During the rainy season <input type="checkbox"/>	During the dry season <input type="checkbox"/>	During most of the year <input type="checkbox"/>																								
	No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)																								
<table border="1"> <tr> <td>1. Piped from water treatment plant (chlorinated)</td> <td>13. Water vender with tanker truck</td> </tr> <tr> <td>2. Piped from water treatment plant (not chlorinated)</td> <td>14. Water vender with cart or small tank</td> </tr> <tr> <td>3. Borehole (> 20m deep)</td> <td>15. Large dam (built & managed by government, company or collective)</td> </tr> <tr> <td>4. Borehole (< 20m deep)</td> <td>16. Small dam (built & managed by households, village or collective)</td> </tr> <tr> <td>5. Private well (> 20m deep)</td> <td>17. Stream</td> </tr> <tr> <td>6. Private well (< 20m deep)</td> <td>18. River</td> </tr> <tr> <td>7. Communal well (> 20m deep)</td> <td>19. Pond, lake (or other still water body)</td> </tr> <tr> <td>8. Communal well (< 20m deep)</td> <td>20. Irrigation canal</td> </tr> <tr> <td>9. Protected ('box') spring</td> <td>21. Bottled water (delivered by vender)</td> </tr> <tr> <td>10. Unprotected spring</td> <td>22. Bottled water (collected by household)</td> </tr> <tr> <td>11. Rainwater harvesting container (closed)</td> <td>23. Other (specify):</td> </tr> <tr> <td>12. Rainwater harvesting container (open)</td> <td></td> </tr> </table>				1. Piped from water treatment plant (chlorinated)	13. Water vender with tanker truck	2. Piped from water treatment plant (not chlorinated)	14. Water vender with cart or small tank	3. Borehole (> 20m deep)	15. Large dam (built & managed by government, company or collective)	4. Borehole (< 20m deep)	16. Small dam (built & managed by households, village or collective)	5. Private well (> 20m deep)	17. Stream	6. Private well (< 20m deep)	18. River	7. Communal well (> 20m deep)	19. Pond, lake (or other still water body)	8. Communal well (< 20m deep)	20. Irrigation canal	9. Protected ('box') spring	21. Bottled water (delivered by vender)	10. Unprotected spring	22. Bottled water (collected by household)	11. Rainwater harvesting container (closed)	23. Other (specify):	12. Rainwater harvesting container (open)	
1. Piped from water treatment plant (chlorinated)	13. Water vender with tanker truck																										
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11. Rainwater harvesting container (closed)	23. Other (specify):																										
12. Rainwater harvesting container (open)																											
<i>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means it is shared by 5 or more households]</i>																											

box will be in the top box in the column.

The last step of coding now entails taking these values from the left-hand column on the MPAT Household Survey and entering them into the Excel Spreadsheet. Again using the example of Q32, one sees that there are three columns, Q32.1, Q32.2 and Q32.3, corresponding to these three boxes. Thus, the column for Q32.1 will have the data for the 'rainy season', and following that logic, the column for Q32.3 will have the data for 'most of the year'. In Figure 7, the three columns that correspond to these three boxes for Q32 are highlighted in blue.

The same logic applies to all other survey questions with multiple boxes. For example, one can also see in Figure 7, below, that for survey question 32, there are three corresponding columns for the three shaded

boxes, labelled Q32.1, Q32.2 and Q32.3 in the spreadsheet.

The only point in data-entry coding at which this becomes slightly more complicated is for survey items Q52-Q54. Figure 8 shows an MPAT Household Survey for these questions after it has gone through the checking and scoring stages. This household has reported that they are concerned about three possible events: earthquakes, crop pests and sickness. They are most worried about earthquakes and less worried about sickness. Then, for each of these events, they have reported how severe this event might be were it to occur, and how likely it is to occur in the next 12 months. For example, this respondent feels that 'Earthquake' would be quite severe ('3' High-major severity) and that an earthquake

	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI
1	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32.1	Q32.2	Q32.3	Q33.1	Q33.2	Q33.3
2	4	1	15	5	6	6	8	1	1	1	1	1	
3	5	10	15	4	4	4	3	11	5	11	10	60	
4	6	2	6	6	5	5	6	1	1	1	1	1	
5	1	1	1	3	2	4	4	6	18	6	20	70	
6	4	4	44	4	4	4	4	5	5	5	4	4	

Figure 7.

Screenshot from the Excel Spreadsheet with columns for survey item Q32 highlighted

52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) <i>/Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)/</i>															
53	For these events, how damaging would each be for your household? ['Likely severity']															
54	For these events, how likely is it that the event will occur in the next 12 months? ['Likely frequency']															
<table border="1"> <tr> <td>Don't know (-1) <i>[skip to question 59]</i></td> <td colspan="3">Not very worried about any negative events (-2) <i>[skip to question 59]</i></td> </tr> <tr> <td>Likely severity (53) =</td> <td>Low-minor (1)</td> <td>Medium-moderate (2)</td> <td>High-major (3)</td> </tr> <tr> <td>Likely frequency (54) =</td> <td>Unlikely (1)</td> <td>Likely (2)</td> <td>Very likely (3)</td> </tr> </table>					Don't know (-1) <i>[skip to question 59]</i>	Not very worried about any negative events (-2) <i>[skip to question 59]</i>			Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)	Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)
Don't know (-1) <i>[skip to question 59]</i>	Not very worried about any negative events (-2) <i>[skip to question 59]</i>															
Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)													
Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)													
1 st	1	2	52.1) Earthquake	53.1) Likely severity= 3	54.1) Likely frequency= 2											
2 nd	2	3	52.2) Crop pests	53.2) Likely severity= 2	54.2) Likely frequency= 3											
3 rd	2	2	52.3) Sickness	53.3) Likely severity= 2	54.3) Likely frequency= 2											

Figure 8.
MPAT Household Survey – example response for Q52-Q54

event is likely to occur in the next 12 months ('2' Likely). As the severity and frequency questions are asked for up to three events, there are corresponding boxes to be filled in for each event.

One also sees in Figure 8 that this survey has already been scored, as responses for these questions have been transcribed in the boxes in the left-hand column. For these questions, the survey diverges from its typical vertical column format and instead uses an **enlarged shaded section** to accommodate the identification of up to three events, with information on the severity and frequency of each.

Figure 9, below, shows a screenshot from the MPAT Excel Spreadsheet. The data from the filled-in survey in Figure 8 are the same data shown on the first row in Figure 9. By comparing the two images, one can see how the data are first recorded by the enumerators (blue font in Figure 8); then during the scoring stage, transcribed to the shaded boxes

on the left of the survey (red font in Figure 8); and finally, entered from these shaded boxes into the Excel Spreadsheet (as shown in the first row of Figure 9) during the coding stage. The images also show that the spreadsheet's columns are arranged in ascending order to make the data-entry process as logical and efficient as possible. Thus, going from left to right in Figure 9, one sees that the first column (Q52.1) is reserved for the first event listed (in words), followed by two columns for the severity and frequency (Q53.1 and Q54.1) associated with that event. This pattern then repeats as shown in Figure 9 for the next two events.

Once the primary data entry for a survey is finished, the coder is responsible for reviewing the entire survey and typing up notes that describe all the errors found during the checking and scoring stages (which have already been written in the survey margins by the checker and scorer). There are spaces in the Excel Spreadsheet (at the far right side of

	CC	CD	CE	CF	CG	CH	CI	CJ	CK
1	Q50	Q51	Q52.1	Q53.1	Q54.1	Q52.2	Q53.2	Q54.2	Q52.3
2	4	10	Earthquake	3	2	Crop pests	2	3	Sickness
3	5	2	Sickness	3	2	No money	2	3	Flooding
4		10	Sickness	2	1	Earthquake	3	1	
5	2	1	Lose land	3	1	Sickness	2	2	
6	4	11	-2						

Figure 9.
Screenshot from the Excel Spreadsheet showing response for Q52-Q54

the 'Household Survey' worksheet) for these comments/notes. In this way, all relevant information is available to data-entry staff on one spreadsheet, regardless of whether the hard copies of the surveys are at hand.

On the MPAT website, there is also a much smaller Excel file called the MPAT Excel Data-entry template. This file is very simple and has only two tabs, one for Household Data and one for Village Data, with only column headings provided (i.e. the question numbers for each column). *It is highly recommended that data entry first be done with this simple template file, and that the data then be transferred to the larger MPAT Excel Spreadsheet once finished.* This two-stage data-entry approach is recommended for a number of reasons:

- In most cases, projects will have a number of staff working on data entry at the same time, and using this file will allow each staff member to have *their own* quick and easy-to-use Excel sheet. Once data entry is complete, the data can be combined and easily copied into the actual MPAT Excel Spreadsheet to calculate the indicators.
- The MPAT Excel Spreadsheet is a relatively large file with many computations occurring 'behind the scenes', making it a more cumbersome and potentially challenging file to work with for number-by-number data entry.
- Entering data into the small, simple Excel file helps avoid the possibility that someone working on data entry might accidentally change some of the MPAT valuations or weightings, which would in turn alter the results.

For all these reasons, it is recommended that the simple template be used for preliminary data entry. Once the data entry is complete, the data should be 'copied and pasted' into the MPAT Excel Spreadsheet to calculate MPAT results. Lastly, project staff should randomly check ~10% of the paper surveys against the data in the Excel Spreadsheet for an added level of quality assurance.

Data entry for the MPAT Village Survey

Essentially, the same CSC method is used for the Village Surveys, and data entry can be completed by project staff or trained data-entry staff. There are only two notable differences between data entry for the Household Survey and the Village Survey: first, there is usually more information that needs to be typed up in a Village Survey; and second, the Village Survey does not include a column of shaded boxes, as there are not as many questions/responses as in the Household Survey. The Village Survey worksheet in the MPAT Excel Spreadsheet provides the appropriate columns for responses and notes.

9.3 Understanding different types of missing data

When working with MPAT data, there are four main types of missing data that project staff are likely to encounter. It is important to understand the differences among these four types, as the MPAT Excel Spreadsheet handles them differently when calculating results.

Missing data (MD). If a given village or region has many blank questions, or MD, for the Household Surveys, project staff should contact the enumerators and enumerator supervisors involved to try to figure out why this is the case. This should be done as soon as the problem is noticed so that it might be corrected quickly (i.e. do not wait until all the surveys have been implemented). If more than 10 per cent of the questions on a given survey form have MD, then that survey should not be used. Staff should work quickly to identify why there are so many (fault of the enumerator or due to the specific situation/household?). If there is only a minimal amount missing, MPAT results should still be reliable.²³ If it is found that more than 20 per cent of the surveys for a given village have too much data missing (and thus cannot be used), then all the surveys from that village should not be used for MPAT. There is no clear guidance in the research literature on the cut-offs for these decisions, although

23/ Methods sometimes used to fill in MD, such as using *averages*, or *next neighbours*, or *extrapolating based on similar villages* should not be used for MPAT, as the negative implications of filling in missing data inaccurately can outweigh the potential utility to be gained.

10 per cent is an oft-used threshold (United Nations 2005). But the primary reason for these MD policies is that ignoring too much missing data often means not including households with particular characteristics, and thus the results will likely not be sufficiently representative of the population in question.

'N/A'. There are some questions on the survey that may be irrelevant for certain households. For example, if a household has no children, then the questions pertaining to children's education (Q5-Q8) will not be relevant and the enumerator will therefore skip them (as indicated on the survey in the enumerator instructions). In training, enumerators will have learned to clearly cross a line through question numbers that are supposed to be skipped. This should make it clear to data-entry staff that these questions were intentionally skipped because they were not applicable and thus they *should not* be marked as missing data. Data-entry staff should check if the logic of using an N/A option makes sense, and if it does, *they should leave these questions blank when entering data into the Excel Spreadsheet*. This step also helps ensure that scorers do not race through the surveys, but spend time carefully reading them, getting a feel for the household in question. This is also a good means of identifying logical contradictions in the surveys, as mentioned above.

'Don't know'. In many instances, when respondents report that they 'Don't know' the answer to a survey question, the explanation is as simple as that – they do not have adequate knowledge to answer the question. In other cases, the situation behind the response may be more complex. Project staff supervising MPAT should be informed of particularly high rates of 'Don't know' responses for more sensitive questions. Valuable information may be lost where high rates of 'Don't know' are reported, as these are treated as missing data in MPAT calculations.

While there is a significant difference between MD and a respondent not knowing certain information, the two must be treated the same way in calculating MPAT results.

This also provides an opportunity for survey administrators to flag these areas (where 'Don't know' is selected excessively) for additional analysis in order to get to the root of the issue.

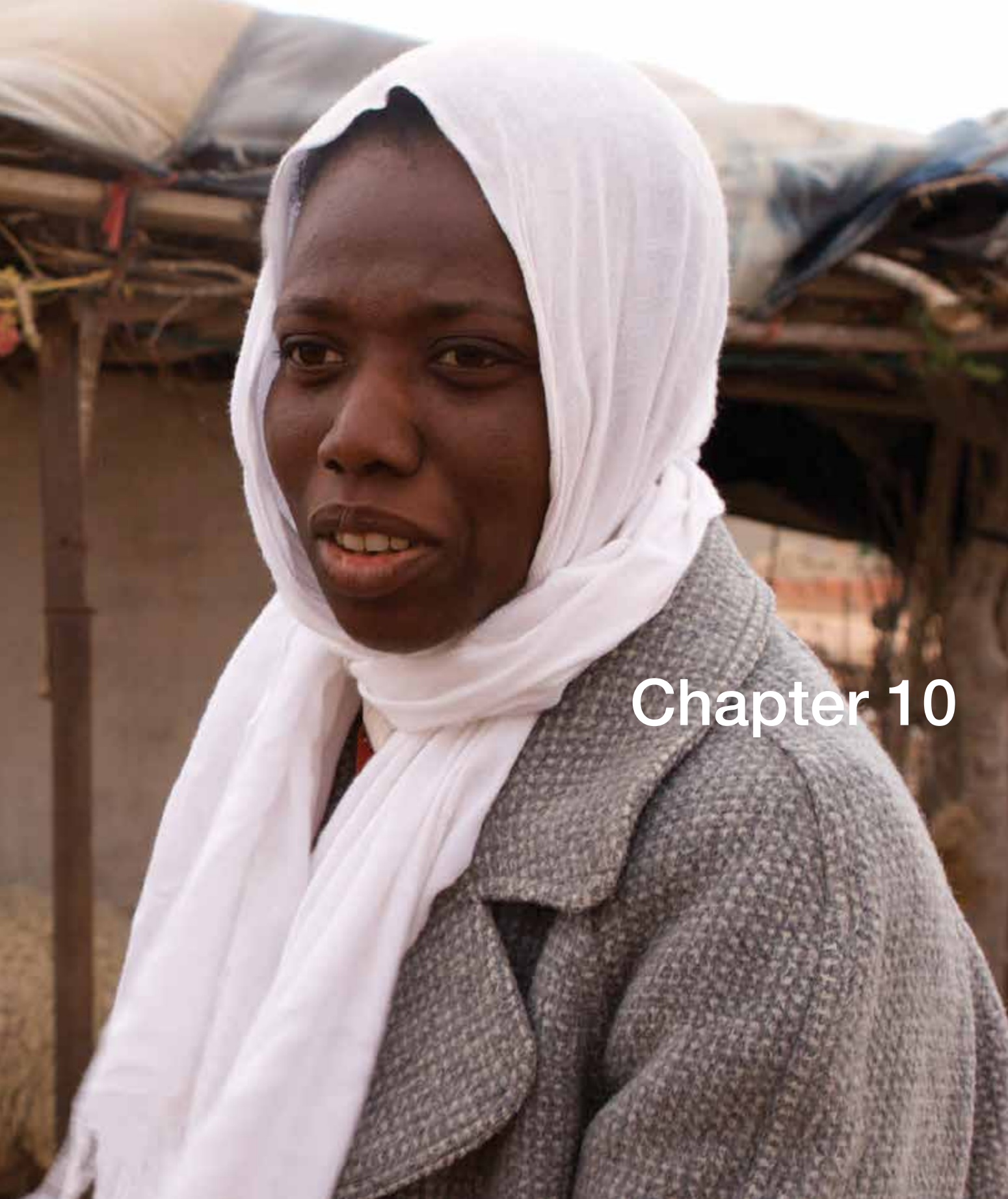
'Other'. For many of the survey questions, 'Other' is an option provided in the list of answer choices. This option is included because it was discovered, during MPAT testing and design, that in some instances the range of answers provided will not address the particulars of a given household. How should the 'Other' response be managed in terms of data coding and MPAT calculations? The general rule is that these responses can be coded as MD. However, in cases where an area has more than 5 per cent of the households reporting 'Other' for a given question, project managers should examine enumerators' margin notes to determine if one of the answer choices provided might actually fit the respondent's situation. If a provided response is acceptable, the responses should then be re-coded on this case-by-case basis and the data calculated again. When no response is sufficiently close to the explanation that the enumerator provided (or when the enumerator neglected to write why 'Other' was selected), the response should be left as MD, but the notes should be examined by staff to understand the situation(s).

Key points from this chapter

- ✓ The quality-control process for MPAT survey data involves three key stages: checking, scoring and coding. The first stage is a check of whether the data recorded are accurate, clear and logical. The second is a double-checking and scoring of this recorded data so that the numerical codes and values are transferred to the shaded column on the left of the survey. The last stage is simply coding the data, that is, reading the numbers from the column on the left of the survey and entering them into the MPAT Excel Spreadsheet.
- ✓ The CSC method requires that a different person complete each stage of the process, ensuring that at least three different people have reviewed each survey – a checker, a scorer and a coder. To ensure reliability of data and a high degree of quality control, no one data-entry staff member should ever complete more than one stage of CSC per survey.
- ✓ Data entry/CSC must be undertaken carefully and closely supervised by project staff. CSC staff should ‘think and act like detectives’. That is, when going through the surveys, they should not simply conduct a cursory overview of the surveys question-by-question, but should also be thinking more critically about the household as a whole, getting a sense of the household.
- ✓ Training lesson plans for MPAT data-entry staff are available in Annex VII MPAT data-entry training (check-score-code) – detailed lesson plans.
- ✓ There are important differences in the four main types of missing data (MD) that project staff are likely to encounter – ‘MD’, ‘N/A’, ‘Other’, and ‘Don’t know’. It is important to understand the differences among these four categories, and how the Excel Spreadsheet handles them.



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Chapter 10

Chapter 10 Calculating standardized MPAT indicators/results

This chapter provides an overview of the results produced by MPAT and a summary of the methodology and calculations behind these results. It also describes the main ways in which the tool presents results to users.

10.1 MPAT Excel Spreadsheet

While MPAT indicators can be calculated manually (based on the information in this User's Guide), for most users the Excel Spreadsheet will be the crucial resource for calculating and reviewing standardized MPAT results because it comes pre-coded with expert-devised values/scores and weightings. The spreadsheet does all calculations automatically for the user (once data are entered through the CSC procedure described earlier) and quickly computes and displays results based on the information gathered from surveys. Again, an important aspect of MPAT is that it presents its carefully obtained results in a clear, simple and visually oriented way, allowing for the straightforward interpretation and comparison of sectoral needs, and thus a comprehensive picture of the different dimensions of poverty in an area. MPAT results are displayed in three places on the spreadsheet: the Household Results and Village Results and All Results sheets/tabs. Each of these are described in the Quick User's Guide tab of the spreadsheet, but are also introduced and explained below.

The Household Results tab shows the subcomponent and component scores for all surveyed households individually. These may be especially useful in analysing and comparing household-level characteristics/indicators. Auxiliary information entered in the Household Survey sheet – such as household code, survey time, etc. – is also displayed here automatically. The Village Results and All Results sheets of the main Excel Spreadsheet summarize results for

subcomponent and component scores for all households in a given village, or in the entire project (or region). Average, minimum and maximum scores are reported. Once the village code is entered into the appropriate cell (on the top left, blue-coloured cell of the Village Results sheet), MPAT results are calculated for that village (the user may note that the sheet may take some time in calculating).

As can be seen in the sample MPAT village profile below, Figure 10, summaries of the basic household and village demographic information described above are automatically calculated and generated by the MPAT Excel Spreadsheet at the top left corner of the village profile.

10.2 Understanding the mechanics of MPAT indicator calculation

The Excel Spreadsheet provided on the MPAT website is preprogrammed to do the math for the user, but it is still important that users are aware of what is happening 'behind the scenes' in calculating MPAT's different subcomponent and component values. Users should begin by reading through the first tab, the Quick User's Guide, which is the first worksheet on the spreadsheet. Additional and more detailed information is provided below.

First, survey data from the Household and Village Surveys are entered into the spreadsheet. The survey data are then automatically converted to values on a 1-10 scale (see the Values worksheet/tab). Once the Village Survey data are entered, the calculated values derived from the surveys are automatically assigned to all households that belong to the village in question. MPAT's unit of analysis is the household, though the village level may be the lowest level of data

Village Code	2		
General Information		[min, max]	
Number of households surveyed	30		
Average survey time (minutes)	30	[12, 52]	
Average respondent's age (years)	52	[17, 79]	
Average head of HH age (years)	53	[30, 79]	
Gender Statistics		%	
Male respondents	17	57%	
Female respondents	13	43%	
Male headed HHs	18	60%	
Female headed HHs	8	27%	
Female & male headed HHs	4	13%	
Head of Household's Marital Status			
Married	25	83%	
Single	0	0%	
Divorced	0	0%	
Widowed	4	13%	

Note: HH = household

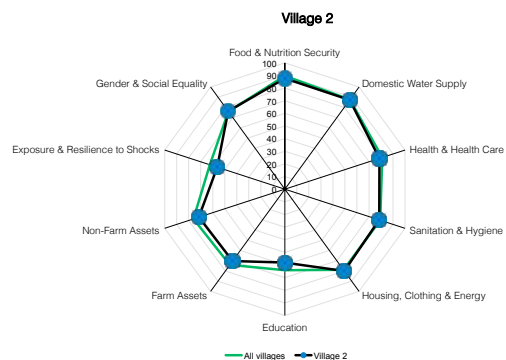
MPAT (2014) Components

Scores across households	Average	[min, max]
Food & Nutrition Security	87.7	[42.1, 96.2]
Domestic Water Supply	87.2	[71.9, 99.1]
Health & Health Care	78.8	[60.7, 89.1]
Sanitation & Hygiene	78.5	[60.4, 94.6]
Housing, Clothing & Energy	80.0	[60.3, 88.1]
Education	58.1	[52.7, 66.4]
Farm Assets	70.4	[10.0, 100.0]
Non-Farm Assets	71.5	[23.6, 98.3]
Exposure & Resilience to Shocks	56.2	[23.8, 77.3]
Gender & Social Equality	76.2	[69.0, 82.1]

Number of MPAT scores	Components	Subcomponents
Above 80 points	3	14
Between 60 and 80	5	10
Between 30 and 60	2	4
Below 30 points	0	0
Missing data	0	3

Color code:

Score [80-100]
Score [60-80]
Score [30-60]
Score [0-30]
Missing data (MD)



MPAT (2014) Subcomponents

Scores across households	Average	[min, max]
1. Food & Nutrition Security		
Consumption	96.7	[20.0, 100.0]
Access Stability	99.1	[72.5, 100.0]
Nutrition Quality	65.5	[43.8, 85.8]
2. Domestic Water Supply		
Quality	70.0	[46.4, 96.9]
Availability	96.2	[73.0, 100.0]
Access	96.2	[64.0, 100.0]
3. Health & Health Care		
Health Status	81.3	[46.0, 100.0]
Access & Affordability	77.2	[61.5, 96.5]
Quality	80.0	[69.1, 87.1]
4. Sanitation & Hygiene		
Toilet Facility	92.3	[76.0, 100.0]
Household Waste Management	60.2	[20.0, 88.3]
Hygiene Practices	82.2	[50.3, 100.0]
5. Housing, Clothing & Energy		
Housing Structure Quality	90.1	[73.0, 100.0]
Clothing	MD	
Energy	68.8	[41.0, 81.0]
6. Education		
Quality	54.3	[54.3, 54.3]
Availability	51.3	[51.3, 51.3]
Access	91.6	[65.0, 100.0]
7. Farm Assets		
Land Tenure	63.0	[10.0, 100.0]
Land Quality	MD	
Crop Inputs	82.4	[18.0, 100.0]
Livestock/Aquaculture Inputs	88.9	[20.0, 100.0]
8. Non-Farm Assets		
Employment & Skills	73.9	[10.0, 100.0]
Financial Services	MD	
Fixed Assets & Remittances	77.1	[60.0, 96.0]
9. Exposure & Resilience to Shocks		
Degree of Exposure	49.9	[10.0, 100.0]
Coping Ability	76.2	[15.0, 85.0]
Recovery Ability	60.2	[40.0, 81.5]
10. Gender & Social Equality		
Access to Education	91.6	[70.0, 100.0]
Access to Health Care	94.0	[85.0, 100.0]
Social Equality	55.0	[55.0, 55.0]

Figure 10.
Sample village profile created with MPAT Excel Spreadsheet

aggregation and analysis for project planning and design and for M&E.

Every subcomponent is composed of multiple survey items. Thus, the values that make up each subcomponent are aggregated using a weighted arithmetic average (see Equation 1) and converted to a 10-100 scale (for increased resolution) – see Figure 11. The weights used to accomplish this are provided in the MPAT Values and Weights tabs, and are also listed in Annex XII Valuations and weighting for MPAT components and subcomponents. In this way, a value is obtained for each subcomponent and each household.

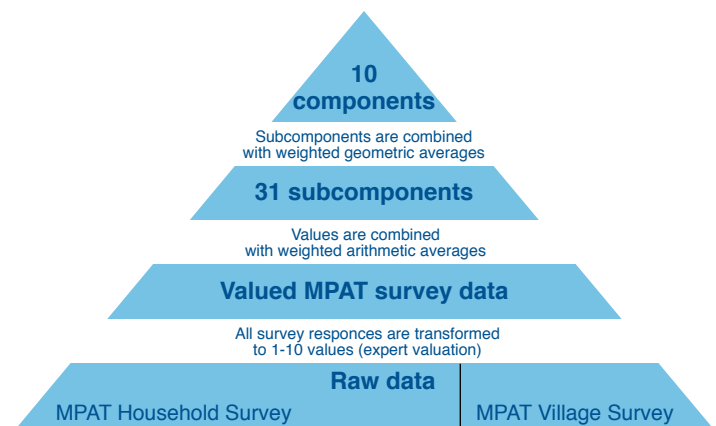


Figure 11.
Visual summary of how MPAT data are aggregated into indicators

$$y_{jk} = \sum_{i=1}^n w_{ik} x_{ijk}$$

Equation 1. Weighted arithmetic average formula and explanation

Where: y_{jk} is the score for household j in subcomponent k , w_{ik} is the weight attached to survey question i in subcomponent k , and x_{ijk} is the scaled score for household j in question i in subcomponent k .

Therefore, $\sum_i w_{ik} = 1$ and $0 \leq w_{ik} \leq 1$.

These subcomponent values are then aggregated using a weighted geometric average (see Equation 2) to calculate the component values (the weights for this conversion are found in Annex XII). Though the user enters the data for all villages at once, this process is actually done for each village (and thus the importance of having individual codes for each).

$$y_{jk} = \prod_{i=1}^n x_{ijk}^{w_{ik}}$$

Equation 2. Weighted geometric average formula and explanation

Where: y_{jk} is the score for household j in subcomponent k , w_{ik} is the weight attached to survey question i in subcomponent k , and x_{ijk} is the scaled score for household j in question i in subcomponent k .

Therefore, $\sum_i w_{ik} = 1$ and $0 \leq w_{ik} \leq 1$.

To explore these equations, let us begin with the first: a weighted arithmetic mean, which is, in fact, quite intuitive. An arithmetic mean is the average of n values, calculated by summing the values and dividing by n . For example, the average of 10 and 20 is $10+20 = 30/2 = 15$. A *weighted* arithmetic mean is the average of n values wherein each value has a different contribution

(percentage) to the total. For example, the weighted arithmetic mean of 10 and 20, with a weighting of 30 per cent and 70 per cent, respectively (the weights must always sum to 1, or 100 as it were), would be:

Weighted arithmetic average:

$$(10 \times 0.3) + (20 \times 0.7) = 17$$

Hence, while the simple average of 10 and 20 is equal to 15, their weighted average is 17, which is closer to 20 than to 10 as a 'heavier' weighting was applied to 20.

Before discussing the weighted geometric mean, let us review the simple geometric mean. Simply put, this is calculated as the n -th root of the product of n numbers. For example, the geometric mean of 10 and 20 is equal to 14.14 and is calculated as follows:

$$10 \times 20 = 200, \text{ the square root of } 200 = 14.14$$

Thus, in this example, the geometric mean (14.14) is lower than the arithmetic mean (15). In general, the geometric mean is always lower than the arithmetic mean.²⁴ This is the natural result of using a geometric mean, namely that the lower value 'pulls down' the total score (which is desirable in the context of MPAT as it is important to highlight low values).

The weighted geometric average of 10 and 20, using the same weightings as above of 30 per cent and 70 per cent, respectively, would be:

Weighted geometric average:

$$10^{0.3} \times 20^{0.7} \approx 2.00 \times 8.14 \approx 16.25$$

Again, the weighted geometric average (16.25) is lower than the weighted arithmetic average (17), but due to the heavier weight attached to the value 20, this difference in the two averages is not so extreme.

The MPAT design team deliberately used aggregation equations that were relatively intuitive and straightforward to ensure that MPAT is technically sound, yet not too complicated to understand easily – see Box 18.

24/ In the case of equal values, however, the arithmetic mean is equal to the geometric mean. For example, if we have two values, 10 and 10, their arithmetic average is equal to their geometric average, which is 10.

Box 18. Key take-away points about MPAT's inner workings and equations

The equations are presented here so that everyone can understand how the MPAT indicators are calculated and, if they wish, calculate them manually. However, the MPAT Excel Spreadsheet does the math automatically provided you enter the survey data accurately. The most important things to understand are:

- (i) The Excel Spreadsheet organizes information by village.
- (ii) MPAT formulas weight each survey item based on its importance in determining the subcomponent score. Survey questions that are considered more important in determining the subcomponent score receive a higher weight. This is the weighted arithmetic average.
- (iii) MPAT formulas also weight each subcomponent based on its relative importance/contribution to the overall component score. This time, however, MPAT uses a weighted geometric mean, which means that a lower value will 'pull down' the total score. This serves a positive purpose, because MPAT wants to be sure that it 'sees' the low values loud and clear, so they are not averaged away and thus hard to identify.

10.3 Values/scores and weightings for standardized MPAT indicators

This section explains the values associated with all MPAT survey item responses, and the weightings used for aggregating them into subcomponents (the weights for aggregating the subcomponents into components are provided at the end of Annex XII).

These values are also programmed into the MPAT Excel Spreadsheet and visible on its Values and Weights tabs. All the information needed to calculate MPAT's indicators is provided in this guide in the interests of transparency – and in case users wish to calculate MPAT results themselves (that is, without using the MPAT Excel Spreadsheet).

For an understanding of the expert elicitation process used to arrive at these values (cardinalizations), weights, and the expert weighting scheme for aggregating subcomponents into components, the interested reader is encouraged to consult the MPAT Book (Cohen 2009a) and Cohen and Saisana (2013).

In Annex XII, brief descriptions of the purpose of each component and its subcomponents are provided, as well as

the percentage weight each subcomponent contributes to its respective component (i.e. the expert weighting scheme). For example, for component 1, Food & Nutrition Security, subcomponent 1.1 Consumption is weighted at 43 per cent, subcomponent 1.2 Access Stability is weighted at 32 per cent, and subcomponent 1.3 Nutrition Quality is weighted at 25 per cent – see Box 19.

Box 19. Example of how the values/scores for survey item responses are organized and aggregated in Annex XII

An example: Food & Nutrition Security's first subcomponent

1.1 Consumption – 43% of Food & Nutrition Security component

This subcomponent assesses whether or not the household has a sufficient quantity of food most of the time.

59		During the last 12 months, did any member of your household eat fewer meals, or smaller portions, than usual because there was not enough food? [If 'Yes', for approximately how long?]				
		Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)	
		Yes, for about 1 month (5)		Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)
60		During the last 12 months, did any member of your household go to sleep at night hungry? [If 'Yes', how often did this occur?]				
		Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)	
		Yes, for about 1 month (5)		Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)

For 59

Answer code	Value (1-10)
1	10
2	8
3	6.5
4	5
5	3.5
6	2
7	1
8	MD

For 60

Answer code	Value (1-10)
1	10
2	9
3	7
4	6
5	4.5
6	2
7	1
8	MD

Aggregation for subcomponent 1.1

59	60
60	40
Total	100%

This information demonstrates that the answers to these two survey questions are first given values/scores and are then aggregated to create a subcomponent score for each household. This is done for every subcomponent, and the weights to combine the subcomponents into components are provided at the end of Annex XII.

Under each subcomponent name and description, the survey questions providing data for that subcomponent are displayed as they appear on the actual surveys. Questions in blue-shaded boxes are from the MPAT Village Survey. Separate tables for each question appear under each box, displaying the possible responses and the corresponding MPAT values (cardinalization) associated with each response. Below these tables, the reader will find other tables displaying the aggregation rules (i.e. the weighting percentages) for each subcomponent. All this

information also appears in the MPAT Excel Spreadsheet.

At the project level (or 'All Results' as in the MPAT Excel Spreadsheet), the MPAT subcomponent and component scores for each village are averaged together (using a population-weighted average) to calculate the average MPAT subcomponent and component scores for all the villages combined. That is, each village's MPAT scores contribute to the total average based on the number of household samples in each village.

In addition to ensuring that MPAT is not a 'black box', all these values and weights are provided in Annex XII Valuations and weighting for MPAT components and subcomponents so that the user might review them to decide if and where it might be appropriate to alter the values or weights to create a customized MPAT (discussed below). When calculating a customized MPAT, or the MPAT Excel Spreadsheet, survey item response valuations (in blue font) and weightings (also in blue font) may be changed to better fit the local context; however, please consult Chapter 11 Optional – how to customize MPAT before attempting to do so.

When data are missing in some items due to intentionally skipped survey questions or particular responses, the weights for the remaining items are re-scaled by dividing by their sum, unless otherwise indicated (as, for example, in the aggregation rules for subcomponent 3.1). That is, if an item is not relevant for a given household, the new weights for the remaining items are calculated by dividing the old weights by their sum and multiplying by 100, so that the ratio of the weights remains the same. See Annex XIII Special cases – aggregating components with missing data, 'unused' survey items and skip logic for additional details.

For example, for subcomponent 3.1, Health Status, there are two different aggregations: the first includes weighting percentages for all three survey questions, and the second includes weighting percentages for only two survey questions (Q9 and Q10). When the response to Village Survey v21 is that there has been no significant change in the overall health of people, then the subcomponent is calculated using only data from Q9 and Q10. In this case, the weighting percentages are revised so that the 'new' weights are calculated by dividing by their sum (i.e. $30 + 45 = 75$); thus, the new weights are: $30/75 \times 100 = 40$; and $45/75 \times 100 = 60$. In this way, the ratio of the two weights remains constant.

Aggregation for subcomponent 3.1

9	30
10	45
v21	25
<i>Total</i>	<i>100%</i>

Aggregation for subcomponent 3.1 – **option 1** (if overall health of people has not changed [v21, answer code '7'])

9	40
10	60
<i>Total</i>	<i>100%</i>

For a summary of instances where alternative weighting options are used due to skipped questions, please see the end of Annex XIII Special cases – aggregating components with missing data, 'unused' survey items and skip logic.

10.4 Reviewing MPAT results – taking a first look

As should be clear, and as will be discussed shortly in this chapter, MPAT provides easily understood values for a significant amount of information about the many dimensions of poverty at the household, village and project level – these values are the results produced by MPAT. Yet demographic information, another result of MPAT data collection, is not assigned values at all. Still, demographic information is one of the first types of information that should be reviewed and investigated when beginning to explore and understand MPAT results.

Enumerator: _____		Time _____:_____ to _____:_____		Date (YY/MM/DD): 20____/____/____	
AA1: _____		AA2: _____		AA3: _____	
Household ethnic group (optional): _____		Household type (optional): _____		Household code: _____	
Respondent's age: _____		Gender: <i>M(1) F(2)</i>		Head of household's age: _____	
				Gender: <i>M(1) F(2) M&F(3)</i>	
Head of household's marital status: <i>married(1) single(2) divorced(3) widowed(4)</i>					

Figure 12.

MPAT Household Survey – respondent and head of household information

At the top of the MPAT Household Survey, there is a section for collecting basic demographic data about the survey respondent and the head of the household (including age and gender, and head of household age, gender and marital status). These data are very useful in providing a quick overview of the characteristics of the respondents and households in the randomly sampled population. It is highly recommended that, as a first step in reviewing responses, these data be analysed to understand general demographic characteristics, as this is the first avenue through which bias might be introduced into the survey at a macro level.

If this initial analysis reveals, for example, that 86 per cent of the household respondents were men between the ages of 18 and 24, there is arguably reason to question the nature and perhaps reliability of the data captured. If the data also reveal that, for example, 70 per cent of those same households were headed by women, a critical lens must be used. In such instances, it is important to use good judgement and logic and conduct deeper investigations to understand the quality of information received. In this example, the gender ratios beg several questions: Why is it that the majority of the households are headed by women, yet the vast majority of those interviewed were young men? What are the gender dynamics in the village surveyed, and what might be the underlying causes? And, of course, to what extent has this possibly biased the data collected?

