

CARE CAMBODIA

Local Economic Leadership for Marginalised Rural Women

Gendered Market Analysis

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Abbreviation

FGD	Focused Group Discussion
IDI	In-depth Interview
KII	Key Informant Interview
LEL	Local Economic Leadership
MAFF	Ministry of Agriculture, Forestry and Fisheries
MFI	Micro Finance Institute
MoC	Ministry of Commerce
MRW	Marginalised Rural Women
NGO	Non-Governmental Organization
NTFP	Non Timber Forest Product
PDA	Provincial Department of Agriculture
PDC	Provincial Department of Commerce
PDWA	Provincial Department of Women's Affairs
SDK	Satrek Dekneam Kaksethan
VAHW	Village Animal Health Worker
VEW	Village Extension Worker

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Summary

The rationale for this research is derived from the belief in the potential of market and production improvements as a driver of development and as a vehicle to overcome poverty. However, it recognises the imbalances in markets, which, if not addressed, can create difficulties for poor small-scale producers and women in particular to benefit from the improvements in an equitable and sustainable manner. The main purpose of this study is to identify the various potential markets in two districts of Koh Kong province and to provide further analysis of the opportunities and the barriers to women's engagement in the commodity chain.

The primary data collection techniques included two focus group discussions (FGD) and key informant interviews (KII) with 12 respondents (National Government officials, sub-national government officials, district officials, local authorities and Satrei Dekneam Kaksethan [SDKs]), and two district stakeholder workshops.

Potential markets have been identified using two main criteria – criteria for a variable market and criteria for market that works well for women, participated by stakeholders including different women producer groups, local authorities, local government officials, traders, and NGO. The potential markets include: vegetable, chicken, pig and rice production.

Vegetable Value Chain

Vegetables in the two districts are mainly cultivated for local consumption and the surplus is then sold in the local market. The average area of cultivated land per household is less than 0.1 hectare. The vegetable value chain is short, involving input suppliers, farmers and retailers. Due to the limited vegetable production, 90 per cent of vegetables consumed in the studied areas are imported. Growing vegetables requires cooperative labour between women and men who divide the work in the production process. Men take charge in land preparation, watering and pesticide spraying, while women do the weeding, cultivating and harvesting.

The most challenging factors for vegetable production development for women include water shortage, ground water retention, poor soil fertility and labour shortages. Nonetheless, production is found to have potential in terms of high market demand, low cost production, the short cycle of production and potential for income.

Chicken Value Chain

In the two districts, backyard chicken production for meat is practiced by most farmers, especially by the women who own the production business. Its value chain involves input suppliers, collectors and wholesalers/retailers. The sale of chicken is irregular; farmers generally sell chicken during special occasions. This study found that small-scale chicken

producers already have strong leverage in price negotiations with traders and wholesalers. This is a result of the high demand for the local chicken (*monsrei*), and the shortage of supply. Farmers receive the highest profit margin per unit of all the value chain actors. Along the value chain, chicken farmers earn the highest profit margin per unit (about 12,000–14,000 riels per kg). This high profit margin is based on the situation whereby farmers use their own feed and breeding stock, which is the typical case, instead of purchasing new breeding stock and chicks for their flock. The major challenge hindering the chicken farmers, especially women, from seizing this opportunity is production risks (widespread incidence of disease).

Swine Value Chain

Pigs are being raised as small-scale production across almost all villages in the two districts. In these studied area, most of villagers in the two districts typically raise piglets for fattening and few number raise piglets for breeding stock. Small-scale pig production is considered a women's business, since women are the main labour force in pig production. Yet women do not possess the knowledge and skills needed to undertake farming and livestock raising. As a result most women only raise pigs in a traditional and ineffective way. The value chain for raising swine involves input suppliers, farmers, trader and retailers. The small-scale pig producers have only limited bargaining power with traders and trader Although there is high demand for pigs, there is significant competition from imported pigs from Vietnam and Thailand, leaving local producers vulnerable to price fluctuations.

Recommendations

Increase Productivity

1. Identifying the product with the greatest potential for scaling up among women's existing livelihood strategies.
2. Improve vaccination and medical treatment services for chicken and swine production.
3. Equip women producers with the technical skills to increase productivity through:
 - a. Continuing to improve technical knowledge related to agriculture of farmers through SDK and using successful farmers as role models to inspire other farmers;
 - b. Enabling collective learning and sharing within the group;
 - c. Field visits and using successful farmers in the areas as resources persons;
 - d. Strengthening the capacity of local animal health workers and extension workers;
 - e. Linking the women's group to the Provincial Department of Agriculture (PDA) in order to access support and capital provided through agricultural cooperatives.
4. Enable the savings group within the SDK group, so they can use the savings to invest in their production.

Market Linkages

1. Facilitate smallholders creating links firstly with the existing local market through enabling a business forum where smallholder and traders exchange market information.
2. Explore and expand the local market through existing collectors/traders or by linking farmers directly to wholesaler/retailers.
3. Initiate a producer group and collective market to link farmers' produce with the market.
4. Develop an umbrella marketing association to facilitate the producer group linking to a larger market. Equip them with the necessary skills – including management, marketing, negotiation, conflict resolution and financial literacy skills – to run the group smoothly.
5. In order to access high value or export markets, it is important to ensure that farmers' produce meets the quality demanded.

Part I: Introduction

1.1 Background

Cambodia has made rapid progress in its economic development, with poverty rates decreasing in recent years. But while Cambodia's economy has been growing, income inequality has increased and a significant proportion of the population remains in poverty, particularly in rural areas, where up to 90 per cent of Cambodia's poor live. Marginalised rural women (MRW) are amongst those at risk of being left behind and not benefiting from market-based economic change; at the same time, development is contributing to new vulnerabilities for rural women. Economic exclusion and vulnerability are linked to deeply rooted gendered attitudes. Women in Cambodia are subject to different expectations and opportunities than men. For example, many believe that men and women have different rights, with men having more rights in business, decision-making, social and sexual freedom and mobility. Where rural women have entered the cash economy, they largely take on work that is of lower value than that of men, and in roles often seen as an extension of 'women's work' in the home, again which is not considered as 'real' work.

The overall purpose of this study was to conduct a detailed gendered market analysis for the CARE Local Economic Leadership (LEL) project being implemented in Koh Kong Province. This included an analysis of the wider social cultural and economic context, followed by a selection of markets with the potential to increase women's empowerment and gender equality. A detailed analysis of the potential markets was done to identify the constraints and opportunities for women's participation. This market analysis will be a key resource for a range of stakeholders working to strengthen women's economic empowerment. The analysis applied a participatory approach and was conducted in consultation with key partners and stakeholders.

1.2. Objectives of Study

- To analyse the wider social, cultural and economic context in which the market interventions will take place, including the institutional, legislative, local structural and household environment.
- To select a number of locally appropriate market interventions that have the potential to increase women's empowerment and gender equality, and that are locally feasible and appropriate, low cost, and sustainable, and are well within the resource capacities of target groups to implement; also to identify potential traders of producers. This will be done through consultation with key stakeholders.
- To conduct a detailed analysis of the various value chain options, including identifying the constraints and opportunities for women to participate, different actors within the market chain, roles and division of labour, and access to and control over resources. This will be achieved through a participatory approach, engaging all key stakeholders including district fair workshops.

- To develop recommendations and market intervention strategies that: address policy barriers or support policy enablers; effectively and inclusively engage all actors; promote sustainability and women’s leadership.

Part 2: Research Methodology

2.1. Methodology

This was a qualitative research study conducted in two districts in Koh Kong province: Sre Ambel and Botum Sakor, using both primary and secondary data, as available, from various sources including participatory research approaches.

The primary data collection techniques included: (i) four focus group discussions (FGD), consisting of 28 participants, all of them female; and (ii) key informant interviews with 13 respondents, nine of them women (national government officials, sub-national government officials, district officials, local authorities and SDKs), two district stakeholder workshops attended by 52 participants, 35 of them female, from different farmer groups, traders, village chiefs, officials from district offices, extension workers, animal health workers and NGO workers (for details, please see annex).

A study of secondary data sources was done on pertinent materials when available. These largely consisted of printed and on-line materials from the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Commerce (MoC), the Ministry of Women’s Affairs, (MoWA) and the Trade Promotion Department of the government of Cambodia. Pertinent studies and documents written or produced by different agencies were also reviewed. The secondary data were reviewed to supplement, validate and help understand the raw data gathered from the fieldwork data gathering activities.

The documents used for review include:

- LEL Baseline Survey
- LEL Design Narrative
- Young Women in Business, Final Evaluation Report
- Annual Agricultural Statistics 2013
- Census of Agriculture in Cambodia 2013
- Koh Kong Economic Information
- Pig farming system in Southeast Asia – The Case of Cambodia
- Neary Ratanak IV – Four-Year Strategic Plan of MoWA
- Livestock Market in Cambodia

2.2. Analytical Framework

The research used a set of frameworks to guide analysis of the findings in order to arrive at certain conclusions and recommendations. Findings from both primary and secondary sources were subjected to the elements of this framework so that the raw information could be interpreted.

Gender Market Mapping involves a shift in thinking and work practices. It goes beyond a

value chain analysis and closely looks at gender and adaptation issues. The framework helps to identify and design effective and sustainable market-based livelihood programs. It is a systems approach. Three systems are analysed: market system, household system and farm system. Barriers and opportunities in the household and farm systems can play a key role in how or even whether poor small-scale farmers can become involved in the market system.

The market system involves not only the value chain actors or the supply chain that links a product to a processor. It also includes a complex set of organisations and relationships involving trading companies, government departments, producers, banks, extension services, households and so forth.

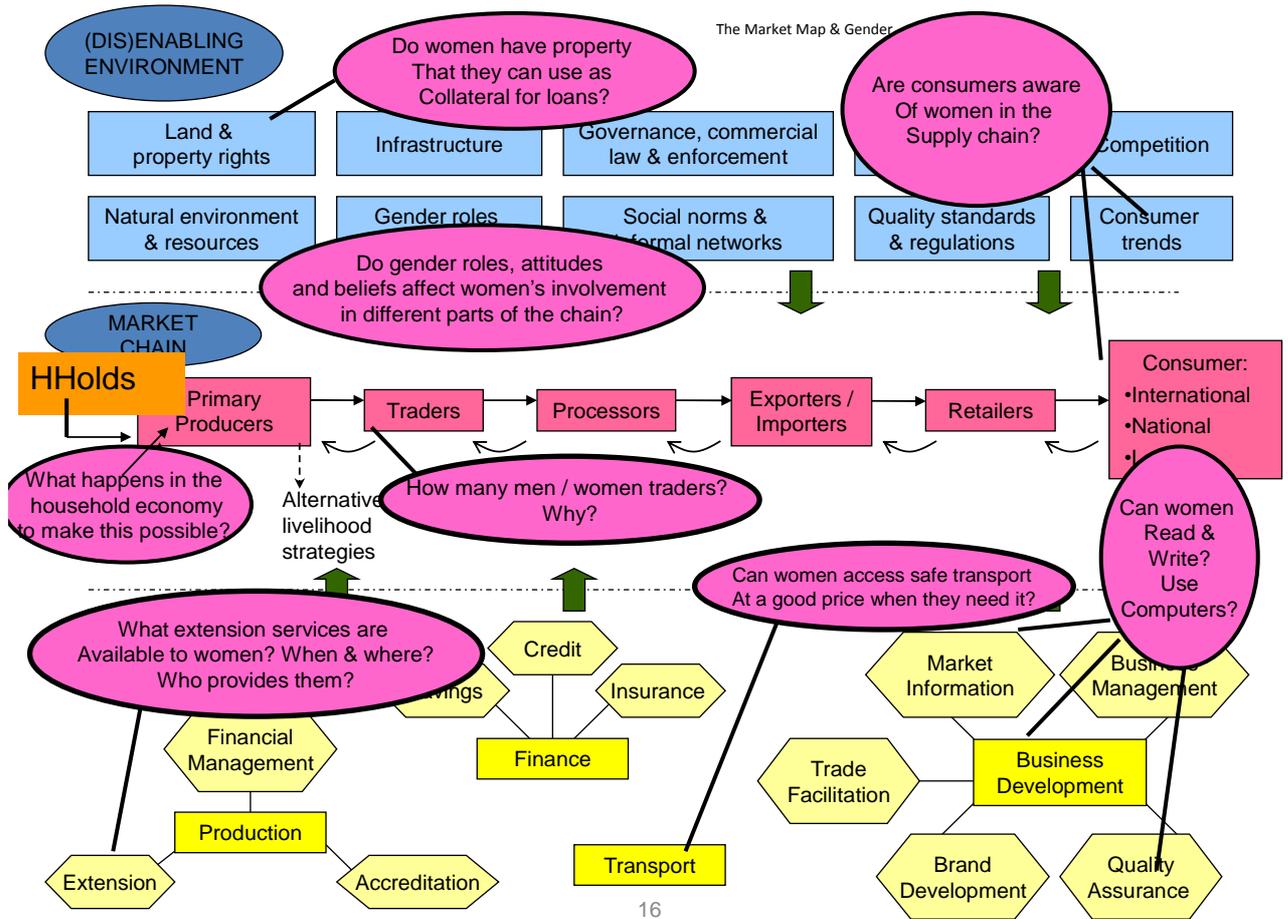
In this study, the complex system is organised into three key areas:

- **Enabling environment:** This comprises the existing institutions, rules and practices – which affect men and women differently – and which shape the way that a market works. For example, this can include things as diverse as the rules and practices around who can own land to the traditional gender roles that shape opportunities for women.
- **Value chain:** describes those involved in the production, processing and buying and selling of a product. This includes the input suppliers, producers, traders, wholesalers, processors and retailers.
- **Market services:** These are services that help support the production and trading process – for example banks, transporters, etc.

