

KINGDOM OF CAMBODIA
NATION RELIGION KING



Beneficiary Profile Report
Ka Chanh Indigenous Community, Lbang
II Commune, Lum Phat District,
Ratanakiri Province

PROJECT IP: P171331

APRIL, 2023

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I. Introduction

1.1 LASED III in brief

1. Since 2008, the World Bank, through Land Allocation for Social and Economic Development (LASED) projects, have continuously supported the government Social Land Concessions (SLC) program to successfully pilot a more sustainable and transparent process of land allocation to poor people. In addition, these projects have also supported the development of rural roads, small irrigation systems, primary schools and health posts, while providing agricultural training and support for expanded farming services in order to promote the livelihood and economic development of the land recipients during the whole project.
2. The Land Allocation for Social and Economic Development, Phase III (LASED III) would follow a two-pronged approach: (i) consolidating through complementary activities the current SLC program under LASED II and expanding it into new SLC sites within the same provinces; and (ii) implementing an adapted approach into communities of indigenous peoples in new project provinces. The project would build on the successful and well-established procedures under LASED and LASED II for implementing SLC activities, but also adapt them to indigenous peoples' communities.
3. The project development objective (PDO) is to provide access to land tenure security, agricultural and social services, and selected infrastructure to small farmers and communities in the project areas. In addition, the project's key activities include social land concessions, indigenous community land registration, commune land use planning, physical infrastructure development, and support for livelihood development. LASED III is expected to contribute to poverty reduction, livelihood improvement and expansion of climate resilient road infrastructure.
4. The Land Allocation for Social and Economic Development, Phase III (LASED III) is the governmental project with a total budget of US \$ 107 million, funded by the International Development Association (IDA) through the World Bank (WB) of which US \$ 93 million and US \$ 14 million is a contribution from the Royal Government of Cambodia. LASED III has been implementing by the following ministries:
 - a) Ministry of Land Management, Urban Planning and Construction (MLMUPC) as the Executing Agency (EA), and
 - b) Ministry of Agriculture, Forestry and Fisheries (MAFF) as the Implementing Agency (IA).

5. Within their framework, the project would support: (i) about 15 Indigenous Communities (ICs) to carry out their respective Indigenous Communal Land Titling (ICLT) processes; (ii) about 30 ICs, that have completed their titling processes, with development activities; (iii) about 12 SLC new sites in both currently covered and new provinces for land allocation and development activities; and (iv) the current 14 SLC sites currently covered by LASED II with limited, discrete and complementary activities such as small-scale irrigation and agriculture access tracks across SLC sites. However, it is not likely that all the estimated 57 new sites and communities would be identified and fully delineated, and all potentially required reclassification and/or reallocation completed before the start of the project.
6. During the launching workshop¹ presided by **H.E CHEA SOPHARA**, Deputy Prime Minister, Minister of MLMUPC, and Chairperson of the LASED III, he has announced officially that LASED III will be lasting for the period of six years project, starting from October, 2020 until December, 2026. During the six years of the project, the MLMUPC and MAFF will execute the project in the geographical targeted with suitable land and location at 71 sites² of around 30,000 hectares (included 10,000 hectares of indigenous communities), wherein 26 sites are for social land concessions and 45 sites for indigenous communities with approximately 15,000 rural households will get direct benefit from LASED III.
7. LASED III would follow a two-pronged approach: (i) consolidating through complementary activities the current SLC program under LASED II and expanding it into new SLC sites within the same provinces; and (ii) implementing an adapted approach into communities of indigenous peoples in new project provinces. The project would build on the successful and well-established procedures under LASED and LASED II for implementing SLC activities, but also adapt them to indigenous peoples' communities.
8. The Project consists of following parts:

A. Component 1: Selection and Development Planning of Social Land Concessions and Indigenous Communal Land Titling

This component is planning to the provision of technical support for (a) processing applications for SLCs, including determination of land availability, carrying out environmental and social

¹ Launching workshop virtually dated on June 24-25th, 2021, organized by MLMUPC which has been participated from implementing ministry, governors of relevant provinces such as Ratanakiri (RAT), Mondolkiri (MKR), Stung Treng (STG), Thboungh Khmum (TBK), Kratie (KRT), etc. amounting more than a hundred participants.