This type of analysis is an important first step because it allows one to better understand the nature of the data collected and the

extent to which household respondents are in a position to accurately provide information about their situation. That said, as the data are organized by village, this initial stage of analysis could also reveal that the data from a few villages could be too biased to use reliably and/or that the majority of the survey data are too biased and the survey must be reimplemented.

For example, if it was found that the average age of the household respondent across all villages in a region/project was 35, but for one particular village the average age was 17, the user would be advised to look into this village's situation more closely.

Such observations are referred to as 'outliers',²⁵ and they must be examined closely. In instances of outlier data, several critical questions should be asked. Are the observations simply errors in data collection or entry? This should be unlikely if the steps outlined above have been followed, but of course project staff should remain open to this possibility. If this is the case, these errors should be corrected by members of the data-entry team. Or do the outliers perhaps represent unusual circumstances? Discussion should always take place as to the reasons why outliers are unusual, and the practical applications of knowing this. It should be understood that outliers often provide valuable insight into particular observations or questions. Ultimately, knowing *why* an observation is an outlier is very important; this will require further investigation and contextual knowledge.

It is not appropriate to delete several or numerous outliers automatically just because they are outliers. One cannot, for example, pick and choose which village to exclude based on other MPAT data, as this

25/ Results differing greatly from others in the same sample.

will manipulate the sample and affect the representativeness and accuracy of data. Outliers often provide interesting case studies. They should always be identified and discussed, and should not be concealed or deleted without sound justification and

explanation.²⁶ Again, it is important that project staff conduct spot checks to ensure that Excel data match the paper surveys. Field visits to try to 'ground-truth' (validate) MPAT findings are similarly encouraged.

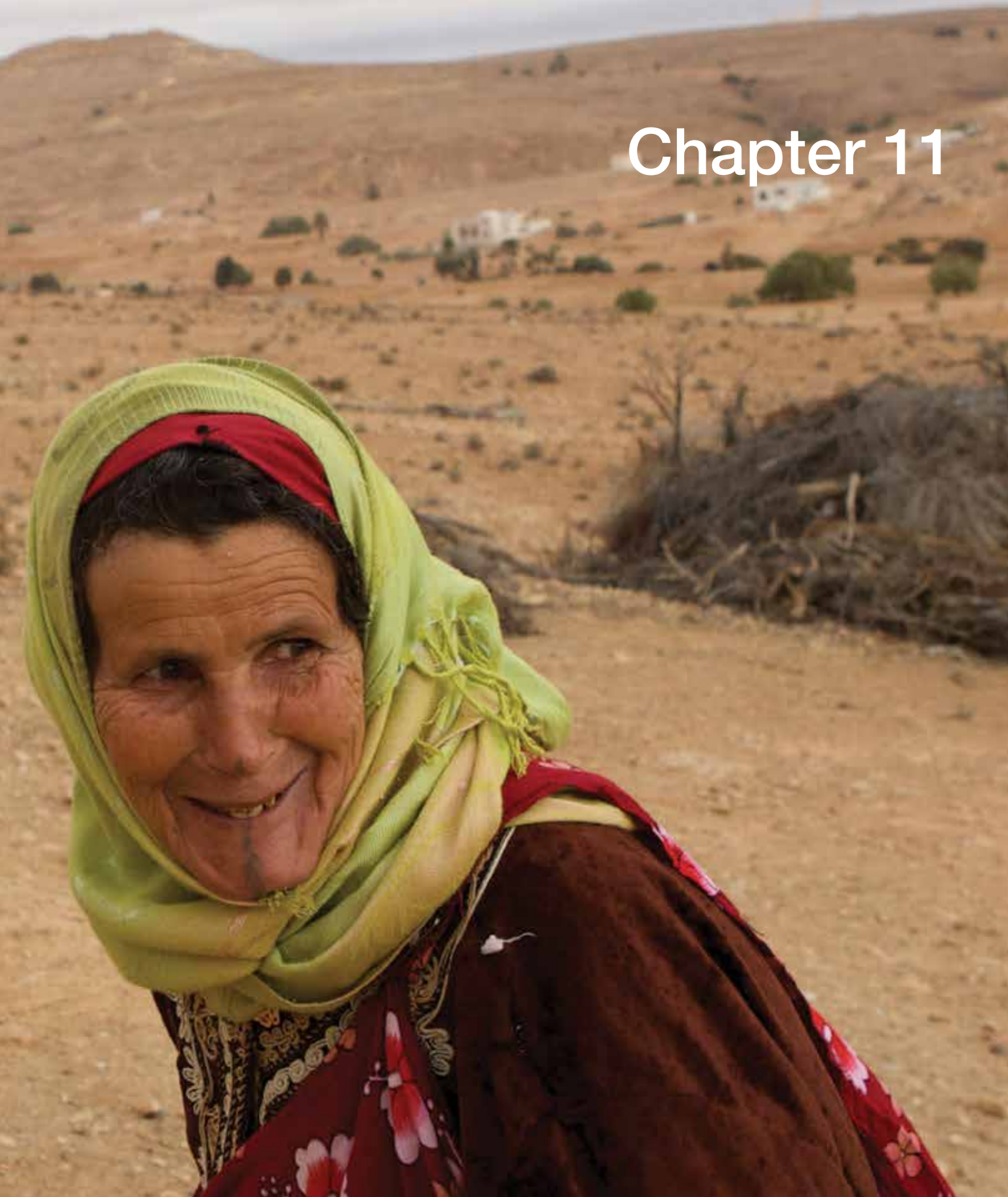
Key points from this chapter

- ✓ The Excel Spreadsheet does all calculations automatically for the user and quickly computes and displays results based on the information gathered from surveys.
- ✓ MPAT results are displayed in three places on the MPAT Excel Spreadsheet: the Household Results and the Village Results and All Results sheets/tabs. Each of these are described in the Quick User's Guide tab of the spreadsheet.
- ✓ Every MPAT component is composed of three subcomponents (and potentially four in the case of component seven), which are each, in turn, composed of multiple survey items. The values that make up each subcomponent are aggregated using a weighted arithmetic average, converted to a 10-100 scale. The weights used to accomplish this are provided in the Values tab and are found in Annex XII, where the valuations for each item are listed (they are also provided in the Weights tab in the Excel Spreadsheet). These subcomponent values are then aggregated using a weighted geometric average to calculate the component values (the weights for this conversion are found at the end of Annex XII).
- ✓ Demographic information is one of the most basic types of data produced by MPAT (especially data on who is responding to the surveys). A careful review of this information is not only useful to projects, but can highlight potential biases in the data.

26/ If possible, project supervisors should use a more sophisticated software package (e.g. SPSS, SAS or Stata) to go through the data and check for outliers and other errors. When errors or outliers are found, the hard copy of the survey can quickly be found using the household code. By comparing the colour of ink used by each data entry staff, the origin of errors can be immediately identified. That is, supervisors can use the assigned numerical codes for enumerators and data entry staff to further simplify the identification of responsibility for each task for any given survey. If too many errors are found for any given stage or individual, the supervisors can then consider either redoing the CSC process for those surveys, or deciding not to use the data at all. This is not desirable, but certainly preferable to using data that may not be accurate. If the outliers are not the result of enumerator or data-entry error, they should be investigated further.



Chapter 11



Chapter 11 Optional – how to customize MPAT

MPAT is expressly designed to be applicable in most rural areas. That said, there are several ways that MPAT can be customized to the specific needs of a particular project or area, if project staff find it useful and/or necessary. The two main ways of doing so, discussed below, are:

- (i) Calculating the customized MPAT
- (ii) Adding programme-related questions at the end of MPAT surveys

11.1 Decision to calculate a customized MPAT

Once project staff have thoroughly reviewed and analysed the MPAT materials, they may decide that some valuations and weightings of the Standardized MPAT (Annex XII) do not sufficiently align with their local context. In this case, a project may choose to create a customized MPAT. *This uses the same MPAT data, collected from the exact same surveys, but involves revising the Excel Spreadsheet to include valuations and weightings that are specific to a project's local context.* Project staff should carefully consider whether or not a customized MPAT needs to be designed and

used, because MPAT was specifically created to be relevant to the majority of situations and contexts as a tool for poverty assessment.

To better understand why one might wish to change MPAT's valuations and/or weightings, two examples are provided below. For Q32 in subcomponent 2.1 Quality, in the Domestic Water Supply component, there are many answer choices listed for possible water sources. Using this example, and assessing these water sources, it is clear that in some parts of the world, a specific water source may be of generally higher quality than the same water source in a very different part of the world. For example, in some places, perhaps with low population density and no rural industry, stream water may be relatively uncontaminated, and its quality may be very high, so that answer code 17 should receive a higher value than the Standardized MPAT provides. Customization would thus lead to a more accurate representation of the community situation in such places.

Another example of a situation where users might want to customize MPAT could be Q55, which asks for 'the three main ways your household would likely react/cope' to

32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? <i>[If the household uses different water sources for drinking and cooking, only record the drinking water source]</i>		
	During the rainy season	During the dry season	During most of the year
	No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)
	1. Piped from water treatment plant (chlorinated)	13. Water vender with tanker truck	
	2. Piped from water treatment plant (not chlorinated)	14. Water vender with cart or small tank	
	3. Borehole (> 20m deep)	15. Large dam (built & managed by government, company or collective)	
	4. Borehole (< 20m deep)	16. Small dam (built & managed by households, village or collective)	
	5. Private well (> 20m deep)	17. Stream	
	6. Private well (< 20m deep)	18. River	
	7. Communal well (> 20m deep)	19. Pond, lake (or other still water body)	
8. Communal well (< 20m deep)	20. Irrigation canal		
9. Protected ('box') spring	21. Bottled water (delivered by vender)		
10. Unprotected spring	22. Bottled water (collected by household)		
11. Rainwater harvesting container (closed)	23. Other (specify):		
12. Rainwater harvesting container (open)			
<i>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means it is shared by 5 or more households]</i>			

negative events. Though the Standardized MPAT assigns a low value of 1.5 to ‘Selling farmland’ as a coping strategy, in a fishing community, where farmland is not central to household livelihoods, selling farmland might be a reasonable (that is, potentially beneficial) coping strategy and thus could be assigned a higher value. In an agricultural community, however, selling farmland would be less sustainable and more detrimental to the respondents’ livelihoods, only to be employed in truly dire situations. In such a community, a value of 1.5 for this particular coping strategy is probably appropriate.

Decisions on what to change – and what the changed values should be in customizing MPAT – must be arrived at before MPAT results are calculated. Otherwise, there is a risk that changes to valuations and weightings might be made in order to manipulate MPAT results. When creating a customized MPAT, there is room to make MPAT ‘say’ whatever one wants it to say. Thus, project staff and

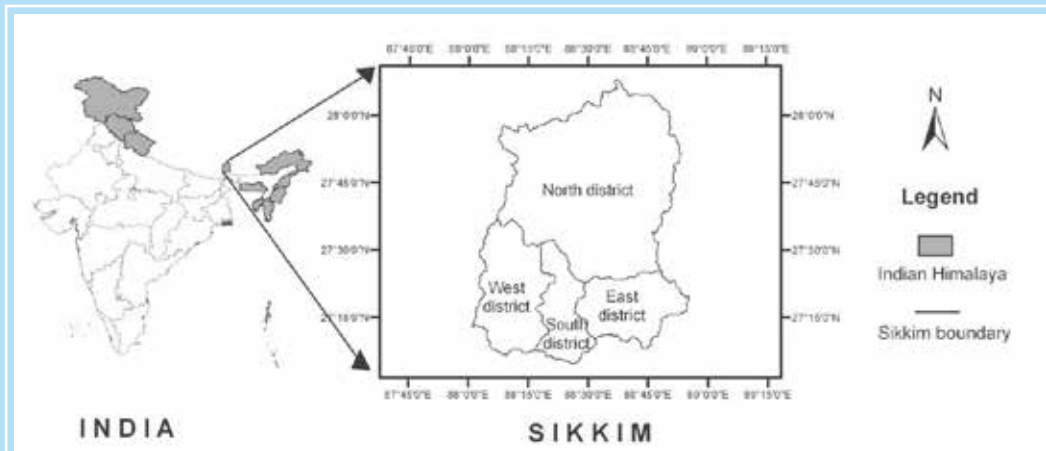
community members should be aware of the possibility that some might customize MPAT to deliberately misrepresent certain aspects of the rural community’s poverty situation, and they must be vigilant that *this does not occur*, clearly documenting the decision process. Clear documentation must also be provided (in the MPAT report) as to why and how MPAT was changed/customized.

In addition, results from the Standardized MPAT must be presented together with customized MPAT results. This will allow interested parties to clearly see the impact of the changes that were made and ask questions to better understand the reasons behind the decision to develop the customized version. Finally, it should be noted that the customized MPAT indicators *cannot* be compared to standardized MPAT indicators from other projects/regions, as the valuations or weightings in the Excel formulas are not the same.

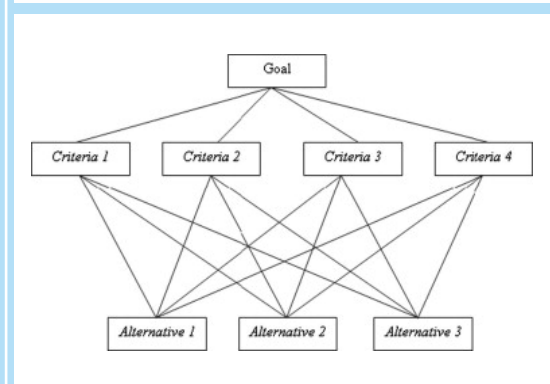


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Box 20. Customizing MPAT's weights to better fit the local context – an example from India (2011)



While one of its key strengths is its standardized, expert-devised structure, MPAT is also highly adaptable and flexible to local contexts. That said, any customization of MPAT should be undertaken carefully and thoughtfully and properly documented.



In 2010-2011, researchers from the Indian Institute of Technology (IIT), Guwahati, Department of Humanities and Social Sciences, created a customized MPAT to support several studies related to climate change, water and poverty in Sikkim, in the north-eastern region of India. To derive contextually more appropriate weights for MPAT's subcomponents and 10 components, researchers gathered qualitative information from consultations with stakeholders and used the Analytical Hierarchy Process (AHP) to identify site-specific weights. AHP is a widely used, structured technique for group decision-making. In AHP, a problem or issue is decomposed into a hierarchy of more easily understood subproblems and criteria, each of which can be analysed independently. Once the hierarchy is constructed (see example to the left), participants can systematically apply subjective/qualitative decision-making to each component to try to better understand its relative importance in the larger structure. These qualitative evaluations are converted to quantitative scores/values in order to better compare all the pieces of the hierarchy with each other using a comparable scale.



AHP is one approach to facilitating stakeholder focus groups in which new, contextually appropriate weightings for MPAT's subcomponents and components are devised.

©Indian Institute of Technology

How to: Customizing MPAT should only be undertaken if there is a clear and carefully considered rationale. AHP is one potentially useful approach to quantifying context-specific subcomponent and component weightings. For further information on using AHP for participatory development projects, see Schmoldt et al. (2001).

Implementing agency: Indian Institute of Technology (IIT), Guwahati, Ministry of Human Resource Development.

Contacts: Dr Anamika Barua (Assistant Professor), Suparana Katyaini (Research Scholar) and Bhupen Mili (Research Scholar).

11.2 Mechanics of calculating a customized MPAT

Once project staff have determined the values and weights that do not fit well within the local context and have clearly documented the proposed customizations, they must then develop a process that determines the more appropriate values and weights for the local situation.

When changing existing values, it is recommended that project staff consult sector-specific experts as well as project managers and other stakeholders to collect a wide array of opinions on how items should be valued. If a consensus does not emerge, the user is faced with the difficult task of attempting to determine which values are most appropriate.

The steps in calculating a customized MPAT:

- (i) Carefully review standardized MPAT values and weights.
- (ii) Determine if the local context is different enough from the standardized MPAT context to require a customized MPAT.
- (iii) If so, discuss with sector-specific experts and stakeholders and come to a consensus about the new value or weighting.
 - (a) In addition, if possible, it is desirable to have values for a given survey item span the 1-10 scale. In this way, it will be possible for a household to score high or low, or in the middle. That is, one would not want to change the values so that they were all low, or all high, as this would not provide any discerning power in the data captured.
- (iv) Document:
 - (a) The changes to be made – the old value/weighting and the new value/weighting.
 - (b) The rationale for each change – i.e. why the change is being made.
- (v) Collect MPAT data as outlined in this User's Guide and enter them into the Excel Spreadsheet.
- (vi) Calculate the Standardized MPAT and save the file as 'Standardized MPAT'.
- (vii) Copy the standardized MPAT spreadsheet and save it as '*customized MPAT*'.
- (viii) Use the password found in the first tab of the Excel Spreadsheet to make the specific valuation or weighting changes documented above.
- (ix) Calculate the customized MPAT; explain and present documentation for all changes.
- (x) Present standardized MPAT results together with customized MPAT results.

As mentioned in the previous section, the danger of this approach is that users may be tempted to manipulate valuations/weightings until they produce 'desirable' values for the MPAT subcomponents and components. In order to avoid this, it is recommended that users first discuss how they plan to change the values/weights, in consultation with sector-specific experts and other stakeholders, and come to an agreement on context-appropriate values *before they actually change them in the spreadsheets and see the results*. Again, any resulting reports that employ a customized MPAT should explain which values/weights were changed and, most importantly, why.

11.3 Adding survey questions to the end of MPAT surveys

Aside from creating a customized MPAT by altering MPAT's valuations or weightings, MPAT users have the option of creating or adding additional questions that can be used to capture data specific to their programme or area. Another reason for adding survey questions is to anticipate potential problems with responses to existing questions, due to the particular nature of the local context (i.e. if after reviewing the MPAT Household and/or Village Survey, it is determined that there

will likely be a high non-response rate for a given item). This type of issue can also be discovered during the MPAT piloting phase.

However, additional questions can only be placed at the end of the Household and Village Surveys. The surveys have been analysed based on their psychometric properties, and accordingly, questions are in a specific order to try to reduce participant bias. As the addition of questions *within* the existing surveys would likely disrupt their overall psychometric soundness, additional items must be added to the end of the surveys so as not to affect the quality of the preceding part.

When creating additional survey questions, it is recommended that one follow the survey guidelines initially developed for MPAT's creation. This document, found in

Annex X Instructions for MPAT survey item development, should be consulted closely. When creating new questions, as when modifying MPAT valuations/weightings, users should consult with sector-specific experts and other stakeholders, and then *evaluate/test the new questions in the field* iteratively before adding them to the MPAT surveys. In this way, users should be able to responsibly create and use programme-related questions.

Finally, it should be noted that in the course of developing MPAT, the design team created several questions that some project managers considered desirable, but that were not useful for the final version of MPAT. These questions are provided in Annex IX and could be added to the end of the MPAT Household Survey if so desired.



Key points from this chapter

- ✓ Customizing MPAT to better fit the local context is not a straightforward or easy task. Great care should be taken to ensure that customization is based on sound theoretical grounds and is done before the data are collected (otherwise there is a risk that customization could be done to skew the data).
- ✓ Similarly, decisions on what to change must be arrived at before MPAT results are calculated. Otherwise, there is a risk that changes to valuations and weightings might be made in order to manipulate MPAT results. Clear documentation must be provided as to why and how MPAT was customized.
- ✓ Users are encouraged to examine in detail the cardinal scores (the values) for each MPAT survey item, as well as the weights used for aggregating the subcomponents and components (see Annexes XII and XIII). If changes are made to create a customized MPAT, then the resulting scores and graphs should always be presented alongside the standardized MPAT results and graphs so that third parties can clearly see how the standardized MPAT indicators relate to the newly created customized ones.
- ✓ Additional survey questions can only be placed at the end of the Household and Village Surveys. The addition of questions within the existing surveys would potentially disrupt their overall psychometric soundness.



Chapter 12



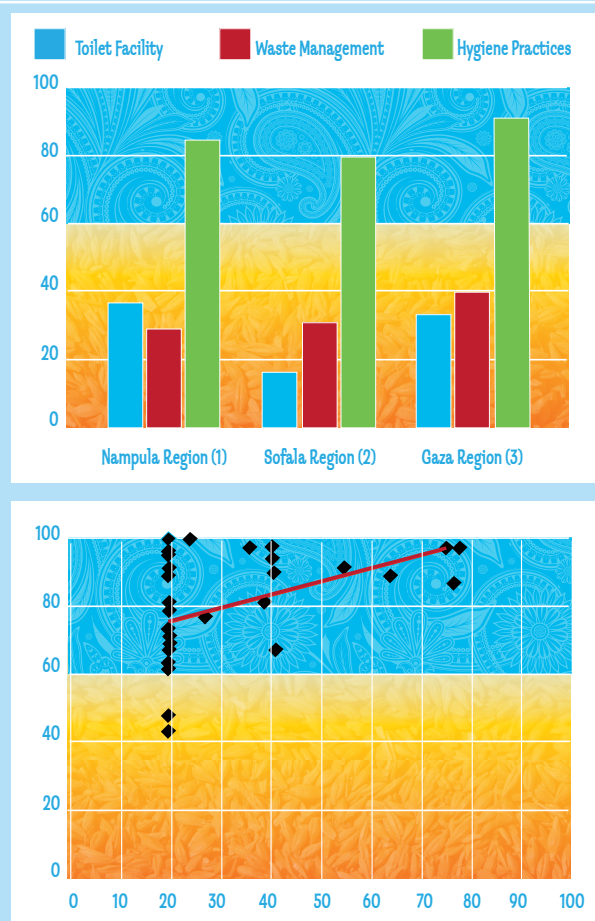
Chapter 12 MPAT data analysis and reporting

This chapter introduces some of the many different ways that MPAT data and results can be used. The true value of Household and Village Survey data, such as those produced by MPAT, is realized only when they are analysed. Analysis of such surveys can range from encompassing simple descriptive statistics, to more complicated multivariate analysis. There are virtually an unlimited number of ways in which an organization may wish to use a large, comprehensive dataset such as that created through MPAT implementation. Several of these ways have been mentioned throughout this User's Guide:

- Results can be disaggregated by any number of variables to be explored in detail.
- MPAT data can be used to understand poverty at a *point in time*, while periodic implementation allows users to see *changes over time*.
- MPAT data can be used to *compare different groups* (with different characteristics), and/or to compare groups that have varying levels of participation in project activities. Household-level analysis can be conducted using the raw survey data and/or MPAT results, as the indicators are calculated for every household (see the All Results tab).



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Box 21. Analysing Sanitation & Hygiene at village and household levels – Mozambique (2013)

Once one has a better understanding of the situation in a given region, it will often be helpful to investigate the values behind the component scores for certain sectors. Let's begin with the 'big picture', then, and look at the component scores for Sanitation & Hygiene: averaging for each region, for Nampula the overall result was 45.4, for Sofala 30.8 and for Gaza 47 (see Box 7 as well). In order to better understand where these numbers come from, one can look at the subcomponent scores for the Sanitation & Hygiene component – one example of how to visually display these scores is presented to the left.

More interesting, let us choose scores that look very similar at the aggregate (regional) level. In this way, we might better understand the variation for the household Waste Management and Hygiene Practices subcomponent scores. One initial option is to calculate the average (mean) value for these two subcomponents in each region, as well as the standard deviation (which gives us an understanding of the variation across households in each region). In the table below, we see that, although the Hygiene Practices scores are all quite similar (all three almost within 10 points), the scores vary a lot for Sofala (standard deviation = 16.6). This might lead project staff to look more closely at the household scores for this subcomponent, and then focus specifically on those households with especially low, or high, scores by examining their scores on other MPAT indicators.

Another option for initial exploratory analysis is to analyse correlations between subcomponents. We can do this by using each household score within each region. We might hypothesize that those households with better waste management practices would also have better hygiene practices. After calculating the correlation coefficient for all three regions, we find that for Sofala there is a moderate correlation between the two ($r = 0.42$). Although this is not the case for Gaza – additional analysis would help one understand why. We can also graph this relationship using a simple scatterplot as depicted above.

		Nampula	Sofala	Gaza	Combined
Waste Management	Mean MPAT score	29.0	30.9	40.3	33.4
	Standard deviation	15.9	18.1	17.8	17.7
Hygiene Practices	Mean MPAT score	84.4	79.3	90.4	84.8
	Standard deviation	7.7	16.6	10.8	13.0
Correlation		0.299	0.423	-0.173	0.276

How to: Use the MPAT Excel Spreadsheet to cut-and-paste the subcomponent scores for all households, organized by region/village, into a new file, and then create a 3-D column graph. Excel can also be used to calculate the mean and standard deviation for each village, as well as correlations. The last figure is created using a 'scatterplot'.

Implementing agency: National Institute for the Development of Small-Scale Fisheries (IDPPE).

Contacts: Paulo Muchave (Senior M&E Officer), Fisheries Promotion Project (ProPESCA).

The most fundamental starting point for data analysis lies in the questions that the data were collected to answer. Thus, the first task for successful MPAT data analysis is to set the goals of the survey; this should occur well before actual implementation (several such goals are described in Chapter 2 of this User's Guide).

Data collected through the MPAT Household and Village Surveys can be thought of as a collection of variables, some of which are of interest in isolation, while others are primarily of interest when compared with other variables.

Undertaking analysis of MPAT data will largely depend on whether users have access to data for several villages/regions, or panel data (i.e. data collected from the same area over time). In principle, insights into the dynamics of poverty require the availability of several village datasets collected at different times.

In instances where only limited data are available, detailed analysis can be done on responses to individual or multiple MPAT questions (discussed later in this chapter). Deeper and potentially more useful analysis can be done with larger samples, as this will allow for comparison and identification of trends among different areas. Similarly, panel data obtained through multiple MPAT implementations (e.g. at different points in a project cycle) can be useful for observing changes in the levels and patterns of poverty over time. As mentioned previously, poverty comparisons over time require careful planning and analysis, but they can offer unique insights into the dynamics of poverty and its determinants, and they can be very useful in programme evaluation. 'Ground-truthing' some of the MPAT results is also advisable.

Developing local-level poverty lines using MPAT

At times, an organization may want to define local-level poverty lines – that is, certain thresholds below which a household or village may be considered to be in a state of poverty. Reasons for doing so vary and may include:

- Eligibility criteria for inclusion in a rural poverty programme: defining who is poor and who is not
- Exit criteria for a project: defining when its work is 'successful' and goals have been met
- Monitoring movement along a poverty-level continuum: identifying households that are shifting or may shift between ultra-poor, very poor, poor to relatively well-off, or between food secure, food insecure and extremely food insecure, etc.
- Other reporting to government, donors or funding agencies

Because they are already quantified and colour-coded, MPAT data may be applied to the task of developing poverty lines. However, defining local-level poverty lines is not a straightforward task, and it should be undertaken with great care, in terms of both the process (how the local-level poverty lines are set and where they are set) and the end use. Poverty lines are best developed through participatory methods; two possible methods using MPAT would be to:

- Ask project staff, community members and stakeholders to answer the MPAT Household Survey as if they were a household that was successfully out of poverty given the local context. Then discuss the difference in responses across individuals and strive for a consensus on the range of survey answers that would reflect an out-of-poverty household, focusing on how those responses translate into MPAT results/values. Repeat the exercise using the MPAT Village Survey, enter MPAT data into the Excel Spreadsheet, and similarly discuss

the resulting MPAT component scores.

Use focus-group discussions to explore whether the resulting MPAT component scores serve as accurate local-level poverty lines for each component.

- Work with community members and stakeholders to rank households along a poverty continuum, and then define a 'community poverty line' above which a household is considered not poor and below which a household is defined as poor. Once the 'community poverty line' is determined by the group, it can be compared side-by-side with the MPAT component scores to see how high and low MPAT scores compare with the poverty line defined by the community or village leaders. This can be done for each of the MPAT components or the components of greatest interest, recognizing that the 'poverty line' (i.e. minimum MPAT score at which a household is out of poverty) will likely be different for each component. For example, the data and resulting discussion may conclude that, for this particular project and context, an MPAT score of 70 would be the poverty line for the Housing, Clothing & Energy component, while a score of 85 might be needed for the Gender & Social Equality component.

When developing local-level poverty lines, it is important to ensure that input from diverse members of the community is considered, and that participants are free to express themselves fully in discussions and to record information in front of the entire group. These points should be factored into pre-focus-group planning (e.g. discussing with men and women separately might overcome disadvantageous gender norms and power dynamics that exclude certain important opinions). One option is to use the 'Ladder of Life' approach (Narayan, Pritchett and Kapoor 2009). Note that this activity can also be done with the village as the unit of analysis, by having the discussion with village leaders or higher-level officials.

12.1 Suggested use of the MPAT Excel Spreadsheet for additional analysis

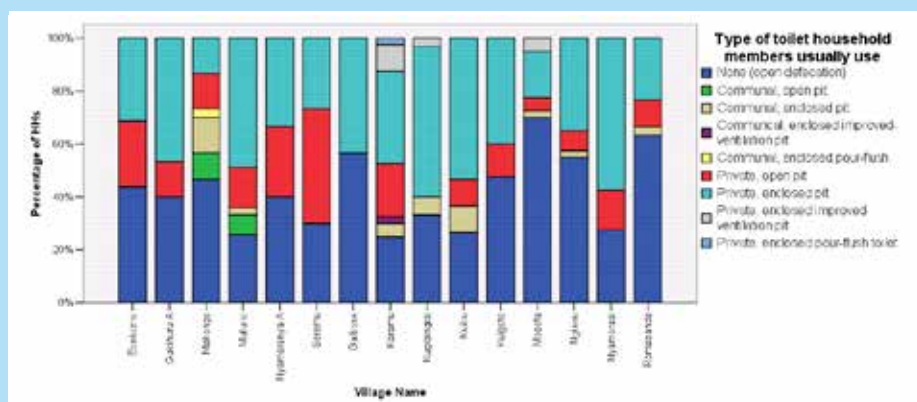
MPAT, and especially the MPAT Excel Spreadsheet, can be very useful for secondary data analysis and research undertakings not directly related to project planning and design or M&E. The wealth of data collected via MPAT surveys and presented in the spreadsheet results can be used to provide key information for studies of all kinds. Having followed the MPAT survey methodology and the CSC method, the user can be confident that the data are of high quality – to the point that sophisticated statistical analysis can be confidently performed at the household level.

The best way to work with, analyse and present MPAT results will vary according to the audience and the purpose of MPAT implementation. Tables and graphs can be very useful for providing basic information about variables of interest using simple descriptive statistics. In many cases, the presentation of data can be made more interesting and easier to understand if displayed as a graph instead of a table. For a single variable that has only a small number of categories or values, a common way to display data graphically is in a column chart or histogram, in which the relative frequency of each category or value is indicated by the height of the column. Various functions in Excel can be used to automatically generate such graphs.²⁷

27/ There are many free resources, available online, that illustrate how to use Excel for such analysis.

Box 22. Secondary uses for MPAT data – analysing specific survey question results (Kenya)

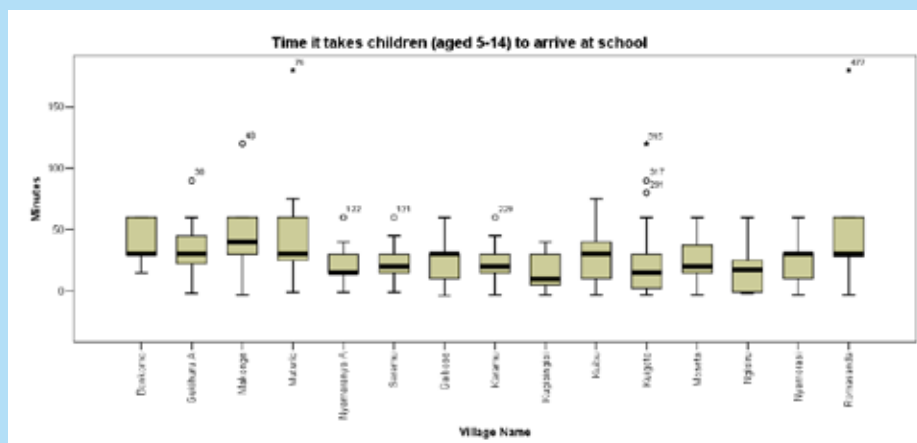
The MPAT surveys were specifically designed to collect the data needed to calculate MPAT's indicators. However, this should be viewed as only the first use of MPAT survey data. Indeed, the surveys are also designed to ensure that basic demographic data are collected, as this is often needed for project planning and monitoring purposes. Thus, users should keep in mind that each of the MPAT survey questions can provide highly detailed and useful information that can be used to support poverty reduction programmes, monitoring and research. Even basic descriptive statistics can be used to explore the MPAT dataset.



For example, many development interventions in the water, sanitation and hygiene (WASH) sector focus on providing improved latrines. While MPAT provides components on water, sanitation and health, the data may also be used for village-level infrastructure reporting.

The first figure to the left uses the data collected from MPAT Household Survey Q23 to

display the results from rural Kenya, 2011, for each village. In this case, Nuru International found that 42 per cent of all households in the project did not have toilet facilities. Project staff consulted other related data (e.g. only 21 per cent of the 480 households surveyed reported 'Always' cleaning their hands after defecation, 16 per cent reported that they 'Never' cleaned their hands after defecation, and 13 per cent did so only 'Rarely') and then discussed the data with village officials and other community stakeholders and subsequently used it alongside MPAT results to guide their planning of health and sanitation programmes.



Another example of using simple descriptive statistics would be to use MPAT Household Survey Q5, which collects data used to assess access to education. Using a boxplot, one can graph these data (time, recorded in minutes) to examine the median time needed to access schools and the variation in each village – as shown in the second figure.

How to: These figures were created using SPSS. Once MPAT data are used with the MPAT Excel Spreadsheet to calculate MPAT results, they can also be entered into a statistics package such as SPSS (or Stata or SAS, etc.). Labels are assigned to all possible survey responses and a frequency bar graph can then be created as above. The usefulness of displaying the data this way (by percentage) is that one can compare the proportions of different types of toilet facilities across villages with different sample sizes. The second figure is called a boxplot (also known as a box-and-whiskers graph).

Implementing agency: Nuru International, Kenya.

Contacts: Veronica Olazabal (M&E Director) and Jamie Frederick (M&E Senior Program Manager).

Figures provided courtesy of Nuru International

Much of the MPAT Excel Spreadsheet is locked to ensure that its components and information are not accidentally altered.

As such, once users have entered all the data into the Excel sheets and the MPAT indicators are automatically calculated, users are advised to copy the data into a new Excel sheet (or other statistical analysis software package) so that they can then freely manipulate the data, make additional graphs, conduct other statistical analyses, etc. Additionally, MPAT users are encouraged to use statistical programmes such as SPSS, Stata or SAS to analyse MPAT survey data for purposes other than direct project planning and design or M&E.

As mentioned above, specific advice on undertaking secondary data analysis would depend on the specific interests and questions of the MPAT user – it is thus beyond the scope of this general User's Guide. But one potential data analysis option is provided here for illustrative purposes: users may delve deeper and explore correlations between MPAT demographic information and subcomponent results for

households and villages in order to obtain a better understanding of how different groups in an area experience poverty differently. Particularly relevant for organizations interested in gender issues, this might involve comparing responses of households headed by men and women on any question of interest.

Other questions that might have important gender dimensions pertain to the Education component of MPAT. Questions such as 'how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school' and 'highest level of schooling the female children in your household ... will likely complete' could be analysed, for example, to determine if distance from school seems to be a significant barrier to attending school for girls from a particular village.

Again, however, this is only one illustrative approach – the possibilities for using MPAT to answer such questions are numerous and depend on the particular interests and capacity of the user.

Box 23. Using MPAT to support applied research projects – China (2013)



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©Chinese Center for Disease Control & Prevention

The National Center for Rural Water Supply Technical Guidance (NCRWSTG) – a division of the Chinese Center for Disease Control and Prevention (China CDC) – and its provincial Chinese CDC counterparts are working on a collaborative research project with the University of California, Berkeley, to better understand and improve the drinking water situation in underdeveloped rural areas of China (where 250-300 million people lack reliable access to safe water).

In these poor rural areas, in order to improve this access – until the time when higher quality, centralized treatment and distribution can be provided to all households – different policies or technologies may be appropriate for certain regions or types of households. However, without an understanding of the current situation, and the variables that influence and impact drinking-water-related beliefs and behaviours, recommendations cannot be made responsibly as to which drinking water treatment methods or technologies or policies might be most useful.

The goal is to first understand what factors impact household decisions on drinking water; but before the data are collected and analysed, it is not clear which factors are most relevant. This is similar to research on HIV/AIDS, in that in order to understand the larger context and the drivers of behaviours and beliefs, one must examine multiple factors surrounding rural life and rural livelihoods. Thus, slightly censored MPAT Household Surveys were used to help determine which factors appear more relevant for which types of households regarding their current practices and beliefs

about drinking water. The MPAT Household Survey questions were complemented with other, specifically designed surveys to help determine which drinking water treatment options may be appropriate for improving the rural drinking water situation in parts of China (with these questions added at the end of the MPAT survey) – as well as drinking water samples and other data collection.