These three key areas of the market system are visualised into a gendered market map. The four main questions to think about when mapping out the market system are:

1. Where can we make the greatest positive impact for our target community? Is it by helping them to upgrade and increase the value added to their existing products and services?
2. How does that market system function and how do we shift the power within the system to achieve better outcomes for those in poverty and to make sure the system actually functions?
3. Where do women appear within the market map? What are the barriers for them and how or where can we improve their opportunities?
4. Whose role is it to perform different functions in the market system?

Figure 1: Gendered Market Mapping



Source: Oxfam

2.3. Scope and Limitations

Several challenges were encountered during field data collection. These constraints included: (i) the limited availability of secondary data from the government; and (ii) the lack of statistics generated from provincial level for the selected products of the two districts, which led to references being made to the data generated by the national government; and (iii) it was difficult to identify the collectors, especially from outside, to conduct interviews because they were not resident in the areas.

FINDINGS

Part 3: Selection of Potential Markets

The Ministry of Commerce (MoC) of Cambodia conducted systematic investigation and data collection through the 24 provincial departments of commerce (PDC) to identify the top products of each province. Top products that have been identified by the MoC for Koh Kong province include: prawn paste, marine products, sugarcane, banana wine, dried shrimp and natural honey, (http://www.tpd.gov.kh/cambodiaproduct/index.php?option=com_content&view=category&layout=blog&id=64&Itemid=211&lang=en). The MoC identified the potential production based on the quantity and uniqueness of production in each province. A comparison of the top products identified by the MoC and the potential products identified by participants during stakeholder workshop shows that they are completely different. It should be noted that potential products identified in this study were done only in two districts of Koh Kong province, and were selected based on the criteria of their contribution to promoting women's economic empowerment and also to their commercial viability. It is noted that the potential products identified by MoC were less appropriate for CARE's beneficiaries because only a small percentage of women in the two districts work on those products.

Figure 2: A diagram briefly outlines how the priority product for Sre Ambel was eventually identified

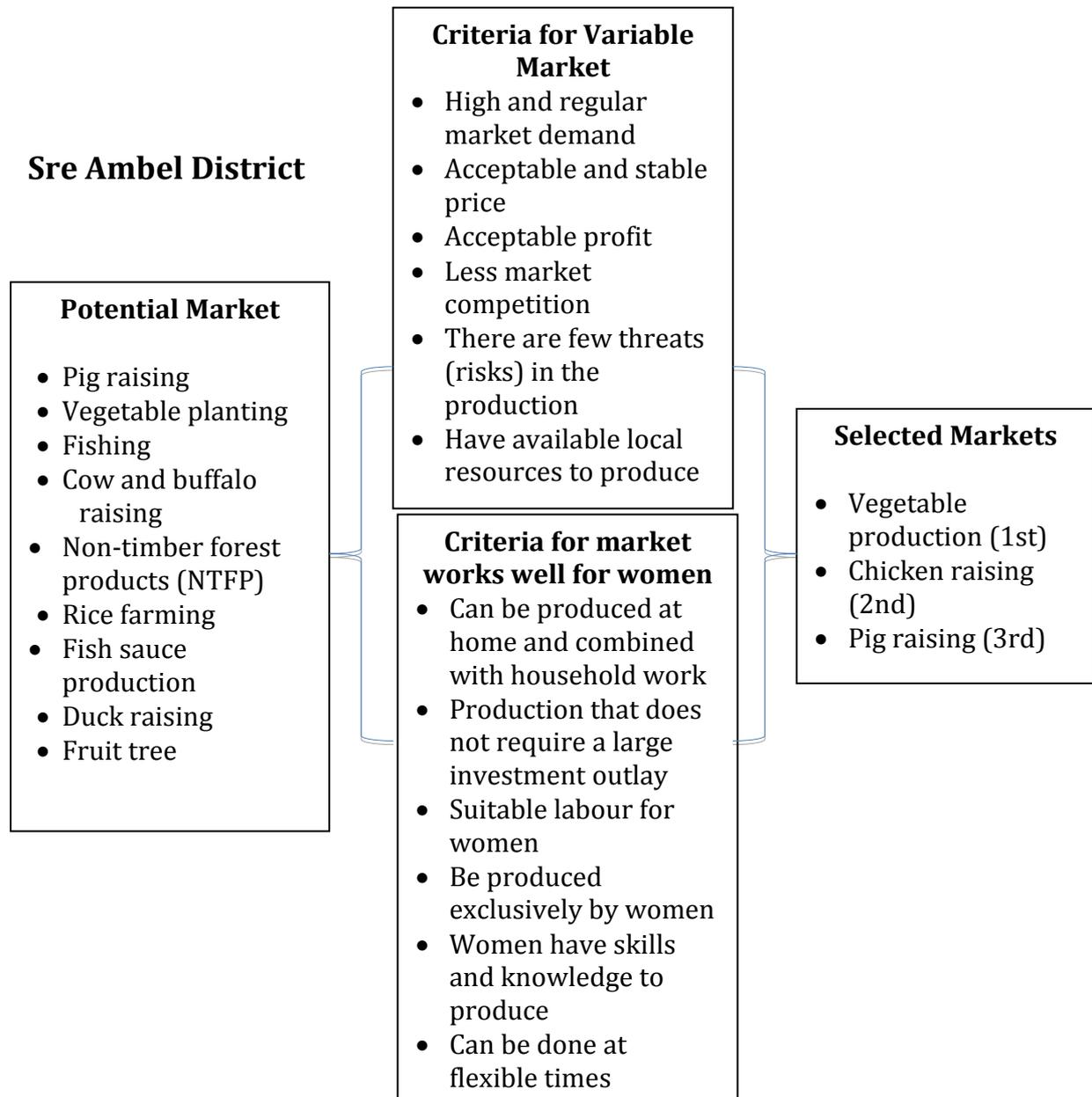
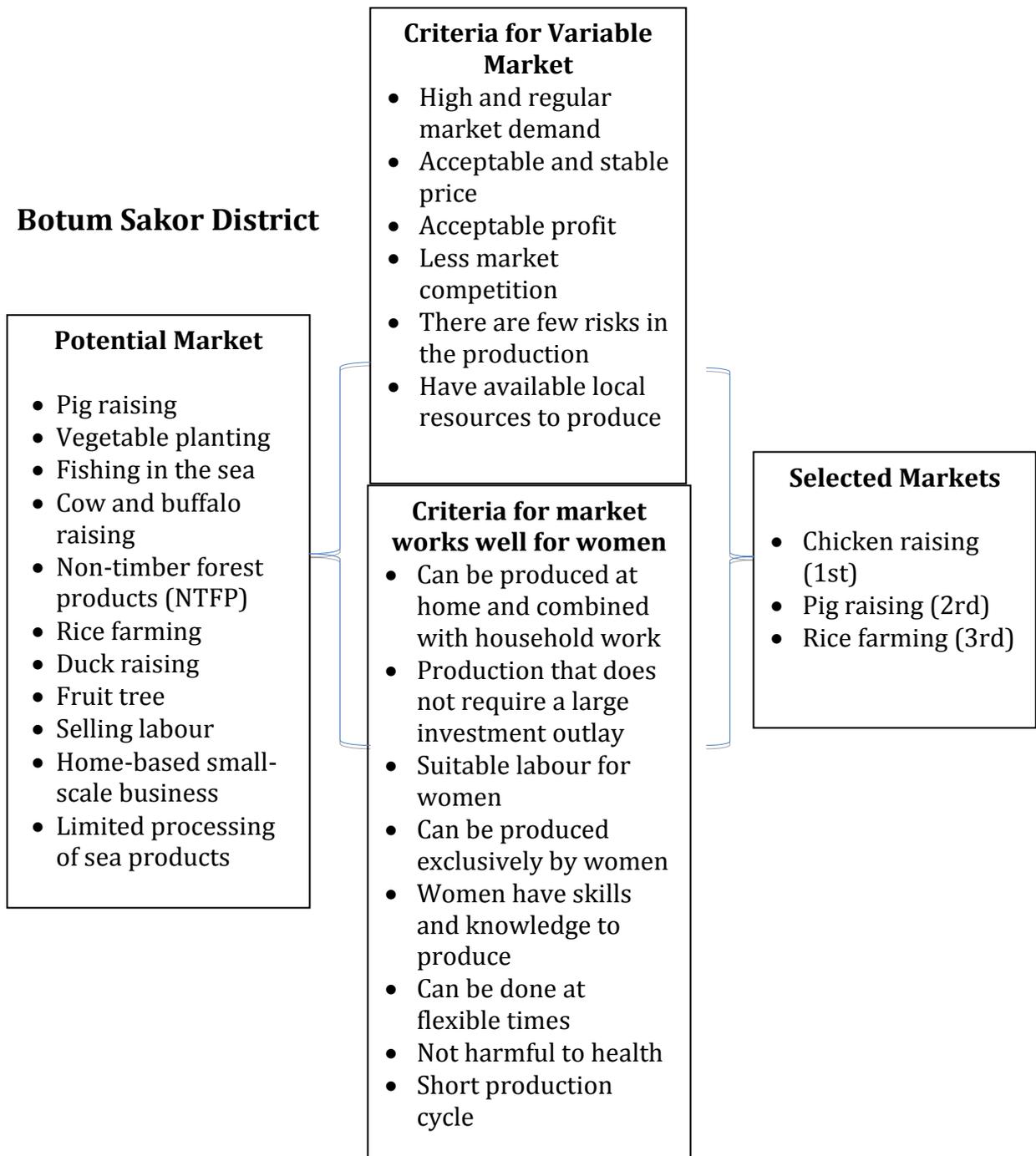


Figure 3: The diagram briefly outlines how the priority product for Botum Sakor was eventually identified.



Part 4: Social, Cultural and Economic Context

4.1. Geographical Areas

This province is located to the west of Phnom Penh and shares the border with Pursat, Kampong Speu, Preah Sihanouk Provinces and the Gulf of Thailand, giving it the potential for diverse economic activities. A new economic zone has been developed, inviting more national and international investors, resulting in improvements to roads. The improvement to roads has improved local villagers' access to markets. There have been arrivals of planned hydropower investment and large-scale rubber and sugar plantations through economic land concessions, creating more job opportunities for local villagers. At the same time, it creates land conflict and a need for resettlement. For example, several villages were resettled in new areas, which were considered to be less fertile. The job opportunities created were insecure because: (i) the jobs created by a large plantation are seasonal and irregular, (ii) the wage is based on the amount of work done each day (on average, they earn 15,000–25,000 riels per day), and (iii) there is no social protection or any benefit other than the daily wage.

4.2 Agricultural Situation

The province consists mainly of a large chain of mountains, the Cardamom Mountains, and thick forests. According to interviews with officials from the Provincial Department of Agriculture in Koh Kong (PDA) and local authorities, some parts of the province are not suited to agricultural activities due to their low levels of productivity. Poor soil fertility, a shortage of fresh water during the dry season and the lack of irrigation hinder agricultural cultivation.

According to the Census of Agriculture Report, 2013, Koh Kong province accounted only for 0.4 per cent (the second lowest province) of agricultural production in the country and 0.5 per cent of livestock raising. The average land holding was around 2.14 hectares per household. In addition 60 per cent of agricultural production in Koh Kong was produced for household consumption.

The annual report of MAFF 2013–2014 shows that there were 10,374 hectares of rice cultivation, producing around 28,866 tons (the average yield is 2.788 tons per hectare). This production does not meet the local consumption needs of the province. Vegetable production covers around 165 hectares, yielding 905 tons. Livestock [husbandry] including pig and chicken production has the lowest production level in the country. For example, a total of 6,249 pigs and 47,054 poultry were raised in 2013. Pig production decreased by around 3.52 per cent between 2012 and 2013. According to these figures, agricultural activities including planting and livestock production were very low.

4.3 The Broader Context of Transition and Livelihoods

Over the last few years, there has been an increased trend in migration especially among teenaged females, to work in the garment industry in Phnom Penh and in

cross-border migration to Thailand. This is perhaps because of economic pressure resulting from the decrease in natural resources – both forestry and marine products – population growth and the need for employment. Those whose livelihoods once largely depended on natural resources have turned to agricultural activities as a coping strategy in response to the decrease in natural resources. The arrivals of large-scale rubber and sugar plantations have attracted some local villagers to work as labourers to earn extra income when they are free from undertaking their own agricultural production activities. Villagers in the two districts engage in migration both within and outside the province. Some villagers seek jobs in the nearby plantations, returning home in the afternoon. According to the agricultural census, the median age of agricultural holders in Koh Kong is around 40 years; teenagers are more likely to work in the garment industry or to migrate across borders. Middle-aged people in rural areas tend to sell their labour in the agricultural or construction sectors in their local area.

4.4 Gender Roles and Women's Roles in Income Generating Activities

Traditionally, there is a gender division in labour at household level. Women are strongly attached to the main responsibilities of housework, while men are regarded as the main income earners. The gender roles assigning men as breadwinners and women as housewives determine their differing roles in income generating activities. Rural women in the study areas mainly engage in subsidiary income generating activities to contribute to the household economy. These responsibilities create differing mobility between women and men. The men work outside the home, while women are attached to the income generating activities that are home-based. The amount of domestic work, occupying so much of women's time, limits their capacity to expand their production.