² This amount will be flexible due to the actual implemented activities done by MLMUPC. The ICs is increased from 30 ICs to 33 ICs, so the total is 74 sites for both ICLTs and SLCs that will be implemented under LASED III.

assessment (ESA) and (commune) land use planning ((C)LUP)³; (b) processing and registration and completion of titling process; (c) planning of infrastructure and service investments in indigenous communities, through (i) participatory preparation of SLCs and ICLTs plans; and (ii) identification, prioritization, and planning for infrastructure investments; and (iii) processing of individual SLC land titling for eligible land recipients and ICLT for eligible indigenous communities.

B. Component 2: Community Infrastructure Development

According to the early preparation from the relevant execution ministries with the participatory preparation of WB team, this component is subjecting to the provision of economic and social community infrastructures investments in the sub-projects in the projects areas in: (a) transport connectivity, water supply and sanitation, school and health infrastructures; and (b) small-scale irrigation schemes.

C. Component 3: Agriculture and Livelihood Development

This component is mainly implemented by MAFF as implementing agency on the provision of: (a) settling-in assistance to new land recipients; (b) initial land preparation assistance including a first cover crop; (c) technical support for MAFF's implementation of the comprehensive agricultural services strategy; (d) technical and operational support for establishment and strengthening capacity of community groups; and (e) revolving funds (RF) to eligible community groups to scale-up local initiatives on enhanced productivity and incomes for farmers, mitigation and adaptation.

D. Component 4: Project Management, Coordination, and Monitoring and Evaluation

This component would ensure effective project management through the (a) carrying out of the day-to day implementation, coordination, and management of project activities, including planning and execution, financial management, procurement, internal and external audit, environmental and social impact management, monitoring, reporting and evaluation; and (b) strengthening the SLC and ICLT management information systems.

E. Component 5: Contingent Emergency Response

This component is provisioned of immediate response to an eligible crisis or emergency, as needed. The contingent emergency response component, with a provisional zero allocation, would

³ According to the sub-decree No.72 dated on June 05th, 2009 about the procedure of commune land use planning will be used as the tool to prepare on the land use planning. In addition, MAFF will conduct the agro-ecological analysis (AEA) onsite to randomly select the soil samples to analyze the physical and chemical assessment for suitable agricultural land usages and zoning.

allow for the reallocation of financing to provide immediate response to an eligible crisis or emergency. An Emergency Response Manual (ERM) is included in the PIM which will describe implementation arrangements for the component, including its activation process, roles and responsibilities of implementing agencies, positive list of activities that may be financed, environmental and social aspects, and fiduciary arrangements.

9. Principally, LASED III's geographically targeted shall be operated throughout the whole country, where Phnom Penh capital city is not included, according to the demand driven approach adopted for the SLC and ICLT. However, current agreement with authorities limits the project's coverage to the 14 provinces⁴ that would host about 71 sites and IP communities. In addition, to choose the beneficiary targeting, the approach to the delivery of LASED III relating to SLCs and ICLT⁵ is applied based on "demand-driven". For instances, the allocation of both SLCs and ICLTs is commune-based or ICs-driven, rather than pre-determined by the project. Table 1.1 below shows about the beneficiary targeting of both SLC and ICLT.

Table 1.1 Beneficiary targeting				
SLC/ICLT	SLC's support		IP's supports (ICLTs and ICs)	
			Development support to already titled ICs	Titling - ICLTs
	Existing	New	(targeted)	(targeted)
	14	12	30 (+3)	15
Total	26		45	
Grand total	71 (+3)			
Source: PIM, 2022.				

⁴ Such as Ratanakiri, Mondolkiri, Stung Treng, Kratie, Kompong Thom, Preah Vihear, Thboun Khmum, Kompong Speu, Odormeanchey, Banteaymeanchey, Siem Reap, Battambang, Kompong Chhnang and another one will be done soon according to the proposed site location from the local governor of available land to join with the project.

⁵ **ICLT Eligibility:** According to the Article 23 of Land Law 2001, the eligible criteria for starting the process of ICLT include a group of people who share ethnic, social, cultural and economic characteristics and cultivate their land in a collective manner. In addition, the Circular 0974/09 of the Ministry of Rural Development made specific criteria that 1) they manifest their self-identity which is recognized by the local authority; 2) they have their own speaking or written language, even that has disappeared; 3) There are traditional leaders including elders, tribal leader, or an existence of traditional decision making structure; and 4) there are five different types of community land including spirit forest land, burial ground, swidden land or reserve land, actual land area for cultivation, and residential land. In addition, the well ranking of the IC applicants would also include the requirement of having community by-laws, composition of the Community Committee, and the IPC Internal Rules accommodate inclusion of women and youth in decision making.