Implementing agency: National Center for Rural Water Supply Technical Guidance (NCRWSTG).

Contacts: Yong Tao (Executive Director), Qing Luo (Project Officer), Gemei Zhong (Guangxi CDC Unit Director) and Alasdair Cohen (UC, Berkeley).

12.2 Preparing an MPAT report

Regardless of the analysis done on MPAT data, these data and results will only be useful if they are communicated clearly and effectively to the people that can make informed decisions based on them. For some decision-makers and some situations, a full report that addresses the entire MPAT implementation process, study methodology, and findings and underlying trends may be necessary. For others, a brief presentation of the key data and findings may be more

appropriate. For all programmes and contexts, the MPAT radar graphs and visual data tools should be helpful in communicating MPAT results.

A full MPAT report can be a very useful and compelling way to present the significant amount of data obtained by the Household and Village Surveys. One suggestion for writing an MPAT report is to use this sample table of contents as a *guideline* for the issues and sections one might wish to address; where necessary, explanations have been provided in italics:

Table of contents

Table of tables

Table of figures

Abbreviations and acronyms

Executive summary

1. Introduction (*What is MPAT? Why was it undertaken?*)
2. Background (*Which project is MPAT being used to support? Which organization is carrying out MPAT implementation?*)
3. MPAT implementation
 - 3.1 Activities overview and timeline (*When were key MPAT activities carried out?*)
 - 3.2 Training
 - 3.2.1 Enumerator training (*including key information about strengths and weaknesses of training, the selection process for enumerators and lessons learned*)
 - 3.2.2 Enumerator supervisor training (*presented in the same way as the section on enumerator training*)
 - 3.3 Piloting the surveys (and additional/custom questions)
 - 3.4 Training in quality control and data entry (using the CSC method) (*presented in the same way as the earlier section on enumerator training*)
 - 3.5 MPAT implementation
 - 3.5.1 Description of a typical day in MPAT implementation (*a time line detailing hour-by-hour progress of MPAT implementation would be a useful way to organize this section*)
 - 3.6 Data overview (demographic information and total number of households/villages) (*broad information that is not a part of MPAT results per se, but which is still useful for those who wish to understand where MPAT was used*)
4. MPAT results
 - 4.1 MPAT: Project overview
 - 4.2 MPAT: Village profiles
 - 4.3 MPAT: Subdistrict profiles and comparisons
 - 4.4 MPAT: Subcomponent data at the project level
5. MPAT data – village scale (*component scores may be provided and discussed in terms of key trends and strengths/weaknesses*)
 - 5.1 Food & Nutrition Security
 - 5.2 Domestic Water Supply

- 5.3 Health & Health Care
- 5.4 Sanitation & Hygiene
- 5.5 Housing, Clothing & Energy
- 5.6 Education
- 5.7 Farm Assets
- 5.8 Non-Farm Assets
- 5.9 Perceived Exposure to Shocks & Likely Coping Strategies
- 5.10 Gender & Social Equality
- 5.11 Additional/custom survey questions (optional)
- 6. Additional MPAT data analysis – household scale (optional)
 - 6.1 Disaggregating by head of household gender
 - 6.2 Disaggregating by farm size
 - 6.3 Disaggregating by ... etc.
- 7. Exploratory analysis of MPAT data (optional)
 - 7.1 Correlation analysis with household characteristics on:
 - 7.1.1 Sanitation and Health (subsections 7.1.1-7.1.3 are simply suggested correlations to explore using MPAT data, as they are typically important in rural contexts in the less developed world. Additional correlations may, of course, be explored as appropriate, given the particular context of MPAT implementation)
 - 7.1.2 Access to water and agricultural output
 - 7.1.3 Gender equality and employment
 - 7.1.4 ... etc.
 - 7.2 Multivariate analysis/modelling
- 8. Follow-up and plans for future implementation
 - 8.1 Costs & logistical considerations
 - 8.2 Notes on future implementation of MPAT
- 9. Conclusions (*detailing lessons learned and how the data and MPAT results will be used in decision-making and programming*)
- Annex I: MPAT Household Survey (with additional/custom questions – optional)
- Annex II: Miscellaneous notes concerning MPAT in rural ____ (name of region(s)) ____
- Annex III: Revised MPAT consent statement

While their structures may vary, in general, MPAT reports should be as straightforward, easy to understand and usable as possible in order to help practitioners and support poverty alleviation efforts. Towards this end, users compiling MPAT reports should avoid presenting huge numbers of tables and a vast array of numbers in each table; excessive quantities of tables giving minute details are unlikely to be of interest to most audiences, and a similar point often applies concerning

the detail in a given table. Staff preparing reports should discuss the purpose of the various tables that are being prepared, and if little use can be perceived in presenting a particular table or the detailed information in a given table, then the extra information should be excluded (though, of course, all the raw data should be made accessible to interested information consumers as far as possible).



Key points from this chapter

- ✓ Using MPAT data to calculate the MPAT indicators should be only the first use of MPAT survey data.
- ✓ A number of highly useful participatory approaches can be used to create locally specific poverty lines with MPAT results.
- ✓ MPAT surveys collect a wide range of data, which can and should be used for additional analysis and reporting; project staff may find it useful to use statistical analysis programmes (e.g. SPSS, SAS or Stata).²⁸
- ✓ MPAT data and results generated from the MPAT Excel Spreadsheet should be communicated to others with accompanying reports that explain how, when, where and why the data were collected, and any problems encountered.
- ✓ MPAT reports should be as straightforward and easy to understand as possible. Towards this end, users compiling the reports should avoid presenting huge numbers of tables and a vast array of numbers in each table. Ideally, the project's MPAT Excel Spreadsheet should be made available to interested parties.

28/ The authors are not recommending any particular software package, only suggesting that it would be worthwhile to use statistical analysis software to 'get more' out of the MPAT survey data, beyond what is produced using the MPAT Excel Spreadsheet.

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Annexes



Annex I MPAT preparation checklist

		TASK	Assigned to (name)	Notes/page
GENERAL PREPARATION				
<input type="checkbox"/>	1	Read MPAT User's Guide, especially those chapters pertaining directly to MPAT implementation		
<input type="checkbox"/>	2	Review MPAT Book		
<input type="checkbox"/>	3	Review Household and Village Surveys – become familiar with them		
<input type="checkbox"/>	4	Take a 'quick tour' of the MPAT Excel Spreadsheet, review the tabs to get an idea of the spreadsheet layout		
<input type="checkbox"/>	5	Introduce MPAT to local leaders, key community members and key staff; start the community buy-in process (see Section 3.2 of the User's Guide for more information)		
<input type="checkbox"/>	6	Prepare for translation A. Identify translator or professional firm B. Work with translator to ensure that they understand the meaning behind the questions, not just the literal words C. Use double blind/back translation		
<input type="checkbox"/>	7	Translate training materials A. Household Survey B. Village Survey C. Consent statement D. Notes and definitions for Household Survey E. Notes and definitions for Village Survey F. Test survey translations in the field with real households (even for just half a day) – make corrections, if necessary		
<input type="checkbox"/>	8	Create a sampling frame A. Ensure that village lists and population figures are available B. Create a table organizing population data for project area C. Randomly select clusters/villages D. Prepare household lists for each village sampled E. At the time of MPAT implementation, inform enumerator supervisors of which village they will survey. Tell the enumerators about one or two selected villages at a time, rather than providing them with a list of all villages (supervisors may tell friends or family that their village has been selected for an MPAT survey – and this foreknowledge may introduce bias)		

		TASK	Assigned to (name)	Notes/page
MPAT TRAINING: ENUMERATOR TRAINING, ENUMERATOR SUPERVISOR TRAINING, DATA-ENTRY TRAINING				
<input type="checkbox"/>	9	Plan and implement enumerator training (expected duration: 4 days) <ul style="list-style-type: none"> A. Identify trainer, venue, dates B. Plan training, using MPAT training lesson plans from User's Guide C. Recruit/hire enumerators (50 per cent men, 50 per cent women, minimum of high school education, fluent in local dialect) D. Identify interpreter for training, if necessary E. Determine the likelihood that enumerators will need to translate from the survey language to a local dialect while in the field. Allow time to practise 'translating as you go' F. Determine codes for geographical regions to be used for each administrative region (AA1, AA2, AA3) G. Look for translation issues during enumerator training, make necessary changes H. Prepare pictures of items assessed by each MPAT component (e.g. water-source types, latrines) to ensure that everyone implementing MPAT is using the same terms I. Identify field-work villages, contact in advance 		
<input type="checkbox"/>	10	Enumerator supervisor training (expected duration: 12 days) <ul style="list-style-type: none"> A. Recruit enumerator supervisors (possibly from pool of enumerators) B. Implement enumerator supervisor training, using training lesson plans from the User's Guide C. Identify field-work villages, contact project staff and community members in advance 		
<input type="checkbox"/>	11	Finalize survey translations (after enumerator training) and have them printed		
<input type="checkbox"/>	12	Preparation for field practice by project staff – enumerator and enumerator supervisor training <ul style="list-style-type: none"> A. Print agency contact information card B. Contact leader/elder/government official responsible for selected clusters to agree on date for sampling and survey in their area C. Contact health-care official and education leader to plan meeting for survey date D. Prepare household list for each village E. Get village map, if available 		
<input type="checkbox"/>	13	Pilot/field practice <ul style="list-style-type: none"> • Undertake MPAT implementation as if it were the real exercise, but ensure that residents understand that the pilot is for practice only, and that data will not be used 		

		TASK	Assigned to (name)	Notes/page
<input type="checkbox"/>	14	Data-entry training (expected duration: 1-2 days) <ul style="list-style-type: none"> A. Identify trainer, venue B. Data-entry training should occur immediately after enumerator supervisor training, as this presents an opportunity to identify problems early on (e.g. with enumerators, supervisors or other issues), so they can be rectified for the remainder of survey implementation C. Recruit data-entry staff – should have a college education and computer literacy D. Implement training as described in User's Guide lesson plans E. Make dummy surveys (use MPAT English versions as samples to make local language versions) F. Identify who will enter data for Village Surveys (project staff, or data-entry staff are also an option) and ask them to attend CSC session of data-entry training G. Using data from the field test, practise implementation of training/practice data entry H. Establish ID/code number for each enumerator, supervisor and data-entry assistant I. Create one-page sheet with enumerator etc. codes, ethnic group codes, administrative region codes, conversion to hectares, etc. 		
		MPAT DATA COLLECTION		
<input type="checkbox"/>	15	Prepare field materials for enumerators <ul style="list-style-type: none"> 1. Copies of Household Surveys 2. Copies of consent statement 3. Pens/pencils 4. Lists of households to visit 5. Map to find households 6. Agency contact information card 		
<input type="checkbox"/>	16	Prepare for household sampling with village leaders <ul style="list-style-type: none"> A. Project staff prepare numbered list of households for each village to be sampled B. Project staff assign sampled villages to each enumerator supervisor C. Project staff give household list to each enumerator supervisor D. Project staff schedule time and date for enumerator supervisor to meet with village leader 		
<input type="checkbox"/>	17	Conduct household sampling with village leader <ul style="list-style-type: none"> A. Enumerator supervisors meet with village leaders at specified date and time B. Cut out X number tabs (where X = the number of households on the village list) C. Invite village leader to draw number tabs randomly to select 30 households and five or more alternate households D. Enumerator supervisor writes down the 30 households and the five or more alternate/extra households (the order of the extra households should be documented, as this is the order in which they will be used) E. Draw a map of selected households, make notes of locations to give to enumerators F. Assign households to each enumerator team, based on location and access 		

		TASK	Assigned to (name)	Notes/page
<input type="checkbox"/>	18	Conduct Household Surveys		
<input type="checkbox"/>	19	Conduct Village Surveys with A. Village leader B. Health-care official C. School official D. Other schools/health-care centres, if necessary		
		MPAT DATA ENTRY		
<input type="checkbox"/>	20	Organize data by village and household		
<input type="checkbox"/>	21	Begin data-entry/CSC process (1-2 days after start of data collection) A. Load each computer with Excel template (use the small-file-size template for data entry) B. Provide feedback to enumerator supervisors and project staff, as necessary when/if errors are discovered C. Organize data D. Check data E. Make one-page sheet of codes F. Score G. Assign household code H. Code		
<input type="checkbox"/>	22	Copy all data from templates into MPAT Excel Spreadsheet		
		ANALYSE AND COMMUNICATE MPAT RESULTS		
<input type="checkbox"/>	23	Review data/graphs/results		
<input type="checkbox"/>	24	Present MPAT results to programme managers; support their analysis, reflection and identification of key findings and trends. As appropriate, encourage spot-checking (validation) of MPAT results		
<input type="checkbox"/>	25	Present MPAT results to community members for participatory discussion (optional, but strongly recommended)		
<input type="checkbox"/>	26	Based on feedback from items 23, 24 and 25, conduct secondary data analysis using the MPAT dataset to explore survey items and/or sectors more deeply		
<input type="checkbox"/>	27	Write MPAT report (a suggested outline can be found in Section 12.2 of this User's Guide)		

Useful information for an external trainer

The following information will help the external trainer provide high-quality training to project staff. It should be provided well in advance of training so that they can plan accordingly.

- (i) Standard working hours in the organization and expected by enumerators. Structure of a typical day (breaks for lunch only or regular tea breaks or other habits)
- (ii) Strictness of these boundaries (i.e. will enumerators have second jobs or other responsibilities that would require them to leave directly after working hours?)
- (iii) Photos of the training room where most of the training will take place
- (iv) Conditions of the room: presence and reliability of electricity, heating/air conditioning
- (v) Printing and photocopying abilities at the training site
- (vi) Average travel time from the training space to field locations? Means of travel to and from the field for the field-practice sessions (for enumerators and trainers)
- (vii) Basic information about the enumerators: background with this type of work (i.e. implementing surveys), average educational levels, language skills, etc.

Annex III MPAT enumerator training – detailed lesson plans

The following lesson plans have been designed for groups of 8-20 participants, but can be revised to accommodate different-sized training groups. *Times given are estimates only* and will vary for each trainer and each group.

The following lesson plans outline the suggested MPAT enumerator training programme. This assumes that the eventual data-entry staff (CSC) will also be attending this training to become thoroughly familiar with the MPAT surveys.

Of course, this training schedule can and should be modified in response to trainee needs.

The suggested lessons are as follows (with detailed lesson plans for each on the following pages):

1. **Introductions, training schedule and objectives, and MPAT overview** (2-2.5 hours)
2. **Becoming familiar with the MPAT survey materials: Reviewing the consent statement and Household Survey** (2-3 hours)
3. **Household Survey: How to ask the survey questions/importance of standardization** (1 hour)
4. **Household Survey: Question-by-question review of survey and notes** (4 hours)
5. **Household Survey: How to record answers on the survey** (may also be combined with session 4) (1 hour)
6. **Household Survey: Stop-and-go role play for observation and discussion** (2 hours)
7. **(Optional) Household Survey: Survey practice – real-time role play, with trainees marking survey responses** (1 hour)
8. **Household Survey: Practising in pairs and small group discussions** (3-3.5 hours)
9. **Household Survey: Survey practice – role play in pairs** (2.5 hours)
10. **Household Survey: Feedback loop, review common errors, scoring issues and difficult questions** (1 hour)
11. **Household Survey: Role of enumerators and enumerator supervisors** (also possible to insert at other times in the training schedule) (1 hour)
12. **Household Survey: Field practice** (1-2 days)
13. **Household Survey: Final review and wrap-up** (1 hour)

Session 1: MPAT Enumerator Training

Introductions, training schedule and objectives, and MPAT overview

Session objective(s) Enumerators will be able to explain the: <ul style="list-style-type: none"> • Purpose of MPAT • Ten dimensions of MPAT • Components of MPAT (Household Survey, Village Survey, CSC data-entry system, Excel Spreadsheet, component and subcomponent scores, radar graphs) • Importance of random sampling • Importance of standardization and accurate data 	Time estimate: ≈ 2-2.5 hours Preparation/materials <ul style="list-style-type: none"> • Name tags/name plates • Notebooks/pens for enumerators • Training agenda/schedule (either paper copies for each enumerator or large flipchart posted in training room) • Visual aid for MPAT enumerator training objectives (listed below – copy for each trainee, in PowerPoint slide or on white board) • White board and markers or flipchart paper, markers, tape • Laptop/projector • MPAT overview presentation or PowerPoint • (Copies of PowerPoint slides for enumerators)
Session activities <ul style="list-style-type: none"> • Introductions and objectives • MPAT overview presentation or PowerPoint • MPAT Q&A 	

Detailed description of activities

1. Introductions of project staff, training team and enumerator trainees (15 min)
 - a. Icebreaker introduction (optional)
2. Opening remarks, if requested by project leaders (10 min)
3. Enumerator expectations: (10 min)
 - a. Ask enumerators what they expect to learn from the training, write all ideas on flipchart/white board.
4. Overall training objectives: (5 min)
 - a. List the overall training objectives:
 - i. Understand the general purpose of MPAT and the purpose of the project (or research)
 - ii. Understand why the data are collected, who will use them and for what purpose (this is important because respondents may ask for this information)
 - iii. Understand your role as enumerator (and/or supervisor)
 - iv. Be able to correctly implement consent statement, MPAT Household Survey and MPAT Village Survey (for supervisors)
 - v. Know the correct process for MPAT implementation – random sampling (supervisors), assigned households, standardization, etc.
 - vi. Be able to accurately record responses on survey forms
 - vii. Know how to respond to issues that arise while implementing surveys in the field
 - b. Referring to 'enumerator expectations' on white board, explain which expectations can and cannot be met and why.
5. Training agenda/programme/schedule: (10 min)
 - a. In order to meet your expectations and our training objectives, we will cover the following topics and carry out the following activities.
 - b. Review schedule – very brief description of each activity.
 - c. Review materials provided (notebook – *please take notes*, agenda, copy of surveys, etc.).
 - d. Ask for any questions/concerns.
 - e. Discuss any 'housekeeping' issues (location of toilets, breaks, timekeeper); encourage trainees to ask questions, etc.

6. MPAT overview, possibly aided by PowerPoint presentation (45 min)
 - a. How it was developed and why
 - b. The 10 dimensions
 - c. Random sampling, Household Survey, Village Survey, data entry/CSC, the Excel Spreadsheet, radar graphs and scores
 - d. Emphasize that accurate data are the foundation, hence the need for standardized data collection, and why it's so important to use a random sampling approach.
7. Question and answer session (to assess understanding). Ask enumerators some or all of the following questions: (20 min)
 - a. What do you think is the purpose of MPAT?
 - b. Why is random sampling important?
 - c. Why are accurate data (and thus the work of enumerators) so important?
 - d. Why is standardization so necessary (for example, of exactly how survey questions are asked)? [to ensure that MPAT is used the same way by each enumerator and each project each time it is used]
8. Summarize (5 min)

Session 2: MPAT Enumerator Training

Becoming familiar with the MPAT survey materials: Reviewing the consent statement and Household Survey

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Explain the importance of the consent statement • Be generally familiar with the Household Survey • Make suggestions for local-language translation issues 	Time estimate: ≈ 2-3 hours
Session activities <ul style="list-style-type: none"> • Read and discuss consent statement • Read Household Survey questions, individually and as a group • Review local language translation for accuracy; make changes as needed 	Preparation/materials <ul style="list-style-type: none"> • Session objective flipchart/white board • Handouts of consent statement in local language (one for each enumerator) • Handouts of Household Survey in local language¹ • Interpreter, if necessary • Someone to take notes on translation/language issues in the Household Survey/consent statement

Detailed description of activities

1. Introduction of session objectives/activities (5 min)
2. Consent statement – read aloud as a group, must be read word-for-word (5 min)
3. Consent statement discussion (10 min)
 - a. Ask enumerators: Why do you think the consent statement is important?
 - b. Ask enumerators: What important information was given to the respondents in the consent statement?
 - c. After a few minutes' discussion, give the four main reasons that the consent statement is so important:
 - i. It explains that the survey is voluntary. They do not have to give their time if they do not want to.
 - ii. It explains that the household was chosen randomly. They were not selected for any reason – good or bad – as in a lottery.
 - iii. The surveys are anonymous. Names are not written anywhere on the survey.
 - iv. It gives the household the name and contact information of the local organization (that you work for), in case they have any questions or concerns.
 - d. In some cultures, the need for the consent statement may not be apparent. However, for the sake of ethical standards and participant consent, and to reduce bias, it is crucial that enumerators gain consent by reading the statement before beginning. Moreover, if households are aware of the general purpose of the survey, they will be more likely to fully participate.
 - e. *Recommended:* Verbal quiz on the four main reasons for using the consent statement.
4. Read through Household Survey individually (15 min)
 - a. Give each enumerator a copy of the Household Survey and ask them to read it to themselves quietly, making notes about anything that is unclear, including translation issues.
 - b. We will review these questions *after* these sessions to be sure that we covered everything you wanted to know.
5. Read through Household Survey as a group, discussing translation issues (1-2 hours)
 - a. When most people seem to be finished, bring the group back together.
 - b. Read the Household Survey aloud together for additional familiarization with it (going around the room, question by question, but not reading the answer choices).
 - c. Allow enumerators to ask questions about the meaning/intent of the questions and translation issues.
 - d. Discuss possible edits to the local language survey (wording only, not content). Trainer/local staff/ translator to note translation problems and agree to find a solution.
6. Summarize

1/ If training M&E staff or participants with a very high level of English, trainer may also want to consider distributing English surveys in order to further review/ improve local language translation.

Session 3: MPAT Enumerator Training

Household Survey: How to ask the survey questions/importance of standardization

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Understand the proper way to ask MPAT survey questions • Understand the difference between <i>same</i> and <i>similar</i> question wording • Understand the importance of standardization for MPAT data/results 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Good enumerator/bad enumerator activity • Role play and discussion on seven main survey questioning topics • Discussion/examples of <i>exact</i> question wording 	Preparation/materials <ul style="list-style-type: none"> • Topics written on small slips of paper (see list below, in bold) • Box/hat • Session objectives white board/flipchart • <i>(Optional)</i> Three assistants – one respondent, one ‘good’ enumerator and one ‘bad’ enumerator (and some entertaining way to make that clear – big good/bad signs, smiley face/sad face hung around their necks, etc.) – this will require some preparation, some thought about what kind of examples to act out <p>Note: If you don’t have three assistants, you can convert this into a discussion activity and/or the trainer can play both good and bad enumerator roles</p>

Detailed description of activities

1. Session objectives/activities (5 min)
2. How to ask survey questions (good enumerator/bad enumerator activity) (30 min)
 - a. Explain how the activity works: One trainee picks a paper from the box/hat, reads the phrase aloud and explains what they think it means in regard to the Household Survey.
 - b. *(Optional)* Bad enumerator acts out a dramatic example of how it should *not* be done.
 - c. *(Optional)* Then good enumerator acts out an example of how it should be done.
 - d. Another trainee picks a paper from the box/hat, until all phrases are discussed.
 - e. List of seven phrases/topics:
 - i. **The survey should seem like a dialogue with the household members, not as if the enumerator is a robot.**
 1. *Trainer note:* interaction should be closer to that of a dialogue/conversation, rather than the more traditional ‘yes/no’ one-way survey administration, and respondents will likely begin to talk about other issues not directly asked about in the surveys (given the nature/format of the Household Survey, this will occur naturally; enumerators should be aware that this is acceptable – but don’t let the respondents digress for too long).
 2. *Trainer note:* This can be accomplished by adding in short statements between questions (rather than robotically reading through them one by one), such as ‘okay, now I would like to ask you some general questions about farming...’; but these segues/transitions should be very general so as not to potentially influence the respondent’s answers.
 3. *Trainer note:* It is very important that enumerators make notes of the issues respondent’s raise and are concerned about (concerns, worries, complaints, questions, etc.) and that they share these with enumerator supervisors at the end of each day – notes can be written in the margins of the survey.
 - ii. **Be patient. Do not prompt respondent or anticipate their answers. Let the respondent settle on their answer before recording their response.** (Q9 and Q10 are good survey questions to use as an example.)
 - iii. **No matter how the respondent answers, do not appear to judge in any way – maintain a polite and neutral facial expression.** (Q30 and Q31 are good survey questions to use as an example.)
 - iv. **The enumerator should stay motivated and energetic when asking the questions – if the enumerator appears tired or bored, then the respondent will likely not put as much energy into thinking about and answering the questions.**

- v. Do not read the answer choices (grey-shaded tables) to the respondents. (They are there so you can easily and quickly score the responses.)
 - vi. Ask questions exactly as they are written, in a slow and clear manner – repeat if needed. Stay close to the meaning of the question as it is written, even when you must translate into the local dialect. If a question is still not understood, reword it as little as possible.
 - 1. (If necessary) Translating ‘on-the-go’ is not easy, but it is very important. We will practise it during role play and field practice.
 - vii. Do not rephrase the questions – especially avoid rephrasing as *leading questions*.
 - 1. Ask trainees to explain why they are ‘leading’ questions and why this is problematic.
 - 2. Bad and good enumerators to give examples of leading questions.
- a. ‘Do you prefer to grow maize or millet?’ compared with ‘What crop do you prefer to grow?’
 - b. ‘Don’t you think this is a fantastic training?’ as opposed to a non-leading question such as: ‘What is your opinion of this training?’
 - c. ‘Are the majority of the members of your household sick all the time?’ compared with ‘How often are the majority of the members of your household sick?’
3. Further discussion of exact question wording (10 min)
 - a. Ask: Why do you think we should ask questions exactly as they are written? What problems might we encounter if we rephrase the question?
 - b. After a few minutes’ discussion, use the following example:
 - i. Pretend that this is the real question: How many meals did the majority of your household eat today?
 - ii. Ask three different people how they might rephrase it *and/or* use the ‘rephrasing’ examples below:
 1. How many times did the majority of your household eat today?
 2. How much did the majority of your household eat today?
 3. How many meals did you eat today?
 - c. Compare/discuss the differences.
 - d. Emphasize that these hypothetical questions are similar but not the same.
 - e. Draw the conclusion:
 - i. Similar (not same) questions might result in inaccurate data and thus in inaccurate MPAT results.
 - ii. Asking questions the same way (also called ‘standardization’) should result in accurate data and accurate MPAT results.
 4. Summarize – ask trainees to summarize, review objectives if desired (5 min)

Session 4: MPAT Enumerator Training

Household Survey: Question-by-question review of survey and notes

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Understand the intent/meaning of the Household Survey questions • Begin to determine the best possible survey answer choice based on the respondent's reply • Furnish additional survey translation corrections, if needed 	Time estimate: ≈ 4 hours
Session activities <ul style="list-style-type: none"> • Systematically review 'Notes and definitions for the MPAT Household Survey' (reading one-by-one as a group, or read to oneself and then read together) • Encourage questions, problem-solve together • Review local language translation for accuracy in the context of this exercise; make changes as needed 	Preparation/materials <ul style="list-style-type: none"> • Session objectives • Project staff decide on AA1, AA2, AA3 codes to share with enumerators • Project staff decide on 'ethnic group categories' and 'household type categories' to share with enumerators • Copy of local language 'Notes and definitions for the MPAT Household Survey' for each enumerator (and English, if appropriate) – found in Section 6.2 • Method for demonstrating survey marking to a large group (overhead projector, white board, extra-large printout of surveys, laptop projector and picture files of the survey, so trainer can virtually 'write' answers on the survey forms using a program similar to Microsoft Paint) • Pictures of most common toilet types in the area (or get list of common toilet types from project staff for drawing game) • Pictures of water sources (or get list of common water-source types from project staff for drawing game) • Interpreter, if necessary

Note to trainer: This is a very important, but also very detailed session. Take breaks as needed to keep participants engaged. It may also be beneficial to ask trainees to review the survey question notes (Section 6.2) at home, both the night before this session and the night after.

Detailed description of activities

1. Review session objectives.
2. Distribute the handout 'Notes and definitions for the MPAT Household Survey'.
3. As a group, go around the room reading through the 'Definitions' and 'General notes' sections of the handout.
 - a. Encourage questions and group discussion.
 - b. May be useful for enumerators to read each section to themselves before reading aloud as a group. Ask what their preference is.
 - c. Give a demonstration when reading through 'Marking answers on the survey form'.
 - i. This can be done in several ways:
 1. Using overhead projector.
 2. White board showing several example survey questions.
 3. Extra-large printout of surveys.
 4. Laptop projector and picture files of the survey, so trainer can virtually 'write' answers on the survey forms using a program similar to Microsoft Paint.
 5. As a group, go around the room reading through the 'Notes on specific questions' section of the handout.
 - a. Encourage questions and group discussion.
 - b. Stop regularly to ask for questions.
 - c. It may be useful for enumerators to read each section to themselves before reading aloud as a group. Ask what their preference is.

5. Areas of additional discussion, as you read through the notes:
 - a. Discuss AA1, AA2, AA3 categories to be used (get decision from project staff).
 - b. Discuss ethnic group and household type categories to be used (from project staff).
 - c. Recall important events in this area over the last 12 months, to help with respondent recall.
 - d. Common toilet types:
 - i. Trainer can provide pictures of each toilet type *or*
 - ii. Trainer can lead a 'toilet-type' drawing game:
 1. From list provided by project staff, ask for volunteers and assign each volunteer a specific toilet type (do not let other trainees hear).
 2. Volunteers should draw a picture of the assigned toilet type.
 3. Based on the pictures, enumerators guess the type of toilet.
 4. Discuss any discrepancies in understanding.
 - e. Common water-source types:
 - i. Trainers can provide pictures of the common water-source types in the area *or*
 - ii. Trainer can lead a 'water-source' drawing game (see above).
6. *Note to trainers: Q52-Q54 are difficult.* It is important that the enumerators receive extensive training with regard to these questions. The format of the survey is designed to make it easy for the enumerator to quickly record responses from the respondent. Trainers may need to revisit this topic with trainees (during role play, giving examples of how to encourage the respondent, helping enumerators become comfortable with the answer choices, possibly rereading the notes as a group).
7. *Note to trainers: This is also a good place to take a short break and then do the 'group quiz' from session 5.*
8. Ask enumerators to summarize, review session objectives if desired.

Session 5: MPAT Enumerator Training

Household Survey: How to record answers on the survey

(may also be combined with session 4)

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Correctly mark answers on Household Survey form • Correctly perform skip logic and marking • Write clearly • Know when to write margin notes for enumerator supervisor 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Demonstrate how to mark survey answers • Give situations and ask enumerators how to mark the response 	Preparation/materials <ul style="list-style-type: none"> • Method for demonstrating survey marking to a large group (overhead projector, extra-large printout of surveys, laptop projector and picture files of the survey, so trainer can virtually 'write' answers on the survey forms using a program similar to Microsoft Paint) • Copy of Household Survey for each enumerator • Interpreter, if necessary

Detailed description of activities

1. Review session objectives.
2. Demonstration of marking *if* not covered adequately in previous session (any method):
 - a. Survey start time
 - b. Write clearly
 - c. Household family structure (draw picture)
 - d. Circle best answer choice²
 - e. Write numbers in boxes
 - f. Write margin notes
 - g. Do not write in shaded boxes
 - h. Cross out questions based on skip logic
3. 'Group quiz'/Q&A discussion:
 - a. Trainer asks 'What should I write/how should I mark _____ (insert situation from below)?'
 - b. Take answer from the group and then demonstrate on the actual survey (using whatever method trainer chooses).
 - c. Situations for discussion/demonstration:
 - i. If the respondent gives consent
 - ii. If the respondent does not give consent
 - iii. If the respondent is from X, Y, Z (use example of AA1,2,3)
 - iv. If respondent answers 'I don't have any children' to Q4
 - v. If head of household says they are separated
 - vi. If respondent says that water is a tough issue for its household
 - vii. If respondent answers '2 hours' to Q11
 - viii. If respondent answers 'Feed to dogs' to Q25
 - ix. If respondent answers 'In the garbage bin' to Q26
 - x. If respondent answers 'Yes' to Q31
 - xi. If respondent answers 'No' to Q34
 - xii. If respondent answers 'I don't want to talk about it' to Q67
 - xiii. If respondent answers 'Grandma is a little sick all the time, but the other 2 people are only sick once or twice a year' to Q9 or Q10
 - xiv. If respondent answers 'I have land but I mostly work in the shop, so my neighbours use all my land' to Q39
 - xv. Other situations

2/ Looking at Q4 as an example, on survey questions that have answer choices for questions that seek a numeric answer, the minus sign is used as a negative symbol to delineate them from other responses, such as 'Don't know (-1)'. For the eventual data entry, if we were to enter '1' (instead of '-1'), this could mean one woman, or 'Household has no children'. Thus, in questions that seek a number (number of adults, number of minutes, months, etc.), we use negative codes for other possible answers to avoid any confusion during data entry.

4. Timing:
 - a. Data show that the average survey takes 35 minutes to complete.
 - b. It may seem long now, and take much longer than 35 minutes, but you will get faster and more comfortable the more you practise.
5. Summarize, review session objectives if desired.

Session 6: MPAT Enumerator Training

Household Survey: Stop-and-go role play for observation and discussion

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Deepen their understanding by observing trainers role playing and by asking questions 	Time estimate: ≈ 2 hours
Session activities <ul style="list-style-type: none"> • Explain in-field procedure – ‘from hello to thank you’ • Trainers role play • Trainers stop to raise issues and answer questions • Trainees follow the role play and practise marking the correct response on the survey form 	Preparation/materials <ul style="list-style-type: none"> • Request help from project staff or co-trainer to role play (project staff member as respondent is optimal choice as they will be able to respond based on cultural context of project area) • Handout or flipchart of ‘Implementing the MPAT Household Survey: Steps, start to finish’, attached • Copy of Household Survey for each enumerator • Method for demonstrating survey marking to a large group (overhead projector, extra-large printout of surveys, laptop projector and picture files of the survey, so trainer can virtually ‘write’ answers on the survey forms using a program similar to Microsoft Paint)
Detailed description of activities <ol style="list-style-type: none"> 1. Opening/explanation of session activities (10 min) <ol style="list-style-type: none"> a. Explain the ‘role playing’ process: <ol style="list-style-type: none"> i. Trainer/project staff will role play. ii. Enumerators will follow along and mark their own surveys based on what they hear in role play. iii. Trainer will mark a survey form (page 1 or all) visible to all (using an overhead projector or whatever method is feasible). iv. Trainer will encourage enumerators to ask questions and ‘challenge’ the right answer. 2. Trainer quickly reviews the in-field survey procedure (to be role played in a few minutes). Refer to the handout ‘Implementing the MPAT Household Survey: Steps, start to finish’ (in User’s Guide or on flipchart or as handout) (20 min) 3. Trainer and assistant role play as enumerator and respondent from beginning to end (‘from hello to thank you’). [Trainer should play the enumerator role, with another assistant or participant acting as the second enumerator, to emphasize that enumerators work in pairs] (60-75 min) <ol style="list-style-type: none"> a. Trainer stops to explain throughout the role play. b. Trainer pauses after each question to indicate how the respondent’s response was marked as an answer (aided by an overhead projector if needed) so that enumerator trainees can see how their answers compare. c. At the end of the session, trainer can collect the survey forms to analyse discrepancies and provide individual feedback/corrections, if feasible. 4. Collect observations from the group/summarize (10 min) 	

Session 6 handout

Implementing the MPAT Household Survey: Steps, start to finish

1. Get your household list and consult the map from your enumerator supervisor to know which households to visit.
2. Go to household No. 1.
3. Introduce yourself and the organization you are working for, and generally explain why you are at their household, what information you wish to collect and what it will be used for.
4. Be sure that a suitable person is available for the survey (an adult that lives in the household at least nine months each year), willing to participate and not busy, or not going to be busy in the next ~30 minutes.
 - a. If not, go to the next household on the list, and find a suitable time to return to the previous household.
 - b. Make note of the household that did not wish to participate, or was not available, so that you can return and/or tell your enumerator supervisor.
5. Read the consent statement, word for word.
6. Give the respondent the contact information card, in case they have any questions/concerns.
7. If you receive consent to continue, sign/initial the appropriate box on the form and conduct the survey.
 - a. If you do not have consent, thank the person, leave the household and make a note of the household so that you can tell your enumerator supervisor.
8. Mark the survey start time.
9. Complete the survey.
10. Mark the survey completion time.
11. Say thank you and go to the next household.