In agricultural activities, a division of work between women and men is found. In rice cultivation, men are responsible for land preparation and water management, while women take charge of seedling raising, transplanting, weeding and harvesting. Similarly, in vegetable production, men are expected to support women with the land preparation and watering because women regard themselves as not having the physical strength to carry out this work. In terms of livestock production, backyard chicken and small-scale pig production are considered as women's business, while men's engagement is less than 10 per cent of the total labour force, (information from district workshop). The types of income generating activities that women engage in are closely determined by their gender roles. Women in this context participate in both reproductive work (cooking, washing, taking care of children etc.) and productive work (rice, vegetable, pig and poultry raising, freshwater fishing, selling their produce etc.).

4.5 Women in Decision-Making

Culturally, Cambodian women are responsible for keeping the money, yet this role is not equated with decision-making over the money. At the household level decision-making on expenses is decided according to the amount of the expense. Daily expenditure on food, considered a small expense, is solely decided by women, while the major expenses on assets or other expenses costing more than 100,000 riels

(USD 25) they said this should be done jointly by both women and men. Joint decision-making does not imply an equal voice between women and men. In-depth discussions with women shows that in a case where there is conflict in decision-making over an expense, women tend to align to the husband's decision, acknowledging him as the main income earner. However, in some cases where women make a significant contribution to the household economy, women have more decision making power over expenditure.

At the production level, how a decision is made depends on the scale of production. For small-scale and low-cost production investment running as subsidiary income, decision-making can be done by the women alone, whereas production that requires a significant capital outlay they said it should be decided by both husband and wife. For example, decisions on raising backyard chickens (several hens) can be made solely by women. Yet, if chicken farming becomes larger in scale, men enter the decision-making process. In contrast, for pig production (in which women contribute 90 per cent of the labour) the decision-making over the raising as well as the selling of the pigs that they both agreed, as pigs require a significant capital outlay.

In relation to vegetable production, home vegetable gardening does not require a great deal of capital; however, men's agreement on production is strongly needed because men's labour is required to support women with land preparation and watering.

In examination of how households prioritise their investments, priority is given to the man's occupation or production, which is attributed to men's role as breadwinner and head of household, whereas women's production is regarded as a secondary income sources. For instance, raising chickens and pigs is considered as women's business, which is usually subsistence-based production with low investment costs and undertaken for the purpose of household consumption or as a secondary income source.

4.6 Women's Access to and Control Over Resources

According to Cambodian Land Law, both women and men are entitled to land ownership. Overall, the majority of women in the two districts said that they had never taken out a loan from a microfinance institution to invest in their business (rice, chicken, pig and vegetable). Their business operates with their capital or a loan from their village savings group. It is observed that members of the savings group are predominantly women. The loans from the savings group are for relative small amounts; average savings are around 3.7 million riels per group, according to the CARE savings officer. The decision to take out a loan is made by a husband and wife because the husband contributes some of the savings.

In terms of accessing the market, women are able to access the local market or a commune market that is up to 10–20 kilometres away using their own motorbike or bicycle. However, accessing the market in the town of each district is still a problem for those living further away. For example, some villages are located 50 or even 100 kilometres from a town.

4.7 Social Acceptance of SDK's Role

SDKs were selected and trained by CARE to be village extension workers, village animal health workers (VAHWs) and village extension workers (VEWs). An interview with commune chiefs, commune councils, officials from the district office of animal health, the head of the department of Economic Empowerment (MoWA) and an officer from the Provincial Department of Women's Affairs (PDWA) shows that they support these women to engage in this community work. These people are very positive and appreciative of the increased confidence and the work these women have done to assist in the development of their village. They have not previously seen women work as VAHWs and VEWs because this kind of work is regarded as men's work. Despite being a veterinarian being regarded as men's work, there is no social restriction on women working in this area. However, it is important to ensure that the burden on women is not increased without receiving some benefit from their new work.

Part 5: Vegetable Subsector in Sre Ambel and Botum Sakor District, Koh Kong Province

5.1 Vegetable Subsector in Cambodia

The production of vegetables in Cambodia is insufficient to supply market demand. According to the Agriculture Minister Cambodia currently produces only half as many vegetables it needs. Cambodia only produces 40 to 60 per cent of its needs and imports the rest from Vietnam and Thailand. This importation occurs throughout the year especially during the dry season when imports can meet as much as 70 per cent of Cambodia's requirements. The major vegetable producing provinces are Kandal, Kampot, Siem Reap, Takeo, Kampong Cham and Battambang. Cambodia is a net importer of vegetables, importing around 114,000 tons per year from neighbouring countries to supplement this shortfall in production (of which 200–300 tons is imported from Vietnam each day).

Vegetables grown in Cambodia include cucumber, eggplant, yard long bean, cabbage, water spinach, and cauliflower. However these products are available only during the wet season. Also grown during some months, but on a small scale, are broccoli and tomatoes. The majority of other crops (carrot, garlic, onions, bell pepper, etc.) are imported from Vietnam throughout the year (Agri Food Consulting International).

5.2 Value Chain Actors of Vegetable Subsector in Sre Ambel and Botum Sakor District

The vegetable value chain studied in both districts (Sre Ambel and Botum Sakor) is short. The main value chain actors are input suppliers, farmers and retailers. There is no processing node in the study area. The majority of locally produced vegetables are typically sold and consumed in local markets. Essentially, because of the limited production of vegetables in these districts, a large proportion of vegetables consumed are imported from other provinces or are imported from Vietnam. The vegetables that are commonly grown in the two districts include morning glory, cucumber, yard long bean, potato, pumpkin, and edible leaves. According to local agricultural officials, 90 per cent of vegetables consumed in these areas are imported.

5.2.1 Input Suppliers

At district level, there around three to five input suppliers, which are jointly run by both husband and wife as micro businesses that buy products from private companies. According to the MAFF registers, there are 33 companies in Cambodia with an agricultural material business permit. Farmers in the two districts can easily buy fertilisers and pesticides on their local market. Farmers can buy their vegetable seeds in the district town market, but it is difficult for people who live a long way from district towns to purchase seeds. Farmers also use seeds imported from

Thailand and Vietnam. There is no local seed supply. Some farmers have purchased expired seeds that do not germinate.

5.2.2 Vegetable Producers

Income from vegetable growing is considered a subsidiary income source. Most of land for vegetables farming is maximum 0.1 hectare. During the rainy season, the priority for land use is rice farming because it is essential for household food security. Geographically, many parts of the area cannot be used for growing vegetables because there is too much rain during the rainy season and the soils are sandy and therefore do not hold water. Farmers grow vegetables in the dry season in home gardens or in small plots in rice fields that are accessible to water. Wells are the main water source for vegetable home gardening.

Commonly, husbands and wives cultivate vegetables cooperatively. Men are usually responsible for preparing the land, applying pesticides and watering, while women sow the seeds, and do the transplanting, weeding and harvesting. Cooperation between women and men is required in vegetable production, especially some types of work requiring physical strength, including land preparation and watering.

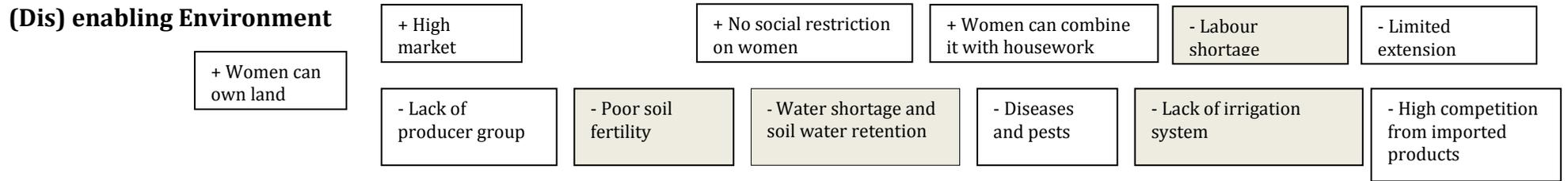
The majority of farmers in these areas grow vegetables, mainly for household consumption, and sell their produce to nearby villagers or on the local market if there is a surplus. There are no vegetable traders or middlemen due to the small scale of production. Farmers act individually in the transportation and sale of vegetables. Collective sales are not seen.

Usually, it is the farmers, mainly women engaging in this business, who set the price based on the market price. The amount they sell is relatively small and is supplied to nearby villagers with little fluctuation in price.

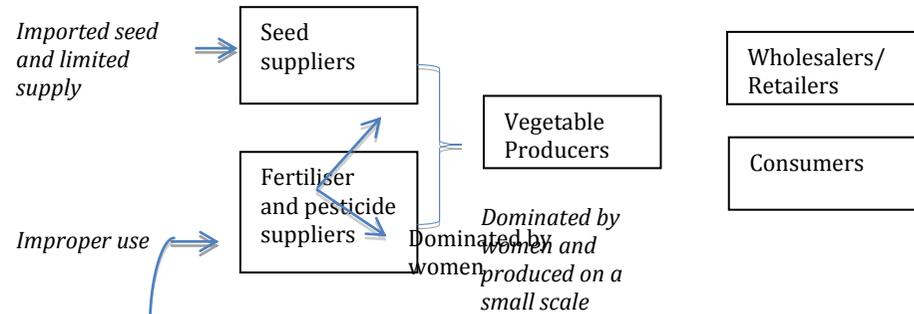
5.2.3 Wholesaler/Retailer

There are four to five wholesalers/retailers in the Sre Ambel district and a few in the Botum Sakor district. Some wholesalers/retailers are not resident in Sre Ambel. Wholesalers/retailers are usually women and men who transport their vegetable produce from Kampong Speur and Phnom Penh. Usually, men transport the product, while women sell it at the market. According to the wholesalers/retailers, the highest market demand is from October to April and the demand falls between May and September. The demand for vegetables over the last three years has been stable. A wholesaler in Sre Ambel stated that she supplies between 1.5 and 2 tons daily. On average, the wholesalers/retailers make an income of 200–500 riels per kilogram of vegetables. There are some retailers that are farmers who transport their product from their village and sell on the market, but this is only temporary

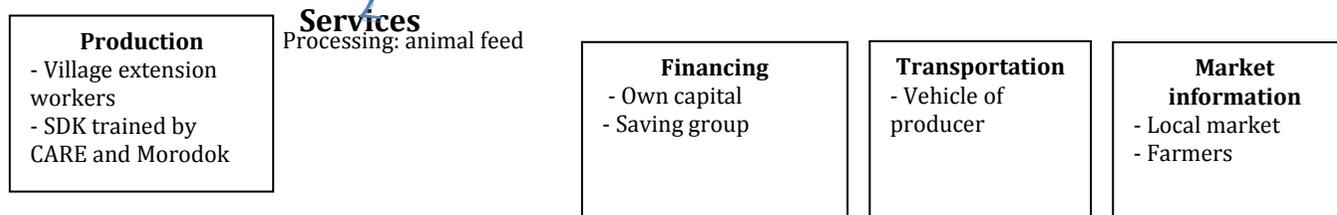
Figure 4: Gendered Market Mapping of Vegetable Subsector In Sre Ambel and Botum Sakor District



Market Chain



Market



5.3 Market Services

5.3.1 Financial Services

There are a number of official Microfinance Institutions (MFIs) providing loans in Koh Kong province, including AMK, ACLEDA, Prasak, Vision Fund and Hatakasekor among others. These MFIs offer a range of short-term financing, typically a 12-month loan term, which ranges by loan size, repayment options (i.e. decreasing monthly payments), and lending methodology (group versus individual loans). The interest rate ranges from 1.5 per cent per month to 3 per cent per month, depending on the loan size, duration and loan use. MFIs lend for business investment, consumption (i.e. home improvement) and in some cases, emergencies. The collateral requirements also vary by type of loan: group loans require no collateral (or social guarantee), while individual loans usually require soft land titles obtainable from the commune council; for large loans, hard land titles are required. For the MFIs like AMK, Amret, Vision Fund, Hathakasekor also provide a type of small loan which is not required the collateral but required farmer to have a warrantee group to guarantee the loan. The amount of loan also limited to 2 or 3 million riels with the interest rate between 2.7 to 3 per cent. Women are able to access loans. The decision to take out a loan is agreed by both husband and wife.

Besides the MFIs, there are also unofficial savings groups and revolving fund groups created by non-governmental organisations (NGO). These unofficial savings and loans groups are the main sources of farmers' capital. These groups, however, have small membership numbers, and have only accumulated limited savings to provide loans.

5.3.2 Supporting Services

Currently, there are a few organisations working to promote agricultural productivity in the two districts, namely CARE, Morodok and the Provincial Department of Agriculture (PDA) through district offices. Morodok is currently providing agricultural technical training to farmers as well as mobilising the farmers to save in organised savings groups and provide revolving funds to the group to run credit schemes. Compared to other provinces, this province has fewer NGOs working to promote the agricultural sector.

5.3.3 Formal and Informal Farmer Organisations

A vegetable farmer association, in the community area, was created by Morodok; however, it is inactive. At the commune and district level, there are only savings and revolving funds groups. It is observed that no groups that promote collective marketing were found.