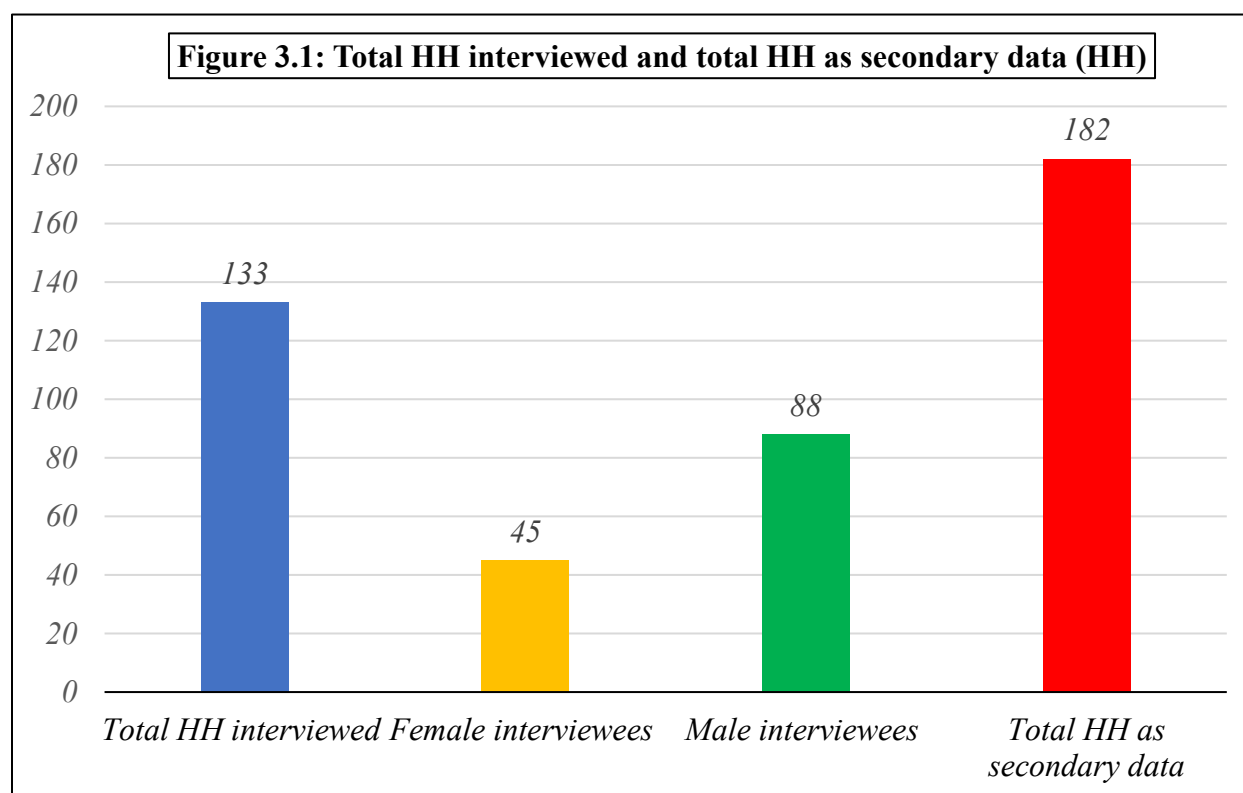
II. Data Collection Methodology

10. This study is divided into two phases in order to collect the data and information regarding to the targeted indigenous communities such as (i) secondary data sources collection is provided by the local authorities through the implementing officials of LASED III under provincial Department of Agriculture, Forestry and Fisheries (PDAFF) includes the total households (HHs), number of the population inside the village and community (included males, females and children, etc.), and (ii) primary data sources collection is gathered from the interview during the mission at the communities directly by using the prepared questionnaires (See the annexes).
11. Practically, the method used to collect the data and information of beneficiaries includes the organizing the orientational extensively meeting to introduce the objectives of the project, the purposes of the mission and mission team members in order to provide the information to the participants understand of the mission then arranging the interview of each participant. After that, the mission team will go directly to interview the rests who do not participate at every household remained. In order words, there are two different ways of interviews such as (1) individual and (2) group interviews in order to make every interviewee to be isolated without disturbing from another people or to ensure they are free at talking.
12. The mission was conducted provincially in **Ka Chanh indigenous community/village, Lbang II commune, Lum Phat district, Ratanakiri province** from **20 to 24 March 2023** led by Mr. Siek Vichay, a member of agro-industry sub-component and participated by other relevant technical sub-component under LASED III project as well as the implementing agency at sub-national officers under Ratanakiri PDAFF.