(Optional)**Session 7: MPAT Enumerator Training****Household Survey: Survey practice – real-time role play, with trainees marking survey responses**

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Become more comfortable with the Household Survey procedure • Become more comfortable marking survey responses 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Role play, start to finish • Trainees record answers as if they were enumerators • Short break so trainers can analyse survey markings by trainees • Correct answer marking is reviewed and discussed <i>after</i> the role play is finished (at this stage, focus on how to correctly write answers on the survey form, not if they chose the correct answer) 	Preparation/materials <ul style="list-style-type: none"> • Assistant(s) for the role play – trainer to determine if trainees should play both enumerator and respondent or have trainer act as enumerator and project staff or enthusiastic enumerator trainee act as respondent • Copy of Household Survey for each trainee • Method for demonstrating survey marking to a large group (overhead projector, extra-large printout of surveys, laptop projector and picture files of the survey, so trainer can virtually 'write' answers on the survey forms using a program similar to Microsoft Paint)

Detailed description of activities

1. Overview of the session/explanation (10 min)
 - a. Review key points from previous sessions – ask enumerators to share their opinions of key points.
 - b. Trainers/volunteers role play the Household Survey, but without interruptions:
 - i. Identify who will act in each role – enumerator and respondent.
 - c. Enumerator trainees will observe and mark answers on a blank survey form:
 - i. Hand out blank surveys.
 - ii. Instruct enumerators to put their names at the top.
 - iii. Surveys will be collected at the end, to identify any problem areas the group is having.
2. Role play, start to finish (45 min)
 - a. Trainer (if not acting as enumerator) also completes survey form to be used as the 'correct' version – and to which to compare trainee forms in the later feedback loop session.
3. Thoughts/observations/questions from trainees (10 min)
 - a. Collect completed survey forms from each trainee at the end of the role play.
4. Short break to analyse/check surveys (20 min)
 - a. Visual but very careful check by trainer. Look at each survey individually and note any issues/mistakes.
5. Trainer discusses any systematic problems identified immediately [ideally using an overhead projector] (15-30 min)
 - a. Focus on errors in marking/scoring the survey.
 - b. Give enumerators the opportunity to ask questions.
 - c. Go through each question for which there were wide discrepancies in answers and have trainees discuss and debate the best answer.
 - i. For example, for Q5, trainees marked 30 min and 90 min. Which is correct?
For Q7, trainees marked 2 or 3 or 4. Which is the best answer?
6. Summarize (5 min)

Session 8: MPAT Enumerator Training

Household Survey: Practising in pairs and small group discussions

<p>Session objective(s)</p> <p>Enumerators will be able to:</p> <ul style="list-style-type: none"> • Practise with the consent statement and Household Survey • Become more familiar with the Household Survey 	<p>Time estimate: ≈ 3-3.5 hours</p>
<p>Session activities</p> <ul style="list-style-type: none"> • Enumerators work in pairs, one as respondent and one as enumerator; then switch roles • Break into small groups, discuss any problems or concerns based on pair work and previous sessions • Report back to large group • Debrief/address issues raised by enumerators 	<p>Preparation/materials</p> <ul style="list-style-type: none"> • Copy of consent statement for each enumerator • Copy of Household Survey for each enumerator • Flipchart paper, markers, tape (optional)
<p>Detailed description of activities</p> <ol style="list-style-type: none"> 1. Session objectives/plan for the session (5 min) 2. Divide into pairs – one as respondent, one as enumerator. Practise implementing the survey, including the consent statement, and marking the survey. Switch roles (1.5-2 hours) 3. Break (10 min) 4. Divide into small groups (20 min): <ol style="list-style-type: none"> a. Discuss any problems or questions based on pair work and previous sessions. b. Encourage enumerators to problem-solve together, while consulting the notes. c. Trainer to listen in on small group discussions and assist when appropriate. d. After X minutes, each group will report back with the issues they are still not sure about (either verbally or by writing on flipchart paper). 5. Small groups report back to large group on unanswered questions/trainer addresses remaining issues (30 min) 6. Quick debriefing of survey practice in pairs (10 min) 7. Summarize (5 min) 	

(Optional but recommended)**Session 9: MPAT Enumerator Training****Household Survey: Survey practice – role play in pairs****Session objective(s)**

Enumerators will be able to:

- Be more comfortable with the Household Survey through practice
- Understand the problems caused by unclear survey marking/writing
- Identify common errors and correct methods
- Practise marking the survey

Time estimate: ≈ 2 hours

Preparation/materials

- Blank surveys for each enumerator trainee
- Different colour pens (for enumerator trainees to check completed surveys)

Session activities

- Each trainee practises as enumerator and respondent
- Completed surveys are checked by the group
- Common errors are discussed

Detailed description of activities

1. Overview/explanation of session activities (5 min)
 - a. Key points from previous session?
 - b. Pairs will role play, person acting as enumerator will mark the survey.
 - c. Completed surveys will be reviewed by the group and discussed.
 - d. Distribute blank surveys.
2. Survey practice: One time in each role (1.5 hours)
 - a. This is a crucial step in the training and sufficient time must be allocated.
 - b. Organize the enumerators in pairs.
 - c. Ask them to record their responses on a *blank survey*.
 - d. Have them go through all the steps, start to finish, hello to thank you.
 - e. Walk around the room assisting enumerators as needed and correcting them where appropriate.
 - f. Take notes of common errors (to discuss with the group later).
 - g. After most pairs are finished, have the enumerators *switch roles and partners* and practise again.
3. Review completed surveys as a group (15 min)
 - a. Collect completed surveys and distribute them back to enumerators randomly, ensuring all enumerators have someone else's survey.
 - b. Ask each enumerator trainee to review the survey independently and circle and/or correct all scoring errors found in the survey they were given:
 - i. Trainees should use a different coloured pen (from that which was used already) and write their name at the top.
 - ii. Collect the surveys again.
4. Summarize/key points (5 min)
5. Short break for trainer to carefully review the surveys before the next session (15-30 min, depending on number of trainees)
 - a. These surveys will be used again in the next session.

Session 10: MPAT Enumerator Training

Household Survey: Feedback loop, review common errors, scoring issues and difficult questions

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none">• Thoroughly understand the intent/meaning behind the more difficult MPAT questions• Identify and correct common errors, in survey marking and survey implementations	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none">• Feedback from previous role playing session• Group discussion on common errors	Preparation/materials <ul style="list-style-type: none">• Notes on errors from surveys in previous session• Completed surveys from previous session
Detailed description of activities <ol style="list-style-type: none">1. Key objectives<ol style="list-style-type: none">a. Build on lessons learned during role playing practice.2. Group discussion of common errors from role playing practice in previous session (20 min)<ol style="list-style-type: none">a. After analysing surveys from previous session, trainer discusses:<ol style="list-style-type: none">i. Errors observed by trainer during role playii. Errors noted on completed surveysiii. Errors missed by 'checker' on completed surveysiv. Questions3. Open time for questions/difficulties4. Review difficult questions (at trainer discretion), such as:<ol style="list-style-type: none">a. Q5b. Q7 and Q8c. Q16d. Q25-Q27e. Q32 and Q33f. Q39 and Q40g. Q52-Q54h. Q64i. Q675. Summarize	

Session 11: MPAT Enumerator Training

Household Survey: Role of enumerators and enumerator supervisors

(also possible to insert this session at other times in the training schedule)

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Explain the different roles of enumerators and enumerator supervisors 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Brainstorming/discussion on role of enumerators • Brainstorming/discussion on role of enumerator supervisors 	Preparation/materials <ul style="list-style-type: none"> • Flipchart paper, markers or white board and markers
Detailed description of activities <ol style="list-style-type: none"> 1. Explanation of session activities (5 min) <ol style="list-style-type: none"> a. In preparation for field practice, we will discuss the roles of both enumerators and enumerator supervisors. b. For field practice, trainers/project staff will serve as enumerator supervisors. c. For MPAT implementation some trainees may be selected to serve as enumerator supervisors and to undergo additional training. 2. Brainstorming on role of enumerators (10 min) <ol style="list-style-type: none"> a. Ask trainees ‘What is the role of the enumerator?’ b. Capture responses via flipchart/white board. c. Summarize, making sure the list includes: <ol style="list-style-type: none"> i. Be the expert on the Household Survey ii. Make the respondent feel comfortable iii. Read the consent statement iv. Mark start and end times of the survey v. Follow supervisor instructions as to which households to survey vi. Report accurate data vii. Write clearly and legibly d. Emphasize the enumerator role of collecting accurate information/data. <ol style="list-style-type: none"> i. The underlying purpose of every aspect of this training is <i>accurate data</i>. 3. Brainstorming on role of enumerator supervisors (10 min) <ol style="list-style-type: none"> a. Ask trainees ‘What is the role of the enumerator supervisor?’ b. Capture responses via flipchart/white board. c. Summarize, making sure to include: <ol style="list-style-type: none"> i. Support and manage enumerators ii. Assist enumerators when they aren’t sure how to mark a question iii. Manage the sampling of households iv. Assign households for the enumerators to visit and provide directions (or a map) v. Change enumerator partners (recommendation is to work with a different partner/team member in each village) vi. Be the expert on the Village Survey and administer them vii. Assist with Household Surveys viii. Collect completed surveys at the end of the day 4. Questions/summarize (5 min) 	

Session 12: MPAT enumerator training

Household Survey: Field practice

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Become more comfortable implementing Household Survey 	Time estimate: ≈ 1-2 days
Session activities <ul style="list-style-type: none"> • Field practice • Feedback from trainer 	Preparation/materials <ul style="list-style-type: none"> • Field-practice village identified (and approved) • Village leaders available to assist • Household lists for field-practice village • Transport arranged • Clipboards, pens • Contact information cards • Copy of consent statement for each enumerator • Copies of Household Surveys for each enumerator • Copy of Village Survey for enumerator supervisors (if field practice occurs after enumerator supervisor training)

Detailed description of activities

Note: The work done in the classroom is very important, but there is no substitute for the time spent actually implementing the survey and dealing with the sort of issues that arise in real-life situations in the field. Thus, the need for and importance of field training cannot be overemphasized.

Field practice should occur immediately after classroom training. In some cases, if the enumerator supervisor training is scheduled within a few days, the training team may want to consider having day one of field practice immediately, with all trainees as enumerators, with day two of field practice to occur after enumerator supervisor training. This will allow enumerators to have two full days of Household Survey field practice, and enumerator supervisors to have one day of Household Survey field practice and one day of enumerator supervisor/Village Survey field practice.

Whether one or two days are needed can be decided based on the success of the first day. That is, the shorter option for this session is to arrange for enumerators to practise in the morning and then to review in the afternoon of the same day. Alternatively, two days may be used as described below.

1. Final reminders
 - a. Ask each enumerator to share one key point that we should all remember during field practice.
 - b. Explain the logistics – where and when to meet, which villages to go to, etc.
2. Day one of field practice with enumerators and/or enumerator supervisors
 - a. Trainer accompanies enumerators into the field and observes them as they practise implementing the Household Survey (blank versions) to consenting households.
 - b. Trainer acts as enumerator supervisor (if supervisors have not yet been trained).
 - c. Enumerators inform households that this is for practice only and that the data will not be used.
 - d. Trainer observes and takes notes, but does not engage/interrupt.
 - e. Trainer must 'let go' and allow enumerators to practise and make mistakes.
3. Feedback on day one of field practice
 - a. Group meets at the end of first field-practice day, asks questions; trainer provides feedback.
 - b. If logistically feasible, trainer may wish to have feedback sessions in smaller groups for greater freedom of expression.
4. Day two of field practice with enumerators and/or enumerator supervisors (if supervisors have been trained).
5. Feedback on day two of field practice
 - a. Group meets at the end of second field-practice day, asks questions; trainer provides feedback.
 - b. If logistically feasible, trainer may wish to have feedback sessions in smaller groups to allow for greater freedom of expression.
6. Wrap-up

Session 13: MPAT Enumerator Training

Household Survey: Final review and wrap-up

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Perform well as MPAT enumerators • Successfully complete MPAT enumerator training 	Time estimate: \approx 1-1.5 hours
Session activities <ul style="list-style-type: none"> • Final role play, at discretion of trainer • Final feedback and review • Discuss lessons learned from field practice • Next steps • Awarding of certificates 	Preparation/materials <ul style="list-style-type: none"> • Training certificates • Staff identified to explain next steps • Staff identified to deliver closing remarks
Detailed description of activities <ol style="list-style-type: none"> 1. Final feedback and review (30 min) <ol style="list-style-type: none"> a. Ask trainees to describe any difficulties encountered during field practice. Discuss lessons learned. <ol style="list-style-type: none"> i. Trainer to specifically ask about 'difficult questions'. b. Discuss any difficulties/modifications to the translation, if applicable. c. Give feedback to enumerators on field practice. d. Training team works with any enumerators still having difficulty understanding any aspects of survey administration. 2. Final role play, if trainer feels that additional role play is needed to help enumerator trainees improve further (45 min) 3. Next steps (project staff) (10 min) <ol style="list-style-type: none"> a. Selection of enumerator supervisors (if desired) b. MPAT implementation plan/schedule 4. Final words from trainer (5 min) <ol style="list-style-type: none"> a. Note progress of the group since day one of training. 5. Awarding of training certificates (10 min) 6. Closing remarks (10 min) 	

Annex IV

Household sampling list – template for enumerators

Enumerator 1 name:

Enumerator supervisor:

Enumerator 2 name:

Village name:

Date:

	Household name	Notes on household location	Notes for enumerator supervisor	Survey completed?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**THIS PAGE TO BE RETURNED TO
ENUMERATOR SUPERVISOR AND THEN DISCARDED**

Annex V Contact information cards, template

For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____	For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____
Cut here	
For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____	For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____
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For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____	For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____
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For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____	For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____
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For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____	For more information on this survey, please contact: Name: _____ Organization: _____ Phone number: _____ Date: _____

MPAT enumerator supervisor training – detailed lesson plans

The following lesson plans have been designed for small groups, but can be revised to accommodate different-sized training groups. *Times given are estimates* and will vary for each trainer and each group.

As with the suggested training programmes and lessons for enumerators, here, too, users may decide how best to use these resources to responsibly train enumerator supervisors and ensure that training is successful.

1. **Enumerator supervisor training: Overview and objectives, responsibilities of enumerator supervisors** (2-2.5 hours)
2. **Random sampling of households/assigning enumerators** (1.5-2 hours)
3. **Village Survey: Question-by-question review of survey and notes** (2 hours)
4. **Village Survey role play: Observation and in pairs** (2-2.5 hours)
5. **Enumerator supervisor/Village Survey field practice (to be conducted with enumerator teams)** (1-2 days)
6. **Village Survey and supervisor responsibilities: Final review and wrap-up** (1 hour)

Session 1: MPAT Enumerator Supervisor Training

Enumerator supervisor training: Overview and objectives, responsibilities of enumerator supervisors

Session objective(s) Enumerator supervisors will be able to: <ul style="list-style-type: none"> • Describe responsibilities of an enumerator supervisor • Explain why those responsibilities are important 	Time estimate: 2-2.5 hours
Session activities <ul style="list-style-type: none"> • Introductions and objectives • Review training schedule • Read 'A day in the life of an MPAT team' (Section 8.4) • Discuss supervisor responsibilities 	Preparation/materials <ul style="list-style-type: none"> • MPAT Village Survey • Supervisor training schedule • 'A day in the life of an MPAT team' (Section 8.4), print as handout • List/handout of 'Fifteen supervisor responsibilities' (or write on flipchart/white board)
Detailed description of activities <ol style="list-style-type: none"> 1. Opening (5 min) 2. Enumerator supervisor expectations: (10 min) <ol style="list-style-type: none"> a. Ask supervisors what they expect to learn from the training, write all ideas on flipchart/white board. 3. Enumerator supervisor training objectives: (5 min) <ol style="list-style-type: none"> a. List the overall training objectives: <ol style="list-style-type: none"> i. Understand the general purpose of MPAT and the purpose of the project (or research). ii. Understand why the data are collected, who will use them and for what purpose (this is important because respondents may ask for this information). iii. Understand your role as enumerator supervisor. iv. Be very comfortable with the MPAT Village Survey (and Household Survey and consent statement from previous training). v. Be able to accurately record responses on Village Survey. vi. Be able to answer questions posed by enumerators. vii. Know how to respond to issues that arise while implementing surveys in the field. viii. Be able to successfully manage the work of a team of enumerators. ix. Know the correct process for MPAT implementation – random sampling of households, assigned households, etc. x. Be able to communicate feedback to project staff and the data-entry and enumerator teams. b. Referring to 'supervisor expectations' on flipchart/white board, explain which expectations can and cannot be met and why. 4. Training agenda/programme/schedule: (10 min) <ol style="list-style-type: none"> a. In order to meet your expectations and our training objectives, we will cover the following topics and carry out the following activities. b. Review schedule – very brief description of each. c. Ask for any questions/concerns. d. Discuss any 'housekeeping' issues (location of toilets, breaks, timekeeper); encourage trainees to take notes, ask questions, etc. 5. Read 'A day in the life of an MPAT team' (Section 8.4), individually, to oneself (15 min) 6. Supervisor responsibilities – trainee suggestions (10 min) <ol style="list-style-type: none"> a. Based on handout reading, enumerator training, etc., ask trainees what they see as their supervisor responsibilities. Write on white board. 	

7. Present list/handout of 'Fifteen supervisor responsibilities' (45 min)
 - a. Discuss one-by-one. Ask probing questions: 'Why do you think this is important?' or 'What might happen if a supervisor didn't do this?'
 - i. Work with village leaders to randomly sample households and five or more extra households.
 - ii. Be able to tell enumerators how to get to those households (draw map).
 - iii. Assign enumerator teams.
 1. Have enumerators change partners in each new village.
 2. Do not assign enumerators to villages where they have relatives/friends.
 - iv. Have a thorough understanding of the MPAT Household Survey and procedure (through MPAT enumerator training).
 - v. Maintain familiarity with the Household Survey, assist team when needed.
 1. Plan to conduct 2-3 Household Surveys per week, partnering with an enumerator (more as needed).
 - vi. Help enumerators when they have problems with the Household Survey.
 - vii. Summarize Household Survey margin notes from enumerators, if necessary, to share with project staff.
 - viii. Conduct spot checks to ensure that enumerators are visiting the correct households and performing the work correctly (project staff will conduct spot checks on enumerator supervisors).
 - ix. Complete Village Surveys with village leader, head teacher (or the most senior teacher available) and senior health-care staff member.
 1. This may require visiting multiple schools or health-care centres in order to combine information for a single village.
 - x. General management and support of enumerator teams.
 - xi. Provide feedback from project staff/data entry if there are errors in survey marking, in order to make corrections early and prevent future mistakes.
 - xii. Discuss with the village leader if more than five households are not able/willing to participate
 1. Find out if those five households are relatively poorer or wealthier than the average household in the village.
 2. Find out if the size of those five households is relatively smaller or larger than the average household in the village.
 3. Carefully document the information for project staff.
 - xiii. Lead debriefing sessions with enumerators at the end of each day.
 1. Identify common problems, village issues, etc.
 2. Report back to project staff.
 - xiv. After completing surveys in each village, give household lists to project staff to destroy.
 - xv. Stay in the field during data collection in order to:
 1. Be available if enumerators have problems.
 2. Monitor the work of enumerators.
 3. Complete Village Survey (visit schools and health-care centres to collect data).
 4. Assist with Household Surveys, when needed.
8. Project staff responsibilities (10 min)
 - a. Supervisors are not alone. Project staff are also there to assist you.
 - b. Project staff will:
 - i. Tell supervisors which villages to visit.
 - ii. Give the supervisor a numbered household list for each village (to use for random sampling of households).
 - iii. Arrange for village leader to be available to assist during first day at each village.
 - iv. Field questions and complaints from households making use of the contact information card.
 - v. Conduct spot checks of supervisors to ensure quality work/supervision.
9. Summarize (5 min)

Session 2: MPAT Enumerator Supervisor Training

Random sampling of households/assigning enumerators

Session objective(s) Enumerator supervisors will be able to: <ul style="list-style-type: none"> • Understand the importance of random sampling to MPAT data/results • Explain the importance of random sampling to village leaders • Correctly conduct a random sample of 30 households per village + five or more extra/alternate households • Efficiently assign households to each enumerator pair 	Time estimate: ≈ 1.5-2 hours
Session activities <ul style="list-style-type: none"> • Discussion of importance of random sampling • Role play of random sampling with a village leader, mapping selected households and assigning to enumerator pairs 	Preparation/materials <ul style="list-style-type: none"> • Number chart • Scissors • Sample household list • Sample village map, showing households • Two volunteers for sampling role play • Two volunteers for mapping role play
Detailed description of activities <ol style="list-style-type: none"> 1. Introduction of session objectives/activities (5 min) <ol style="list-style-type: none"> a. Primary goal is to understand how to randomly sample households from a household list provided by project staff. 2. Importance of random sampling (15 min) <ol style="list-style-type: none"> a. Open with a question ‘Why is random sampling important?’ b. Continue with a discussion: <ol style="list-style-type: none"> i. Gives accurate data about the village as a whole/as a group. <ol style="list-style-type: none"> 1. Give examples: <ol style="list-style-type: none"> a. Box of fruit: if you just look at the fruit on top, you might think the whole box is good, but if you empty the box and take fruit from all parts of the box, some might be ripe, overripe, bruised from being at the bottom of the box – this is a more accurate picture of the box of fruit b. Wealthier sections of a village or town ii. Random sampling is the foundation: <ol style="list-style-type: none"> 1. ‘What did we say is the foundation of MPAT?’ Accurate data. 2. ‘Well, random sampling is the foundation of accurate data’. Everything is based on this. iii. If the random sample is not done correctly (or not done at all), MPAT data cannot be used. Enumerators <i>must</i> visit the sampled households, and <i>not</i> the most conveniently located households. iv. Quality control: Project staff will be monitoring supervisors to ensure that samples are random in the same way that supervisors are monitoring enumerators. 3. Overview of the sampling procedure with the village leader; explain through role play (45-60 min) <ol style="list-style-type: none"> a. Role play (with commentary along the way, explaining why and answering questions). <ol style="list-style-type: none"> i. Trainer to be the ‘narrator/director/project staff’. ii. Ask for two volunteers to act as enumerator supervisor and village leader. b. Project staff will tell you: <ol style="list-style-type: none"> i. Which villages to visit (staff will probably only tell you one or two villages at a time). ii. Give you a numbered household list for each village. iii. Give you a village map (if they have one). iv. Tell you how many households to sample in each village (probably 30 households in each village). 	

- c. Steps for random sampling:
 - i. Cut out numbers 1 to n (n = total number of households on the household list), show village leader and ask them to put the numbers in a hat/box/envelope.
 - ii. Invite village leader to reach in and pick the first number.
 - iii. Supervisor marks that numbered household on the household list. This is a sampled household.
 - iv. Repeat 29 more times to get 30 sampled households (assuming that is the number of households per village).
 - v. Explain to village leader that this is the random sample of the village.
 - vi. Now, select five or more additional numbers from the hat.
 - vii. Supervisor marks these five household numbers as 'extra' on the household list, indicating the order in which they were selected.
 - 1. These are the extra/alternate households, which will only be visited if one or more of the households on the random sample list is not available or not interested in answering the survey.
 - viii. Your random sample is complete.
 - ix. Explain to village leader that once the surveys are completed in this village, the household list will be destroyed so that no one will know *which* households in the village were surveyed.
- d. Why do we do it this way?
 - i. Transparency: So village leaders can see that this is random and can help explain to others when/if they ask.
 - ii. Fairness: Some households will be selected, others will not. No household is getting preferential treatment. It's all random.
 - iii. Anonymity: That's why we destroy the household lists.
- 4. Overview of how to map households and assign enumerator teams (20 min)
 - a. Role playing (with commentary along the way, explaining why and answering questions)
 - i. Trainer to be the 'narrator/director/project staff'.
 - ii. Ask for two volunteers to act as enumerator supervisor and village leader.
 - b. Mapping households and writing useful information to help enumerators find the households
 - i. If you have a village map from project staff, you can immediately begin marking the sampled households on the map.
 - ii. If you don't have a map, you may need to draw one with the village leader (this will be time-consuming).
 - iii. Start with household 1. Mark it on the map. Make a note of any useful detail on the household list/map (e.g. 'take the small path, just past the big papaya tree').
 - iv. Continue for all 30 sampled households and five extras.
 - 1. You may need to walk/motorbike around the village to understand where the households are, so that you can tell the enumerator team.
 - v. Thank the village leader for their time. Give them a contact information card.
 - c. Assigning households to each enumerator team
 - i. Using the map, the supervisor must figure out the most efficient way to divide the work among the team.
 - 1. Let's assume 30 households per village, three enumerator pairs. How many households (approximately) per enumerator pair?
 - a. Depending on the geography of the village, each enumerator pair may not have exactly the same number of households.
 - 2. For example, households on the north side of the river assigned to pair one, households on the south side of the river assigned to pair two, households in the village centre assigned to pair three.

- ii. For especially large villages, supervisors will likely wish to split the work into two or more pieces and only use/draw maps for a limited number of households at a time. They can work with the village official to divide the randomly sampled households based on what regions of the village/area they are in. For example, they could start with the 15 randomly sampled households that happen to be on the east side of the village, and then create a map for the west side at a later time.
- iii. Don't assign enumerators to villages they are from or have worked extensively in or, for whatever other reason, know the residents well.

5. Summarize (5 min)

- a. The key point is that the supervisor should randomly sample the households and then be in a position to efficiently tell the enumerator teams which households to visit.

Session 3: MPAT Enumerator Supervisor Training

Village Survey: Question-by-question review of survey and notes

<p>Session objective(s)</p> <p>Enumerator supervisors will be able to:</p> <ul style="list-style-type: none"> • Understand the intent/meaning of the Village Survey questions • Determine the best possible survey answer choice based on the respondent's reply • Provide additional survey translation corrections if needed 	<p>Time estimate: ≈ 2 hours</p>
<p>Session activities</p> <ul style="list-style-type: none"> • Systematically review 'Notes and definitions for the Village Survey' (reading one-by-one as a group, or read to oneself and then read together) • Encourage questions, problem-solve together • Review local language translation for accuracy in the context of this exercise; make changes as needed 	<p>Preparation/materials</p> <ul style="list-style-type: none"> • Session objectives on white board/flipchart • 'Notes and definitions for the Village Survey' handout, in local language, one copy for each trainee • User's Guide or Excel, to look up components/subcomponents
<p>Detailed description of activities</p> <ol style="list-style-type: none"> 1. Review session objectives (5 min) 2. Distribute 'Notes and definitions for the Village Survey' (Section 7.4) 3. As a group, go around the room reading through the 'General notes' section of the handout (30 min) <ol style="list-style-type: none"> a. Encourage questions and group discussion. b. May be useful for trainees to read each section to themselves before reading aloud as a group. Ask what their preference is. 4. As a group, go around the room reading through the 'Notes on specific questions' section of the handout (60 min) <ol style="list-style-type: none"> a. Encourage questions and group discussion. b. Ask trainees, based on enumerator training, 'How would you mark the answer for question X?' c. Have them demonstrate correct marking on Village Survey questions. 5. How do these questions fit into MPAT results? (10 min) <ol style="list-style-type: none"> a. Choose a few examples most relevant to the project type or activities. Have them predict ('What do you think this is measuring?'). b. Look up component/subcomponent affiliated with that question. 6. Areas of additional discussion, as you read through the notes (15 min) <ol style="list-style-type: none"> a. As with the MPAT Household Survey, enumerator supervisors should implement the Village Survey only with the respondent (village official, teacher, health-care staff member). b. In some parts of the world, a crowd may form when the enumerator supervisor is meeting with the village leader/chief/elder. This is acceptable, because interested villagers can observe the random sampling process and because the MPAT Village Survey is deliberately structured so as not to ask for any sensitive information from the village official. c. Every effort should be made to meet with and interview the village educator and health-care staff member in private. d. While the MPAT Household Survey <i>must</i> be implemented in a standardized fashion, staying as close to the question wording as possible, enumerator supervisors will find that when implementing the Village Survey, this is not always possible – though they should attempt to read the questions as written the first time. e. If there are multiple health centres in a village and the primary health-care staff member in the primary centre does not have enough familiarity with or information about the other centres, then the enumerator supervisor should visit the other centres as well (public and private, large and small). 	

- f. The same applies to schools.
 - g. Project staff can then take the average opinions across centres and/or schools for the data entry for the village.
7. Summarize – ask trainees to summarize, review objectives if desired (5 min)

Session 4: MPAT Enumerator Supervisor Training

Village Survey role play: Observation and in pairs

Session objective(s) Enumerator supervisors will be able to: <ul style="list-style-type: none"> • Become more comfortable with the Village Survey procedure • Become more comfortable marking survey responses 	Time estimate: ≈ 2-2.5 hours
Session activities <ul style="list-style-type: none"> • Trainees observe role play and mark responses • Trainer checks survey forms; discusses issues • Trainees practise Village Survey in pairs 	Materials/preparation <ul style="list-style-type: none"> • Session objectives • Volunteer to role play as the village leader/teacher/health-care staff member • Two copies of Village Survey for each trainee
Detailed description of activities <ol style="list-style-type: none"> 1. Opening/explanation of session activities (10 min) <ol style="list-style-type: none"> a. Explain the 'role playing' process: <ol style="list-style-type: none"> i. Trainer will act as enumerator supervisor. Volunteer/project staff will act as respondents (village leader, teacher, health-care staff member). ii. Enumerator supervisors will follow the process and mark their own survey based on what they hear in role play. iii. Surveys will be collected and used as the basis for a discussion on correct/incorrect survey marking. 2. Role play, start to finish (25-40 min) <ol style="list-style-type: none"> a. Trainer completes survey form as the enumerator supervisor – to be used as the 'correct' version to which to compare trainee forms. b. Trainees also mark surveys. c. No interruptions – save questions until the end. 3. Quick debriefing: Thoughts/observations/questions from trainees (10 min) <ol style="list-style-type: none"> a. Collect completed survey forms from each trainee at the end of role play. 4. Short break to analyse/check surveys (20 min) 5. Discussion on survey forms – good, bad, systematic problems (10 min) <ol style="list-style-type: none"> a. Trainer highlights what was done well. b. Trainer highlights what needs to be improved. c. Encourage enumerators to ask questions and 'challenge' the right answer – as a learning tool. d. Go through each question where there were wide discrepancies in answers and have trainees discuss and debate the best answer. 6. Role play in pairs/Village Survey practice: Once in each role (1 hour) <ol style="list-style-type: none"> a. This is a crucial step in the training and thus sufficient time must be allocated. b. Organize the enumerators in pairs. c. Ask them to record their responses on a <i>blank survey</i>. d. Have them go through all the steps, start to finish. e. Walk around the room assisting trainees as needed and correcting them where appropriate. f. Take notes of common errors (to discuss with the group later). g. After most pairs are finished, have enumerators <i>switch roles</i> and practise again. 7. Role playing debriefing (15 min) <ol style="list-style-type: none"> a. Trainees share. b. Trainer highlights key observations/issues during role play. c. Ask trainees to share their observations – 'Ready for field practice? Not ready? Comfort level?' 8. Ask trainees to summarize (5 min) 	

Session 5: MPAT Enumerator Supervisor Training

Enumerator supervisor/Village Survey field practice

(to be conducted with enumerator teams)

Session objective(s) Enumerator supervisors will be able to: <ul style="list-style-type: none"> • Fulfil all enumerator supervisor responsibilities • Correctly manage household sampling process • Successfully manage enumerator teams • Confidently implement Village Surveys 	Time estimate: ≈ 1-2 days
Session activities <ul style="list-style-type: none"> • Field practice • Feedback from trainer 	Preparation/materials <ul style="list-style-type: none"> • Field-practice villages identified (and approved) • Transport arranged • Clipboards, pens • Contact information cards • Copies of Village Survey • Household lists/map • Enumerator teams • Copies of Household Survey

Detailed description of activities

Note: The work done in the classroom is very important, but there is no substitute for the time spent actually implementing the survey and dealing with the sort of issues that arise in real-life situations in the field. Thus, the need for and importance of field training cannot be overemphasized.

Field practice should occur immediately after classroom training. In some cases, if the enumerator supervisor training is scheduled within a few days of the enumerator training, the training team and project staff may want to consider having day one of field practice immediately, with all trainees as enumerators, with day two of field practice to occur after enumerator supervisor training. This will allow enumerators to have two full days of Household Survey field practice, and enumerator supervisors to have one day of Household Survey field practice and one day of enumerator supervisor/Village Survey field practice.

1. Final reminders
 - a. Ask each enumerator supervisor to share one key point for everyone to remember during field practice.
 - b. Explain the logistics – where and when to meet, which villages to go to, etc. Enumerator supervisors should do this if possible, to practise their role as team managers.
2. Enumerator supervisor/Village Survey field practice
 - a. Trainer accompanies enumerator supervisors/enumerators into the field and observes them as:
 - i. Enumerator supervisors practise doing a random sample of village households (if possible, project will have created household lists).
 - ii. Enumerator supervisors practise managing their enumerator teams.
 - iii. Enumerator supervisors practise implementing the Village Survey.
 - iv. Enumerators practise implementing the Household Survey to consenting households.
 - b. Enumerators/enumerator supervisors inform village leaders/households that this is for practice only and that the data will not be used.
 - c. Trainer observes and takes notes, but does not engage/interrupt.
3. Feedback on field practice
 - a. Group meets at the end of the field-practice day(s), asks questions.
 - b. Enumerator supervisor provides feedback.
 - c. Trainer provides feedback.
 - d. If logistically feasible, trainer may wish to have feedback sessions in smaller groups to allow for greater freedom of expression.
4. Wrap-up/summarize

Session 6: MPAT Enumerator Supervisor Training

Village Survey and supervisor responsibilities: Final review and wrap-up

Session objective(s) Enumerators will be able to: <ul style="list-style-type: none"> • Perform well as MPAT enumerator supervisors • Successfully complete MPAT enumerator supervisor training 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Final feedback and review • Discuss lessons learned from field practice • Next steps • Awarding of certificates 	Preparation/materials <ul style="list-style-type: none"> • Training certificates • Staff identified to explain next steps • Staff identified to deliver closing remarks
Detailed description of activities <ol style="list-style-type: none"> 1. Final feedback and review (30 min) <ol style="list-style-type: none"> a. Ask trainees to describe any questions or difficulties encountered during field practice: <ol style="list-style-type: none"> i. Village Survey ii. Supervisor responsibilities b. Discuss lessons learned. 2. Next steps (project staff) (10 min) <ol style="list-style-type: none"> a. MPAT implementation plan/schedule 3. Final words from trainer (5 min) <ol style="list-style-type: none"> a. Note progress of the group since day one of training. 4. Awarding of training certificates (10 min) 5. Closing remarks (10 min) 	

Annex VII MPAT data-entry training (check-score-code) — detailed lesson plans

Depending on the logistics involved, MPAT data-entry/CSC training can take place either at the end of full MPAT training or immediately before actual MPAT implementation begins. Ideally, CSC trainees will attend full MPAT enumerator training so as to become very familiar with the surveys.

Either way, the actual data-entry process should start one to two days after the start of MPAT data collection. In this way, the CSC process can identify errors made by enumerators in the field early on in the data-collection timeline, so they can be corrected and improved in subsequent surveys. Surveys should not be ‘saved up’ to start data entry at a later date, because this does not allow immediate feedback to enumerators and enumerator supervisors.

1. **Introductions, training schedule and objectives, and MPAT overview** (2 hours)
2. **Overview of check-score-code, practice using dummy household survey** (3-3.5 hours)
3. **Practise CSC with dummy village surveys** (1-1.5 hours)
4. **CSC game: “What should you do when ...?”** (1 hour)
5. **CSC practice using field-practice surveys/pilot surveys** (2-4 hours)
6. **Final review and wrap-up** (1 hour)

Session 1: MPAT Data-entry Training

Introductions, training schedule and objectives, and MPAT overview³

Session objective(s) Trainees will be able to explain the: <ul style="list-style-type: none"> • Purpose of MPAT • Ten dimensions of MPAT • Components of MPAT (Household Survey, Village Survey, CSC data-entry system, Excel Spreadsheet, component and subcomponent scores, radar graphs) • Importance of quality control and accurate data 	Time estimate: ≈ 2 hours
Session activities <ul style="list-style-type: none"> • Introductions and objectives • MPAT overview (PowerPoint) • MPAT Q&A 	Preparation/materials <ul style="list-style-type: none"> • MPAT data-entry training objectives (listed below in lesson plan – copy for each trainee or on white board) • Training agenda/schedule (copy for each trainee or large flipchart/white board in training room) • MPAT overview (PowerPoint) • Laptop/projector • Copies of PowerPoint slides for each trainee (optional) • Notebook/pen for trainees • White board and markers or flipchart paper, markers, tape

Detailed description of activities

1. Introductions of project staff, training team and data-entry trainees (15 min)
 - a. Icebreaker introduction (optional)
2. Opening remarks if requested by project leaders (10 min)
3. Trainee expectations: (10 min)
 - a. Ask trainees what they expect to learn from the training.
 - b. Write all ideas on flipchart/white board.
4. Overall training objectives: (5 min)
 - a. List training objectives:
 - i. Understand the general purpose of MPAT and the purpose of the project (or research).
 - ii. Understand why the data are collected, who will use them and for what purpose (this is important because respondents may ask for this information).
 - iii. Understand your role as data-entry/quality-control staff.
 - iv. Be very comfortable with the check-score-code (CSC) data-entry system.
 - v. Be able to enter MPAT data accurately and efficiently.
 - b. Referring to 'trainee expectations' on white board, explain which expectations can and cannot be met and why.
5. Training agenda/programme/schedule: (10 min)
 - a. In order to meet your expectations and our training objectives, we will cover the following topics and carry out the following activities:
 - b. Review schedule – very brief description of each activity.
 - c. Review materials provided (notebook – please take notes, agenda, etc.).
 - d. Ask for any questions/concerns.
 - e. Discuss any 'housekeeping' issues (location of toilets, breaks, timekeeper); encourage trainees to ask questions, etc.
6. MPAT overview, aided by PowerPoint (45 min)
 - a. How it was developed and why.
 - b. The 10 dimensions.
 - c. MPAT elements: random sampling, Household Survey, Village Survey, data entry/CSC, Excel Spreadsheet, radar graphs and scores.
 - d. Emphasize that accurate data are the foundation.
 - e. How MPAT can be used.