5.4 Market Power in the Vegetable Value Chain

The vegetable farmers in these two provinces operate primarily outside the market, producing only for household consumption and not for commercial purposes.

Farm-gate prices are set based on the prevailing market price, which farmers are aware of through their trips to the local markets and by word-of-mouth from other farmers or retailers. In general, farmers in these two districts are not organised into producer groups to aggregate their production, increase their terms of trade and strengthen their market connection. The majority of vegetables consumed in the areas are imported from Vietnam and other provinces. At the household/farmer level, vegetable growing is perceived as a peripheral activity to generate income to help with cash flow problems. It is not viewed as a commercial enterprise in its own right, but rather as an activity that is fitted in during spare time.

5.5 Risks and Constraints for Women's Participation in the Vegetable Value Chain

Insufficient water supply and soil water retention: During the rainy season, land has been used for rice cultivation and some parts of the land cannot grow vegetables because the soil retains too much water. The soil is also heavy in rainfall-prone areas. Typically, farmers in areas of this sort grow vegetables in the dry season, so an inadequate water supply is a major constraint to scaling-up of vegetable production. During the dry season, water is supplied to the vegetable plots from wells, nearby rivers or canals. In many areas, there are wells which provide very limited amount of water during dry season. The irrigation systems are quite limited either.

Land ownership: Villagers in the two districts have access to and control over their land, yet they reported a lack of official land certification. The national land-titling program is still in progress, so it is very likely that many farmers have not received official land certificates. There are several villages, especially in Botum Sakor district, that have been relocated due to governmental development plans and private sector investment. The resettlement areas are reported to be less fertile for agricultural production than the previous locations.

Small land holdings for vegetable production: Farmers own land of between 0.5 and 2 hectares. Official data from the Census of Agriculture in 2013 shows that a household owns an average of 2.7 hectares. However, the amount of land that is planted for vegetables is significantly smaller. According to a district official in Sre Ambel, the average land area for vegetable growing is less than 0.1 of a hectare. According to a district agriculture official, there should be between 0.3 – 0.4 hectare of productive land.

Poor soil quality: Farmers reported that the soil in their area is not sufficiently fertile for planting rice and vegetables. Farmers believe that in the costal areas, the land is not productive. They reported their agricultural production to be low.

Pests and crop diseases: It is reported that crops are destroyed by insects and other diseases. Farmers do not know how to prevent, diagnose and treat for pests. The extension services provided by the PDA and NGOs (CARE, Morodok, Promvihearthor

and Tebeta) only reach a limited number of farmers.

Lack of technical knowledge: Farmers reported that their understanding of the proper techniques for vegetable production, especially for commercial purposes is limited. Some farmers have started growing vegetables since receiving technical training and seeds from CARE International and DPA. It is to be noted that currently there are few NOGs (CARE, Morodok, Promvihearthor and Tebeta) working on promoting agricultural technical skills. Again, the agricultural extension service provided by PDA is limited.

Labour shortage: Vegetable production requires a substantial amount of time to plant and maintain. Women can devote only a limited amount of time to tending a vegetable farm due to their domestic work, childcare and other income generating activities, which include chicken, pig, cow and buffalo raising and rice farming. These production enterprises are run for household consumption the surplus is sold. Women appear to be unwilling to make a trade-off between reducing housework and increasing the time spent on certain kinds of income generating activities. More importantly, to invest in vegetable production, women require support from men with certain hard physical work. However, there is an increase in job opportunities in other sectors with the arrival of commercial plantations in the area. This motivates men to sell their labour because they can get instant cash at less risk, leaving women working alone with agricultural tasks, with some women also selling their labour to nearby plantations.

Lack of financial capital: Farmers noted that the lack of capital is one of the challenges to expanding their vegetable production. For example, capital is needed to prepare the land and pump water for their vegetables. However, they are unwilling to borrow money or scale up their production because: (i) they feel it is only a peripheral source of income, (ii) labour shortage, and (iii) they feel the production is associated with high risk. All the farmers used their own funds or loans from their unofficial savings group to invest in their vegetable production.

Seed, fertilisers and pesticides: Farmers buy seed fertilisers and pesticides from private local retailers. Some seed is expired so they do not germinate. Seeds imported from Vietnam or Thailand might not be suitable for the local geographical situation. Therefore, farmers need to use heavy doses of fertiliser and pesticides to produce crops from these imported varieties. Also, farmers learn how to use agricultural inputs from retailers who are not well equipped to advise on proper and appropriate usage. The farmers' knowledge about the selection of good quality products and its appropriate use are quite limited.

Part 6: Chicken Subsector in Sre Ambel and Botum Sakor District, Koh Kong Province

6.1 Chicken Subsector in Cambodia

There are two main systems in operation in the Cambodian poultry sector: backyard (small-scale) and commercial. The commercial sector is further sub-divided into broiler, layer, duck and hatchery systems. In 2011, the total number of backyard chickens was 21,236,755 and of commercial broilers and layers was 1,896,690, (MAFF, 2011). The total number of chickens produced in Cambodia was 23.6 million, on 1.4 million farms. Over 92 per cent of production is from the backyard system, while the rest are from commercial source. The most important poultry production centres are Pursat, Takeo, Kampong Cham, Kandal, and Prey Veng. There is no official report that Cambodia exports or imports poultry or poultry product.

There is high demand for chicken and eggs in Cambodia, especially free-range chicken (monsrei). All classes of Cambodian society consume both. As income increases, the demand for chicken and eggs will also increase. Currently, consumption of poultry meat in Cambodia is still low compared to other Southeast Asian countries, at just 1.84 kg per capita per year.

6.2 Value Chain Actors of the Chicken Subsector in Sre Ambel and Botum Sakor District

In the two districts, there is backyard chicken production for meat. The chicken value chain in both districts involves input suppliers, farmers, local collectors/traders and collectors from outside and wholesalers/retailers. The wholesalers and retailers play a dual role as processors (slaughtering and dressing the chicken).

6.2.1 Input Suppliers

Villagers in the two districts commonly raise backyard chickens on a subsistence basis, so inputs (feed) are not generally bought. In Botum Sakor, there are one or two shops that supply limited varieties of chicken vaccines and medicines, making this service unreliable. According to the villagers, some suppliers have no technical knowledge on how to use the medicine and some have expired and are not in good condition. In Sre Abel, there are several shops that have a greater variety of vaccines and medicines that are reliable. In each village, there are village animal health workers, yet those workers do not supply chicken vaccines or medicines. Many of them are not active. However, many chicken producers do not vaccinate their chickens, usually only treating their chickens with medicines once they fall ill.

There are no available hatching facilities or breed suppliers in the areas. Farmers simply use their existing hens for breeding and restocking their flock. Cages are constructed using locally available materials such as bamboo or wood that they can collect in their area.

6.2.2 Chicken Producers

More than 80 per cent of the households in the two districts typically raise free-range chickens for meat and none of them produce broilers or layers. The free-range chicken production cycle is from four to six months. Chicken farming is considered as a subsidiary income source and is done primarily for household consumption rather than for commercial purposes. They rank the income from chicken as third or fourth among other income generating activities. Typically, a household owns three to five hens and rarely more than 10 hens because they are afraid of the diseases that can suddenly kill all their chickens.

Women predominately raise chickens, including feeding, taking care of, cleaning their cages and selling them, while men play a role in building the cages for the chickens or caring for the chickens when their wife is unable to. Women mentioned that raising chickens is an easy task that women can do alone without requiring the support of men's labour; in particular it can be done at home to generate a side income and is not time consuming.

The sale of chicken is done intermittently, with farmers usually selling chicken during special occasions including Chinese New year, Khmer New year, Pchum Ben and Sen Kal Tek as they are able to negotiate a higher price. Sometimes, farmers sell when they are in need of money. If they sell to the local market, farmers transport the chickens using their own motorbike. Collectors come to the village with their own transportation (motorbike) to collect chickens. Commonly, farmers sell their chickens individually. It is the women who mainly engage in this business who set the price based on the market price they obtain from other farmers, the market and traders. The price of hens varies between 17,000 and 20,000 riels (USD 4.25–5.00) per kilogram and cocks are sold for between 15,000 and 17,000 riels (USD 3.75–4.25) per kilogram. Raising backyard chickens is considered to generate a high profit because it is subsistence-based with less input invested.

Regarding the decision-making about chickens, although chicken production is considered to be women's business, men enter the decision-making when they have to deal with large amounts of money. That is, if the amount is small, women make independent decisions but when the quantity is larger, women consult with and ask for their husband's agreement.

6.2.3 Traders/Collectors

There are both local collectors and collectors from outside who come monthly or once every two months to purchase chickens. Those collectors are both women and men (but mostly men) who run this as a family business. An interview with a local male trader in Botum Sakor said that it is a dying business because of limited number of chicken available from farmers. This trader expressed difficulties in collecting the chicken as he mentioned that most of the chicken farming is for family consumption. As with the production of chicken, the trading of chicken in these areas tends to be a peripheral activity. All the chickens sold to collectors are live chicken. The average weight for hens is 1–1.5 kilograms, while the cocks is between 1.2 to 2 kilograms. The collectors supply chickens to wholesalers or retailers in the district's town or

restaurants. The collectors are able to make income around 1,000–1,500 riel per kilogram.

6.2.4 Wholesalers/Retailers

There are several retailers in the Sre Ambel and in Botum Sakor district. However, retailers sell it in small quantities – fewer than 50 chickens per day. No wholesaler who distributes chicken to retailers in large quantities has been found. The retailers sell to end-consumers and supply the product to restaurants. Retailers play dual roles as processors, both slaughtering and dressing the chicken. Men are responsible for the slaughtering and dressing, while women sell and calculate the income. The price of chicken at Sre Ambel market is 20,000 riels (USD 5) per kilogram. The free-range chickens raised by farmers are likely to be sold alive and the retailers/wholesalers will immediately slaughter the chickens after the chicks are sold.

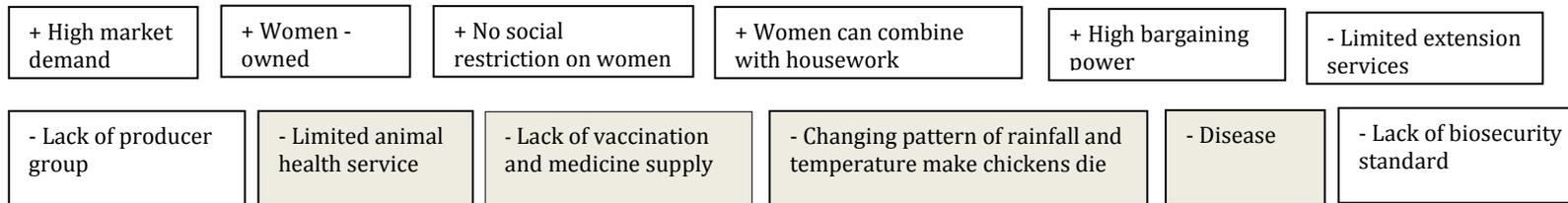
The two main sources to the retailers in Sre Ambel are mainly from chicken imported from the nearby provinces – Kampong Speur and Kampot province – and some from collectors. Retailers reported that the supply of chicken from the local area is irregular and the price is higher than for imported chickens. The imported female chickens from the nearby province cost around 16,000 riels (USD 4) per kilogram. Retailers show a greater preference to purchase it from their suppliers in Veal Renh commune, Prey Nob District and Preach Sihanouk province, Kampong Speur province where they can get a regular supply at a better price. Usually, the retailers order the chicken via phone, and their supplier then delivers the chickens. The average weight of each chicken purchase is 1–1.7 kilograms. An interview with a retailer shows that she is interested in purchasing chickens from local producers, if they get a regular supply at a good price. Her average demand would be around 50 chickens per day and the cost should be around 16,000 riels. Purchasing directly from farmers' groups will reduce some make up in price by traders. The retailers spoke of the difficulties of purchasing directly from farmers who sell as individuals, and are not able to meet the demand required. The price of local free-range chicken has increased from between 12,000 and 14,000 riels over the last few years to the current price of 20,000 riels per kilogram.

Despite the high demand for free-range chicken, there is an increase in competition from CP¹ chicken. Consumers who buy chickens in large quantities, for example for restaurants for wedding parties, prefer CP chicken, which is cheaper (around 12,000–14,000 riels per kilogram) than the free-range chicken.