^{3/} If data-entry trainees were not part of the MPAT overview session in enumerator training, it is recommended that they receive the general MPAT overview information, so that they understand the larger context and purpose of their work and the importance of data quality and accuracy.

7. Question and answer session (to assess understanding) (20 min)
 - a. Ask trainees some or all of the following questions:
 - i. What do you think is the purpose of MPAT?
 - ii. How do you think it might help your home village/community?
 - iii. Why are accurate data (and thus the work of data entry/quality control) so important?
8. Summarize (5 min)

Session 2: MPAT Data-entry Training

Overview of check-score-code, practice using dummy household survey

Session objective(s) Trainees will be able to: <ul style="list-style-type: none"> • Complete all three stages of the MPAT quality-control process: checking, scoring, coding • Identify logical errors in MPAT Household Survey forms 	Time estimate: ≈ 3-5 hours
Session activities <ul style="list-style-type: none"> • Introduction • Review of CSC process • Practise CSC with dummy household survey • Discuss differences between MD, NA, Don't know, Other (Section 9.3 of User's Guide) • Debrief 	Preparation/materials <ul style="list-style-type: none"> • Determine if project staff or data-entry staff will enter data for Village Surveys • If project staff will do data entry for Village Surveys, invite them to this session • CSC PowerPoint file (optional, or use lesson plan notes to teach content/prepared flipcharts) • Laptop/projector • One-page code sheet from project staff (enumerator codes, CSC staff codes, hectare conversion, etc.) • Different coloured pens (minimum of three colours) • Create dummy household survey in local language⁴ • Copy of dummy household survey for each trainee • Computer, loaded with MPAT Excel data-entry template for each trainee • Method for demonstrating survey marking to a large group (overhead projector, white board, extra-large printout of surveys, laptop projector and picture files of the survey, so trainer can virtually 'write' answers on the survey forms using a program similar to Microsoft Paint)

Detailed description of activities

1. Overview of objectives and activities (5 min)
2. Very brief overview of the CSC method (10 min)
 - a. Trainer to use white board/flipchart/PowerPoint as visual aids for the following information (write the key idea on flipchart/white board).
 - b. C is for Check
The first stage is a check of whether the data recorded are accurate, clear, logically coherent, etc.
 - c. S is for Score
The second stage is a double-checking and scoring of the recorded data, so that all numbers/ codes from survey answers are transferred to the shaded column on the left of the survey.
 - d. C is for Code
The last stage is simply coding the data; that is, reading the numbers from the shaded boxes on the left of the survey and entering them into the Excel Spreadsheet.
 - e. Other important CSC elements:
 - 1) Timing. Data entry starts one to two days after data collection, in order to catch errors and provide feedback to enumerator supervisors in the field.
 - 2) Organizing the data. Organizing the surveys by village and chronologically, in order to easily analyse data later.
 - 3) Quality control
 1. Different colour pens for each stage, in order to tell where errors occurred.
 2. Three different people for each data-entry phase of each survey, so that someone is always checking your work.
 3. Codes for each member of the data-entry team, in order to tell where errors occurred.
 4. Enumerator codes, in order to identify the source of survey mistakes in the field.

4/ Sample dummy household and dummy village surveys are included in the MPAT materials. You will need to transfer the survey markings to the local language surveys. If you choose to create your own dummy survey, it should include unclearly written responses, two responses circled for one question, missing data, logical inconsistencies (e.g. some questions about children with answers and others suggesting there are no children in the household), etc.

3. Project staff. Preparation for checking (5 min)
 - a. Organizing the data:
 - 1) By village in chronological order (that is, all the MPAT Household Surveys from one village should be in a pile, ordered chronologically from the most recent (on the bottom) to the oldest (on top), and with the corresponding MPAT Village Survey on top of the pile).
 - 2) One of the reasons for keeping the villages organized under their administrative regions is that once the data are entered in the spreadsheets, they are more easily analysed and organized.
 1. For example, in a typical Project X, we might find that households '1' through '30' are in Village A, households '31' through '60' are in Village B, and both Village A and Village B are in Township H. Thus, households '1' through '60' are in Township H.
 - b. First-glance quality control:
 - 1) Take a quick look through all the MPAT Household Surveys.
 - 2) Note the survey dates and durations, flagging any that appear problematic.
 1. This is one good way to determine if any surveys may have been falsified (for example, if the recorded survey durations for a given village are all the same, or if one enumerator completed more surveys than possible on one day).
 - c. Assigning the work:
 - 1) Once this is accomplished, project staff can give data-entry staff one entire village's surveys to work on at a time.
4. Stage 1. Check (10 min)
 - a. Trainer uses visual aid (white board, flipchart, PowerPoint, large printout of the survey) to explain the following information:
 - 1) Write your name in a different colour at the top of the survey.
 - 2) The first stage is to check whether the data recorded are:
 1. Accurate
 2. Clear/legible
 3. Logically coherent
 4. Looking for possible missing data
 - 3) When the checker finds an error, they use a different colour pen (from the one the enumerator used) to:
 1. Circle the problem/issue.
 2. Circle the question number.
 3. Write a note identifying the problem *and* a suggested solution.
 4. After going through the whole survey, checker returns to the circled questions:
 - a. To try to determine, with a very high degree of certainty, what the intended answer was
 - b. They then write the likely answer alongside the unintelligible or missing answer
 - c. If they can't determine with a high degree of certainty (which is very likely, that is, almost positive, almost 100 per cent sure, that one knows what the enumerator should have marked), then always default to marking 'MD' (missing data)
 - d. The point again is that it's always better to be cautious and mark MD than to guess what you think the answer probably is (there must be a high degree of certainty)
 - 4) Another way to think about it: the checker is a detective:
 1. Looks for logical inconsistencies (non-applicable questions, correct skip logic, etc.).
 2. Requires checker to 'get to know' the household.
 - a. For example, a household reporting having no children, but then providing responses to questions about children
 3. This process takes time.
 - b. Training activity: 'Checking' the dummy survey (25 min)
 - 1) Trainer distributes dummy survey.

- 2) Trainer asks trainees to systematically find the errors, starting on page 1.
 1. This can be done by simply going around the room, with the first individual identifying the first error, the second individual the second, and so on.
 2. For each error, trainer should show the correct way to mark as a checker (name on top in X pen colour, circle the issue, circle the question number ...).
 - a. Use the selected method for demonstrating survey marking to a large group (large printout of survey or laptop projector/Microsoft Paint, etc.).
 3. After several examples, trainees should be asked to mark the dummy survey by themselves, in the correct way as a checker.
5. Project staff. Preparation for scoring (5 min)
 - a. Ensure that the data are still organized by village and chronologically.
 - b. Make/distribute the one-page sheet for scorer to use, including:
 - 1) Names of enumerators and codes
 - 2) Names of enumerator supervisors and codes
 - 3) Names of data-entry staff and codes
 - 4) Names of ethnic groups and codes
 - 5) Names of administrative areas (AAs) and codes
 - 6) Conversion for local land unit to hectares
6. Stage 2. Score (30 min)
 - a. Double-check for logic:
 - 1) Double-check for errors, following same process as checker (different person, different pen colour; circle the new problem/issue not found during the checking stage).
 - b. Get survey ready for easy data entry by putting the correct numbers in the shaded boxes.
 - 1) Go through survey, write correct number in shaded box (left-to-right on survey form/top-to-bottom in shaded boxes):
 1. Correct number is either the answer code for the answer choice that was circled by the enumerator or
 2. The written numerical response (i.e. 120 min) or
 3. Hectare conversion or
 4. The codes from the one-page sheet from project staff
 - 2) One final review to confirm that scores have been entered correctly.
 - 3) Calculate survey duration; write total number of minutes above 'to' in the time blank (show example in dummy survey).
 - c. Training activity: Scoring the dummy survey
 - 1) Using the dummy survey, ask trainees to practise the scoring process individually.
 - 2) Trainees give their 'checked' survey to someone else to 'score'.
 - 3) After 10-15 minutes, come back together as a group and repeat the process used during the 'check' stage, identifying the errors systematically, starting on page 1 of the survey.
7. Project staff. Preparation for coding/assigning household code (5 min)
 - a. Surveys are ready, at least two people have checked them and feel confident that the data are valid.
 - b. Assign household code (unique ID) to each survey:
 - 1) Number consecutively starting with 1.
 - 2) Project staff write the code in the household code box at the top of page 1.
 - 3) This is not done at the first stage of CSC because, during the 'check' stage, it is possible that some of the surveys will have too many problems and will be discarded; thus, if they were numbered beforehand, there would be 'holes' in the final numbering.

8. Stage 3. Code (45 min)
 - a. Use visual aid (of trainer's choice) to communicate the following information:
 - 1) Type codes from the survey form into the Excel Spreadsheet.
 1. Read the numbers from the column on the left of the survey and enter them into the spreadsheet.
 2. Top-to-bottom in shaded boxes is left-to-right on Excel template.
 - a. Show Q32.1-32.3 as example
 - b. Show Q33.1-33.3 as example
 - c. Q52-54
 3. MD is coded as '-99'.
 - 2) Type up the 'notes' from enumerators, checkers and scorers
 1. Describe all errors found during the 'check' and 'score' stages (which have already been written in the questionnaire margins by the assistants who completed those stages of CSC).
 2. There are spaces in the Excel Spreadsheet (at the far right side of the 'Household Data worksheet) for these comments.
 3. In this way, all relevant information is available on one spreadsheet, whether or not the hard copies of the surveys are at hand.
 - b. Training activity: 'Coding' the dummy survey
 - 1) Have each trainee use a computer to enter the data, from start to finish, for the dummy household survey.
 - 2) Walk through the Excel file.
 1. Two tabs – Household Data and Village Data
 2. Better to use the small Excel file instead of the large Excel Spreadsheet because:
 - a. Working with the big file takes too long because it's constantly calculating
 - b. Every data-entry person can work on their own file at the same time
 - c. No risk of accidentally changing some aspect of the MPAT Excel Spreadsheet
 - d. Project staff will copy and paste data into the Excel Spreadsheet after all data entry is complete
 - 3) Trainer to observe, answer questions.
9. Review of completed CSC survey together (10 min)
 - a. Trainer takes one of the completed CSC surveys and points out to the group:
 - 1) Three names, three colours
 - 2) Question numbers circled
 - 3) Issues identified/solutions suggested
 - 4) Survey duration calculated and written in correct place
 - 5) Codes entered,
 - 6) Notes typed, etc.
10. Debriefing on CSC practice – Household Survey questions/observations (10 min)
 - a. Trainer collects dummy household survey (and Excel template if possible) to review for common errors in order to provide specific feedback (if possible, a short break can be taken so that feedback can be given immediately, or feedback can be given in subsequent session).
11. Special situations (15 min)
 - a. Missing data:
 - 1) If you discover a lot of missing data, discuss with project staff.
 - 2) Staff must try to figure out why there is so much and may need to not use surveys from that area.
 - 3) Read and explain all of Section 9.3.

12. Additional notes (10 min)

- a. If data-entry staff are not sure what to do, they should *ask* project staff/supervisor for help.
 - 1) For example, if not sure if you should write MD or what you think the answer is, then ask.
- b. Trust enumerators
 - 1) Unless the survey is filled with errors, in which case be more sceptical
- c. If survey is filled with errors, discuss with project staff/supervisor, who should:
 - 1) Give feedback to the enumerator supervisor to correct future surveys.
 - 2) Check other surveys completed by that enumerator to see if many mistakes were made.
 - 1. Staff may decide to not use data from all surveys completed by this enumerator.
 - 3) Determine if survey data should be discarded.
- d. Be careful. Do not rush. Double-check your work often.

13. Review project staff responsibilities (10 min)

- a. Organize data
- b. Assign household codes
- c. One-page code sheet
- d. Address issues such as too much MD, more than 5 per cent 'Other', too much 'Don't know'
- e. After all data entry is complete, copy and paste data-entry templates into MPAT Excel Spreadsheet

14. Resources (5 min)

- a. MPAT Excel Spreadsheet can be downloaded at www.ifad.org/mpat
- b. MPAT small Excel template

15. Summarize/debrief (5 min)

- a. Next step is to practise with Village Surveys and then with field-practice surveys

Note to trainer: Trainer should collect the dummy household surveys and review the Excel templates to review/analyse for errors and to give specific feedback in the next session.

Session 3: MPAT Data-entry Training

Practise CSC with dummy village surveys

Session objective(s) <ul style="list-style-type: none"> • Trainees will be able to: • Learn the CSC process for Village Surveys 	Time estimate: ≈ 1-1.5 hours
Session activities <ul style="list-style-type: none"> • Practise all three stages of CSC individually with the dummy village survey 	Preparation/materials <ul style="list-style-type: none"> • Create dummy village survey⁵ • One copy of dummy village survey per trainee • Markers of multiple colours • Computer, loaded with MPAT Excel template, for each trainee

Detailed description of activities

Note to trainer: If project staff will do data entry for Village Surveys, there is no need to train/practise with data-entry staff on Village Survey CSC.

1. Quick check-in with trainees (10 min)
 - a. How are things going? Are you understanding? What would help you the most?
 - b. If appropriate, trainer can provide feedback on dummy household survey practice.
2. Practise with the dummy village survey (1 hour)
 - a. Distribute dummy village survey.
 - b. General Information on the Village Survey:
 - i. The same CSC method is used for the Village as for the Household Surveys. The only difference is that there is usually more information that needs to be typed into Excel.
 - ii. Process can be carried out either by project staff or data-entry staff (to be determined by staff of each project).
 - iii. There are no column or shaded boxes on the Village Survey, as there are not as many responses.
 - c. Trainees practise all three CSC stages with the Village Survey
 - i. With the dummy village survey, have each trainee carry out the 'check' process.
 - ii. Switch surveys.
 - iii. Have each trainee carry out the 'score' process (not as much to do in scoring, as there are no shaded boxes, rather just double-checking).
 - iv. Switch surveys, pass to the right.
 - v. Have each trainee do the 'code' process.
 - d. Trainer addresses any questions.
 - e. Trainer collects dummy village surveys (and Excel templates if possible) to review common errors in order to provide specific feedback (if possible, a short break can be taken so that feedback can be given immediately or feedback can be given in the next session).
3. Debrief/summarize (5 min)

5/ A sample dummy household survey is included in the MPAT materials. You will need to create your own dummy village survey. It should include unclearly written responses, two responses circled for one question, missing data, logical inconsistencies, etc, just as the dummy household survey does.

(Optional)

Session 4: MPAT Data-entry Training

CSC game: “What should you do when ...?”

Session objective(s) <ul style="list-style-type: none">• Trainees will be able to:• Know what to do in a variety of possible CSC situations	Time estimate: ≈ 1 hour (variable, depending on how long you play the game)
Session activities <ul style="list-style-type: none">• In CSC, “What should you do when ...?” game	<ul style="list-style-type: none">• Preparation/materials• Small pieces of paper• Box/hat• Small prizes/candy

Detailed description of activities

1. Debrief/quickly review lessons learned from dummy household and village surveys (20 min)
 - a. Trainer highlights common errors found during review of CSC process with dummy household and village surveys.
2. Explain session activity – “What should you do when ...?” game (45 min)
 - a. Pass out small pieces of paper to each trainee.
 - b. Ask them to write a question to which they want an answer or to which they think others should hear the answer.
 - c. Questions should start with ‘What do you do when ...?’
 - d. Examples:
 - i. What do you do when there is a lot of missing data?
 - ii. What do you do when you’ve scored and, when you finish, you see that you missed one of the shaded boxes on page 2?
 - iii. What do you do when you’re the scorer and you find a lot of logical inconsistencies in the survey markings?
 - iv. What do you type in Excel when there is missing data?
 - v. What do you type in Excel when a question is not applicable?
 - e. Have trainees put the questions in a box/hat.
 - f. Draw out a question, read it aloud, ask the group to answer.
 - g. Best answer gets a prize.
3. Summarize (5 min)

Session 5: MPAT Data-entry Training

CSC practice using field-practice surveys/pilot surveys

Session objective(s) Trainees will be able to: <ul style="list-style-type: none"> • Understand real-life Household and Village Survey situations and respond appropriately • Correctly complete the CSC process for 'real-life' Household and Village Surveys 	Time estimate: ≈ 2-4 hours (variable)
Session activities <ul style="list-style-type: none"> • 'Field practice' using completed Household Surveys implemented during enumerator field testing • 'Field practice' using completed Village Surveys implemented during enumerator supervisor field testing 	Preparation/materials <ul style="list-style-type: none"> • Completed MPAT surveys from field practice/pilot • Markers of multiple colours (minimum of three colours) • Project staff/trainer to act in staff role • Computer/Excel template • One-page code sheet

Note on timing: CSC practice should begin one to two days after the enumerator/supervisor field practice.

Detailed description of activities

1. Final reminders to each other (5 min)
 - a. Ask trainees to each give one important reminder to their fellow trainees about the CSC process.
2. 'Field practice' of CSC method for the Household Survey (2-4 hours)
 - a. Trainer/project staff organize the data, do first-glance quality control, assign the work.
 - i. Trainer talks through what they are doing and why as they do it.
 - b. Trainer distributes one completed 'field-practice' Household Survey (from enumerator training field practice) to each trainee.
 - c. Each trainee completes checking of a completed Household Survey.
 - d. Trainer/project staff member distributes one-page code sheet.
 - e. Each trainee completes scoring of a completed Household Survey.
 - f. Project staff member assigns household code.
 - g. Each trainee completes coding of a completed Household Survey.
3. Short break for trainer to review 'field-practice' work of trainees.
4. Feedback and discussion on common errors identified in 'field practice'.
5. Repeat 'field practice' of CSC method for the Household Survey, until trainer feels confident in the ability of the data-entry team/sees no mistakes.
6. 'Field practice' of CSC method for the Village Survey – repeat process as above (1-2 hours).
7. Completion of training (5 min)
 - a. Once trainers and project staff feel confident that trainees are entering data efficiently and accurately, the training period can be ended and data-entry staff can start using 'real' data.
8. Summarize/close (5 min)

Session 6: MPAT Data-entry Training

Final review and wrap-up

Session objective(s) Trainees will be able to: <ul style="list-style-type: none"> • Enter MPAT data accurately and efficiently • Identify survey errors and follow correct process • Provide quality-control feedback to project staff and enumerator supervisors 	Time estimate: ≈ 1 hour
Session activities <ul style="list-style-type: none"> • Final feedback and review • Discuss lessons learned from 'field practice' • Next steps • Awarding of certificates 	Preparation/materials <ul style="list-style-type: none"> • Training certificates • Staff identified to explain next steps • Staff identified to deliver closing remarks
Detailed description of activities <ol style="list-style-type: none"> 1. Final feedback and review (30 min) <ol style="list-style-type: none"> a. Ask trainees to describe any difficulties encountered during practice with 'real' field-practice surveys. b. Discuss lessons learned. 2. Next steps (project staff) (10 min) <ol style="list-style-type: none"> a. MPAT implementation plan and CSC schedule. 3. Final words from trainer (5 min) 4. Awarding of training certificates (10 min) 5. Closing remarks (10 min) 	

Annex VIII Household Survey – dummy version

MPAT Household Survey		IFAD	
Enumerator: Sarah Abukari		Time 9:36 to	Date (YY/MM/DD): 20 13 / 08 / 30
AA1: ^a	AA2:	AA3:	Village: Kihuru
Household ethnic group (optional): M		Household type (optional):	Household code: Consent: SA
Respondent's age: 35 Gender: M(1) F(2)		Head of household's age: Gender: M(1) F(2) M&F(3)	
Head of household's marital status: Married(1) Single(2) Divorced(3) Widowed(4)			
1	Can the head of the household read a newspaper? No (1) Yes, with difficulty (2) Yes, without difficulty (3) Don't know (4)		
2	During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months? Female adults: 2 Male adults: 3 Don't know (-1)		
3	During the last 12 months, how many adults lived and worked outside your home for 3 or more months? Adults: 1		
4	During the last 12 months, how many children (age 14 and younger) lived and slept in your home for 9 or more months? Female <5: Male <5: Female 5-14: 1 Male 5-14: 2 Household has no children (-1) [skip to question 9]		
5	If there are no school-age children (age 5 to 14) in the household, skip to question 7. During the last year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one-way, by any means: for example, walking, bicycle, scooter, bus)? No. of minutes = 40 [If children attend more than 1 school, enumerator to record the average time] Children usually live at school (-1) School-age children do not regularly attend school (-2) Don't know (-3)		
6	Can your household afford your children's school fees and school supplies? No (1) Yes (5) Rarely (2) Sometimes (3) Usually (4) Household does not pay the fees and cannot afford supplies (6) Household does not pay fees, but can afford supplies (7) Household does not pay fees or supply costs (8)		
7	What is the highest level of schooling the female children (0 to 14) in your household will likely complete? No female children (-1) Don't know (-2) Highest likely level = 3 1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)		
8	What is the highest level of schooling the male children (0 to 14) in your household will likely complete? No male children (-1) Don't know (-2) Highest likely level = 1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)		
9	In the last 12 months, how often have members of your household had a non-serious illness (meaning they were sick, but not so sick they had to rest in bed a full day or more)? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)		
10	In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)		
11	How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines? Household self-diagnoses, self-medicates for simple illnesses (-1) No health centre in the area, or centre is too far to travel to (-2) [skip to question 14] Minutes = 20		

12	How often does this health centre have enough medical supplies to provide adequate health care?	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)																		
13	How much time does it take for members of your household to reach the nearest health centre that can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?	No health centre for serious illness, or centre too far to reach easily (-1) Don't know (-2) Minutes = <input type="text"/>																							
14	Can your household afford professional treatment for serious illness or injury?	No (1)	Yes, if money is borrowed (2)	Yes, with much difficulty (3)	Yes, with some difficulty (4)	Yes, because government or employer helps pay for treatment (5) Yes, household can afford it (6)																			
15	For the majority of the households in your village/area, do you think there is a better chance for women or men to receive health care when needed?	Women (1)	Men (2)	About the same (3)	Don't know (4)																				
16	Are the health-care centres in your village/area (within 2 hours distance from your home) usually able to provide women with adequate health care if they seek it?	There are no health-care centres in our village/area (1) No (2) Rarely (3) Sometimes (4) Often (5) Always (6) Yes, but women prefer not to go (for whatever reason) (7) Don't know (8)																							
17	What is the primary construction material of the housing unit's exterior walls?	<table border="1"> <tr> <td>Reinforced concrete (1)</td> <td>Stone & mortar (2)</td> <td>Cement blocks (3)</td> <td>Brick (fired/burned) (4)</td> </tr> <tr> <td>Metal sheeting (5)</td> <td>Logs or thick wood (6)</td> <td>Thin wood (7)</td> <td>Bamboo (8)</td> </tr> <tr> <td>Brick (mud or earth) (9)</td> <td>Mud & straw (10)</td> <td>Earth or adobe (11)</td> <td>Reeds/thatch (12)</td> </tr> <tr> <td>Thick plastic (13)</td> <td>Fabric or thin plastic (14)</td> <td colspan="2">Other, specify: (15)</td> </tr> </table>						Reinforced concrete (1)	Stone & mortar (2)	Cement blocks (3)	Brick (fired/burned) (4)	Metal sheeting (5)	Logs or thick wood (6)	Thin wood (7)	Bamboo (8)	Brick (mud or earth) (9)	Mud & straw (10)	Earth or adobe (11)	Reeds/thatch (12)	Thick plastic (13)	Fabric or thin plastic (14)	Other, specify: (15)			
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18	What is the primary construction material of the housing unit's main roof?	<table border="1"> <tr> <td>Roofing shingles (1)</td> <td>Ceramic tiles (2)</td> <td>Synthetic roofing (3)</td> <td>Metal sheeting (4)</td> </tr> <tr> <td>Cement or concrete (5)</td> <td>Thin wood (6)</td> <td>Thick wood (7)</td> <td>Bamboo (8)</td> </tr> <tr> <td>Thick plastic (9)</td> <td>Thin plastic or fabric (10)</td> <td>Straw or reeds (11)</td> <td>Other, specify: (12)</td> </tr> </table>						Roofing shingles (1)	Ceramic tiles (2)	Synthetic roofing (3)	Metal sheeting (4)	Cement or concrete (5)	Thin wood (6)	Thick wood (7)	Bamboo (8)	Thick plastic (9)	Thin plastic or fabric (10)	Straw or reeds (11)	Other, specify: (12)						
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19	Can your home withstand strong winds, severe rain, snow or hail without significant damage?	No (1) Yes (2) Yes, with minor damage (3) Perhaps, but with significant damage likely (4) Little to no extreme weather in this region (5) Don't know (6)																							
20	What is the primary source of light your home uses when it is dark?	<table border="1"> <tr> <td>1. None</td> <td>8. Liquid fuel (petrol, kerosene)</td> </tr> <tr> <td>2. Heat not needed in region</td> <td>9. Coal or charcoal</td> </tr> <tr> <td>3. Stable voltage electricity from grid (legal or illegal connection)</td> <td>10. Vegetable- or animal-based fats or oils</td> </tr> <tr> <td>4. Unstable voltage electricity from grid (legal or illegal connection)</td> <td>11. Candle, paraffin wax or battery-powered source</td> </tr> <tr> <td>5. Electricity from a generator</td> <td>12. Wood, sawdust, grass or other natural material</td> </tr> <tr> <td>6. Electricity from solar cells, wind turbine or small dam</td> <td>13. Don't know</td> </tr> <tr> <td>7. Gas fuel (from tank or biogas)</td> <td>14. Other, specify:</td> </tr> </table>						1. None	8. Liquid fuel (petrol, kerosene)	2. Heat not needed in region	9. Coal or charcoal	3. Stable voltage electricity from grid (legal or illegal connection)	10. Vegetable- or animal-based fats or oils	4. Unstable voltage electricity from grid (legal or illegal connection)	11. Candle, paraffin wax or battery-powered source	5. Electricity from a generator	12. Wood, sawdust, grass or other natural material	6. Electricity from solar cells, wind turbine or small dam	13. Don't know	7. Gas fuel (from tank or biogas)	14. Other, specify:				
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21	What is the primary fuel source your household uses for cooking?																								
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23	What type of toilet facility does your household usually use?	<table border="1"> <tr> <td colspan="2">None, open defecation (1) [skip to question 25]</td> </tr> <tr> <td>Open pit, communal (2)</td> <td>Open pit, private (8)</td> </tr> <tr> <td>Enclosed pit, communal (3)</td> <td>Enclosed pit, private (9)</td> </tr> <tr> <td>Enclosed improved-ventilation pit, communal (4)</td> <td>Enclosed improved-ventilation pit, private (10)</td> </tr> <tr> <td>Enclosed pour-flush, communal (5)</td> <td>Enclosed pour-flush toilet, private (11)</td> </tr> <tr> <td>Enclosed flush, communal (6)</td> <td>Enclosed flush, private (12)</td> </tr> <tr> <td>Compost or biogas, communal (7)</td> <td>Compost or biogas, private (13)</td> </tr> <tr> <td colspan="2">Other, specify: (14)</td> </tr> <tr> <td colspan="2">*Open means there is no structure, or a structure with no roof. *Enclosed means there is a structure with any sort of roof. *Communal means the facility is shared by 3 or more households. *Private means the facility is used by 1-2 households.</td> </tr> </table>						None, open defecation (1) [skip to question 25]		Open pit, communal (2)	Open pit, private (8)	Enclosed pit, communal (3)	Enclosed pit, private (9)	Enclosed improved-ventilation pit, communal (4)	Enclosed improved-ventilation pit, private (10)	Enclosed pour-flush, communal (5)	Enclosed pour-flush toilet, private (11)	Enclosed flush, communal (6)	Enclosed flush, private (12)	Compost or biogas, communal (7)	Compost or biogas, private (13)	Other, specify: (14)		*Open means there is no structure, or a structure with no roof. *Enclosed means there is a structure with any sort of roof. *Communal means the facility is shared by 3 or more households. *Private means the facility is used by 1-2 households.	
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24	If the household uses a toilet facility of any kind, ask: Over the last 12 months, how often was the toilet usable? (meaning it was working properly or was available to use)	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)																							

25	What does your household usually do with food waste/remains (any parts not consumed by people in the household)?	[Enumerator to remind respondent "all responses are anonymous"]	
26	What does your household usually do with non-food waste/garbage?	1. Discard close to a house (within 25 metres) 2. Discard near a house (25 to 75 metres from the house) 3. Discard far from a house (75 metres or more) 4. Feed to livestock 5. Feed to pets or guard dogs 6. Use for biogas generation 7. It is collected regularly within 75 metres of a house (organized garbage collection) 8. Put down the drain (piped sewage network) 9. Use to water vegetable garden 10. Burn it 11. Compost it 12. Sell to vendor 13. It is collected regularly further than 75 metres from house (organized garbage collection) 14. Use to water crops grown for livestock fodder 15. Discard into local waterway or irrigation canal 16. Other, specify:	
27	What does your household usually do with wastewater (for example, from bathing, cleaning, the toilet)?		
28	How many times a week do most members (the majority) of your household clean their teeth?	Never (1) Rarely (2) 1 or 2 days a week (3) Most days of the week (4) Usually once a day (5) Usually 2 or 3 times a day (6) Don't know (7)	
29	How often do the adults in your household clean their hands before eating a meal?	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)	
30	How often do the adults in your household clean their hands after defecating?	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5) Don't know (6)	
31	Do the adults in your household use soap (any kind of soap) when they clean their hands?	No (1) Yes, but very rarely (2) Yes, but only when guests visit (3) Yes, after defecating (4) Yes, after meals (5) Yes, after defecating and before meals (6) Don't know (7) Other, specify: (8)	
32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? <i>[If the household uses different water sources for drinking and cooking, only record the drinking water source.]</i>	During the rainy season: 6 During the dry season: 18 During most of the year: 6 No rainy season in our area (-1) No dry season in our area (-2) Don't know (-3)	
	1. Piped from water treatment plant (chlorinated) 2. Piped from water treatment plant (not chlorinated) 3. Borehole (> 20m deep) 4. Borehole (< 20m deep) 5. Private well (> 20m deep) 6. Private well (< 20m deep) 7. Communal well (> 20m deep) 8. Communal well (< 20m deep) 9. Protected ('box') spring 10. Unprotected spring 11. Rainwater harvesting container (closed) 12. Rainwater harvesting container (open) 13. Water vendor with tanker truck 14. Water vendor with cart or small tank 15. Large dam (built & managed by government, company or collective) 16. Small dam (built & managed by households, village or collective) 17. Stream 18. River 19. Pond, lake (or other still water body) 20. Irrigation canal 21. Bottled water (delivered by vendor) 22. Bottled water (collected by household) 23. Other (specify):		
33	Approximately how much time (in minutes) does it take your household to collect enough water for your household's drinking and cooking needs for a normal (average) day? <i>[Total time = there and back for each person and trip combined.]</i> <i>[If water is collected from inside the household or in the household's yard/compound, write '1' minute.]</i>	During the rainy season: 1 During the dry season: 80 During most of the year: 1 No rainy season in our area (-1) No dry season in our area (-2) Don't know (-3)	
34	Does your household treat water before drinking it (any treatment method: boiling, allowing to settle, filter, chemical treatment, etc.)?	No, household does not believe treatment is necessary (1) Never (2) Rarely (3) Sometimes (4) Often (5) Always (6)	

35	During the last 12 months, for how many months was your household's main source of water sufficient to meet your household's drinking and cooking needs?	Months: <u>9</u> Don't remember (-1)
36	How often do you worry there will not be enough water from your household's main water source to satisfy your household's drinking and cooking needs?	Never (1) Rarely (2) <u>Sometimes (3)</u> Often (4) Always (5)
37	Can your household usually afford to pay the fees (direct payments only, not maintenance fees) for using water from your household's main water source?	No (1) Rarely (2) Sometimes (3) Often (4) Always (5) <u>Household does not need to pay for water (6)</u>
38	Generally, what do you think the quality of your household's drinking water is (before any treatment)?	Don't know (1) Very bad (2) <u>Poor (3)</u> Satisfactory (4) Good (5) Very good (6)
39	Does your household have access to land for agriculture, orchards, livestock or aquaculture (meaning fish farming)?	<u>Yes, have access and using the land (1)</u> Yes, have access and leasing some land to others (2) No access to land because leasing to others (3) <i>[skip to question 51]</i> No access to land (4) <i>[skip to question 52]</i>
40	How much land does your household have for agriculture (for crops, grasses, trees, orchards, etc.)?	Hectares: <u>0.5</u> Don't know (-1) None, only access for livestock/aquaculture (-2) <i>[skip to question 46]</i>
41	Is the majority of your household's land flat, gently sloping, steep or terraced?	Don't know (1) Steep (2) <u>Gently sloping (3)</u> Flat (4) Terraced (5) Mixed, specify: (6)
42	What kind of soil covers the majority of your household's land?	Don't know (1) Stony-gravelly (2) Clay (3) <u>Loam (mixed clay, sand &/or silt) (4)</u> Sandy-droughty (5) Wet [wetland/marsh] (6) Mixed, specify: (7) Other, specify: (8)
43	During the last 2 years, was your household able to make, or buy, enough compost/manure or artificial fertilizer for each growing season?	Household does not think they need to use compost/manure or fertilizer (1) No (2) Rarely (3) <u>Sometimes (4)</u> Often (5) Always (6)
44	During the last 2 years, was your household able to afford enough seed for each growing season?	Not necessary because household saved seed (1) No (2) Rarely (3) <u>Sometimes (4)</u> Often (5) Always (6) Other, specify: (7)
45	Is there generally enough water for your household's crops during the dry season/rest of the year?	Dry season: <u>3</u> Never (1) Rarely (2) Sometimes (3) Often (4) Rest of the year: Always (5) No dry season in our area (6) Few or no crops grown (7)
46	Is there generally enough water for your household's livestock during the dry season/rest of the year?	Dry season: <u>Little or no livestock (1) [skip to question 45]</u> Never (2) Rarely (3) Rest of the year: Sometimes (4) Often (5) Always (6) No dry season in our area (7)
47	During the last 2 years, how often was your household able to grow, collect or buy enough fodder?	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
48	Is there generally enough water for your household's aquaculture during the dry season/rest of the year?	Dry season: <u>Little or no aquaculture (1) [skip to question 50]</u> Never (2) Rarely (3) Rest of the year: Sometimes (4) Often (5) Always (6) No dry season in our area (7)
49	During the last 2 years, how often was your household able to make or buy enough fish feed?	Never (1) Rarely (2) <u>Sometimes (3)</u> Often (4) Always (5)
50	Does your household usually have enough people to work/manage your farm? (crops, orchards, forestry, livestock and/or aquaculture)	Never (1) Rarely (2) Sometimes (3) <u>Often (4)</u> Always (5)
51	What kind of ownership of your land does your household have?	Illegal access, squatting (7) Leasehold less than 5 years (5) Leasehold 31-40 years (9) Share-cropping arrangement (2) Leasehold 5-10 years (6) Leasehold for > 40 years (10) Rented for less than 12 months (3) Leasehold 11-20 years (7) Freehold (legally owned) (11) Common-law ownership (4) Leasehold 21-30 years (8) Other, specify: (12)

clay and silt

52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) <i>[Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)]</i>																																													
53	For these events, how damaging would each be for your household? [<i>Likely severity</i>]																																													
54	For these events, how likely is it that the event will occur in the next 12 months? [<i>Likely frequency</i>]																																													
	<table border="1"> <tr> <td>Don't know (-1) [<i>skip to question 59</i>]</td> <td colspan="3">Not very worried about any negative events (-2) [<i>skip to question 59</i>]</td> </tr> <tr> <td>Likely severity (53) =</td> <td>Low-minor (1)</td> <td>Medium-moderate (2)</td> <td>High-major (3)</td> </tr> <tr> <td>Likely frequency (54) =</td> <td>Unlikely (1)</td> <td>Likely (2)</td> <td>Very likely (3)</td> </tr> </table>				Don't know (-1) [<i>skip to question 59</i>]	Not very worried about any negative events (-2) [<i>skip to question 59</i>]			Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)	Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)																														
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1 st	52.1)	Flooding	53.1) Likely severity=	2	54.1) Likely frequency=	3																																								
2 nd	52.2)	Local conflict	53.2) Likely severity=	3	54.2) Likely frequency=	1																																								
3 rd	52.3)	write in	53.3) Likely severity=		54.3) Likely frequency=																																									
55	If the worst of the negative events you just mentioned [<i>in question 52</i>] were to occur in the next 12 months, what are the 3 main ways your household would likely react (cops)?																																													
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56	If the worst of the negative events you just mentioned [<i>in question 52</i>] were to occur in the next 12 months, how long do you think it would take for your household to return to a satisfactory situation? [<i>Record answer in months (for example, 2 years = 24 months)</i>]																																													
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57	If in an extreme disaster (of any sort) your household's home was completely destroyed, but your family members were not injured, how long would it take for your household to rebuild your home?																																													
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59	During the last 12 months, did any member of your household eat fewer meals, or smaller portions, than usual because there was not enough food? [<i>If 'Yes', for approximately how long?</i>]																																													
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60	During the last 12 months, did any member of your household go to sleep at night hungry? [<i>If 'Yes', how often did this occur?</i>]																																													
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61	During the past 12 months, did your household experience a period of time longer than 2 weeks when there was not enough food? <i>[If 'Yes', how many such periods?]</i>			
	No (1)	Yes, 1 (2)	Yes, 2 (3)	Yes, 3 (4)
	Yes, 4 (5)	Yes, more than 4 (6)	Don't remember (7)	Other, specify: (8)
62	During the past 12 months, did your household ever experience 1 full day with no food to eat? <i>[If 'Yes', how often did this occur?]</i>			
	Never (1)	Once or twice (2)	Approximately once a month (3)	
	Approximately every 2 weeks (4)	Approximately every week (5)	Don't know (6)	
63	During the last 12 months, how often did the majority of your household eat the following foods?			
.1	Grains (cereals, bread, rice, pasta)	7	1. Never	
.2	Roots &/or tubers (potatoes, cassava, etc.)	5	2. Almost never	
.3	Vegetables/greens	6	3. Approximately once a month	
.4	Fruits	3	4. A few times a month	
.5	Dairy &/or eggs	5	5. About once a week	
.6	Meat &/or fish/seafood	3	6. A few times a week	
.7	Nuts &/or legumes (and/or derivatives, tofu, etc.)	4	7. Every day	
			8. Not eaten for religious or cultural reasons	
64	During the last 12 months, has anyone in your household managed/run their own business (other than selling agricultural products)? <i>[If 'Yes', for how many months (out of the last 12 months)?]</i>			
	No (1)	Yes, 1-2 months (2)	Yes, 3-4 months (3)	Yes, 5-6 months (4) Yes, 7+ months (5)
65	During the last 12 months, has anyone in your household provided others a skilled service (for example, equipment repair, tailoring, construction work) for money or barter? <i>[If 'Yes', how often?]</i>			
	Never (1)	Rarely (2)	Sometimes (3)	Often (4) Always (5)
66	If your household wanted to borrow money from a bank or other financial service provider (not including friends or relatives), would your household be able to borrow money?			
	No (1)	Probably not (2)	Probably yes (3)	Definitely yes (4) Don't know (5)
67	<i>[Enumerator to remind respondent that all responses are anonymous.]</i> Is your household currently in debt?			
	No (1) <i>[skip to question 69]</i>	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)
	Don't know, or don't want to discuss (5) <i>[skip to question 69]</i>			
68	To whom is the majority of this debt owed?			
	Relatives (1)	Friends (2)	Village fund (3)	
	Village government (4)	Rural credit cooperative (5)	Private money lender (6)	
	Microfinance institution (7)	Government bank (8)	Private bank (9)	
	Joint village & bank fund (10)	Joint development project & bank fund (11)	Other, specify: (12)	
69	How many of the people (adults and children) in your household usually have adequate footwear?			
	None (1)	Less than half the household (2)	About half the household (3)	
	Most of the household (4)	All household members do (5)	Don't know (6)	
70	How many of the people (adults and children) in your household have sufficient clothing for severe weather (for example, very hot and sunny, very cold or very wet weather, depending on the area)?			
	None (1)	Less than half the household (2)	About half the household (3)	
	Most of the household (4)	All household members do (5)	Don't know (6)	
71	Does your household have a television? <i>[If none write '0']</i>			
	Number of televisions	1		
72	Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?			
	No (1) <i>[skip question 73]</i>	Yes, a few households (2)	Yes, less than half the households (3)	
	Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)	
73	In the last 2 years, how has this situation of inequality changed?			
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)	
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)	
	No significant change (7)	Don't know (8)	Other, specify: (9)	

^a AA = administrative area.

Survey completion time: _____

Key for the Household Survey dummy version

Item or question number	Problem/error
Top of survey	No survey completion time
Top of survey	Did not write admin. area names (or codes)
Respondent gender	Circled two answers
Head of household's age	Did not write their age
Q1	Skipped question (and no note in the margin explaining why)
Q4	Did not write '0' (zero) for female under 5 or male under 5 – so not clear if there are none or if the enumerator forgot to ask or forgot to write the response
Q6	Not clear which answer selected
Q8	No answer marked, may be '4', but not clear
Q15	Skipped (and no note in the margin explaining why)
Q16	Logical contradiction (as answers to Q11 and Q12 suggest there is a health centre)
Q17	Selected two answers
Q22	Selected 'Other' but did not write a note in the margin to explain
Q25, 26, 27	Not clear which answers pertain to which questions
Q29	Skipped
Q38	Not very clear that 'Very bad' is the selected answer
Q42	Good that they wrote a note, but probably they could have selected answer choice (4)
Q45	Not clear which question answer '3' is to – and there should be two answers (for Q45.1 and Q45.2)
Q49	In Q48 they indicated 'Little or no aquaculture', but they provided a response for Q49 – logical contradiction
Q51	'Other' selected but no note provided
Q59	Did not clearly select an answer
Q61	Logical contradiction with answer to Q60
Q64	Two answer choices
End of survey	Survey completion time not recorded

MPAT consent statement

NOTE: this template can, of course, be changed and/or complemented with additional information to better suit the local context, but we strongly advise that the core content provided here not be significantly altered.

MPAT consent statement (template)

Hello, my name is _____. I work with the _____ in partnership with _____ [modify as appropriate]

We are conducting a survey to better understand the general situation in your region. The data we collect will help us improve _____'s work.

Your household was randomly selected, by chance, among other households in your village (as in a lottery).

We would like to ask you general questions about your household's situation and get your opinion on different issues. This should take about 35 minutes.

If you participate, all of your responses will be kept absolutely anonymous. We will only record the name of your village, not your name or any other information that could be used to easily identify your household. So please understand that after today we will not know which household this information came from, only that it came from a household in your village; thus, your household cannot receive any direct benefits due to your answers.

We ask that your responses be truthful, because this will help _____ do their work better.

Of course, your participation in this survey is completely voluntary and you can choose not to answer any question, or questions. Even if you agree to participate, you can still stop any time you want. Would you like to ask me anything about the survey?

If you later have any additional questions about this survey, or about _____, you can contact them using the information on this card [enumerator to hand them contact information card].

Are you willing to participate in this survey?

[If 'Yes', sign the box on the MPAT Household Survey.]

[If 'No', notify an enumerator supervisor and move on to the next household.]

After the survey is finished:

Enumerator should thank the respondent for their time and assistance, ask if they have any questions about the survey or about _____, and remind them that they cannot change their survey responses after today because _____ will not know which household the information came from.

Annex X Instructions for MPAT survey item development⁶

In creating new questions for the MPAT surveys, it is recommended that they be **simple, clear, easy to translate and require little time to answer**. New survey questions must only be added to the *end* of the MPAT survey. In order to facilitate the process of developing valid and reliable questions that meet these criteria and avoid test bias, please see the following general guidelines.

General guidelines

You should design survey items that collect broad and accurate pieces of information while providing good overall representation for the relevant component. For example, a combination of objective and subjective data should be collected for the component, when appropriate.

The first decision may be to determine what type of survey item and response scale to use. It is advisable to use multiple types of items and scales across questions. Similarly, you should try to capture both objective and subjective types of information to represent a given construct.

In order that respondents can provide accurate information, they must fully understand what you are asking, have access to that information (e.g. memory, knowledge) and provide that information in an understandable way that addresses the question. The criteria and guidelines provided in this document are meant to facilitate the process of developing questions that meet these standards, which is achieved through structuring questions and using appropriate language or content in the survey items you develop. The type of response scale you use for each question will be driven by the type of information you are collecting. Details about criteria for and the structural component of questions are explained below, with examples of good and bad questions for each.

Developing survey items

Survey questions can collect subjective data or objective data. A list of guidelines for developing survey items follows (for each numbered item, see the expanded section below the list).

1. Criteria for all questions

- 1.1 Simplicity (only try to capture one piece of information per question, as concisely as possible)
- 1.2 Clarity (make sure that questions are unambiguous and cannot be misinterpreted)
- 1.3 Can be answered quickly (do not ask questions that require extended thinking or calculation)

2. Types of information you can collect

- 2.1 Objective information (captures measurable data – even if based on people’s estimates) [e.g. number of minutes waiting, quantity of water collected, area of land cultivated, etc.]

6/ These guidelines were developed by Alasdair Cohen and Dr. Moshe Feldman, an expert in psychometrics and survey design at the University of Central Florida, Institute for Simulation & Training (in September 2008, for IFAD). This is a modified version specifically for users generating new questions. These guidelines appear in their original format (as used in the course of the MPAT Project) in the MPAT Book, Annex I.

- 2.2 Subjective information (people's perceptions of a situation, their opinions)
[e.g. degree of access to a resource, satisfaction with services provided, etc.]

3. Appropriate question and response formats

- 3.1 Dichotomous (discriminates between two groups or choices, e.g. yes/no, male/female ...)
- 3.2 Categorical (types or categories, e.g. rice/corn/wheat, no toilet/open pit/latrine ...)
- 3.3 Ratio/numerical (time, quantities, distances, e.g. frequency of a behaviour, number of adults ...)

1. Criteria for all questions

- 1.1 **Simplicity.** The information requested should be simple and basic. A simple question is one that respondents can easily understand and that helps avoid the need for elaboration or explanation of what is being asked (which reduces potential bias that might be introduced if the enumerator has to clarify the meaning of the question). You should avoid questions that ask for more than one piece of information. Survey questions should be direct, require no clarification and be designed to elicit a single response. Any clarification should be structured and limited to avoid bias from the person collecting the data.
- *Bad example:* 'What is the birthday of the head of the household and what is their gender and how many hours do they work each day?'
 - *Good example:* 'How old is the head of the household (best estimate in years)?'
- 1.2 **Clarity.** Questions should be written in a clear and direct way so as to avoid misinterpretation by those collecting information about your component and those providing the information. When writing survey items, always be specific and include time frames where appropriate (e.g. in the past 12 months, in the rainy season). Make sure that the question references the household as the unit (otherwise individuals may assume that you mean the individual rather than the household).
- *Bad example:* 'How many children live with you?'
 - *Good example:* 'How many children (15 or younger) live in your household for at least 9 months each year?'
- 1.3 **Can be answered quickly.** Respondents should be able to answer questions quickly. This means that questions should not require extended calculation or thinking about past events in order to be answered. Of course, in certain cases it will be appropriate to ask questions that require basic calculations or recollection, but generally it should not take more than a minute for respondents to come up with an answer.
- *Bad example:* 'In the last 20 years, which 5 years were the worst with respect to drought?'
 - *Good example:* 'In the last 10 years, which was the worst year for drought?'

2. Types of information you can collect

2.1 Objective information. Objective data are based on quantifiable and measurable events or outcomes. For example, a count of how many times someone goes to collect water for the household each day is objective, because it is quantifiable and based on actual events or things that can be observed in the real world. This information could be provided by actually observing the event or by asking the respondent to estimate.

- *Example:* On average, how many alcoholic drinks do you consume in a week?

2.2 Subjective information. Subjective information represents an attitude or opinion. In other words, subjective information cannot be seen or measured through external observation. It is based on how an individual judges something. For example, asking someone to indicate if they are happy is subjective.

- *Example:* Do you drink too much alcohol?

3. Appropriate question and response formats

3.1 Dichotomous. Dichotomous response options discriminate responses into two groups. Dichotomous scales are generally simple and easy to understand, but should not be used to over-simplify information that requires additional detail. For example, if you want to know if someone belongs to a specific group, this question can be measured with a simple dichotomous response option such as 'yes/no'.

- *Example:* Do you like to eat pizza? (yes/no)

3.2 Categorical. While dichotomous data are informative in many instances, they also reduce the amount of information provided, because they only allow the grouping of people into two, rather than multiple categories. Other types of categorical scales provide multiple response options that are not associated with specific values.

- *Example:* Please indicate which foods you like most? (meat/poultry/vegetables/dairy)

3.3 Ratio/numerical. A ratio or numerical response format assigns a specific number to a given response. This number represents a value for what you are measuring. Many times a frequency count may need to be grouped in time periods such as 'in a week's time' or 'every month'. These time frames should always be explicitly stated to respondents so they do not provide false frequencies as a result of misinterpreting the time period.

A special case of category includes questions aimed at collecting a perception or attitude. For example, you may want to ask if an individual feels they have enough of a particular resource to support their household. In this case, a scale may be used in which the response is in the form of a rating from 1 to 5, where 1 indicates they don't feel there is enough and 5 indicates there is enough of the resource to sustain the household. However, while this type of Likert-scale is familiar to many people, it may not be appropriate in the rural context in which you are working. As such, use of the Likert-scale format is recommended, while also providing a description of each of the numbers. So, if asking about degree of access to a resource, instead of a '1-2-3-4-5' scale with 5 being complete access, you might use 'no access – restricted access – satisfactory access – good access – complete access'.

Annex XI

Additional survey questions available for use at end of MPAT Household Survey

Several survey questions have been developed and tested throughout the MPAT development and piloting process. They are not part of the official MPAT surveys, but may be used by any projects that find the questions useful. As described in the MPAT User's Guide, these questions can only be added at the end of MPAT surveys.

No.	Does your household receive more income (money and/or barter for goods and services) from crops or from livestock?								
	<table border="1"> <tr> <td>Crops (1)</td> <td>Livestock (2)</td> <td>About half & half (3)</td> <td>Crops mostly, but also a lot of livestock (4)</td> </tr> <tr> <td colspan="3">Livestock mostly, but also a lot of crops (5)</td> <td>Little to no income from crops or livestock (6)</td> </tr> </table>	Crops (1)	Livestock (2)	About half & half (3)	Crops mostly, but also a lot of livestock (4)	Livestock mostly, but also a lot of crops (5)			Little to no income from crops or livestock (6)
Crops (1)	Livestock (2)	About half & half (3)	Crops mostly, but also a lot of livestock (4)						
Livestock mostly, but also a lot of crops (5)			Little to no income from crops or livestock (6)						

No.	How much of your household's land is irrigated?				
	<table border="1"> <tr> <td>Hectares:</td> <td></td> <td>Don't know (-1)</td> <td>[Enumerator to convert local measurement to hectares]</td> </tr> </table>	Hectares:		Don't know (-1)	[Enumerator to convert local measurement to hectares]
Hectares:		Don't know (-1)	[Enumerator to convert local measurement to hectares]		

No.	Of the kinds of foods your household consumed during the last 12 months, did the majority come from your household's own production or was most of it purchased? [Enumerator to ask for each group below]												
.1	Grains												
.2	Vegetables & tubers/potatoes												
.3	Fruits												
.4	Meat, fish, tofu, dairy, eggs												
	<table border="1"> <tr> <td>Produced (1)</td> <td>Purchased (2)</td> <td>About half & half (3)</td> </tr> <tr> <td colspan="3">Produced mostly, but also a lot purchased (4)</td> </tr> <tr> <td colspan="3">Purchased mostly, but also a lot produced (5)</td> </tr> <tr> <td colspan="2">Household does not consume this (6)</td> <td>Don't know (7)</td> </tr> </table>	Produced (1)	Purchased (2)	About half & half (3)	Produced mostly, but also a lot purchased (4)			Purchased mostly, but also a lot produced (5)			Household does not consume this (6)		Don't know (7)
Produced (1)	Purchased (2)	About half & half (3)											
Produced mostly, but also a lot purchased (4)													
Purchased mostly, but also a lot produced (5)													
Household does not consume this (6)		Don't know (7)											

No.	How many kg bags of maize did your household harvest during the most recent rainy season?								
	<table border="1"> <tr> <td>Don't remember (-1)</td> <td>No. bags of maize =</td> <td></td> <td>Our household never grows maize (-2)</td> </tr> <tr> <td colspan="2">Our household did not plant maize last season (-3)</td> <td colspan="2">Other, specify: (-4)</td> </tr> </table>	Don't remember (-1)	No. bags of maize =		Our household never grows maize (-2)	Our household did not plant maize last season (-3)		Other, specify: (-4)	
Don't remember (-1)	No. bags of maize =		Our household never grows maize (-2)						
Our household did not plant maize last season (-3)		Other, specify: (-4)							

No.	Does your household save any money (or other goods that can be sold later for money)? [Circle all that apply]								
	<table border="1"> <tr> <td>No (1)</td> <td>Yes, general savings (2)</td> <td>Yes, saving for a wedding (3)</td> <td>Yes, saving for a funeral (4)</td> </tr> <tr> <td colspan="2">Yes, saving for children's education (5)</td> <td>Yes, saving for emergencies (6)</td> <td>Other, specify: (7)</td> </tr> </table>	No (1)	Yes, general savings (2)	Yes, saving for a wedding (3)	Yes, saving for a funeral (4)	Yes, saving for children's education (5)		Yes, saving for emergencies (6)	Other, specify: (7)
No (1)	Yes, general savings (2)	Yes, saving for a wedding (3)	Yes, saving for a funeral (4)						
Yes, saving for children's education (5)		Yes, saving for emergencies (6)	Other, specify: (7)						

No.	During most of the year, who usually (most days) collects the water for your household's drinking and cooking needs?												
	<table border="1"> <tr> <td>1. Female(s) under 5</td> <td>2. Female(s) age 5 to 14</td> <td>3. Female(s) age 15 or older</td> <td>4. Male(s) under 5</td> <td>5. Male(s) age 5 to 14</td> <td>6. Male(s) age 15 or older</td> </tr> <tr> <td>7. (1) & (2)</td> <td>8. (2) & (3)</td> <td>9. (4) & (5)</td> <td>10. (5) & (6)</td> <td>11. Don't know</td> <td>12. Other (specify):</td> </tr> </table>	1. Female(s) under 5	2. Female(s) age 5 to 14	3. Female(s) age 15 or older	4. Male(s) under 5	5. Male(s) age 5 to 14	6. Male(s) age 15 or older	7. (1) & (2)	8. (2) & (3)	9. (4) & (5)	10. (5) & (6)	11. Don't know	12. Other (specify):
1. Female(s) under 5	2. Female(s) age 5 to 14	3. Female(s) age 15 or older	4. Male(s) under 5	5. Male(s) age 5 to 14	6. Male(s) age 15 or older								
7. (1) & (2)	8. (2) & (3)	9. (4) & (5)	10. (5) & (6)	11. Don't know	12. Other (specify):								

Annex XII Valuations and weighting for MPAT components and subcomponents

The valuations for each survey response and the weighting percentages for the aggregation of each subcomponent are provided below. Here you also see the aggregation at the component level – for example, that the subcomponent 1.1 Consumption is 43 per cent of the Food & Nutrition Security component. At the end of Annex XII, a summary of the subcomponent aggregation weights for calculating component scores is provided. Questions from the MPAT Village Survey are shaded in blue.

Additional notes: If users examine the valuations for some of the response sets (e.g. Q61 in subcomponent 1.2), they may note that in some cases multiple responses to one survey question have the same value. These responses are not combined into one response category because the gradations in understanding are still useful for secondary data analysis.

For many of the subcomponents, there will be instances in which certain questions are not used to create the subcomponent value. In these instances the logic is always the same, in that the same ratios of weightings are to be used. For example, if there are three survey questions with weightings of 30 per cent, 45 per cent and 25 per cent, and the survey question contributing 25 per cent is not applicable for some reason, then the remaining two survey item weights (30 per cent and 45 per cent) are still used to calculate the subcomponent, but their weights are adjusted using the same ratios. In this example, the ‘new’ weights are then calculated by dividing by their sum (i.e. $30 + 45 = 75$); thus, the new weights are: $30/75 \times 100 = 40$; and $45/75 \times 100 = 60$. So the original 30 per cent and 45 per cent now become 40 per cent and 60 per cent. In this way, the ratio of the two weights remains constant. (Note that this example is what is done for subcomponent 3.1, the first instance where this is applicable). When this occurs, the adjusted weights are provided for the sake of reference and are referred to as ‘cases’ (as in ‘case 1’). The MPAT Excel Spreadsheet automatically makes these adjustments, but they are provided here in order to make MPAT’s aggregation rules as clear as possible.

In a few instances, there are aggregation rules in which the weights are changed, and not based on using ratios. These are referred to as ‘options’ and are presented below and in the MPAT Excel Spreadsheet as well.

Lastly, for some questions certain responses will not be applicable to the survey question (for example, ‘Use to water vegetable garden’ is not an applicable answer to Q25 ‘What does your household usually do with food waste/remains...?’). These responses are marked as ‘N/A’ instead of providing a value on the 1-10 scale. However, the user should note that the MPAT Excel Spreadsheet will treat this as missing data, as it is not appropriate that these ‘N/A’ responses be used as answers to certain survey questions.

1. Food & Nutrition Security

This component measures the stability and availability of sufficient quantities of adequately nutritious food to the household.

1.1 Consumption – 43% of Food & Nutrition Security component

This subcomponent assesses whether or not the household has a sufficient quantity of food most of the time.

59		During the last 12 months, did any member of your household eat fewer meals, or smaller portions, than usual because there was not enough food? <i>[If 'Yes', for approximately how long?]</i>			
		Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)
		Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)
60		During the last 12 months, did any member of your household go to sleep at night hungry? <i>[If 'Yes', how often did this occur?]</i>			
		Never (1)	Yes, once or twice (2)	Yes, for about 1 week (3)	Yes, for a few weeks (4)
		Yes, for about 1 month (5)	Yes, for more than 1 month (6)	Yes, most days (7)	Don't know (8)

For Q59

Answer code	Value (1-10)
1	10
2	8
3	6.5
4	5
5	3.5
6	2
7	1
8	MD

For Q60

Answer code	Value (1-10)
1	10
2	9
3	7
4	6
5	4.5
6	2
7	1
8	MD

Aggregation for subcomponent 1.1

59	60
60	40
Total	100%

1.2 Access Stability – 32% of Food & Nutrition Security component

This subcomponent assesses the stability of the household's access to food.

61		During the past 12 months, did your household experience a period of time longer than 2 weeks when there was not enough food? <i>[If 'Yes', how many such periods?]</i>			
		No (1)	Yes, 1 (2)	Yes, 2 (3)	Yes, 3 (4)
62		During the past 12 months, did your household ever experience 1 full day with no food to eat? <i>[If 'Yes', how often did this occur?]</i>			
		Never (1)	Once or twice (2)	Approximately once a month (3)	
		Approximately every 2 weeks (4)	Approximately every week (5)	Don't know (6)	

For Q61

Answer code	Value (1-10)
1	10
2	5
3	3
4	2
5	1
6	1
7	MD
8	MD

For Q62

Answer code	Value (1-10)
1	10
2	7
3	5
4	3
5	1
6	MD

Aggregation for subcomponent 1.2

61	55
62	45
Total	100%

1.3 Nutrition Quality – 25% of Food & Nutrition Security component

This subcomponent assesses the diversity of the household's diet as a proxy measure for balanced nutrition intake.

63	During the last 12 months, how often did the majority of your household eat the following foods?		
.1	Grains (cereals, bread, rice, pasta)		1. Never
.2	Roots &/or tubers (potatoes, cassava, etc.)		2. Almost never
.3	Vegetables/greens		3. Approximately once a month
.4	Fruits		4. A few times a month
.5	Dairy &/or eggs		5. About once a week
.6	Meat &/or fish/seafood		6. A few times a week
.7	Nuts &/or legumes (and/or derivatives, tofu, etc.)		7. Every day
			8. Not eaten for religious or cultural reasons

For Q63.1

Answer code	Value (1-10)
1	1
2	2
3	3
4	4
5	5
6	7
7	10
8	MD

For Q63.2

Answer code	Value (1-10)
1	1
2	2
3	3
4	4
5	5
6	7
7	10
8	MD

For Q63.3

Answer code	Value (1-10)
1	1
2	2
3	3
4	4
5	6
6	9
7	10
8	MD

For Q63.4

Answer code	Value (1-10)
1	1
2	2
3	3
4	4
5	6
6	8
7	10
8	MD

For Q63.5

Answer code	Value (1-10)
1	1
2	2
3	3
4	4
5	6
6	8
7	10
8	MD

For Q63.6

Answer code	Value (1-10)
1	1
2	2
3	4
4	5
5	8
6	10
7	6
8	MD

For Q63.7

Answer code	Value (1-10)
1	1
2	2
3	3
4	5
5	7
6	10
7	10
8	MD

Aggregation for subcomponent 1.3 – option 1

63.1	7.5
63.2	7.5
63.3	20
63.4	12.5
63.5	20
63.6	12.5
63.7	20
Total	100%

Aggregation for subcomponent 1.3 – option 2

(if household does not consume meat/fish/seafood for religious/cultural reasons)

63.1	7.5
63.2	7.5
63.3	20
63.4	12.5
63.5	25
63.7	27.5
Total	100%

Note: A standard practice when eliminating a variable from a set for which the values are already assigned is to re-scale the weights of the remaining variables (by dividing by their sum). However, in this case, as 'Nuts &/or legumes' and/or 'Dairy &/or eggs' can provide a nutritional substitute for meat/fish/seafood, it was deemed appropriate to split the weight of the excluded item and assign it as shown above.

Aggregation for subcomponent 1.3 – option 3

(if household does not consume meat/fish/seafood and dairy/eggs for religious/cultural reasons)

63.1	7.5
63.2	7.5
63.3	35
63.4	12.5
63.7	37.5
Total	100%

2. Domestic Water Supply

This component measures the likely quality of domestic water as well as the stability of supply and the household's access to it.

2.1 Quality – 29% of Domestic Water Supply component

This subcomponent assesses the likely quality of the water the household uses for domestic purposes.

(Valuations for Q32 [estimated quality based on water source] will not always be relevant in all areas. Q38 deliberately captures the household's *subjective* assessment of its water's quality, which nonetheless provides a useful proxy measure across households.)

32	What is the primary source (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? <i>[If the household uses different water sources for drinking and cooking, only record the drinking water source]</i>					
	During the rainy season <input type="checkbox"/>		During the dry season <input type="checkbox"/>		During most of the year <input type="checkbox"/>	
	No rainy season in our area (-1)		No dry season in our area (-2)		Don't know (-3)	
	1. Piped from water treatment plant (chlorinated)		13. Water vender with tanker truck			
	2. Piped from water treatment plant (not chlorinated)		14. Water vender with cart or small tank			
	3. Borehole (> 20m deep)		15. Large dam (built & managed by government, company or collective)			
	4. Borehole (< 20m deep)		16. Small dam (built & managed by households, village or collective)			
	5. Private well (> 20m deep)		17. Stream			
	6. Private well (< 20m deep)		18. River			
	7. Communal well (> 20m deep)		19. Pond, lake (or other still water body)			
8. Communal well (< 20m deep)		20. Irrigation canal				
9. Protected ('box') spring		21. Bottled water (delivered by vender)				
10. Unprotected spring		22. Bottled water (collected by household)				
11. Rainwater harvesting container (closed)		23. Other (specify):				
12. Rainwater harvesting container (open)						
<i>['Private' means used primarily by the household, but may also be shared with 2-4 other households, and is located within 100 metres of the household. 'Communal' means it is shared by 5 or more households]</i>						
34	Does your household treat water before drinking it (any treatment method: boiling, allowing to settle, filter, chemical treatment, etc.)?					
	No, household does not believe treatment is necessary (1)	Never (2)	Rarely (3)	Sometimes (4)	Often (5)	Always (6)
38	Generally, what do you think the quality of your household's drinking water is (before any treatment)?					
	Don't know (1)	Very bad (2)	Poor (3)	Satisfactory (4)	Good (5)	Very good (6)

For Q32.3

Note: Only the values from the last box, 'During most of the year' (Q32.3 in the Excel Spreadsheet), are actually used to calculate the subcomponent's value – but the other data are entered in case they are useful for other project data analysis (i.e. Q32.1 and Q32.2 in the spreadsheet).

Answer code	Value (1-10)
-3	MD
1	10
2	8
3	9
4	7
5	7.5
6	5.5
7	6.5
8	4.5
9	7.5
10	5
11	8

Answer code	Value (1-10)
12	4.5
13	7
14	5.5
15	4
16	5
17	3.5
18	3
19	1
20	2
21	7.5
22	7
23	MD

For Q38

Answer code	Value (1-10)
1	MD
2	1
3	2
4	5
5	6.5
6	10

For Q34

Answer code	Value (1-10)
1	10
2	1
3	2
4	4
5	6.5
6	9

Aggregation for subcomponent 2.1

32	45
38	35
34	20
Total	100%

2.2 Availability – 38% of Domestic Water Supply component

This subcomponent assesses the stability and quantity of domestic water supply to the household.

35	During the last 12 months, for how many months was your household's main source of water sufficient to meet your household's drinking and cooking needs? Months: <input type="text"/> Don't remember (-1)
36	How often do you worry there will not be enough water from your household's main water source to satisfy your household's drinking and cooking needs? Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)

For Q35

Unit (months) interval	Value (1-10)
0 - 2	1
3-4	2
5-6	3
7-8	4
9-10	5
11	7.5
12	10
-1	MD

For Q36

Answer code	Value (1-10)
1	10
2	8
3	5.5
4	2.5
5	1

Aggregation for subcomponent 2.2

35	70
36	30
Total	100%

2.3 Access – 33% of Domestic Water Supply component

This subcomponent assesses the degree of access households have to their main water source.

33		Approximately how much time (in minutes) does it take your household to collect enough water for your household's drinking and cooking needs for a normal (average) day? <i>[Total time = there and back for each person and trip combined.]</i> <i>If water is collected from inside the household or in the household's yard/compound, write '1' minute]</i>		
		During the rainy season	During the dry season	During most of the year
		No rainy season in our area (-1)	No dry season in our area (-2)	Don't know (-3)

37		Can your household usually afford to pay the fees (direct payments only, not maintenance fees) for using water from your household's main water source?				
		No (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)

For Q33.3

Note: Only the values from the last box, 'During most of the year' (Q33.3 in the Excel Spreadsheet), are actually used to calculate the subcomponent's value – but the other data are entered in case they are useful for other project data analysis (i.e. Q33.1 and Q33.2 in the spreadsheet).

Unit (minutes) interval	Value (1-10)
1-10	10
11-20	8.5
21-30	6.5
31-60	4.5
61-90	2
91+	1
-3	MD

For Q37

Answer code	Value (1-10)
1	1
2	3
3	4.5
4	6.5
5	10
6	7

Aggregation for subcomponent 2.3

33	60
37	40
Total	100%

3. Health & Health Care

This component measures the quality of health care based on health status, people's access to health care and the quality of care provided.

3.1 Health Status – 38% of Health & Health Care component

This subcomponent assesses the status of people's health.

(For Q9 and Q10, this measure is, of course, determined in part by the size of the household, but these effects [of disproportionately large or small households] balance out at the village level, as is the case for similar questions).

9		In the last 12 months, how often have members of your household had a non-serious illness (meaning they were sick, but not so sick they had to rest in bed a full day or more)?					
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
10		In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)?					
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)

v21	In the last 2 years, how has the overall health of the majority of the people in your village/area changed?					
	Improved slightly (1)		Improved moderately (2)		Improved a lot (3)	
	Worsened slightly (4)		Worsened moderately (5)		Worsened a lot (6)	
	No significant change (7)		Don't know (8)		Other, specify: (9)	

For Q9

Answer code	Value (1-10)
1	10
2	8.5
3	6.5
4	3
5	1
6	MD

For Q10

Answer code	Value (1-10)
1	10
2	7.5
3	5
4	2
5	1
6	MD

For v21

Answer code	Value (1-10)
1	8
2	9
3	10
4	4
5	2
6	1
7	calculate with values from 9 and 10 only
8	MD
9	MD

Aggregation for subcomponent 3.1

9	30
10	45
v21	25
Total	100%

Aggregation for subcomponent 3.1 – case 1

(if overall health of people has not changed [question v21, answer code '7'])

9	40
10	60
Total	100%

Note: As discussed previously, in this case, the 'new' weights for subcomponent 3.1 (case 1) are calculated by dividing by their sum (i.e. $30 + 45 = 75$); thus, the new weights are: $30/75 \times 100 = 40$; and $45/75 \times 100 = 60$. In this way, the ratio of the two weights remains constant. As stated above, the MPAT Excel Spreadsheet does this automatically, but these 'cases' are also provided here for added clarity.

3.2 Access & Affordability – 34% of Health & Health Care component

This subcomponent assesses the household's access to health-care centres and the affordability of the health care those centres provide.

(As with Q33, in Q11 and Q13 time is used instead of distance, as this accounts for varied topography.)

11		How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines?	
		Household self-diagnoses, self-medicates for simple illnesses (-1)	
		No health centre in the area, or centre is too far to travel to (-2) /skip to question 14/	Minutes = <input type="text"/>

13		How much time does it take for members of your household to reach the nearest health centre that can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?	
		No health centre for serious illness, or centre too far to reach easily (-1)	Don't know (-2) Minutes = <input type="text"/>

14		Can your household afford professional treatment for serious illness or injury?			
		No (1)	Yes, if money is borrowed (2)	Yes, with much difficulty (3)	Yes, with some difficulty (4)
		Yes, because government or employer helps pay for treatment (5)		Yes, household can afford it (6)	

For Q11

Answer code	Value (1-10)
-1	3
-2	1
Unit (minutes) interval	Value (1-10)
1-10	10
11-30	9
31-60	8
61-120	7
121-180	6
181-240	3
241-360	2
361+	1

For Q13

Answer code	Value (1-10)
-1	1
-2	MD
Unit (minutes) interval	Value (1-10)
1-10	10
11-30	9
31-60	7
61-120	6
121-180	4
181-240	2
241+	1

For Q14

Answer code	Value (1-10)
1	1
2	3
3	4
4	6
5	8.5
6	10

Aggregation for subcomponent 3.2

11	25
13	35
14	40
Total	100%

Aggregation for subcomponent 3.2 – case 1

(if 'No health centre in the area, or centre is too far to travel to (-2)' for Q11)

11	38.5
13	0
14	61.5
Total	100%

3.3 Health-Care Quality – 28% of Health & Health Care component

This subcomponent assesses the likely quality of health care provided in the village/area.

12	How often does this health centre have enough medical supplies to provide adequate health care?					
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)

v1	What are the approximate population and number of households in your village/area?			
	Population		Number of households	Don't know (-1)

v17	How often does each centre usually have enough medical supplies to provide adequate health care?			
v18	How many full-time (work most days a week) and part-time (work 1 to 3 days a week) health-care staff work in this/these health centre(s)?			
<i>[Enumerator supervisor to fill in the table below with the responses to questions v15, v16, v17 and v18]</i>				
v15 Health centre name	v16 Max. daily patient capacity	v17 Enough medical supplies*	v18.1 FT health-care staff	v18.2 PT health-care staff
a.				
b.				
c.				
d.				
e.				
*Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)				
For all health centres combined:				
v19	How many years has each staff person been working as a health-care professional (in total, at this health centre and elsewhere)?			
v20	How many years of formal medical training has each staff person completed?			
		v19.1 years' working	v20.1 years of training	
				v19.2 years' working
				V20.2 years of training
Full-time staff -a-			Part-time staff -a-	
Full-time staff -b-			Part-time staff -b-	
Full-time staff -c-			Part-time staff -c-	
Full-time staff -d-			Part-time staff -d-	
Full-time staff -e-			Part-time staff -e-	

For Q12

Answer code	Value (1-10)
1	1
2	2
3	4
4	6.5
5	10
6	MD

For v17

Answer code	Value (1-10)
1	1
2	2
3	4
4	6.5
5	10
<p><i>Note:</i> When there are two or more health centres per village, the MPAT Excel Spreadsheet assigns a value to each response (for up to five health centres). The final value for v17 is the weighted average of these values, with the weights based on the 'max daily capacity' of each health centre from v16.</p>	

For v1.1 & v18.1/v18.2 (ratio of health-care staff to population)

<p>First calculate the total number of health-care staff. Do this by treating each part-time staff as '0.5' people. Then calculate the ratio with this value and the population figure from question v1.1 (not the household figure, v.1.2).</p>	
Ratio interval	Value (1-10)
1:2501 - 1:3000	1
1:2001 - 1:2500	2
1:1501 - 1:2000	4
1:1001 - 1:1500	6
1:501 - 1:1000	7
1:251 - 1:500	8
1:101 - 1:250	9
1:1 - 1:100	10

For v19

<p>Calculate the average number of years of work experience for each staff member, using the values below for each interval of years of experience (treat each part-time staff as '0.5' people). Then take the average value that results.</p> <p><i>Note:</i> As per the instructions earlier in this User's Guide, the MPAT Excel Spreadsheet can only use data from up to five full-time staff and up to five part-time staff.</p>	
Years of work experience (intervals)	Value (1-10)
0-5	4
6-7	6
8-9	8
10+	10

For v20

Calculate the average number of years of work experience for each staff member, using the values below for each interval of years of experience (treat each part-time staff member as '0.5' people). Then take the average value that results.

Years of training (intervals)	Value (1-10)
1	1
2	3
3	5
4	6
5	7
6	8
7	9
8+	10

Aggregation for subcomponent 3.3

12	30
v1 & v18	25
v17	15
v19	15
v20	15
Total	100%

4. Sanitation & Hygiene

This component measures the quality of the household's sanitation (toilet facilities), food waste management and personal hygiene.