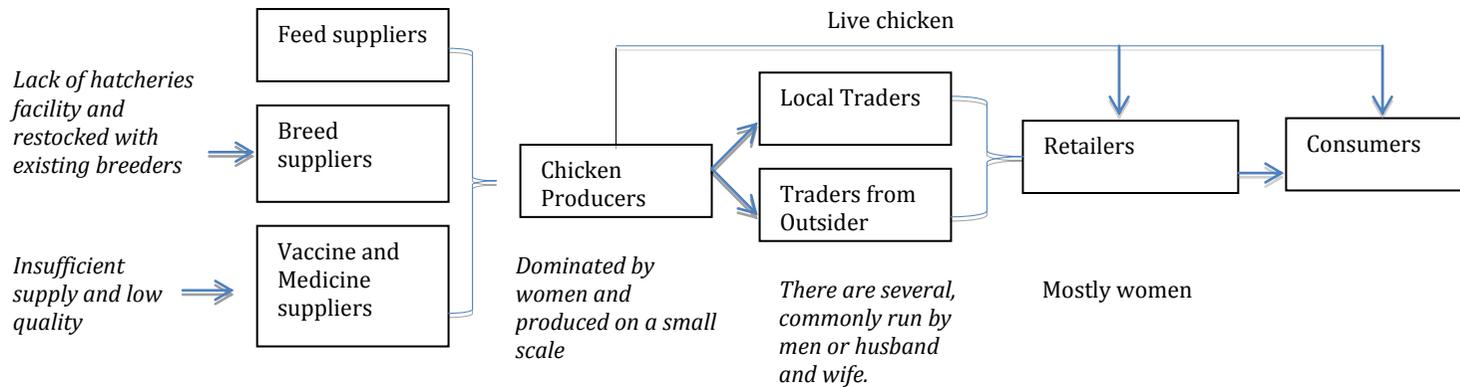
¹ CP is name of a Thai Company

Figure 5: Gendered Market Mapping of Chicken Subsector In Sre Ambel and Botum Sakor District

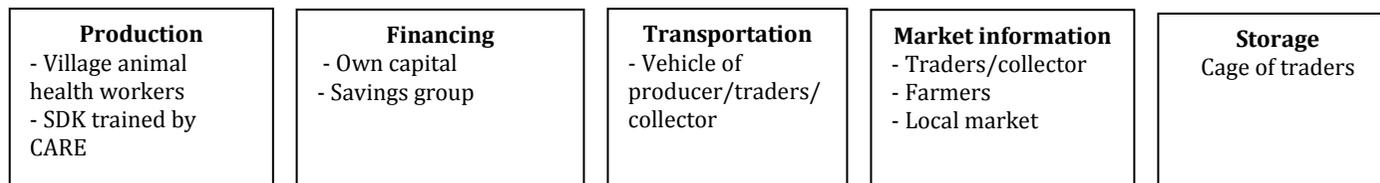
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Market Chain



Market Services



6.3 Market Services

6.3.1 Financial Services

Chicken farmers in the two districts use personal capital to invest in their chicken production. Farmers said that raising chickens does not require much capital as they make use of local resources that already exist. For example, the cages are made from bamboo that can be found on their land. They do not usually feed the chicken with feed produced by a company, but on rice husks and rice harvested from their own fields. Farmers raise several hens to reproduce. Overall, farmers have not invested in chicken production to any significant degree since they feel it is very risky. Farmers spoke of a lack of capital to scale up their production; they were not interested in taking out loans as they felt they could not control the risks associated with raising chickens. They preferred to invest using their own available capital.

6.3.2 Supporting Services

The systems of animal health services or village animal health workers created by PDA are in place, yet many are inactive and inefficient. The village animal health worker provides training courses on animal raising to farmers, yet the extension services are very limited. Veterinary services for chicken are not in place due to the lack of vaccines and medicine storage facilities. CARE is the only organisation working to promote poultry production in the two districts.

6.4 Market Power in Chicken Value Chain

This study found that small-scale chicken producers already have strong leverage in price negotiations with traders and wholesalers. This is because there is a high demand for the local chicken (monsrei), and a shortage of supply. This study found that farmers receive the highest profit margin per unit of all the value chain actors (about 12,000–14,000 riels per kilogram). This high profit margin is based on the situation whereby farmers use their own feed and breed their own flocks instead of purchasing new breeders and chicks. Collectors can earn an estimated margin of 2,000 riels per kilogram, and retailers 2,000–1,000 riels per kilogram.

At the farm gate, farmers set the price based on the information they gain from their fellow chicken farmers, local traders and/ or during their trips to the local market. Chicken producers have considerable bargaining power with their buyers, whether they be local collectors or consumers. This is because there is high demand for the native breed (monsrei) and very limited supply. Furthermore, because chicken, unlike vegetables, is not highly perishable, farmers are not under pressure to sell if prices are unfavourable. Even in the case in which farmers are selling their chicken because they are in urgent need of cash, buyers cannot decrease the price by too much given that there is an overall shortage of chicken and no alternative suppliers. However, farmers earn a relatively low income from the sale of chicken because their production volumes are very small. In addition, the spread of disease has destroyed many of the flocks in these areas.

6.5 Risks and Constraints for Women's Participation in the Chicken Value Chain

Breed and Hatchery Facilities: In the two districts, there are no chicken breeders. Farmers raise hens to increase or replace their flocks. Hatcheries are not used by producers. All of the farmers raise their native breed (Monsrei), among which mortality is high due to limited technical knowledge about raising chickens. It is noted that the indigenous breed is less productive than the commercial breed but the selling price is higher and low inputs are required. The local breed has a slower growth rate and produces fewer eggs.

Disease: Disease was identified as the most critical issue hindering the production of chicken. The native breeds have recently been dying at unpredictable times of the year. This is a critical problem hindering the scaling up of production. Individual farms have limited techniques for selecting the best breeders, and have little awareness of the biosecurity measures necessary to contain and prevent the spread of disease. The changing pattern of rainfall and temperature is also harmful and causes the loss of chickens. As a result of unpredictable and widespread disease, the large-scale producers are at higher risk than small-scale producers. Thus, small-scale farmers lack the willingness to take the high risk of scaling up their chicken production.

Vaccination and Animal Health Service: There is no supply of reliable and good quality vaccinations and medicines at the village level. In Botum Sakor, there is a shop that sells vaccines and medicines but these are limited to certain types and the seller is not well trained in the correct use of the medicines. In Sre Ambel districts, there are several shops selling more kinds of vaccines and medicines. However farmers rarely vaccinate their chickens. There are some possible contributions to this: (i) the lack of confidence in the effectiveness of vaccination, (ii) their flocks are small, making it less economically important, and (iii) the flocks are produced from hens at different times making it inconvenient and costly for farmers to vaccinate, (iv) the limited availability of vaccines and difficulties in storing them, (v) and the lack of understanding of the benefits of vaccinating. Farmers, however, use animal health workers once their chickens fall ill, when it is often too late for treatment to be successful.

Part 7: Swine Subsector in Sre Ambel and Botum Sakor District, Koh Kong Province

7.1 Swine Subsector in Cambodia

In 2010, it was reported that the number of pigs had fallen by 3.2 per cent to about 2.06 million pigs. The decrease was due to disease, especially blue-ear pig disease. Additional factors causing the decline were illegal pig imports and high feed prices. Pig production continued to decline, and the number of animals has now fallen 23.5 per cent since 2006. Minister of MAFF said most livestock production methods were traditional and fell short of standards in terms of animal breeding, feeding and health. According to expert, the decline in pig production is due to competition from imports. Adding that much of the pig production is small-scale and producers struggle with low pork prices and high feed prices, (Cambodia Daily, 2010).

7.2 Value Chain Actors of Swine Subsector in Sre Ambel and Botum Sakor District

The pig value chain in both districts (Sre Abel and Botum Sakor) involves input suppliers (breeders, commercial feed, vaccine and medicine), farmers and local collectors and collector from outsider, wholesalers/retailers.

7.2.1 Input Suppliers

Breed Supplies: The suppliers of commercial feed, breeders, vaccines and medicines are some of the actors in the pig supply chain. There are two categories of breeders: the local breed and a hybrid breed. The local breed is believed to be self-subsistent production (it does not require high calorie feed), grows more slowly, is resistant to disease and has lower production costs, yet is in less demand and is sold at a lower price than hybrids. Farmers in the study areas raise both breeds.

The two breeds are locally produced by breeders or bought through middlemen or traders. The number of pigs supplied by local raisers remains limited. There are no households, or companies or businesses that specialise in breeding piglets in the area. A one-month year-old hybrid piglet costs approximately 200,000–250,000 riels per head, while the local piglets cost around 150,000 riels per head. When buying piglets from traders or middlemen, villagers are not sure about their quality and payment is made immediately. The supply of good quality piglets is considered an important input (to the value chains), and if local farmers also apply modern techniques to pig breeding, this will lead to greater profit than can be achieved from raising pigs for meat.

Commercial Feed Supplies: Small-scale pig farmers who raise two to three pigs are likely to produce their own feed (rice husk, banana tree, morning glory, by-product from rice wine etc.). Those who own more than five pigs tend to buy commercial feed from the

market. Commercial feed is easily found at the local market. CP Company, a Thai company that established a factory in Kampong Speur province, is one of the main suppliers. Some other kinds of pig feed are imported from Vietnam. The price varies between 2,500 and 3,000 riels per kilogram or USD 30 per bag (30 kilograms).

Vaccines and Medicines: The supply of vaccines and medicines is limited, especially in Botum Sakor district. The vaccines and medicines are available only in the district town and are supplied by privately owned shops. Certain types of vaccine and medicine are not widely available in the area, and some villagers therefore buy medicines from the market in Sre Ambel and they are delivered by taxi. Due to the limited supply of medicines, some farmers buy medicines from the market in Sre Ambel district, leading to delays in getting the medicine. Village animal health workers do not store or sell vaccines and medicines, so the service is limited and does not meet people's needs. CARE has trained female villagers as para-vets and they now provide veterinary services including treatment of pigs.

7.2.2 Pig Producers

Pigs are being raised for small-scale production across most of the villages in the two districts. A large percentage of villagers in the two districts typically raise piglets for fattening, while others raise them for breeding. The average number is 2–4 pigs per household. It is unusual for villagers to raise more than 10 pigs. Income from pigs is considered to be one of the main income sources as it involves quite a large amount of money. The production period of piglets for fattening is 6–7 months.

Small-scale pig production (2–4 pigs) is regarded as women's business, since women are the main producers of pig products. Their work includes searching and preparing feed, washing pigs and cleaning pigsties, which requires several hours per day. Other work that women undertake includes the purchasing of breeding pigs, selling pigs, and treating sick pigs. Men's involvement is mainly in building the pig house. Although women are the main ones raising pigs, they are not equipped with the necessary knowledge and skills in farming and livestock raising, and the traditional way that most women therefore raise pigs is ineffective. Women can do the work of raising pigs on their own because it does not require physical strength. The sale of the pigs is very irregular due to competition from imported pigs. The price of the pig varies between 7,000 and 11,000 riels per kilogram for the hybrid. For the local breed, middlemen/traders tend to offer a lump sum per pig, which the farmers claim is lower than selling by the kilogram.

The income from raising pigs in small-scale production is not considered to be as profitable as chicken and vegetable production. If their pigs die, farmers will lose a significant amount of money.

Some local people do not consider pigs a commodity; rather they raise them as a way to save money. Thus local people raise pigs with very little investment and they sell their pigs when they need a large amount of cash for big events. Local pig raisers claim that

they only generate a profit if the price of a living pig is more than 8,500 riels [per kilogram].

7.2.3 Pig Collectors/Traders

There are both local collectors and collectors from outside who irregularly visit the areas. There are about four to five middlemen/traders in Botum Sakor and slightly more in Sre Ambel district. Those collectors are mainly men who have the physical strength to transport the pigs. They come with their own vehicles and transportation. The middlemen/traders are responsible for transporting the pigs. Collectors collect only live pigs.

7.2.4 Pig Retailers

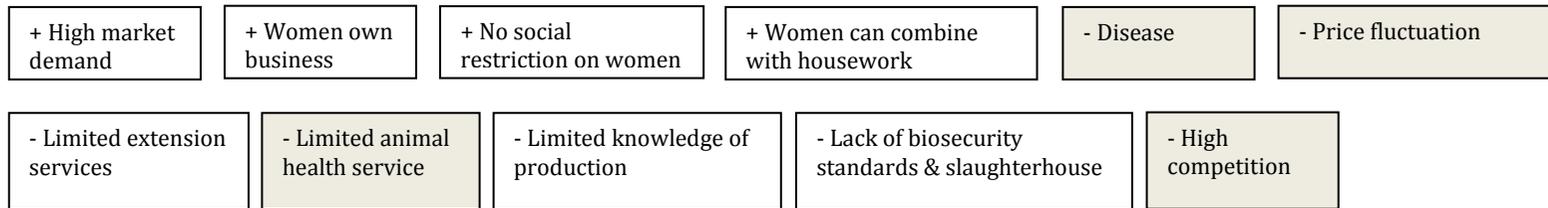
There are several retailers in the Sre Ambel district and in Botum Sakor district. Pork consumption in the two districts is of both local pigs and pigs imported from Thailand and Vietnam and nearby provinces. According to participants from the workshop, there is no wholesaler in the area since consumption is limited. Collectors supply retailers with local or imported pigs. Some retailers have contact with pig producers, yet the producers cannot ensure regular supply. The pigs are supplied either as meat or alive and they are then sent to a local slaughterhouse. The two districts have unofficial slaughterhouses in which the standards, hygiene and safety are not yet guaranteed. The majority of retailers are women, while all the slaughterers are men. The price of pig meat is sold according to the various cuts of meat.