4.1 Toilet Facility – 38% of Sanitation & Hygiene component

This subcomponent assesses the general quality of the toilet facilities the household uses. (Valuations for Q23 [estimated quality based on toilet type] will not always be relevant in all areas.)

23	What type of toilet facility does your household usually use?					
	None, open defecation (1) <i>[skip to question 25]</i>					
	Open pit, communal (2)			Open pit, private (8)		
	Enclosed pit, communal (3)			Enclosed pit, private (9)		
	Enclosed improved-ventilation pit, communal (4)			Enclosed improved-ventilation pit, private (10)		
	Enclosed pour-flush, communal (5)			Enclosed pour-flush toilet, private (11)		
	Enclosed flush, communal (6)			Enclosed flush, private (12)		
	Compost or biogas, communal (7)			Compost or biogas, private (13)		
	Other, specify: (14)					
	Open means there is no structure, or a structure with no roof. *Enclosed* means there is a structure with any sort of roof. *Communal* means the facility is shared by 3 or more households. *Private* means the facility is used by 1-2 households.					
24	[If the household uses a toilet facility of any kind, ask:] Over the last 12 months, how often was the toilet usable ? (meaning it was working properly or was available to use)					
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)

For Q23

Answer code	Value (1-10)
1	1
2	2
3	3
4	7
5	6
6	8
7	5

For Q23 (continued)

Answer code	Value (1-10)
8	6
9	7
10	8
11	9
12	10
13	9
14	MD

For Q24

Answer code	Value (1-10)
1	1
2	2
3	5
4	8.5
5	10
6	MD

Aggregation for subcomponent 4.1

23	60
24	40
Total	100%

Aggregation for subcomponent 4.1 – case 1

(if household does not have any toilet – 'None (open defecation)')

23	100
Total	100%

4.2 Waste Management – 26% of Sanitation & Hygiene component

This subcomponent assesses how the household manages its waste materials.
(Household wastes provide vectors for disease spread.)

25		What does your household usually do with food waste/remains (any parts not consumed by people in the household)?		[Enumerator to remind respondent 'all responses are anonymous']	
				1. Discard close to a house [within 25 metres]	
				2. Discard near a house [25 to 75 metres from the house]	
26		What does your household usually do with non-food waste/garbage?		3. Discard far from a house [75 metres or more]	
				4. Feed to livestock	10. Burn it
				5. Feed to pets or guard dogs	11. Compost it
27		What does your household usually do with wastewater (for example, from bathing, cleaning, the toilet)?		6. Use for biogas generation	12. Sell to vender
				7. It is collected regularly within 75 metres of a house [organized garbage collection]	13. It is collected regularly further than 75 metres from house [organized garbage collection]
				8. Put down the drain [piped sewage network]	14. Use to water crops grown for livestock fodder
				9. Use to water vegetable garden	15. Discard into local waterway or irrigation canal
				16. Other, specify:	

For Q25

Answer code	Value (1-10)
1	2
2	4
3	7
4	8
5	8
6	10
7	10
8	N/A

For Q25 (continued)

Answer code	Value (1-10)
9	N/A
10	6.5
11	10
12	8
13	9
14	N/A
15	3
16	MD

For Q26

Answer code	Value (1-10)
1	2
2	4
3	7
4	N/A
5	N/A
6	7
7	10
8	N/A
9	N/A
10	2
11	7
12	10
13	9
14	N/A
15	1
16	MD

For Q27

Answer code	Value (1-10)
1	2
2	4
3	8
4	3
5	3
6	9
7	10
8	10
9	1
10	N/A
11	4
12	10
13	9
14	9
15	5
16	MD

Aggregation for subcomponent 4.2

25	35
26	25
27	40
Total	100%

4.3 Hygiene Practices – 36% of Sanitation & Hygiene component

This subcomponent assesses the quality of the household's general hygiene practices.

28		How many times a week do most members (the majority) of your household clean their teeth?					
		Never (1)	Rarely (2)	1 or 2 days a week (3)		Most days of the week (4)	
		Usually once a day (5)		Usually 2 or 3 times a day (6)			Don't know (7)
29		How often do the adults in your household clean their hands before eating a meal?					
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
30		How often do the adults in your household clean their hands after defecating?					
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	Don't know (6)
31		Do the adults in your household use soap (any kind of soap) when they clean their hands?					
		No (1)	Yes, but very rarely (2)	Yes, but only when guests visit (3)		Yes, after defecating (4)	
		Yes, before meals (5)		Yes, after defecating and before meals (6)		Don't know (7)	Other, specify: (8)

For Q28

Answer code	Value (1-10)
1	1
2	2
3	3
4	5
5	8
6	10
7	MD

For Q29

Answer code	Value (1-10)
1	1
2	2.5
3	6
4	9
5	10
6	MD

For Q30

Answer code	Value (1-10)
1	1
2	2
3	5
4	8
5	10
6	MD

For Q31

Answer code	Value (1-10)
1	1
2	2
3	2
4	8
5	9
6	10
7	MD
8	MD

Aggregation for subcomponent 4.3

28	20
29	35
30	30
31	15
Total	100%

5. Housing, Clothing & Energy

This component measures the general construction quality of the household's home, the availability of adequate clothing and the quality of the energy sources used in the home (with regard to indoor air pollution and fuel efficiency).

5.1 Housing Structure Quality – 38% of Housing, Clothing & Energy component

This subcomponent assesses the physical quality of the housing structure and its ability to withstand extreme weather events.

17		[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)]			
		What is the primary construction material of the housing unit's exterior walls?			
		Reinforced concrete (1)	Stone & mortar (2)	Cement blocks (3)	Brick (fired/burned) (4)
		Metal sheeting (5)	Logs or thick wood (6)	Thin wood (7)	Bamboo (8)
		Brick (mud or earth) (9)	Mud & straw (10)	Earth or adobe (11)	Reeds/thatch (12)
		Thick plastic (13)	Fabric or thin plastic (14)	Other, specify: (15)	

19		Can your home withstand strong winds, severe rain, snow or hail without significant damage?			
		No (1)	Yes (2)	Yes, with minor damage (3)	Perhaps, but with significant damage likely (4)
		Little to no extreme weather in this region (5)		Don't know (6)	

For Q17

Answer code	Value (1-10)
1	10
2	10
3	10
4	8
5	7
6	7
7	5
8	5
9	4
10	3
11	2
12	2
13	2
14	1
15	MD

For Q19

Answer code	Value (1-10)
1	1
2	10
3	8
4	3
5	8
6	MD

Aggregation for subcomponent 5.1

17	70
19	30
Total	100%

5.2 Clothing – 33% of Housing, Clothing & Energy component

This subcomponent assesses the general availability and quality of footwear and clothing in the household.

69		How many of the people (adults and children) in your household usually have adequate footwear?		
		None (1)	Less than half the household (2)	About half the household (3)
70		How many of the people (adults and children) in your household have sufficient clothing for severe weather (for example, very hot and sunny, very cold or very wet weather, depending on the area)?		
		None (1)	Less than half the household (2)	About half the household (3)
		Most of the household (4)	All household members do (5)	Don't know (6)

For Q69

Answer code	Value (1-10)
1	1
2	2.5
3	4
4	6.5
5	10
6	MD

For Q70

Answer code	Value (1-10)
1	1
2	2.5
3	4
4	6.5
5	10
6	MD

Aggregation for subcomponent 5.2

69	40
70	60
Total	100%

5.3 Energy Sources – 29% of Housing, Clothing & Energy component

This subcomponent assesses the likely quality (with respect to energy efficiency and effects on human health caused by indoor air pollution) of the fuel(s) the home uses for lighting, cooking and heating.

20	What is the primary source of light your home uses when it is dark?		1. None	8. Liquid fuel [petrol, kerosene]
21	What is the primary fuel source your household uses for cooking?		2. Heat not needed in region	9. Coal or charcoal
22	What is the primary fuel source your household uses for heat?		3. Stable voltage electricity from grid [legal or illegal connection]	10. Vegetable- or animal-based fats or oils
			4. Unstable voltage electricity from grid [legal or illegal connection]	11. Candle, paraffin wax or battery-powered source
			5. Electricity from a generator	12. Wood, sawdust, grass or other natural material
			6. Electricity from solar cells, wind turbine or small dam	13. Don't know
			7. Gas fuel [from tank or biogas]	14. Other, specify:

For Q20

Answer code	Value (1-10)
1	1
2	N/A
3	10
4	8
5	7
6	10
7	8

For Q20 (continued)

Answer code	Value (1-10)
8	7
9	1.5
10	4
11	4
12	2
13	MD
14	MD

For Q21

Answer code	Value (1-10)
1	1
2	N/A
3	10
4	7
5	7.5
6	9
7	7
8	10
9	6
10	N/A
11	N/A
12	3.5
13	MD
14	MD

For Q22

Answer code	Value (1-10)
1	1
2	calculate with values from Q20 & Q21
3	9
4	7.5
5	6.5
6	10
7	6
8	8
9	7
10	N/A
11	N/A
12	3
13	MD
14	MD

Aggregation for subcomponent 5.3

20	30
21	40
22	30
Total	100%

Aggregation for subcomponent 5.3 – case 1

(for areas where heat is not needed [Q22=2])

20	43
21	57
Total	100%

6. Education

This component measures the quality of children's formal education, its availability and children's access to it.

6.1 Quality – 31% of Education component

This subcomponent assesses the likely quality of the education provided in the village/area. (For v7, subsidized or free housing can be a means of attracting qualified teachers to rural areas.)

v5	What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school?		
v6	How many full-time (work almost every school day) and part-time (work roughly half the school days) teachers are there at each school?		
v7	Are full-time teachers provided subsidized, or free, housing? If so, what is the quality of the housing?		
	No (1)	Yes, provided poor-quality housing (2)	Yes, provided adequate-quality housing (3)
	Yes, provided high-quality housing (4)		Don't know (5)
v10	In the last 2 school years, how has the overall performance of the majority of the students changed?		
	Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
	Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
	No significant change (7)	Don't know (8)	Other, specify: (9)

For v6 & v5 (ratio of teaching staff to student population)

First calculate the total number of teachers. Do this by treating each part-time teacher as '0.5' people. Then calculate a ratio with this value and the total student population (female + male students) from question v5.	
Ratio interval	Value (1-10)
1:1-10	10
1:11-15	9.5
1:16-20	8.5
1:21-25	7.5
1:26-30	5.5
1:31-40	3.5
1:41-50	2
1:51+	1

For v7

Answer code	Value (1-10)
1	2.5
2	4
3	6
4	10
5	MD

For v10

Answer code	Value (1-10)
1	6
2	7
3	10
4	4
5	3
6	1
7	calculate with values from v6 & v7
8	MD
9	MD

Aggregation for subcomponent 6.1

v6 & v5	40
v7	25
v10	35
Total	100%

Aggregation for subcomponent 6.1 – case 1

(if overall performance of students has not changed [question v10, answer code '7'])

v6 & v5	62
v7	38
Total	100%

6.2 Availability – 33% of Education component

This subcomponent assesses the availability of education.

v8	Do the teachers have adequate teaching supplies to teach effectively? (for example: chalk, teacher's books, maps, posters)		
	No (1)	A few teachers do (2)	About half the teachers do (3)
	Most teachers do (4)	Yes, all teachers do (5)	Don't know (6)
v9	Do the students have adequate school supplies to learn/study effectively? (for example: notebooks, pencils, textbooks, chairs, uniforms [if required], desks)		
	No (1)	A few students do (2)	About half the students do (3)
	Most students do (4)	Yes, all students do (5)	Don't know (6)
v11	How many students was the school(s) unable to accept due to limited places (or sleeping space in the school dorms) and/or limited school supplies?		
	None, able to accommodate all students (-1)	Number of students unable to accept	<input type="text"/>
	None, accepted all students regardless of crowding (-2)		Don't know (-3)
v5	What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school?		

For v8

Answer code	Value (1-10)
1	1
2	2
3	5
4	7.5
5	10
6	MD

For v9

Answer code	Value (1-10)
1	1
2	2
3	5
4	7.5
5	10
6	MD

For v11 (& v5)

<p>Calculate the percentage of potential students unable to attend based on the total present population of students (from v5, female and male) plus those who are unable to attend, but should attend (from v11). That is, if the current student population is 90 students, and 10 students are unable to attend, then the percentage is: $(10/[90+10])*100 = '10\%'$ [which receives a score of 4].</p>	
Percentage of students unable to attend school	Value (1-10)
0% ['None (-1)']	10
1-5%	6
6-10%	4
11-20%	2.5
21+%	1
Answer code (-1)	10
Answer code (-2)	7
Don't know (-3)	MD

Aggregation for subcomponent 6.2

v8	37.5
v9	37.5
v11	25
Total	100%

6.3 Access – 36% of Education component

This subcomponent assesses how easily school-age children in the household can attend school if they, or their household, so wishes.

5	[If there are no school-age children (age 5 to 14) in the household, skip to question 7]	
	During most of the year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one-way, by any means: for example, walking, bicycle, scooter, bus)?	
	No. of minutes = <input type="text"/>	[If children attend more than 1 school, enumerator to record the average time]
	School-age children do not regularly attend school (-2)	Children usually live at school (-1)
6	Can your household afford your children's school fees and school supplies?	
	No (1)	Rarely (2)
	Sometimes (3)	Usually (4)
	Yes (5)	Household does not pay the fees and cannot afford supplies (6)
	Household does not pay fees, but can afford supplies (7)	Household does not pay fees or supply costs (8)

For Q5

Answer code	Value (1-10)
-1	8.5
-2	1
-3	MD
Unit (minutes) interval	Value (1-10)
1-15	10
16-30	8.5
31-45	7
46-60	5.5
61-90	3.5
91-120	2
120+	1

For Q6

Answer code	Value (1-10)
1	1
2	2
3	3
4	6.5
5	8
6	5
7	9
8	10

Aggregation for subcomponent 6.3

5	50
6	50
Total	100%

7. Farm Assets

This component measures the household's general ability to produce food and/or create agriculture-based income.

7.1 Land Tenure – 36%, 39% or 60% of Farm Assets component, depending on survey responses

This subcomponent assesses the household's land tenure status.

39		Does your household have access to land for agriculture, orchards, livestock or aquaculture (meaning fish-farming)?	
		Yes, have access and using the land (1)	Yes, have access and leasing some land to others (2)
		No access to land because leasing to others (3) <i>[skip to question 51]</i>	No access to land (4) <i>[skip to question 52]</i>
40		How much land does your household have for agriculture (for crops, grasses, trees, orchards, etc.)?	
		Hectares: <input type="text"/> Don't know (-1) None, only access for livestock/aquaculture (-2) <i>[skip to question 46]</i>	

51		What kind of ownership of your land does your household have?		
		Illegal access, squatting (1)	Leasehold less than 5 years (5)	Leasehold 31-40 years (9)
		Share-cropping arrangement (2)	Leasehold 5-10 years (6)	Leasehold more than 40 years (10)
		Rented for less than 12 months (3)	Leasehold 11-20 years (7)	Freehold (legally owned) (11)
		Common-law ownership (4)	Leasehold 21-30 years (8)	Other, specify: (12)

For Q39

Answer code	Value (1-10)
1	Subcomponent values calculated from Q40 & Q51
2	Subcomponent values calculated from Q40 & Q51
3	10 (subcomponent score equals 10)
4	1 (subcomponent score equals 1)

For Q40

Answer code	Value (1-10)
-1	MD
-2	MD ^a
Unit (hectares) interval	Value (1-10)
0	1
0-0.2	3
0.21-0.5	4
0.51-1	5.5
1.1-2	6.5
2.1-4	7.5
4.1-6	8.5
6.1+	10

^a Subcomponent 7.1 score not calculated.

For Q51

Answer code	Value (1-10)
1	1
2	3.5
3	2
4	8.5
5	4
6	5.5
7	6.5
8	7.5
9	8
10	9
11	10
12	MD

Aggregation for subcomponent 7.1 – option 1

[assuming the answer to Q39 is 'Yes (1)' or 'Yes, have access and leasing some land to others (2)']

40	35
51	65
Total	100%

Aggregation for subcomponent 7.1 – option 2

(if the answer to Q39 is 'No access to land because leasing to others (3)' or 'No access to land (4)']

39	100
40	0
51	0
Total	100%

7.2 Land Quality – 24%, 26% or 40% of Farm Assets component, depending on survey responses

This subcomponent assesses the likely quality of the household's land and soil.

41	Is the majority of your household's land flat, gently sloping, steep or terraced?
	Don't know (1) Steep (2) Gently sloping (3) Flat (4) Terraced (5) Mixed, specify: (6)
42	What kind of soil covers the majority of your household's land?
	Don't know (1) Stony-gravelly (2) Clay (3) Loamy [mixed clay, sand &/or silt] (4)
	Sandy-droughty (5) Wet [wetland/marsh] (6) Mixed, specify: (7) Other, specify: (8)

For Q41

Answer code	Value (1-10)
1	MD
2	2.5
3	6.5
4	10
5	8.5
6	Attempt to calculate (see note)

For Q42

Answer code	Value (1-10)
1	MD
2	1
3	5
4	10
5	3
6	4
7	Attempt to calculate (see note)
8	MD

Note: The MPAT Excel Spreadsheet is automatically programmed to convert answer code 6 (in Q41) and answer code 7 (in Q42) to missing data. However, when completing the CSC system, if for Q41 answer choice 6, and Q42 answer choice 7, the enumerator has written out what the 'Mixed' combination is, one should attempt to insert a value into the Excel Spreadsheet by taking the average of the 'Mixed' values. For example, in Q41, if the response for the given household is '6' and the enumerator writes that 'the land is steep (2) and flat (4)', then the average value would be: $2.5 + 10 = 12.5 / 2 = 6.25$, and this value should be manually entered into the MPAT Excel Spreadsheet.

Aggregation for subcomponent 7.2

41	50
42	50
Total	100%

7.3 Crop Inputs – 20% or 35% of Farm Assets component, depending on survey responses

This subcomponent assesses the availability of water, compost/manure/fertilizer, seed and food for the household's production of crops.

43	During the last 2 years, was your household able to make, or buy, enough compost/manure or artificial fertilizer for each growing season?
	Household does not think they need to use compost/manure or fertilizer (1)
	No (2) Rarely (3) Sometimes (4) Often (5) Always (6)
44	During the last 2 years, was your household able to afford enough seed for each growing season?
	Not necessary because household saved seed (1) No (2) Rarely (3) Sometimes (4)
	Often (5) Always (6) Other, specify: (7)
45	Is there generally enough water for your household's crops during the dry season/rest of the year?
	Dry season Rest of the year
	Never (1) Rarely (2) Sometimes (3) Often (4)
	Always (5) No dry season in our area (6) Few or no crops grown (7)
50	Does your household usually have enough people to work/manage your farm? (crops, orchards, forestry, livestock and/or aquaculture)
	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)

For Q43

Answer code	Value (1-10)
1	3
2	1
3	3
4	5
5	8
6	10

For Q44

Answer code	Value (1-10)
1	7.5
2	1
3	2
4	5
5	8
6	10
7	MD

For Q45

Dry season Q45.1		Rest of the year Q45.2	
Answer code	Value (1-10)	Answer code	Value (1-10)
1	2	1	1
2	3	2	2
3	5	3	4
4	8	4	7
5	10	5	10
6	^a	6	N/A
7	N/A	7	N/A

^a If there is no 'Dry season' in the area, 100% of the value comes from the 'Rest of the year' value.

For Q50

Answer code	Value (1-10)
1	1
2	2
3	4
4	7
5	10

Aggregation for subcomponent 7.3

43	25
44	25
45.1	14
45.2	21
50	15
Total	100%

Aggregation for subcomponent 7.3 – case 1

(no dry season in the area, answer '6' to Q45.1)

43	25
44	25
45.1	0
45.2	35
50	15
Total	100%

7.4 Livestock/Aquaculture Inputs – 20% or 35% of Farm Assets component, depending on survey responses

This subcomponent assesses the availability of water, fodder and/or fish feed for the household's production of livestock and/or aquaculture.

46	Is there generally enough water for your household's livestock during the dry season/rest of the year?					
	Dry season		Little or no livestock (1) <i>[skip to question 48]</i>		Never (2)	Rarely (3)
	Rest of the year		Sometimes (4)	Often (5)	Always (6)	No dry season in our area (7)
47	During the last 2 years, how often was your household able to grow, collect or buy enough fodder?					
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	
48	Is there generally enough water for your household's aquaculture during the dry season/rest of the year?					
	Dry season		Little or no aquaculture (1) <i>[skip to question 50]</i>		Never (2)	Rarely (3)
	Rest of the year		Sometimes (4)	Often (5)	Always (6)	No dry season in our area (7)
49	During the last 2 years, how often was your household able to make or buy enough fish feed?					
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	

For Q46

Dry season Q46.1		Rest of the year Q46.2	
Answer code	Value (1-10)	Answer code	Value (1-10)
1	N/A	1	N/A
2	2	2	1
3	3	3	2.5
4	4.5	4	5
5	8	5	7
6	10	6	10
7	^a	7	N/A

^a If there is no 'Dry season' in the area, 100% of the value comes from the 'Rest of the year' value.

For Q47

Answer code	Value (1-10)
1	1
2	2.5
3	5
4	8
5	10

For Q48

Dry season Q48.1		Rest of the year Q48.2	
Answer code	Value (1-10)	Answer code	Value (1-10)
1	N/A	1	N/A
2	1	2	1
3	2	3	1
4	4	4	3
5	7	5	6
6	10	6	10
7	^a	7	N/A

^a If there is no 'Dry season' in the area, 100% of the value comes from the 'Rest of the year' value.

For Q49

Answer code	Value (1-10)
1	1
2	2.5
3	5
4	8
5	10

Aggregation for subcomponent 7.4

(if household has both livestock and aquaculture)

46.1	10	0 (No dry season)
46.2	15	25
47	25	
48.1	14	0 (No dry season)
48.2	21	35
49	15	
Total	100%	

Aggregation for subcomponent 7.4 – case 1

(if household has only livestock)

46.1	20	0 (No dry season)
46.2	30	50
47	50	
48.1	0	
48.2	0	
49	0	
Total	100%	

Aggregation for subcomponent 7.4 – case 2

(if household has only aquaculture)

46.1	0	
46.2	0	
47	0	
48.1	28	0 (No dry season)
48.2	42	70
49	30	
Total	100%	

8. Non-Farm Assets

This component measures the household's non-agricultural income-generating ability, access to credit and household wealth.

8.1 Employment & Skills – 39% of Non-Farm Assets component

This subcomponent assesses the household's income-earning potential from small business and/or skilled service provision.

64	During the last 12 months, has anyone in your household managed/run their own business (other than selling agricultural products)? <i>[If 'Yes', for how many months (out of the last 12 months)?]</i>
	No (1) Yes, 1-2 months (2) Yes, 3-4 months (3) Yes, 5-6 months (4) Yes, 7+ months (5)
65	During the last 12 months, has anyone in your household provided others a skilled service (for example, equipment repair, tailoring, construction work) for money or barter? <i>[If 'Yes', how often?]</i>
	Never (1) Rarely (2) Sometimes (3) Often (4) Always (5)
1	Can the head of the household read a newspaper?
	No (1) Yes, with difficulty (2) Yes, without difficulty (3) Don't know (4)

For Q64

Answer code	Value (1-10)
1	3.5
2	5
3	6
4	7
5	10

For Q65

Answer code	Value (1-10)
1	2
2	3.5
3	5
4	7.5
5	10

For Q1

Answer code	Value (1-10)
1	1
2	6
3	10
4	MD

Aggregation for subcomponent 8.1

64	25
65	50
1	25
Total	100%

8.2 Financial Services – 33% of Non-Farm Assets component

This subcomponent assesses the household's access to financial services and degree of debt.

66		If your household wanted to borrow money from a bank or other financial service provider (not including friends or relatives), would your household be able to borrow money?												
		<table border="1"> <tr> <td>No (1)</td> <td>Probably not (2)</td> <td>Probably yes (3)</td> <td>Definitely yes (4)</td> <td>Don't know (5)</td> </tr> </table>	No (1)	Probably not (2)	Probably yes (3)	Definitely yes (4)	Don't know (5)							
No (1)	Probably not (2)	Probably yes (3)	Definitely yes (4)	Don't know (5)										
67		<i>[Enumerator to remind respondent that all responses are anonymous]</i> Is your household currently in debt?												
		<table border="1"> <tr> <td>No (1) <i>[skip to question 69]</i></td> <td>Yes, a little (2)</td> <td>Yes, a moderate amount (3)</td> <td>Yes, a lot (4)</td> </tr> <tr> <td colspan="4">Don't know, or don't want to discuss (5) <i>[skip to question 69]</i></td> </tr> </table>	No (1) <i>[skip to question 69]</i>	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)	Don't know, or don't want to discuss (5) <i>[skip to question 69]</i>							
No (1) <i>[skip to question 69]</i>	Yes, a little (2)	Yes, a moderate amount (3)	Yes, a lot (4)											
Don't know, or don't want to discuss (5) <i>[skip to question 69]</i>														
68		To whom is the majority of this debt owed?												
		<table border="1"> <tr> <td>Relatives (1)</td> <td>Friends (2)</td> <td>Village fund (3)</td> </tr> <tr> <td>Village government (4)</td> <td>Rural credit cooperative (5)</td> <td>Private money lender (6)</td> </tr> <tr> <td>Microfinance institution (7)</td> <td>Government bank (8)</td> <td>Private bank (9)</td> </tr> <tr> <td>Joint village & bank fund (10)</td> <td>Joint development project & bank fund (11)</td> <td>Other, specify: (12)</td> </tr> </table>	Relatives (1)	Friends (2)	Village fund (3)	Village government (4)	Rural credit cooperative (5)	Private money lender (6)	Microfinance institution (7)	Government bank (8)	Private bank (9)	Joint village & bank fund (10)	Joint development project & bank fund (11)	Other, specify: (12)
		Relatives (1)	Friends (2)	Village fund (3)										
		Village government (4)	Rural credit cooperative (5)	Private money lender (6)										
		Microfinance institution (7)	Government bank (8)	Private bank (9)										
Joint village & bank fund (10)	Joint development project & bank fund (11)	Other, specify: (12)												

For Q66

Answer code	Value (1-10)
1	2
2	3
3	6.5
4	10
5	4

For Q67

Answer code	Value (1-10)
1	10
2	6
3	5.5
4	4
5	MD

For Q68

Answer code	Value (1-10)
1	7.5
2	6
3	6
4	5
5	7.5
6	2.5
7	8
8	9
9	10
10	9
11	7
12	MD

Aggregation for subcomponent 8.2 (if household has debt)

66	40
67	30
68	30
Total	100%

Aggregation for subcomponent 8.2 – case 1 (if household has no debt)

66	57
67	43
Total	100%

8.3 Fixed Assets & Remittances – 28% of Non-Farm Assets component

This subcomponent assesses the household's likely wealth.

2	During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months?
	Female adults <input type="text"/> Male adults <input type="text"/> Don't know (-1) <input type="text"/>
3	During the last 12 months, how many adults lived and worked outside your home for 3 or more months?
	Adults <input type="text"/>
18	<i>[Information to be collected by enumerator while in the household (ask only if unable to determine answer visually)]</i> What is the primary construction material of the housing unit's main roof?
	Roofing shingles (1) <input type="text"/> Ceramic tiles (2) <input type="text"/> Synthetic roofing (3) <input type="text"/> Metal sheeting (4) <input type="text"/>
	Cement or concrete (5) <input type="text"/> Thin wood (6) <input type="text"/> Thick wood (7) <input type="text"/> Bamboo (8) <input type="text"/>
	Thick plastic (9) <input type="text"/> Thin plastic or fabric (10) <input type="text"/> Straw or reeds (11) <input type="text"/> Other, specify: (12) <input type="text"/>
71	Does your household have a television? <i>[If none write '0']</i>
	Number of televisions <input type="text"/>

For Q2 & Q3

First, the total number of adults is calculated, adding male and female adults in Q2 together, then the percentage of adults usually living/working outside the home is calculated using the figure from Q2. This is the remittance potential.

Percentage of adults outside the home/ remittance potential	Value (1-10)
101% or more ^a	8
51-100%	9
41-50%	10
31-40%	6
11-30%	5
1-10%	3
none	2
Don't know (-1)	MD

^a In rare instances there will be households where the actual home is unoccupied most of the year because the adults are all working elsewhere. This also applies to rare instances in which all household members are working outside the home (meaning there are, technically, zero adults living in the household).

For Q18

Answer code	Value (1-10)
1	10
2	8
3	8
4	7.5
5	9
6	4
7	6
8	3.5
9	4.5
10	2
11	1
12	MD

For Q71

No. of TVs	Value (1-10)
0	5
1	8
2 or more	10

Aggregation for subcomponent 8.3

2&3	40
18	40
71	20
Total	100%

9. Exposure & Resilience to Shocks

This component measures the household's exposure to natural and socio-economic shocks and its ability to cope and recover from such shocks.

9.1 Degree of Exposure – 33% of Exposure & Resilience to Shocks component

This subcomponent assesses the severity and likelihood of exposure the household faces from natural and/or socio-economic shocks/hazards.

52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) <i>[Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)]</i>			
53	For these events, how damaging would each be for your household? <i>['Likely severity']</i>			
54	For these events, how likely is it that the event will occur in the next 12 months? <i>['Likely frequency']</i>			
	Don't know (-1) <i>[skip to question 59]</i>		Not very worried about any negative events (-2) <i>[skip to question 59]</i>	
	Likely severity (53) =	Low-minor (1)	Medium-moderate (2)	High-major (3)
	Likely frequency (54) =	Unlikely (1)	Likely (2)	Very likely (3)
1 st	52.1)	write in	53.1) Likely severity=	54.1) Likely frequency=
2 nd	52.2)	write in	53.2) Likely severity=	54.2) Likely frequency=
3 rd	52.3)	write in	53.3) Likely severity=	54.3) Likely frequency=

For Q52.1

Answer code	Value (1-10)
-1	MD
-2	10

For Q53

Answer code	Value (1-10)
1	10
2	5
3	1

For Q54

Answer code	Value (1-10)
1	10
2	5
3	1

Aggregation for subcomponent 9.1 – option 1

53.1	25
54.1	25
53.2	25
54.2	25
Total	100%

Note: When calculating the values for subcomponent 9.1, only use the values for the first two events listed (that is, whether there are two or three events listed, only use the first two values). If there are other events listed by the household, these should be analysed and presented in any MPAT reports alongside the indicators for subcomponent 9.1 (the reason for this is that, in many areas, respondents usually provide two events they are concerned about, but there is variability with respect to whether households provide two or three). If only one event is listed, then use the aggregation **case 1** shown below.

Aggregation for subcomponent 9.1 – case 1 (if data for one event only)

53.1	50
54.1	50
Total	100%

Aggregation for subcomponent 9.1 – option 2 (if Q52.1 answer choice -1 or -2)

52.1	100
53	0
54	0
Total	100%

9.2 Coping Ability – 34% of Exposure & Resilience to Shocks component

This subcomponent assesses the household's ability to cope with natural and/or socio-economic shocks/hazards.

(Valuations for the items listed in the table below will likely not apply perfectly to all situations. Users are encouraged to check the valuations and determine their applicability.)

55	If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, what are the 3 main ways your household would likely react (cope)?			
	Don't know (-1)	Primary strategy	Secondary strategy	Tertiary strategy

1. Seek off-farm work	10. Children help more than usual with household work	19. Sell stored grain	28. Postpone payment of debts
2. Work more hours or take on other jobs	11. Ask friends to help with farm labour or business	20. Sell livestock	29. Borrow money from relatives
3. Start a business	12. Ask family to help with farm labour or business	21. Use savings or sell jewellery	30. Borrow money from friends
4. Reduce health-care spending	13. Rely on local government	22. Sell durable goods	31. Borrow money from cooperative or village fund (community source)
5. Reduce alcohol consumption	14. Rely on national government	23. Sell farmland	32. Borrow money from bank or other financial service provider
6. Reduce meat consumption	15. Rely on aid organizations	24. Sell business	33. Borrow money from private lender
7. Reduce fuel consumption	16. Rely on group insurance	25. Sell/leave home (live with relatives in area)	34. Send children to work outside the household
8. Plant fewer crops next growing season	17. Rely on private insurance	26. Sell/leave home (move to another area)	35. Take children out of school so they can work
9. Lease out farmland	18. Seek technical assistance	27. Seek medical treatment	36. Beg for money/food
37. Other, specify:			

For Q55

Answer code	Value (1-10)
1	8.5
2	8
3	9.5
4	3
5	9
6	7
7	5
8	4.5
9	4
10	4
11	7.5
12	8
13	7.5
14	6.5
15	6.5
16	8
17	10
18	8
19	4.5
20	4.5

For Q55 continued

Answer code	Value (1-10)
21	6
22	3.5
23	1.5
24	2
25	2
26	3.5
27	MD ^a
28	6
29	8
30	7
31	7
32	7
33	3
34	3
35	1
36	1.5
37	MD
(-1)	MD

^a Note: This is intentionally scored as MD (as determined by MPAT contributors during MPAT's development).

Aggregation for subcomponent 9.2 (if data for all three coping strategies)

55.1 Primary strategy	40
55.2 Secondary strategy	35
55.3 Tertiary strategy	25
Total	100%

Aggregation for subcomponent 9.2 – case 1 (if data for only primary and secondary strategies)

55.1 Primary strategy	53
55.2 Secondary strategy	47
55.3 Tertiary strategy	0
Total	100%

Aggregation for subcomponent 9.2 – case 2 (if data for only primary strategy)

55.1 Primary strategy	100
55.2 Secondary strategy	0
55.3 Tertiary strategy	0
Total	100%

9.3 Recovery Ability – 33% of Exposure & Resilience to Shocks component

This subcomponent assesses the household's ability to recover from natural and/or socio-economic shocks/hazards.

56	<p>If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, how long do you think it would take for your household to return to a satisfactory situation? [Record answer in months (for example, 2 years = 24 months)]</p> <p>Don't know (-1) Less than 1 month (-2) Months= <input type="text"/> Our household could not recover (-3)</p>												
57	<p>If in an extreme disaster (of any sort) your household's home was completely destroyed, but your family members were not injured, how long would it take for your household to rebuild your home? [Record answer in months (for example, 2 years = 24 months)]</p> <p>Don't know (-1) We would move (-2) Months= <input type="text"/> Our household could not rebuild (-3)</p>												
58	<p>If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, who do you think would be most likely to assist your household?</p> <table border="1"> <tr> <td>No one (1)</td> <td>Family/relatives (2)</td> <td>Friends (3)</td> <td>Insurance company (4)</td> </tr> <tr> <td>Financial institution (5)</td> <td>Local government (6)</td> <td>National government (7)</td> <td></td> </tr> <tr> <td>Government (general) (8)</td> <td>Aid organizations (9)</td> <td>Don't know (10)</td> <td>Other, specify: (11)</td> </tr> </table>	No one (1)	Family/relatives (2)	Friends (3)	Insurance company (4)	Financial institution (5)	Local government (6)	National government (7)		Government (general) (8)	Aid organizations (9)	Don't know (10)	Other, specify: (11)
No one (1)	Family/relatives (2)	Friends (3)	Insurance company (4)										
Financial institution (5)	Local government (6)	National government (7)											
Government (general) (8)	Aid organizations (9)	Don't know (10)	Other, specify: (11)										

For Q56

Answer code	Value (1-10)
-1	MD
-2	10
-3	1
Unit (months) interval	Value (1-10)
1-3	8
4-6	7
7-12	6
13-24	4
25-48	2.5
48+	1

For Q57

Answer code	Value (1-10)
-1	MD
-2	6.5
-3	1
Unit (months) interval	Value (1-10)
1-3	10
4-6	9
7-12	7.5
13-24	6.5
25-48	4.5
48+	1

For Q58

Answer code	Value (1-10)
1	1
2	7
3	5
4	10
5	8
6	9
7	9
8	9
9	5.5
10	4
11	MD

Aggregation for subcomponent 9.3

56	45
57	35
58	20
Total	100%

10. Gender & Social Equality

This component measures the equality of access to food, education and health care for female and male children and adults, as well as the degree of social equality in the village/area.

10.1 Access to Education – 31% of Gender & Social Equality component

This subcomponent assesses the equality of children's access to education.

7		What is the highest level of schooling the female children (0 to 14) in your household will likely complete?	1. No formal education 2. Primary school (age 5 or 6 until age 11 or 12) 3. Junior school (age 11 or 12 until age 14 or 15) 4. High school (age 14 or 15 until age 18 or 19) 5. Technical or vocational school (post junior school or high school, usually 2 years) 6. College or university (post high school, 3 to 5 years) 7. Advanced degree (Master's, MBA, PhD, etc.)
		No female children (-1) Don't know (-2) Highest likely level = <input type="text"/>	
8		What is the highest level of schooling the male children (0 to 14) in your household will likely complete?	
		No male children (-1) Don't know (-2) Highest likely level = <input type="text"/>	

For Q7

Answer code	Value (1-10)
1	1
2	3
3	5
4	7
5	9
6	10
7	10
(-1)	N/A
(-2)	MD

For Q8

Answer code	Value (1-10)
1	1
2	3
3	5
4	7
5	9
6	10
7	10
(-1)	N/A
(-2)	MD

Aggregation for subcomponent 10.1

7	60
8	40
Total	100%

10.2 Access to Health Care – 36% of Gender & Social Equality component

This subcomponent assesses the equality of access to health care for women and men.