7.3 Market Power for Swine Value Chain

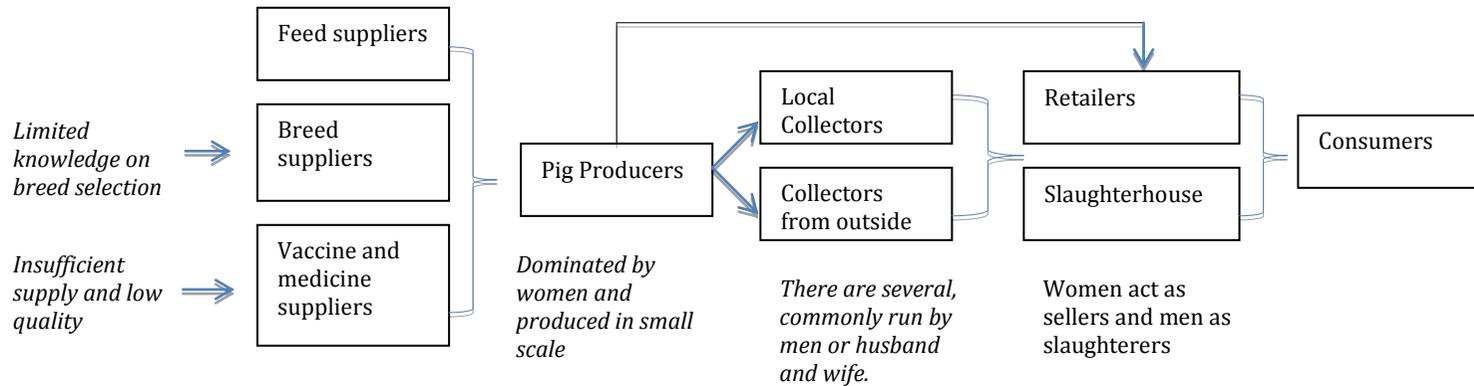
This shows that small-scale pig producers have limited bargaining power with traders/collectors. Although there is high demand for pig, there is high competition from imported pigs from Vietnam and Thailand, making the local producers vulnerable to price fluctuations. At the farm gate, collectors/traders set the price and farmers negotiate the price based on the information they receive from their fellow pig raisers and other local traders/collectors. Pig farmers are sometimes under pressure when they want to sell their pigs in a hurry due to an urgent need for cash. It should be noted that the live pig price varies between 7,000 and 11,000 riels per kilogram. The farmers' strategies of keeping and searching for other traders/collectors who can offer a better price sometimes does not work because there are only a few collectors and more importantly the longer they keep the mature pigs the more they must spend on feed. Pig raisers have the least bargaining power of all value chain actors.

Figure 6: Gendered Market Mapping of Swine Subsector In Sre Ambel and Botum Sakor District

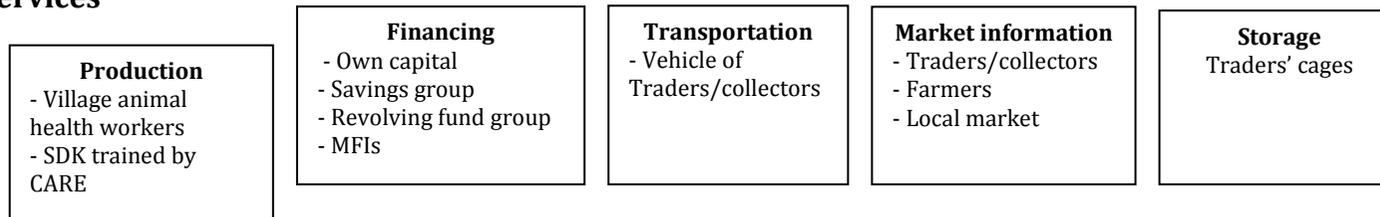
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Market Chain



Market Services



7.4 Market Services

7.4.1 Financial Services

The main financial sources for raising pigs are the farmers' own capital, savings groups and MIFs. Since raising pigs takes significant capital, some farmers make a purchase by combining their own capital or a loan from a group or MIFs. Farmers said that the major expenses are the purchase of the hybrid pigs and feed.

7.4.2 Support Services

The systems of animal health services or village animal health workers created by PDA are in place, yet many are inactive and inefficient. The village animal health worker plays a role in providing training courses on animal raising to farmers, yet the reach of the extension services is very limited. Veterinary services for pigs are not in place due to the lack of vaccines and medicine storage facilities. Besides this, only CARE is working to promote pig production in the two districts.

7.5 Risks and Constraints for Women's Participation in the Swine Value Chain

Breeds: There is no supply of reliable and good quality breed in the two districts. Farmers who produce piglets themselves are not well trained in breed selection and proper breeding techniques. More importantly, the breeds that are brought in by traders/middlemen are from unknown sources. Farmers do not know if the piglets are from a good breed or not.

Disease: Disease was identified as one of the issues that hinders production and affects pig raising productivity. Compared to chicken production, the spread of disease in pigs is more manageable because a sick pig can be treated and cured. Disease in chicken spreads rapidly and some diseases are incurable. However, individual farms have limited knowledge of vaccination and techniques for selecting the best breeders, with little awareness of the biosecurity measures necessary to contain and prevent the spread of diseases.

Vaccination and Veterinary Services: The supply of reliable and good quality vaccines and medicines is limited at village level. The shops that supply a greater variety of vaccines and medicines are located in Sre Ambel's district town. In Botum Sakor district, there are a few shops that sell medicines, but there are fewer varieties and their quality is not guaranteed. The village animal health services provided by DPA do not function well. Village animal health workers do not store vaccines and medicines. Veterinary services tend not to be timely and some face difficulties such as limited capacity, local people diagnosing sickness, long distant traveling and the limited availability of vaccines and medicines etc. Diagnosis and treatment of sick

pigs by the pig raisers still occurs. In this situation, the pig raisers ask advices from the stores where they buy the medicines but the sellers are not well trained in their proper use. In addition, several private veterinarians are reported to be unskilled. CARE has trained female VAHWs and VEWs to treat pigs.

Price fluctuation and competition from imported pigs: Price fluctuation is the most critical demotivating issue to farmers raising pigs, with prices varying from 7,000 to 11,000 riels per kilogram. Farmers mentioned that if the price falls to 7,000 riels per kilogram, it is not profitable. Typically, the price falls during the dry season. The price fluctuation was reported to be due to the importation of pigs from the neighbouring countries (Thailand and Vietnam).

Limited knowledge of pig raising: Farmers raise pigs using traditional methods, leading to low productivity. It is noted that when farmers raise more pigs, they tend to buy commercial feed, which is more costly than self-producing. However, the feed that farmers produce using their existing resources does not contain enough protein to ensure the good growth of pigs.

Water shortages: In some areas, there is problem of fresh water shortage for cleaning the pigs and their house, especially during the dry season. As a solution, farmers use salt water to clean the pigs' house and save the fresh water to give to the pig. If production increases, water shortage might become a critical problem. However, wells can take on the role of supplying water for pig production since pig raising does not require the same large volumes of water as vegetables.

Part 8: Conclusions and Possible Interventions

Both vegetable, chicken and pig production are found to have a significant potential market and as income generating sources, especially for women in the study areas, but are not viewed by households as a priority. Women particularly engage in those activities as subsistence-based production mainly for household consumption and then sell the surplus. The high risks in production prevent the producers from scaling up these activities. For vegetable production, water shortage and poor soil fertility are the crucial challenges. Chicken raisers face the major problem of widespread disease, which is beyond the control of small-scale producers. Similarity, the challenges for pig raisers are lack the proper technical skills needed to raise the pigs commercially, the lack of supply of good breeds and the price fluctuation in particular, which results from imported pigs.

On the positive side, demand exists for these commodities and will likely continue to grow in the future. If the challenges on the production side can be addressed, there could be real and profitable opportunities for small-scale producers. Addressing and increasing productivity are the highest priority, following by intervention on the value chain/market.

Possible Intervention Strategies

Below are the possible interventions/recommendations that CARE International might be interested in further exploring. These interventions are made to build on from CARE's current implementing program.

Increase productivities

- 1. Identifying the product with the greatest potential for scaling up among women's existing livelihood strategies:** In considering the available resources including capital and especially labour, prioritising the potential for investment and scaling up the main income generating activity for women are suggested. Women engage in many diverse income generating activities, which are peripheral activities and undertaken as subsistence based production for household consumption and for occasional selling of the surplus. These activities start from rice farming, vegetable production, fruit trees, and chicken and pig production. In order to increase women's incomes, it is important to prioritise the product with the greatest potential among their existing livelihood activities, to scale it up to for commercial purposes, which will help women to generate a substantial income. The project staff will work with women producers in each group to identify the product with the greatest potential for scaling up according to their interest, geographical context and available resources and capability.
- 2. Improve vaccine and medicine services:** Farmers raise pigs and chickens on a small-scale and few of them use vaccines. It is not profitable for SDK or village animal health workers to supply the vaccine due to the cost of running appropriate storage facilities. To address this issue, it is important firstly to raise people's awareness of the benefits of using vaccines. Once the farmers understand its benefits, the project staff can initiate collective hatchery facilities,

especially for chicken production. Hatching in an incubator would be a great advantage for administering vaccinations as it helps reduce costs. An alternative is working with women who are potential chicken raisers and extensively building their capacity on hatching techniques so they become village chick suppliers. Similarly, local pig raisers could be trained to be suppliers of piglets.

3. **Equip the women producers with the technical skills to increase production:**

This can be done in a number of ways:

- a. **Continue to improve the agricultural technical knowledge of farmers through SDK, using successful farmers as role models to inspire other farmers:** Besides having SDK as a core trainer in each group, having farmers with proven success will be a powerful tool to inspire other villagers. After the training, it is therefore important to encourage farmers to pilot the project. Several selected farmers in each group should be encouraged to voluntarily trial the techniques that have been transferred through the project. The project staff will provide close support, including coaching and close monitoring of the pilot farmers, to minimise the risk of failure when applying the technique, to build farmers' trust and to prove the success of the techniques.
- b. **Enable collective learning and sharing in the group:** In addition to the training the project or SDK provides, collective learning and sharing among members should be enabled. The sessions can be held on a monthly basis, and if there are saving activities it can be combined with the monthly meetings of the saving groups when members gather. The sessions will be a good monitoring tool, giving opportunities to share knowledge and find solutions to any problems they might be having. Outstanding farmers should be invited to share their successful experiences with others.
- c. **Field visits and using successful farmers in the areas as resource persons:** In-class training is not always an effective tool for knowledge transfer. Seeing the success of other farmers might be an effective tool to inspire the farmers. Field visits to successful farmers in the areas might enable practical learning and the exchange of ideas. It might also be the case that farmers, whose education is often limited, learn better by witnessing practices or learning from successful farmers. In addition to the in-class training, it is suggested that farmers should be linked to local successful farmers who will become useful resources. Field visits to local successful farmers would therefore also be a good idea to inspire farmers to adopt new techniques. The project staff shall identify the successful farmers in the areas and the linkages that have been created.
- d. **Strengthening the capacity of local animal health workers and extension workers:** Improving technical assistance to village animal health service workers and extension workers to improve their capacity to treat and diagnose diseases and to transfer agricultural technique to farmers.

4. **Linking the group to DPA in order to access support and capital:** Currently, MAFF is promoting the agricultural cooperative as one of the strategies to provide technical and financial support to the smallholders and to link them to the market. In the near future, MAFF will provide financial support in the form of a credit scheme with lower interest rates and technical support to farmer groups. It is important to keep updated on the agricultural cooperative and to assist farmers to derive the benefits from it. The groups who can access the support should have at least 15 members and be registered as agricultural cooperatives.
5. **Enable the savings group within the SDK group:** This would strongly encourage farmers to invest the skills they have learned from the project when using their savings. For example, the savings will be a source of finances to enable pilot farmers, apply new agricultural techniques or initiate collective actions.

Market or Value Chain Interventions

Potential Market

There are potential markets for these products (vegetables, chickens and pigs) locally and internationally, but the creation of linkages between the smallholders and the markets is a challenge. For instance, there are different collectors at village level, especially for pigs and chickens. Wholesalers/retailers complain of a lack of local supply and a lack of contact with producers.

In Phnom Penh, the establishment of organic stores is growing, among them Natural Garden, Happy Farm, CEDAC shop, Green Organic Farm, and other restaurants and supermarkets that are looking to purchase organic products directly from farmers through contract farming. The Natural Garden has said that it is currently experiencing shortages in the supply of organic vegetables.

For vegetables in particular, there is also international market (European countries). Every week, around one ton of vegetables is exported. The international market can absorb as much as Cambodia can supply, but Cambodia can only supply a very limited amount due to production not meeting the required standard.

If CARE is interested in the high value and export markets, they should get in touch with the Cambodia Organic Agricultural Association (COAA)², which is responsible for certifying the organic production and supporting market linkages.

Yet, certain criteria are applied to be able to access the high value market, including (i) the ability to provide a regular supply (there is no set quantity of supply), (ii) having an organic product, (iii) meeting the desired quality, and (vi) transporting the products to store.

Market Linkage

1. Exploring the local market: Although there is high potential in either Phnom Penh

² <http://www.coraa.org/>

or internationally for the products, it might take some time to meet their desired criteria. At this stage, it is suggested that the local existing markets and nearby areas should first be explored. The market can be expanded through existing collectors/traders or linking farmers directly to wholesaler/retailers. For example, there are different collectors within a district. Project staff can collect the contact details of those traders and share them with SDK to give them further options for selling their products. In the next step after the production have been strongly established and expanded, links can then be created with the potentially high value market mentioned above.

2. Facilitate a business forum: it is important to facilitate a business forum between farmers and traders which serve as a platform for them to interact and exchange market information including about market preferences, market demand and other business opportunities.
3. Initiate a producer group and collective sales: it is crucial to initiate producer groups and collective markets. In order to link farmers' produce to a larger market, it is important to ensure that the produce is of sufficient quantity and quality (organic) to meet market demand and that it can cover transport costs (according to Natural Garden, they do not specify the exact amount of produce that farmers must supply). Because the size of individual production is small in the study areas, individual farmers are not able to supply to traders because of the high cost of transportation. Moreover, collecting produce from individual farmers is costly and time-consuming and adds cost to the final product. Exploring the possibilities of having producer groups or collective sales where members of the group sell the product collectively to trader is suggested. This will also contribute to strengthening their bargaining power with traders as well as attracting more traders. Once the value chain is shorter, for example when farmers have direct links with distributors/wholesalers, this also reduces the mark-up price, thereby increasing the profit margin for farmers. (For details, please see annex 1.)
4. Develop an Umbrella Marketing Association: The association serves as a link or plays a coordination role to facilitate a larger market for small producer groups, but it requires capacity building in marketing, group management and financial management skills. It is also important to consider well-defined management structures, including adopting voting systems, to ensure transparency and smooth operation and avoiding depending on a single person to lead. (Please see best practices for development of a vegetable supply chain). (For details, please see annex 1.)

Annex 1: Best Practice of Vegetable Supply Chain and Saving

Developing a Vegetable Supply Chain for Farmers' Market Engagement

Svay Rieng Agro-products Cooperative (SAC)

Svay Rieng Province

Written by Chea Pisey

With the growing demand for organic vegetables and the potential of vegetable growing in Svay Rieng province, in 2011, PDA and IVY initiated the establishment of SAC. The main objective of establishing the project was to support farmers' groups to register as farmer cooperatives, then to link them to diverse high-value markets.

SAC evolved from a women's vegetable association and currently has 314 shareholders and 567 SAC vegetable suppliers. Members elected the SAC's executive committee, consisting of 12 people. The cooperative uses capital from the sale of shares to members for its operation. One family may purchase no more than 20 per cent of the total shares. The cooperative is a community based agency, working with 60 villages and with 20 collection sites in Svay Rieng. Farmers in the target areas can apply for membership if they grow vegetables and can pay the 5,000 riel membership fee.

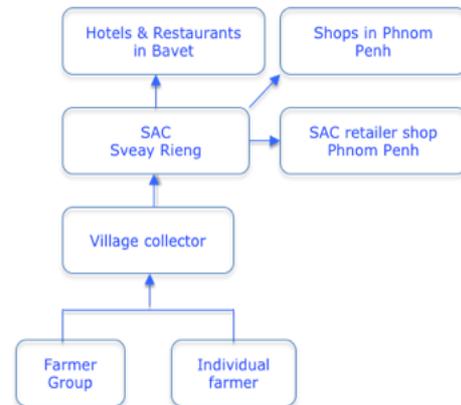
Stakeholder Support of the Establishment of SAC

The cooperative aims to enable local communities to sustain their growing of organic vegetables ultimately to raise farmers' incomes by increasing their vegetable productivity, decreasing marginal costs and expanding markets and networks. In doing so, IVY has assisted SAC by providing training for both committee and members. The training courses include accounting, general administrative work, marketing, operation, management and leadership. IVY has also trained farmers on modern agricultural practices including soil preparation, fertilizers and seed selection, and planting, resulting in increased productivity.

In the first stage of establishment, IVY worked closely with SAC to prepare the work plan, look for new business partners, and strengthen committee's capacity. IVY also granted USD 4,000 to SAC and funded the meetings and workshops that are considered critical to the functioning of SAC. In addition, IVY funded materials including a truck and motorbikes for vegetable collection and distribution. Since late 2013, IVY has been steadily decreasing its support to allow SAC to become independent.

Developing an Organic Vegetable Supply Chain and Distribution System

Executive committee manages the cooperative. The committee is made up of two main groups: a governing council (three women and four men), and a monitoring body (three women and two men). This is a way to achieve transparency. The governing council has a director (female), a deputy, treasurer and assistant, accountant and assistant, and a marketing manager whose work for the cooperative is voluntary. They each receive a subsidy of 30,000 riel (7.5 USD) per month and 12,000 riel (3 USD) for telephone each month.



With regard to decision-making, committee makes decisions in consultation with the shareholders. A routine meeting of committee members has been conducted on a monthly basis. Meetings with members are also occasionally conducted.

The cooperative works as a supply chain agent who directly collects vegetable produce from its members, then distributes to their business partners and sells at its retail shop in Svay Rieng and Phnom Penh. At the collection site, all organic vegetables are selected and arranged in accordance with the customers' orders. Previously, SAC set a stable price for vegetables for a year for the purpose of securing the market for farmers, despite market fluctuation. But this system did not work well because members would only sell their product to SAC when the set price was higher than the market price. On the other hand, members would sell their produce to local traders or to the market when they could get a better price. The trouble was that SAC could not ensure a stable vegetable supply to its partners, which could result in unprofitability and fines in some cases. In addressing this, SAC implements monthly-based price setting, which is competitive with the market price.

Making A Change Through Collective Saving Kasekor Rik Chamreurn Association Takeo Province

Written by Chea Pisey

Kasekor Rik Chamreurn Association is one of the successful associations organised by Rachana for the purpose of improving farmers' livelihoods through collective action. The association has been trained by Rachana to become a village-led microfinance scheme in which farmers' savings accumulate to form the village fund to be used in the form of loans to members. The association has reached total savings of 215

million riel, benefiting 85 members in the village. At the same time, farmers acquire new skills and knowledge that help them to diversify their livelihoods. Transparent management is a way for members to collectively decide on their savings and credit scheme, and committed committees are behind this success.

Improving Farmers' Access to Capital and Production Services

The savings and credit scheme run by the association plays a role as a financial service provider to the farmers. It has become a village bank in which members can easily save and access monthly loans without collateral, then pay back at an interest rate of 3 percent per month when harvesting happens. Given the constraints on poor farmers accessing micro-finance, this is a significant contribution to the decrease in farmers taking out loan from traders and micro-institutions. It creates a culture of collective saving which is an important resource for their community development. Additionally, members receive annual dividends from their savings and shares in the association. A share costs 10,000 riel (USD 2.5).

Through organising as an association, farmers can achieve economies of scale when accessing agricultural inputs, especially fertilizer. Input supply companies usually offer cheaper prices with warranty of quality and quantity and free transportation when buying in large quantities. This enables the association to offer a fertilizer credit scheme to members at a lower interest rate than that of traders. The interest rate is 10,000 riel for a bag of fertilizer over a three-month loan period. This provides the poor with access to agricultural inputs.

Other recognisable benefits of being members are getting capacity building and training in agricultural production skills and modern techniques including farming, livestock production and aquaculture, which are run by Rachana. Technical training is given twice a year in the first three years of support to all members of association. Another benefit is that members are able to share their experience, especially in terms of agricultural techniques, and learn from each other during annual meetings. It is noticeable that there is a significant increase in the number of villagers raising fish in ponds, while this was not often seen before Rachana introduced aquaculture techniques. Management committee is additionally trained on finance and management skills twice a year in the first three years of the association's establishment.

Further, working as an association has led to an increase in collective bargaining power in selling their rice. The association collects rice from its members and sells it to middlemen at a better price than would be achieved through individual sale. This helps to reduce price fluctuation due to the greater bargaining power of middlemen, especially exploiting poor people who are experiencing financial constraints.

Key Intervention Strategies

The local development agency, Rachana, has been actively promoting the development of farmer organisations in a way that brings greater benefits to farmer organisation members. The Kasekor Rik Chamreurn Association has received extensive support from Rachana, especially during the first three years of establishment. The support is only technical support and capacity building in management, while financial support is not provided. The support includes:

Mobilising local resources to form an association: Rachana took the initiative in mobilising the process of forming the association. They first held meetings with local authorities to introduce their development plan. With the assistance of local authorities in coordinating meetings, Rachana conducted the first meeting with all the interested villagers to introduce and normalise the concept and benefits of farmer organisations. However, introducing a new concept into villagers' minds cannot be easily done at a meeting. Rachana used a "field visit approach" to convince villagers. Rachana took some interested villagers to visit a successful model association within their province. Rachana learned from previous experience that farmers are not very convinced by visits to different geographical areas because they believe that variations in the local context can shape different possibilities and successes.

Targeting voluntary and hardworking farmers: In selecting members, Rachana worked closely with the village chief and elders who knew best the behaviour and characteristics of their villagers. The main criteria for membership are that people's participation is voluntary, and that they are hardworking, honest and resident in the village.

Financial training and material provision: To ensure that elected committee is able to function, the elected committee was trained on financial management two or three times a year over the three years. Because of their limited capacity in financial management, close coaching was required at the beginning to ensure effective operation. Rachana also provided some necessary materials such as financial accounting books. After three years of support in capacity building, the association should have been able to function autonomously; yet Rachana continues its occasional monitoring of the association's progress either by phone or quick field visits. However, the committee claims that they require more capacity building on keeping financial accounts. The role of Rachana to occasionally monitor them is a key to building greater trust by members in the effective functioning of the association.

Provision of agricultural technique training: The committee members were trained in modern agricultural practices including in the System of Rice Intensification (SRI) programme, livestock production and aquaculture. Committee members are responsible for transferring of knowledge and experience to their members. Rachana would serve as a technical support team to the association if any problem occurs.

Annex 2: Name List of Interviewed National Government Official

No	Name	Occupation	Organization	Contact
1	Mrs. Savin	Deputy Director of DAH&P	MAFF	011 88 99 29
2	Mr. Say Tom, Head of HRD	Head official of Agricultural Extension	MAFF	012 83 40 30
3	Mrs. Bun Chhit Vesna	Department of Economic Development	MoWA	012 755 196

Annex 3: Name List of Participants in District Workshop in Botum Sakor District

No	Name	Occupation	Organization	Contact
1	Ms. Ouch Seamleng	SDK	Farmer	087740145
2	Ms. Lay Dieb	FIG	Farmer	NA
3	Ms. Kun Sreymao	SDK	Farmer	0977466351
4	Mr. Leng Kao	Village chief	Government	0899267824
5	Ms. Geur Da	FIG	Farmer	0885216691
6	Ms. Ouck Eurn	FIG	Farmer	0888664504
7	Ms. Peurm Sochea	FIG	Farmer	015830050
8	Ms. Sing Chan	FIG	Farmer	0979394012
9	Ms. Nget Deurn	SDK	Farmer	0965705829
10	Ms. Tou Sarim	SDK	Farmer	0972050425
11	Mr. Leng Chan Sophea	Agronomist	DPA	017489399
12	Mr. Som Sophan	Village chief	Government	015775797
13	Mr. Theng Geur	Local authority	Government	015581907
14	Ms. Leng Pao	SDK	Farmer	0979439676
15	Ms. Heng Kongkea	FIG	Farmer	0883750797
16	Ms. Kob Chan Nan	FIG	Farmer	0719242700
17	Ms. Chum Srey Mao	FIG	Farmer	0885073003
18	Ms. Hor Sokha	FIG	Farmer	0972322257
19	Ms. Orn Chea	FIG	Farmer	087909364
20	Mr. Meurng	Village chief	Government	015281609

	Khum			
21	Mr. Kat Pich	District animal health official	DPA	015827966
22	Ms. In Saophorn	Official	District office	015721531
23	Mr. Soun Nan	Head of office	DPA	0976991950
24	Ms. Phat Sonith	Field Assistant	Morodock	0979718168

Annex 4: Name List of Participants in District Workshop in Sre Ambel District

No	Name	Occupation	Organization	Contact
1	Mr. Oun Kea	Village chief	Government	0978053148
2	Ms. In Lin	SDK	Farmer	016917538
3	Ms. Nor Neak	FIG	Farmer	
4	Ms. Ouy Pun	SDK	Farmer	0889337076
5	Mr. Chea Ny	FIG	Farmer	
6	Mr. Klem Klao	FIG	Farmer	
7	Mr. Lorn Seng	Village chief	Government	0885920007
8	Ms. Kak Chork	SDK	Farmer	
9	Ms. Leng Sokly	FIG	Farmer	0974522978
10	Ms. Meng Yuy	Village chief	Farmer	0977292226
11	Mr. Tao Van	Local authority	Government	097554165
12	Ms. Jor Boyi	FIG	Farmer	015447194
13	Ms. Norn Cha	FIG	Farmer	
14	Ms. Chay Smey	SDK	Farmer	0962114401
15	Ms. Chan Kimcheng	SDK	Farmer	016918985
16	Ms. Sous Theurn	FIG	Farmer	
17	Ms. Loun Dyna	SDK	Farmer	016906854
18	Mr. Bor Rany	Fishery officer	PDA	012331397
19	Ms. Lok Neang	FIG	Farmer	
20	Ms. Meas Chet	FIG	Farmer	
21	Mr. Saly Bolivan	Head office of Agriculture	DPA	0888502270
22	Mr. Lim Salouch	Animal health worker	DPA	016268864
23	Ms. Chea Ratha	Head of office	District office	0975064760
24	Ms. Tout Hatina	Deputy district governor	District office	016632124
25	Mr. Thorn	Trader	NA	081601450
26	Mr. Touy Keurng	Trader	NA	0978052560
27	Ms. Morn Sambath	Trader	NA	0979657886
28	Ms. Soun Phorn	Trader	NA	0886642344