15		For the majority of the households in your village/area, do you think there is a better chance for women or men to receive health care when needed?			
		Women (1)	Men (2)	About the same (3)	Don't know (4)
16		Are the health-care centres in your village/area (within 2 hours distance from your home) usually able to provide women with adequate health care if they seek it?			
		There are no health-care centres in our village/area (1)		No (2)	Rarely (3)
		Sometimes (4)	Often (5)	Always (6)	Yes, but women prefer not to go (for whatever reason) (7)
				Don't know (8)	

For Q15

Answer code	Value (1-10)
1	8
2	3.5
3	10
4	5

For Q16

Answer code	Value (1-10)
1	MD
2	1
3	2
4	4
5	7
6	10
7	7
8	MD

Aggregation for subcomponent 10.2

15	50
16	50
Total	100%

10.3 Social Equality – 33% of Gender & Social Equality component

This subcomponent assesses the degree of social equality in the village/area and how/if it had changed.

72		Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?		
		No (1) <i>[skip question 73]</i>	Yes, a few households (2)	Yes, less than half the households (3)
		Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)
73		In the last 2 years, how has this situation of inequality changed?		
		Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
		Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
		No significant change (7)	Don't know (8)	Other, specify: (9)

v12 and v22		<i>[Tell respondent that the next 2 questions are not about education/health care, but we want their general opinion about the community]</i>		
		Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group?		
		No (1) <i>[If 'No', do not ask v13/23]</i>	Yes, a few households (2)	Yes, less than half the households (3)
v13 and v23		Yes, about half the households (4)	Yes, more than half the households (5)	Don't know (6)
		In the last 2 years, how has this situation of inequality changed?		
		Improved slightly (1)	Improved moderately (2)	Improved a lot (3)
		Worsened slightly (4)	Worsened moderately (5)	Worsened a lot (6)
		No significant change (7)	Don't know (8)	Other, specify: (9)

Note: As a reminder to the reader, these two questions are intentionally asked three times: to Household Survey and Village Survey respondents (health-care staff and teachers). This is done in order to better triangulate sentiment on these often-sensitive questions.

For Q72

Answer code	Value (1-10)
1	10
2	7.5
3	5.5
4	3
5	1
6	MD

For Q73

Answer code	Value (1-10)
1	6
2	7.5
3	10
4	4
5	3
6	1
7	Use the value from Q72
8	MD
9	MD

For v12 & v22

Answer code	Value (1-10)
1	10
2	7
3	5
4	2.5
5	1
6	MD

For v13 & v23

Answer code	Value (1-10)
1	5.5
2	7
3	10
4	3.5
5	2
6	1
7	Use the value from v12 or v22
8	MD
9	MD

Aggregation for subcomponent 10.3

72	45
73	20
v12	10
v13	7.5
v22	10
v23	7.5
Total	100%

Aggregation for subcomponent 10.3 – case 1 (if answer 'No' to Q72)^a

72	65
73	0
v12	10
v13	7.5
v22	10
v23	7.5
Total	100%

Aggregation for subcomponent 10.3 – case 2 (if answer 'No' to v12 and v22)^a

72	45
73	20
v12	17.5
v13	0
v22	17.5
v23	0
Total	100%

^a For this subcomponent, there are a number of other possible weighting options – for example, if the answers to Q72, v12 and v22 are all 'No' or are other combinations. The logic of how these different weightings should be calculated is clear from the valuations provided above and the introductory note on weightings ratios provided at the beginning of this annex. The MPAT Excel Spreadsheet is programmed to accommodate all possible combinations, but only the most common are provided above for the sake of clarity.

Subcomponent aggregation weights for calculating component scores

As described in Section 10.2, these subcomponent values are aggregated using a weighted geometric average (see equation 2) to calculate the component values, using the weights listed below.⁷

Subcomponent	Weight		
Sub1.1	43%		
Sub1.2	32%		
Sub1.3	25%		
Sub2.1	29%		
Sub2.2	38%		
Sub2.3	33%		
Sub3.1	38%		
Sub3.2	34%		
Sub3.3	28%		
Sub4.1	38%		
Sub4.2	26%		
Sub4.3	36%		
Sub5.1	38%		
Sub5.2	33%		
Sub5.3	29%		
Sub6.1	31%		
Sub6.2	33%		
Sub6.3	36%	If only 7.3 or 7.4:	
Sub7.1	36%	Sub7.1	39%
Sub7.2	24%	Sub7.2	26%
Sub7.3	20%	Sub7.3 or 7.4	35%
Sub7.4	20%		
Sub8.1	39%		
Sub8.2	33%		
Sub8.3	28%		
Sub9.1	33%		
Sub9.2	34%		
Sub9.3	33%		
Sub10.1	31%		
Sub10.2	36%		
Sub10.3	33%		

7/ Note that this is the expert weighting scheme arrived at in the course of MPAT's 2008-2009 development (Cohen 2009a), with some minor additional changes made in 2013. These data were originally presented in the 2009 beta version of this User's Guide (Cohen 2009b). The interested reader may also consult Cohen and Saisana (2013).

Special cases – aggregating components with missing data, ‘unused’ survey items and skip logic

Missing data and component aggregation at the household level

As a general rule, for any given household, if two of the three subcomponent scores are available (or possibly three of the four in the case of component 7), then they should be aggregated to calculate the component score (using a geometric average as described earlier). In these cases, the weightings used should be proportional to the weights listed in Annex 12 (this is the same approach used for aggregating survey questions into subcomponents in Section 10.3).

For example, the component aggregation weights for component 1 are:

Sub1.1	43%
Sub1.2	32%
Sub1.3	25%

In the event that, for a given household, there were data only for subcomponents 1.1 and 1.2, then proportional weights would be used ($43/75 = 57$ and $32/75 = 43$), as follows:

Sub1.1	57%
Sub1.2	43%
Sub1.3	0%

In the event that data for two subcomponents are missing, then the component score should not be calculated and should be listed as missing data.

Missing data and component aggregation at the village level

At the village level, the MPAT subcomponent and component scores for each household in the village are averaged together (using a simple arithmetic average) to calculate the average MPAT subcomponent and component scores for the village.

In the event that more than 20 per cent of the results for a given subcomponent or component are missing (i.e. across the households in the village), then they should not be calculated and the resulting subcomponent or component score should be marked as missing data.

Explanation of survey items not used for MPAT indicator calculations

The survey items below are not directly factored into MPAT's calculations. These questions are asked for data verification/triangulation and/or to ensure that the same sources of data are not used more than once. Some of these questions are also asked in order to collect important demographic information used for poverty alleviation projects and/or research, or to better understand the sources of the survey data and the potential for the introduction of bias (e.g. if 100 per cent of the survey respondents were male).

These survey items are presented below, with brief descriptions of their usefulness (i.e. aside from the MPAT indicators).

Household ethnic group (optional):	Household type (optional):	Household code:	Consent: _____
Respondent's age: _____ Gender: M(1) F(2)	Head of household's age: _____ Gender: M(1) F(2) M&F(3)		
Head of household's marital status: married(1) single(2) divorced(3) widowed(4)			

These data give the users an understanding of where the survey data are coming from and the characteristics of the people making the most important decisions in each household.

Note that for 'Household ethnic group', codes should be created based on the minority or religious or ethnic groups potentially of interest: (e.g. 1 = Muslim, 2 = Hindu; or 1 = Kikuyu, 2 = Luo, 3 = Masai). In cases where there are other such factors of note to MPAT users, the 'household type' box may also be used in that fashion.

4	During the last 12 months, how many children (age 14 and younger) lived and slept in your home for 9 or more months?
	Female <5 <input type="text"/> Male <5 <input type="text"/> Female 5-14 <input type="text"/> Male 5-14 <input type="text"/>
	Household has no children (-1) <i>[skip to question 9]</i>

For Q4: This is useful demographic information to better understand household composition.

52	Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) <i>[Enumerator to write down up to 3 events in the spaces provided, from most worried about (52.1) to less worried about (52.3)]</i>
----	---

For Q52: Enumerators are asked to write in the 'possible negative event(s)'. Earlier versions of MPAT attempted to assign values to a list of such events, but the importance of context made these valuations only nominally useful in most situations (e.g. should a 'flood' be assigned a value of 1 or 3 or 5? or an 'earthquake' or 'local conflict'?). As such, Q52 is now recorded for the sake of the questions that follow it and to allow users to see which events, specifically, respondents are most concerned with.

v1	What are the approximate population and number of households in your village/area?
	Population <input type="text"/> Number of households <input type="text"/> Don't know (-1) <input type="text"/>

For v1: The v1 population figure is used with the number of full-time and part-time health-care staff in order to calculate an indicator based on health-care staff per capita. The number of households is not used in MPAT's indicators, but is collected so that project staff can double-check their household statistics for villages, and in order to see what percentage of the households in a given village were sampled through MPAT (this information should be reported in any MPAT reports/analysis).

v2	Of all the negative events , natural or socio-economic, that occurred in the region over the last 5 years , which were the most damaging to people in your area (as far as negative impacts on their households, livelihoods and/or agriculture/livestock)? <i>Record pertinent details about each negative event (for up to 5 events), such as when it occurred, its duration, the impact on households and any recovery efforts.</i>
----	---

For v2: This information is used in part to triangulate the data captured in Q52 (to see to what degree the occurrence of past village-level shocks influence respondent's concerns about future shocks).

v3	How many schools (for students age 5 to 14, public and private) are there in your village/area? Schools <input type="text"/>
v4	What are their names? <i>[fill in table below]</i>

For v3 and v4: This information is used to understand if data from the same school(s) are used more than once (as in cases where multiple villages use the same school(s)). This is asking for information from both public and private schools.

v14	How many health-care centres (public & private) are there within approximately 5 km of your village/area's centre? Health-care centres <input type="text"/>
v15	What are their names? <i>[fill in table below]</i>

For v14 and v15: This information is used to understand if data from the same clinic(s) are used more than once (as in cases where multiple villages use the same clinic(s)).

v16	How many patients can be treated (attended to) in 1 day (maximum capacity) at each centre?
------------	--

For v16: This information is deemed potentially useful to project staff, but is not necessarily a good indicator of the quality or availability of health care. The only instance in which these data are used is when a village has two or more health centres. In this case, as noted in Annex XII, this 'max daily capacity' is used as a weight to average the v17 responses for the village.

Notes on survey skip logic and the impact on subcomponent calculations

For many of the MPAT Household Survey questions, skip logic is used when certain questions are not appropriate or applicable for a given household. Table 8 describes all places where skip logic is used in the MPAT Household and Village Surveys. For each instance, the column on the left provides the question number, the answer code that triggers the skip and the question skipped to. For example, the first instance is written as follows:

'4, -1, skips to 9'

Which means that for Q4, if the answer code is '-1', then the enumerator will skip the following questions and resume the survey at Q9.

In accordance with the description of valuation and aggregation of survey questions presented above, the right-hand column describes how this will impact the subcomponent(s) for which the questions skipped are or are not used.

Using the same example above, in this instance subcomponent 6.3 will not be calculated (because there will be no data) and similarly subcomponent 10.1 will not be calculated. For those instances where skipped questions mean that alternative weighting options are used, the options described in the table correspond to the subcomponent weighting options described in Annex XII.

Table 8. Implications of survey item skip logic on subcomponent calculation

Survey item	Implications for subcomponents
Household Survey	
4, -1, skips to 9	6.3 not calculated and 10.1 also not calculated
5, (a bit complicated) if 4.3 and 4.4 are '0', skips to 7	6.3 not calculated
11, -2, skips to 14	3.2 Case-1 weights used
23, 1, skips to 25	4.1 Case-1 weights used
39, 3, skips to 52	7.1 Case-1 weights used
39, 4, skips to 52	7.1 Case-1 weights used
40, -2, skips to 46	7.1 won't be calculated
46, 1, skips to 48	7.4 calculated if household has aquaculture (if neither livestock or aquaculture 7.4 not calculated)
48, 1, skips to 50	7.4 calculated if household has livestock (if neither livestock or aquaculture 7.4 not calculated)
52, -1, skips to 59	9.1 not calculated
52, -2, skips to 59	9.1 Case-2 weights used
67, 1, skips to 69	8.2 Case-1 weights used
67, 5, skips to 69	8.2 won't be calculated
72, 1, skips over 73 (Household Survey ends)	10.3 Case-1 weights used
Village Survey	
v12, 1, skips over v13	10.3 Case-2 weights used (see User's Guide Section 10.3)
v22, 1, skips over v23	10.3 Case-2 weights used (see User's Guide Section 10.3)

Annex XIV MPAT training completion certificates



The Multidimensional Poverty Assessment Tool

Enumerator Training Completion Certificate

This certificate is awarded to certify that in Month, 20XX

Trainee Name Here

successfully completed the requirements of the MPAT Enumerator Training Program



Trainer Name Here

Trainer title & agency here

Annex XV

Number tabs (to be cut) for random sampling of households

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>
<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>	<u>39</u>	<u>40</u>	<u>41</u>	<u>42</u>	<u>43</u>	<u>44</u>	<u>45</u>
<u>46</u>	<u>47</u>	<u>48</u>	<u>49</u>	<u>50</u>	<u>51</u>	<u>52</u>	<u>53</u>	<u>54</u>	<u>55</u>	<u>56</u>	<u>57</u>	<u>58</u>	<u>59</u>	<u>60</u>
<u>61</u>	<u>62</u>	<u>63</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>67</u>	<u>68</u>	<u>69</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>	<u>74</u>	<u>75</u>
<u>76</u>	<u>77</u>	<u>78</u>	<u>79</u>	<u>80</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>84</u>	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>	<u>89</u>	<u>90</u>
<u>91</u>	<u>92</u>	<u>93</u>	<u>94</u>	<u>95</u>	<u>96</u>	<u>97</u>	<u>98</u>	<u>99</u>	<u>100</u>	<u>101</u>	<u>102</u>	<u>103</u>	<u>104</u>	<u>105</u>
<u>106</u>	<u>107</u>	<u>108</u>	<u>109</u>	<u>110</u>	<u>111</u>	<u>112</u>	<u>113</u>	<u>114</u>	<u>115</u>	<u>116</u>	<u>117</u>	<u>118</u>	<u>119</u>	<u>120</u>
<u>121</u>	<u>122</u>	<u>123</u>	<u>124</u>	<u>125</u>	<u>126</u>	<u>127</u>	<u>128</u>	<u>129</u>	<u>130</u>	<u>131</u>	<u>132</u>	<u>133</u>	<u>134</u>	<u>135</u>
<u>136</u>	<u>137</u>	<u>138</u>	<u>139</u>	<u>140</u>	<u>141</u>	<u>142</u>	<u>143</u>	<u>144</u>	<u>145</u>	<u>146</u>	<u>147</u>	<u>148</u>	<u>149</u>	<u>150</u>
<u>151</u>	<u>152</u>	<u>153</u>	<u>154</u>	<u>155</u>	<u>156</u>	<u>157</u>	<u>158</u>	<u>159</u>	<u>160</u>	<u>161</u>	<u>162</u>	<u>163</u>	<u>164</u>	<u>165</u>
<u>166</u>	<u>167</u>	<u>168</u>	<u>169</u>	<u>170</u>	<u>171</u>	<u>172</u>	<u>173</u>	<u>174</u>	<u>175</u>	<u>176</u>	<u>177</u>	<u>178</u>	<u>179</u>	<u>180</u>
<u>181</u>	<u>182</u>	<u>183</u>	<u>184</u>	<u>185</u>	<u>186</u>	<u>187</u>	<u>188</u>	<u>189</u>	<u>190</u>	<u>191</u>	<u>192</u>	<u>193</u>	<u>194</u>	<u>195</u>
<u>196</u>	<u>197</u>	<u>198</u>	<u>199</u>	<u>200</u>	<u>201</u>	<u>202</u>	<u>203</u>	<u>204</u>	<u>205</u>	<u>206</u>	<u>207</u>	<u>208</u>	<u>209</u>	<u>210</u>
<u>211</u>	<u>212</u>	<u>213</u>	<u>214</u>	<u>215</u>	<u>216</u>	<u>217</u>	<u>218</u>	<u>219</u>	<u>220</u>	<u>221</u>	<u>222</u>	<u>223</u>	<u>224</u>	<u>225</u>
<u>226</u>	<u>227</u>	<u>228</u>	<u>229</u>	<u>230</u>	<u>231</u>	<u>232</u>	<u>233</u>	<u>234</u>	<u>235</u>	<u>236</u>	<u>237</u>	<u>238</u>	<u>239</u>	<u>240</u>
<u>241</u>	<u>242</u>	<u>243</u>	<u>244</u>	<u>245</u>	<u>246</u>	<u>247</u>	<u>248</u>	<u>249</u>	<u>250</u>	<u>251</u>	<u>252</u>	<u>253</u>	<u>254</u>	<u>255</u>
<u>256</u>	<u>257</u>	<u>258</u>	<u>259</u>	<u>260</u>	<u>261</u>	<u>262</u>	<u>263</u>	<u>264</u>	<u>265</u>	<u>266</u>	<u>267</u>	<u>268</u>	<u>269</u>	<u>270</u>
<u>271</u>	<u>272</u>	<u>273</u>	<u>274</u>	<u>275</u>	<u>276</u>	<u>277</u>	<u>278</u>	<u>279</u>	<u>280</u>	<u>281</u>	<u>282</u>	<u>283</u>	<u>284</u>	<u>285</u>
<u>286</u>	<u>287</u>	<u>288</u>	<u>289</u>	<u>290</u>	<u>291</u>	<u>292</u>	<u>293</u>	<u>294</u>	<u>295</u>	<u>296</u>	<u>297</u>	<u>298</u>	<u>299</u>	<u>300</u>

<u>301</u>	<u>302</u>	<u>303</u>	<u>304</u>	<u>305</u>	<u>306</u>	<u>307</u>	<u>308</u>	<u>309</u>	<u>310</u>	<u>311</u>	<u>312</u>	<u>313</u>	<u>314</u>	<u>315</u>
<u>316</u>	<u>317</u>	<u>318</u>	<u>319</u>	<u>320</u>	<u>321</u>	<u>322</u>	<u>323</u>	<u>324</u>	<u>325</u>	<u>326</u>	<u>327</u>	<u>328</u>	<u>329</u>	<u>330</u>
<u>331</u>	<u>332</u>	<u>333</u>	<u>334</u>	<u>335</u>	<u>336</u>	<u>337</u>	<u>338</u>	<u>339</u>	<u>340</u>	<u>341</u>	<u>342</u>	<u>343</u>	<u>344</u>	<u>345</u>
<u>346</u>	<u>347</u>	<u>348</u>	<u>349</u>	<u>350</u>	<u>351</u>	<u>352</u>	<u>353</u>	<u>354</u>	<u>355</u>	<u>356</u>	<u>357</u>	<u>358</u>	<u>359</u>	<u>360</u>
<u>361</u>	<u>362</u>	<u>363</u>	<u>364</u>	<u>365</u>	<u>366</u>	<u>367</u>	<u>368</u>	<u>369</u>	<u>370</u>	<u>371</u>	<u>372</u>	<u>373</u>	<u>374</u>	<u>375</u>
<u>376</u>	<u>377</u>	<u>378</u>	<u>379</u>	<u>380</u>	<u>381</u>	<u>382</u>	<u>383</u>	<u>384</u>	<u>385</u>	<u>386</u>	<u>387</u>	<u>388</u>	<u>389</u>	<u>390</u>
<u>391</u>	<u>392</u>	<u>393</u>	<u>394</u>	<u>395</u>	<u>396</u>	<u>397</u>	<u>398</u>	<u>399</u>	<u>400</u>	<u>401</u>	<u>402</u>	<u>403</u>	<u>404</u>	<u>405</u>
<u>406</u>	<u>407</u>	<u>408</u>	<u>409</u>	<u>410</u>	<u>411</u>	<u>412</u>	<u>413</u>	<u>414</u>	<u>415</u>	<u>416</u>	<u>417</u>	<u>418</u>	<u>419</u>	<u>420</u>
<u>421</u>	<u>422</u>	<u>423</u>	<u>424</u>	<u>425</u>	<u>426</u>	<u>427</u>	<u>428</u>	<u>429</u>	<u>430</u>	<u>431</u>	<u>432</u>	<u>433</u>	<u>434</u>	<u>435</u>
<u>436</u>	<u>437</u>	<u>438</u>	<u>439</u>	<u>440</u>	<u>441</u>	<u>442</u>	<u>443</u>	<u>444</u>	<u>445</u>	<u>446</u>	<u>447</u>	<u>448</u>	<u>449</u>	<u>450</u>
<u>451</u>	<u>452</u>	<u>453</u>	<u>454</u>	<u>455</u>	<u>456</u>	<u>457</u>	<u>458</u>	<u>459</u>	<u>460</u>	<u>461</u>	<u>462</u>	<u>463</u>	<u>464</u>	<u>465</u>
<u>466</u>	<u>467</u>	<u>468</u>	<u>469</u>	<u>470</u>	<u>471</u>	<u>472</u>	<u>473</u>	<u>474</u>	<u>475</u>	<u>476</u>	<u>477</u>	<u>478</u>	<u>479</u>	<u>480</u>
<u>481</u>	<u>482</u>	<u>483</u>	<u>484</u>	<u>485</u>	<u>486</u>	<u>487</u>	<u>488</u>	<u>489</u>	<u>490</u>	<u>491</u>	<u>492</u>	<u>493</u>	<u>494</u>	<u>495</u>
<u>496</u>	<u>497</u>	<u>498</u>	<u>499</u>	<u>500</u>	<u>501</u>	<u>502</u>	<u>503</u>	<u>504</u>	<u>505</u>	<u>506</u>	<u>507</u>	<u>508</u>	<u>509</u>	<u>510</u>
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<u>616</u>	<u>617</u>	<u>618</u>	<u>619</u>	<u>620</u>	<u>621</u>	<u>622</u>	<u>623</u>	<u>624</u>	<u>625</u>	<u>626</u>	<u>627</u>	<u>628</u>	<u>629</u>	<u>630</u>
<u>631</u>	<u>632</u>	<u>633</u>	<u>634</u>	<u>635</u>	<u>636</u>	<u>637</u>	<u>638</u>	<u>639</u>	<u>640</u>	<u>641</u>	<u>642</u>	<u>643</u>	<u>644</u>	<u>645</u>

1. Food & Nutrition Security

1.1 Consumption [43%]

59) During the last 12 months, did any member of your household eat fewer meals, or smaller portions, than usual because there was not enough food? [60%]
60) During the last 12 months, did any member of your household go to sleep at night hungry? [40%]

1.2 Access Stability [32%]

61) During the last 12 months, did your household experience a period of time longer than 2 weeks when there was not enough food? [55%]
62) During the last 12 months, did your household ever experience 1 full day with no food to eat? [45%]

1.3 Nutrition Quality [25%]

63) During the last 12 months, how often did the majority of your household eat the following foods?
Grains (cereals, bread, rice, pasta) [7.5%], Roots &/or tubers (potatoes, cassava, etc.) [7.5%], Vegetables/greens [20%], Fruits [12.5%], Dairy &/or eggs [20% or 25% or 0%], Meat &/or fish/seafood [12.5% or 0%], Nuts &/or legumes (and/or derivatives, tofu, etc.) [20% or 27.5% or 37.5%]

2. Domestic Water Supply

2.1 Quality [29%]

32) What is the **primary source** (meaning the source that water comes from immediately before being used) of the water your household uses for drinking and cooking inside the home? [45%]
34) Does your household treat water before drinking it (any treatment method: boiling, allowing to settle, filter, chemical treatment, etc.)? [35%]
38) Generally, what do you think the quality of your household's drinking water is (before any treatment)? [20%]

2.2 Availability [38%]

35) During the last 12 months, for how many months was your household's main source of water sufficient to meet your household's drinking and cooking needs? [70%]
36) How often do you worry there will not be enough water from your household's main water source to satisfy your household's drinking and cooking needs? [30%]

2.3 Access [33%]

33) Approximately how much time (in minutes) does it take your household to collect enough water for your household's drinking and cooking needs for a normal (average) day? [60%]
37) Can your household usually afford to pay the fees (direct payments only, not maintenance fees) for using water from your household's main water source? [40%]

3. Health & Health Care

3.1 Health Status [38%]

9) In the last 12 months, how often have members of your household had a non-serious illness (meaning they were sick, but not so sick they had to rest in bed a full day or more)? [30% or 40%]
10) In the last 12 months, how often have members of your household been seriously ill (meaning they were so ill that they stayed in bed, or lying down, for 2 or more days)? [45% or 60%]
v21) In the last 2 years, how has the overall health of the majority of the people in your village/area changed? [25% or 0%]

3.2 Access & Affordability [34%]

11) How much time does it take for members of your household to reach the nearest health centre that can diagnose simple illness, or treat simple injuries and prescribe basic medicines? [25% or 38.5%]
13) How much time does it take for members of your household to reach the nearest health centre that can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)? [35% or 0%]
14) Can your household afford professional treatment for serious illness or injury? [40% or 61.5%]

3.3 Health-Care Quality [28%]

12) How often does this health centre have enough medical supplies to provide adequate health care? [30%]
v1 & v18) What are the approximate population and number of households in your village/area?
-and-
How many full-time (work most days a week) and part-time (work 1 to 3 days a week) health-care staff work in this/these health centre(s)? [25%]
v17) How often does each centre usually have enough medical supplies to provide adequate health care? [15%]
v19) How many years has each staff person been working as a health-care professional (in total, at this health centre and elsewhere)? [15%]
v20) How many years of formal medical training has each staff person completed? [15%]

4. Sanitation & Hygiene

4.1 Toilet Facility [38%]

23) What type of toilet facility does your household usually use? [60% or 100%]
24) Over the last 12 months, how often was the toilet **usable** (meaning it was working properly or was available to use)? [40% or 0%]

4.2 Waste Management [26%]

25) What does your household usually do with food waste/remains (any parts not consumed by people in the household)? [35%]
26) What does your household usually do with non-food waste/garbage? [25%]
27) What does your household usually do with wastewater (for example, from bathing, cleaning, the toilet)? [40%]

4.3 Hygiene Practices [36%]

28) How many times a week do most members (the majority) of your household clean their teeth? [20%]
29) How often do the adults in your household clean their hands before eating a meal? [35%]
30) How often do the adults in your household clean their hands after defecating? [30%]
31) Do the adults in your household use soap (any kind of soap) when they clean their hands? [15%]

5. Housing, Clothing & Energy

5.1 Housing Structure Quality [38%]

17) What is the **primary** construction material of the housing unit's exterior walls? [70%]
19) Can your home withstand strong winds, severe rain, snow or hail without significant damage? [30%]

5.2 Clothing [33%]

69) How many of the people (adults and children) in your household usually have adequate footwear? [40%]
70) How many of the people (adults and children) in your household have sufficient clothing for severe weather (for example, very hot and sunny, very cold or very wet weather, depending on the area)? [60%]

5.3 Energy Sources [29%]

20) What is the **primary** source of light your home uses when it is dark? [30% or 43%]
21) What is the **primary** fuel source your household uses for cooking? [40% or 57%]
22) What is the **primary** fuel source your household uses for heat? [30% or 0%]

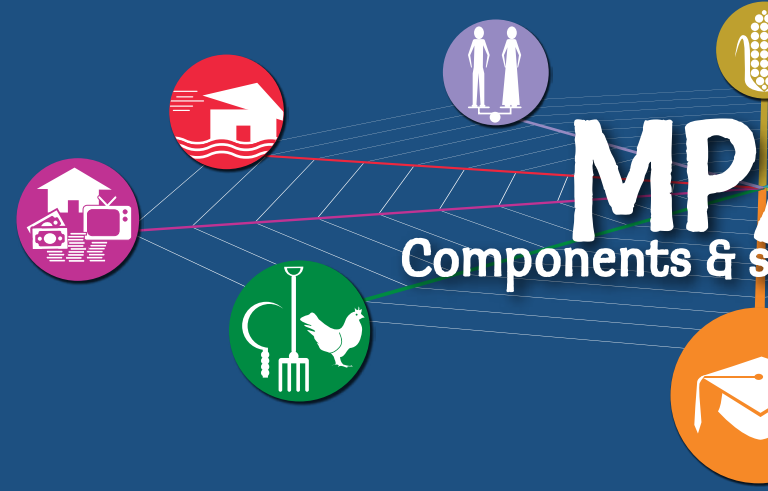
6. Education

6.1 Quality [31%]

v5 & v6) What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school?
-and- How many full-time (work almost every school day) and part-time (work roughly half the school days) teachers are there at each school? [40% or 62%]
v7) Are full-time teachers provided subsidized, or free, housing? If so, what is the quality of the housing? [25% or 38%]
v10) In the last 2 school years, how has the overall performance of the majority of the students changed? [35% or 0%]

6.2 Availability [33%]

v8) Do the teachers have adequate teaching supplies to teach effectively (for example: chalk, teacher's books, maps, posters)? [37.5%]
v9) Do the students have adequate school supplies to learn/study effectively (for example: notebooks, pencils, textbooks, chairs, uniforms [if required], desks)? [37.5%]
v11 & v5) How many students was the school(s) unable to accept due to limited places (or



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Subcomponents



sleeping space in the school dorms) and/or limited school supplies? –and– What is the total number of female and male students (age 5 to 14) that attend classes regularly (at least 4 days a week) at each school? [25%]

6.3 Access [36%]

- 5) During most of the year, how long does it take, in minutes, for the school-age children (age 5 to 14) in your household to go to school (one way, by any means: for example, walking, bicycle, scooter, bus)? [50%]
6) Can your household afford your children's school fees and school supplies? [50%]

7. Farm Assets

7.1 Land Tenure [36% or 39% or 60%]

- 39) Does your household have access to land for agriculture, orchards, livestock or aquaculture (meaning fish-farming)? [0% or 100%]
40) How much land does your household have for agriculture (for crops, grasses, trees, orchards, etc.)? [35% or 0%]
51) What kind of ownership of your land does your household have? [65% or 0%]

7.2 Land Quality [24% or 26% or 40%]

- 41) Is the majority of your household's land flat, gently sloping, steep or terraced? [50%]
42) What kind of soil covers the majority of your household's land? [50%]

7.3 Crop Inputs [20% or 35%]

- 43) During the last 2 years, was your household able to make, or buy, enough compost/manure or artificial fertilizer for each growing season? [25%]
44) During the last 2 years, was your household able to afford enough seed for each growing season? [25%]
45.1 & 45.2) Is there generally enough water for your household's crops during the dry season/rest of the year? [14% & 21% or 0% & 35%]
50) Does your household usually have enough people to work/manage your farm? (crops, orchards, forestry, livestock and/or aquaculture) [15%]

7.4 Livestock/Aquaculture Inputs [20% or 35%]

- 46.1 & 46.2) Is there generally enough water for your household's livestock during the dry season/rest of the year? [10% & 15% or 0% & 25% or 20% & 30% or 0% & 50% or 0% & 0%]
47) During the last 2 years, how often was your household able to grow, collect or buy enough fodder? [25% or 50% or 0%]
48.1 & 48.2) Is there generally enough water for your household's aquaculture during the dry season/rest of the year? [14% & 21% or 0% & 35% or 0% & 0% or 28% & 42% or 0% & 70%]
49) During the last 2 years, how often was your household able to make or buy enough fish feed? [15% or 0% or 30%]

Notes:

The numbers in front of questions are the survey question numbers, with a "v" indicating questions from the MPAT Village Survey, and all others being from the MPAT Household Survey.

After each subcomponent and survey question, its aggregation weight is presented in brackets. For some subcomponents, there are different options for aggregation due to the contextual factors of each household (if they do not eat meat for cultural or religious reasons, if heat is not needed in the region, if they gave a certain response to a survey question, etc.), and so in these cases different weighting options are provided in brackets.

For survey answer responses, response values (cardinalization), aggregations rules and other details, please consult Annex 12 of the 2014 MPAT User's Guide.

Fundamental Needs



Rural Assets, Exposure, Equality



8. Non-Farm Assets

8.1 Employment & Skills [39%]

- 64) During the last 12 months, has anyone in your household managed/run their own business (other than selling agricultural products)? [25%]
65) During the last 12 months, has anyone in your household provided others a skilled service (for example, equipment repair, tailoring, construction work) for money or barter? [50%]
1) Can the head of the household read a newspaper? [25%]

8.2 Financial Services [33%]

- 66) If your household wanted to borrow money from a bank or other financial service provider (not including friends or relatives), would your household be able to borrow money? [40% or 57%]
67) Is your household currently in debt? [30% or 43%]
68) To whom is the majority of this debt owed? [30% or 0%]

8.3 Fixed Assets & Remittances [28%]

- 2 & 3) During the last 12 months, how many adults (age 15 and older) lived and slept in your home for 9 or more months? –and– During the last 12 months, how many adults lived and worked outside your home for 3 or more months? [40%]
18) What is the primary construction material of the housing unit's main roof? [40%]
71) Does your household have a television? [20%]

9. Exposure & Resilience to Shocks

9.1 Degree of Exposure [33%]

- 52) Of all the possible negative events (natural or socio-economic) that could occur in the next 12 months, and that would have a bad or damaging impact on your household, which 3 are you most worried about? (as far as negative impacts on household members, livelihoods, agriculture, livestock, aquaculture ...) [0% or 0% or 100%]
53.1 & 53.2) For these events, how damaging would each be for your household? [25% & 25% or 50% & 0% or 0% & 0%]
54.1 & 54.2) For these events, how likely is it that the event will occur in the next 12 months? [25% & 25% or 50% & 0% or 0% & 0%]

9.2 Coping Ability [34%]

- 55.1 & 55.2 & 55.3) If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, what are the 3 main ways your household would likely react (cope)? [40% & 35% & 25% or 53% & 47% & 0% or 100% & 0% & 0%]

9.3 Recovery Ability [33%]

- 56) If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, how long do you think it would take for your household to return to a satisfactory situation? [45%]
57) If in an extreme disaster (of any sort) your household's home was completely destroyed, but your family members were not injured, how long would it take for your household to rebuild your home? [35%]
58) If the worst of the negative events you just mentioned [in question 52] were to occur in the next 12 months, who do you think would be most likely to assist your household? [20%]

10. Gender & Social Equality

10.1 Access to Education [31%]

- 7) What is the highest level of schooling the female children (0 to 14) in your household will likely complete? [60%]
8) What is the highest level of schooling the male children (0 to 14) in your household will likely complete? [40%]

10.2 Access to Health Care [36%]

- 15) For the majority of the households in your village/area, do you think there is a better chance for women or men to receive health care when needed? [50%]
16) Are the health-care centres in your village/area (within 2 hours distance from your home) usually able to provide women with adequate health care if they seek it? [50%]

10.3 Social Equality [33%]

- 72) Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group? [45% or 65% or 45%]
73) In the last 2 years, how has this situation of inequality changed? [20% or 0% or 20%]
v12 & v22) Do some households in your village/area have fewer economic or political opportunities than others because of their religion or ethnic/minority group? [10% & 10% or 10% & 10% or 17.5% & 17.5%]
v13 & v23) In the last 2 years, how has this situation of inequality changed? [7.5% & 7.5% or 7.5% & 7.5% or 0% & 0%]



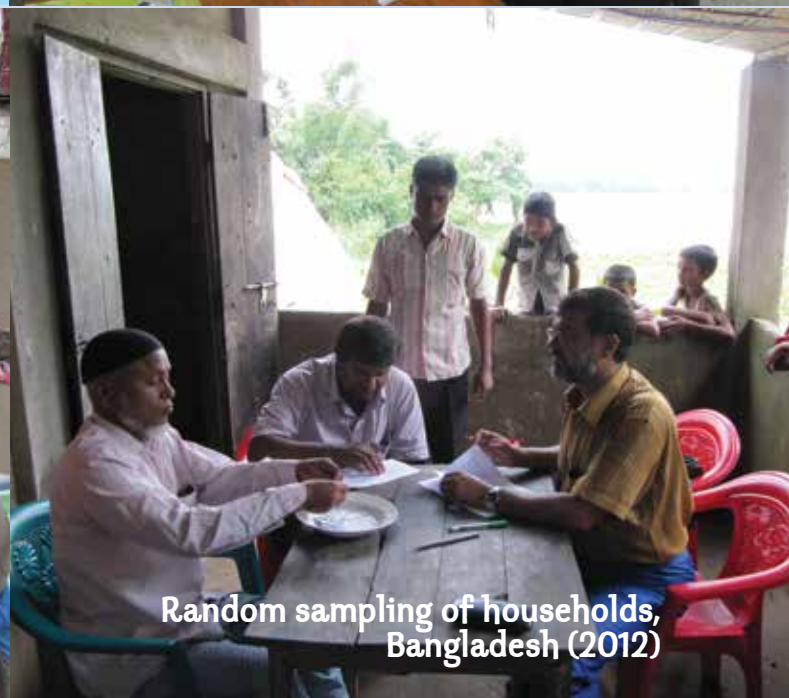
MPAT enumerator training
(role playing), Mozambique (2013)



Random sampling of
households, China (2013)



Administering MPAT Household
Survey, India (2011)



Random sampling of households,
Bangladesh (2012)



Participatory discussion of MPAT
results, India (2013)



Random sampling of
households, Kenya (2011)

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