Annex 5: Name List of Participants in Group Discussion and Interview

No	Name	Occupation	Contact
1	Ms. Mork Nouy	Farmer	
2	Ms. Ly Yet	Farmer	
3	Ms. Ly Srenang	Farmer	
4	Ms. Yong Srey Ang	Farmer	
5	Ms. Yeurng Hear	Farmer	
6	Ms. Bouy Sarin	Farmer	
7	Ms. Meas Synoun	Farmer	
8	Ms. Hang Sreymao	Farmer	
9	Ms. Morn Kea	Farmer	
10	Ms. Doung Sarin	Farmer	
11	Ms. Khim Sarnag	Farmer	
12	Ms. Yorn Ly	Farmer	
13	Ms. Mean Sreytouch	Farmer	093396599
14	Ms. Meas Sothear	Farmer	0975613513
15	Ms. Yut Im	Farmer	0973304283
16	Ms. Ky E Im	Farmer	
17	Ms. Khun Oun	Farmer	
18	Ms. Cheang Ry	Farmer	
19	Ms. Han Hak	Farmer	
20	Ms. Khem Tho	Farmer	
21	Ms. Heng Neung	Farmer	
22	Ms. Bok Sok	Farmer	
23	Ms. Chek Chao	Farmer	
24	Ms. Lay Chan	Farmer	
25	Ms. Hor Sokha	Farmer	
26	Ms. Prom Theng	Farmer	
27	Ms. Kong Sokeng	Farmer	
28	Ms. Min Sao	Farmer	

Annex 6: Name List of Participants in Key Informant Interview

No	Name	Occupation	Organization	Contact
1	Mr. Kat Pich	Animal Health official	PDA	
2	Ms. Un Sieng Leng	SDK	Farmer	087740145
3	Mr. Khim Chhoung	Commune chief	Government	0972623346
4	Ms. Eng Cheang Hong	Vegetable trader	NA	0974080744
5	Mr. Chea Seng	Chicken trader	NA	
6	Ms. Sim Chan	FIG	Farmer	015915230

7	Ms. Ngeur Deurn	SDK	Farmer	0963705829
8	Mr. Chhorn Mom	Commune chief	Government	0978584343
9	Ms. Theara	Deputy Director	DPA	
10	Ms. Chhem Siem	Acting Director	PDWA	015914907

Annex 7: Questionnaires

KII with Government

Respondents: MAFF – department of agricultural extension and animal health production, MoWA-Department of women Economic Empowerment, officials from provincial department of agriculture, husbandry, and women’s affairs, district chief or commune chief.

Objective: To capture existing policies, interventions supporting women’s economic activities, and their perspective toward women extension workers

Background

- Name
- Gender
- Age
- Phone:
- Location (village, commune, district):

Government Agency

- What are the existing policies support women’s empowerment
- What are existing services support women’s smallholders
- How do they benefit or participate in your program?
- What do you think are the barriers or obstacles for women to participate in your program?
- What are the priority or potential products that governing is supporting for the Kok Kong province? Why?
- What are the demand and supply? Competition with imported product?
- What government policies support these potential products?
- What government projects or programs support these potential products? (Infrastructure, finding markets, technical services, trade rules, safe transportation at reasonable price,)
- What do you know women can participate in the market for these products?
- What do you think are the barriers or obstacles for women to participate in the markets for these products?
- What do you think are the challenges encountered by the national government in implementing agricultural programs for women farmers and smallholders?
- What are private services available for these potential products?
- What is the production size?
- What are the uses of the products?
- Who are the actors in this value chain? What percentage at each link is female?
- How would you perceived the role of women working as commune/village/district extension workers?

KII for traders, middlemen

Background

- Name
- Gender
- Age
- Phone:
- Location (village, commune, district)
- How many years have you been involve in this trade?
- How many other traders in the area? How many are female?

Input

- From where do you purchase **the produce**?
- Buying from individual and group, which one is more preferable?
- Do you bring it from field or do farmers come to you to sell? What percentage of the sellers is female?
- What problems do you face while purchasing?
- Do you provide any service to the farmers/sellers (e.g. information on market, technique, credit, etc.)?
- When do you purchase (all months or only seasonal)? What months highest? What months lowest?
Or Term of Payment
- How much do you purchase per year?
- Please tell us the quantity of last three years purchase. Why increased or decreased?
 - 2012:
 - 2013:
 - 2014:

Price Determination

- Are the farmers price takers or price setters?
- What percentage are price takers or price setters?
- Where do the farmers source their price information?
- Do farmers receive payment in cash or in credit?
- How many per cent of them receive what form of payment?
- What price do you pay for these products on average? Please tell us about last 3 years prices. Why increased or decreased?
 - 2012:
 - 2013:
 - 2014:
- Do you process the products before selling to customers? If yes, how? Please explain and tell about the tools and equipment, labour needed to do the processing.

Sales

- Who are your top customers (wholesalers, retailers, exporters, processor, consumer)? Which areas are they from?
- What are the problems that you face with selling the products?
- Do they have negotiation skills and power with larger businesses and processors?

MARKET PERFORMANCE

- Profit Margins

- What percentage of the final selling price is the farmers' profit?
 - What are the profit margins (e.g. percent of the profits to final price of rice) realized by the different channels/middlemen
- Losses
 - What are the losses incurred by the farmers due to improper practices in the commodity system? (e.g. in harvesting, handling, threshing, drying, storage and milling, breeding ?)

Are you aware of any potential long term income earning opportunities in Koh Kong ?

- What are some of the most lucrative business opportunities in Koh Kong?

Session Outline for FGD (4)

Participants: Women smallholders who are the beneficiaries of LEL project and engaging in different income generating activities. Each group should consist between 5-8 members. In each district, there are two FGD conducted. In total, there are 4.

Part 1: The 24-hour day (What's in a day of a husband and wife in a household?)

Objective: is to raise awareness of men and women workloads

Part 2: Four (4) Gendered dimensions of households

Objective: is to explore the four dimensions of households that influence women's (and men's) participation and roles in markets. This should lead towards identifying the barriers (and opportunities) for women smallholders in the province

1. Unpaid productive work
2. Unpaid caring work
3. Resources, assets, time and labour
4. Attitudes, beliefs, norms about gender roles
5. Numbers of women accessing new market based income option and/or job?

Part 3: Developing (broad) criteria on what product/market is feasible for women

Objective: is to identify a set of broad criteria on what market works for women. These criteria will be further refined when they will be used during the district workshop.

Are you aware of any potential long term income earning opportunities in Koh Kong ?

What are some of the most lucrative business opportunities in Koh Kong?

FGD with SDK (2 Groups)

Participants: SDK who are currently in active. Each group should consist between 5-8 members. One FGD with SDK will be conducted in a district. In total, there are 2 FGD with SKD. In each district, SDKs should be representatives from at least 4 communes.

Objective: is to discuss and capture the following information

- Existing resources to work as SDK
- Skills and resources required
- Challenges working as SDK
- Perspective on benefits deriving from this role compared to other occupations
- Constraint and opportunities for them to work as SDK
- Social Norms
- Aspirations

Outline for the District Workshop (1 workshop per district=2)

Objective:

- To identify the potential markets that has variable market and feasible for women.
- To map out the value chain of the potential produces for smallholders and opportunities for women's participation.

Participants: Estimated between 30-35 participants

- Local authorities (village chief, commune chief, district chief)
- Local government officer (district/commune officer from department of agricultural, animal health and production, fishery, women's affairs and labour and vocational training, department of Commerce.
- Traders/middlemen
- Women smallholders from various productions
- SDK
- Local NGOs who are working on livelihood improvement

The workshop will be divided into three parts:

Part 1: Brainstorming on Potential Market (30 minutes)

The main objective of this exercise will be done to brainstorm the potential market in the district

Part 2: Gendered Market Selection (1hour)

This part of the workshop aims to select markets based on criteria to be developed by the participants. A guided discussion will be done to allow the participants to develop the following:

- Criteria for "Feasible for women smallholder to implement"
- Criteria for "Market demand"
- Criteria for "Potential income"
- Criteria for "Risk"

Outputs generated from the FGD with women will be shared with the participants so they are guided in their discussion.

Selection the Priority Produces, ranking 1 to 5 (1=lowest, 5=highest)

Criteria	Market 1	Market 2	Market 3	Etc.
Market Demand				
Feasible for women smallholder				
Potential income				
Associated Risks				
Total				

Part 3: Gendered Market Mapping (1.30 hour)

In this session the participants will assess the characteristics of the market structure of the 3 potential products/market so that potentials for smallholders and women participation and benefit can be identified as well.

The Market Map will be analysed through a structured discussion in small groups by collapsing the map into three parts:

Part 1: Market: bottlenecks, policies, infrastructure, facilitating services that (De)enable the women's production

Part 2: Enterprise: Gender Market Flow Analysis (structure & policies or (lack of) capacities, these facilitate (block) women in in exploiting this opportunity

Gendered Market Flow Analysis

Market flow	Small-scale producer	Collector	Processor	Wholesaler	Retailer
Where are the women? What do they do?					
Where are the men? What do they do?					
What are the barriers for women to participate at each stage of the flow?					
What are the financial costs at each stage of the flow?					
What are the profit at each state of the flow?					

Part 3: Household and Community - the time, control over assets, beliefs, skills required for these women to empowerment.

After properly situating the range of barriers and opportunities for women small holders, the discussion can be distilled into very specific issues of mutual interest which will form part of the researcher's recommendations to CARE.

IDI with Women Small-Scale Producer

Enumerator name	Date of Interview	Starting Time of Interview	Ending Time of Interview
Village		Commune	
District		Province	

Participants: Women beneficiaries of CARE who are currently engage in the market and the selected market

Objectives of IDI:

- To get an in-depth understanding on the selected market and issues specific for women farmers/producers
- To understand the household constraints that can hamper women involvement in the value chain
- To understand the willingness, readiness and confidence of women to change, and their future aspirations

A. BACKGROUND

- 1) How long have you been engaging in this production?
- 2) At present, is this activity your main economic activity or side economic activity?

B. VALUE CHAIN

Map out value chain with participants, from input suppliers to market.

INPUT SUPPLIERS (e.g. fertilizers, vaccines, seeds, chicks, labour, water, etc.)

- 3) What are the most important inputs for production?
- 4) How many input suppliers? How many of them are women?
- 5) What are some constraints you face at this stage as women ?
- 6) Does anyone provide you with information or training on how to use the inputs?
 - a. If yes, who? Is it useful?
 - b. If no, do you think technical support with inputs is important? What kind of services? What kind of provider would you trust to provide these kinds of services? Are you willing to buy and affordable for these services?
- 7) What do you think about services provided by SDK?

PRODUCTION

- 8) How many producers in the village? How many of them are women?
- 9) What varieties/breed do you produce?
- 10) What are the tasks of women during production? Men? Why are tasks divided like this?
- 11) What are the sources of finance for these production costs (e.g. own money, borrow MFI, government donations, etc.)? How much money from each source? Would in the family take care of the finance issue, men or women? Why? Is it difficult for women to access finance? Why or why not?
- 12) What are some of the problems you face with production as women?

- 13) What kinds of services and technical assistance that are supportive to improve the volume and quality of production? What kind of services? What kind of provider would you trust to provide these kinds of services (e.g. someone local or from Phnom Penh; government official or private agent or SDK etc.)? Are you willing to buy for these services?
- 14) What factors are hindering you from expanding production now (e.g. finance, no market, lack production technique)?

MARKET

- 15) Who does the selling in the household, women or men? Why?
- 16) Who do you sell your production to (traders, wholesalers, retailers, processors, exporters)? How many buyers? Are they local people or from outside? How many of them are women?
- 17) Do you prefer to sale as individual or group? Why?
- 18) Explain about the price bargaining situation.
- 19) How do you communicate with the buyer (by telephone, they visit the village, through commune chief, etc.)? Do you have direct access to the buyers?
- 20) What are some problems you have with the sales and marketing of your products? Are there any specific constraints related to being women?
- 21) How do you get information on the location of markets, prices and demand?
- 22) What kind of services and technical assistances do you want related to selling and marketing your products? Who do you want to provide those services (e.g. NGO, government officials, private agents, SDK etc.)? Are you willing to pay for those services?

C. CONSTRAINTS THROUGH HAMPER IN HOUSEHOLD WORK

- 23) What are your main responsibilities in the household?
- 24) How much time do you spent in [chicken raising or vegetable cultivation]?
- 25) Due to participation in [chicken raising or vegetable cultivation], did the household work hamper?
- 26) When you are busy with is activity [chicken raising or vegetable cultivation], who manages the household work? Who looks after the children?
- 27) How did you manage the existing situation? What help/support do you get from your husband or other members of the family?
- 28) Do you face family problems if household work is not done properly?
- 29) In your absence has any problem occurred your family or your children?
- 30) Did family quarrel arise with husband/ family members due to unfinished family work?

D. SOCIAL NORMS / RESTRICTS

- 31) How does the community view women involved in [selected market]?
- 32) Are there other significant cultural or spiritual beliefs associated with women in [selected market]?
- 33) Has attitude in these regards change with the modern production system and through changing time?
- 34) What are the social norms for women related to marketing (selling of products)?
- 35) Are women allowed to travel? Are there constraints on women's mobility? If yes, why? If yes, why?

E. ASPIRATIONS

- 36) Are you interested in expanding your production? Why or why not?

- 37) Along this value chain (input, producer, trader, wholesaler, retailer, processor), where do you want to be? Why?
- 38) What are some of the constraints preventing you from positioning yourself to that station?
- 39) What can intervention or technical assistance can help you get there?
- 40) Do you think your family and community will support this move? Why or why not?
- 41) Do you think you will face conflicts within your household if you move to a higher station (e.g. less time for household work)? If yes, how will you deal with this problem