III. Results

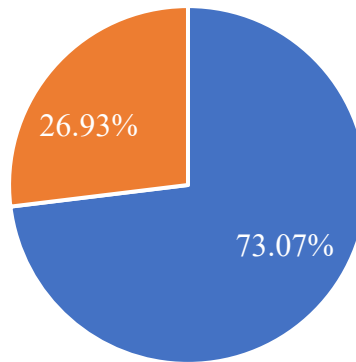
3.1 General Information

13. **Ka Chang indigenous community** is a village locates in **Lbang II, Lum Phat district, Ratanakiri province**, standing at north-east side, about **30 km** from **Banlung town**. The majority of citizen of this village are **Prov Indigenous People (PIP)**. Geographically, its UTM numbers are **48P 713115-1509049** and **48P 713564-1508911** once the mission team pointed by using the Samsung Galaxy S9+ smartphone.
14. According to the secondary data from village chief of **Ka Chanh village**, the total population inside this village is 729 IPs (Includes 346 females and 383 males) equals to 182 households (HHs). However, once the mission team has completely interviewed of all families in **Ka Chanh village** there are totally about 133 HH (F 45; 33.83%, M 88; 66.17%) (See figure 3.1 below).



15. Therefore, the percentage of the households interviewed is approximately 73.08% of the total family in **Ka Chang indigenous community** or **Ka Chanh village** while there are only 26.93% were not interviewed (See figure 3.2 below). In fact, **Ka Chanh** is one among other two villages in Lbang II commune, Lum Phat district, Ratanakiri province.
16. In fact, Lumphat is a district in Ratanakiri Province, north-east Cambodia. In 1998, it had a population of 10,301. Lomphat, the former capital of Ratanakiri, is located in the district on the Srepok River.

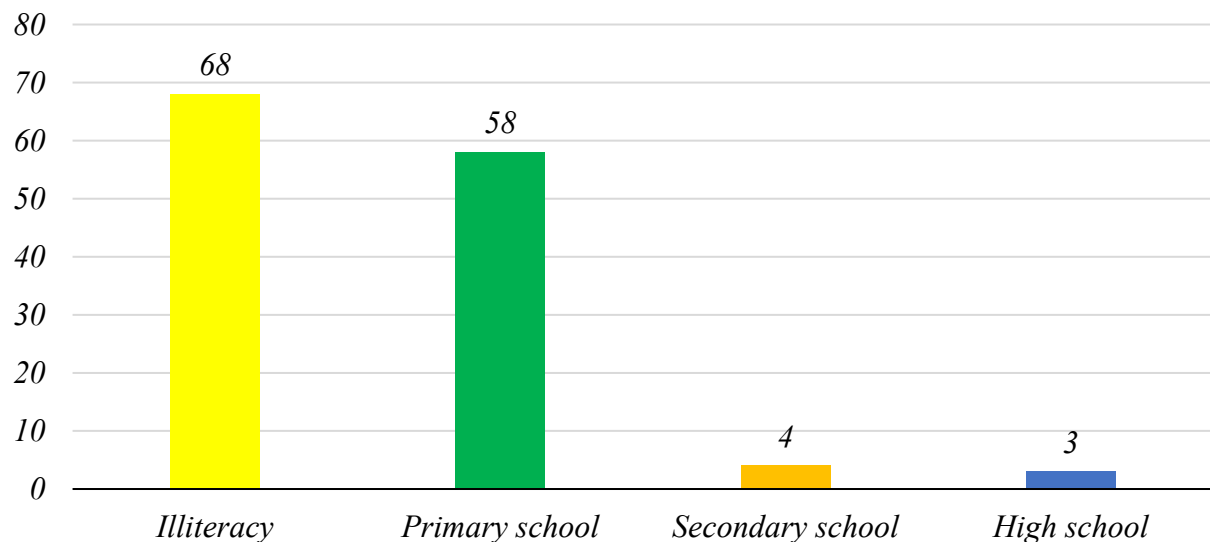
Figure 3.2: Percentage of HH interviewed VS Non-interviewed (%)



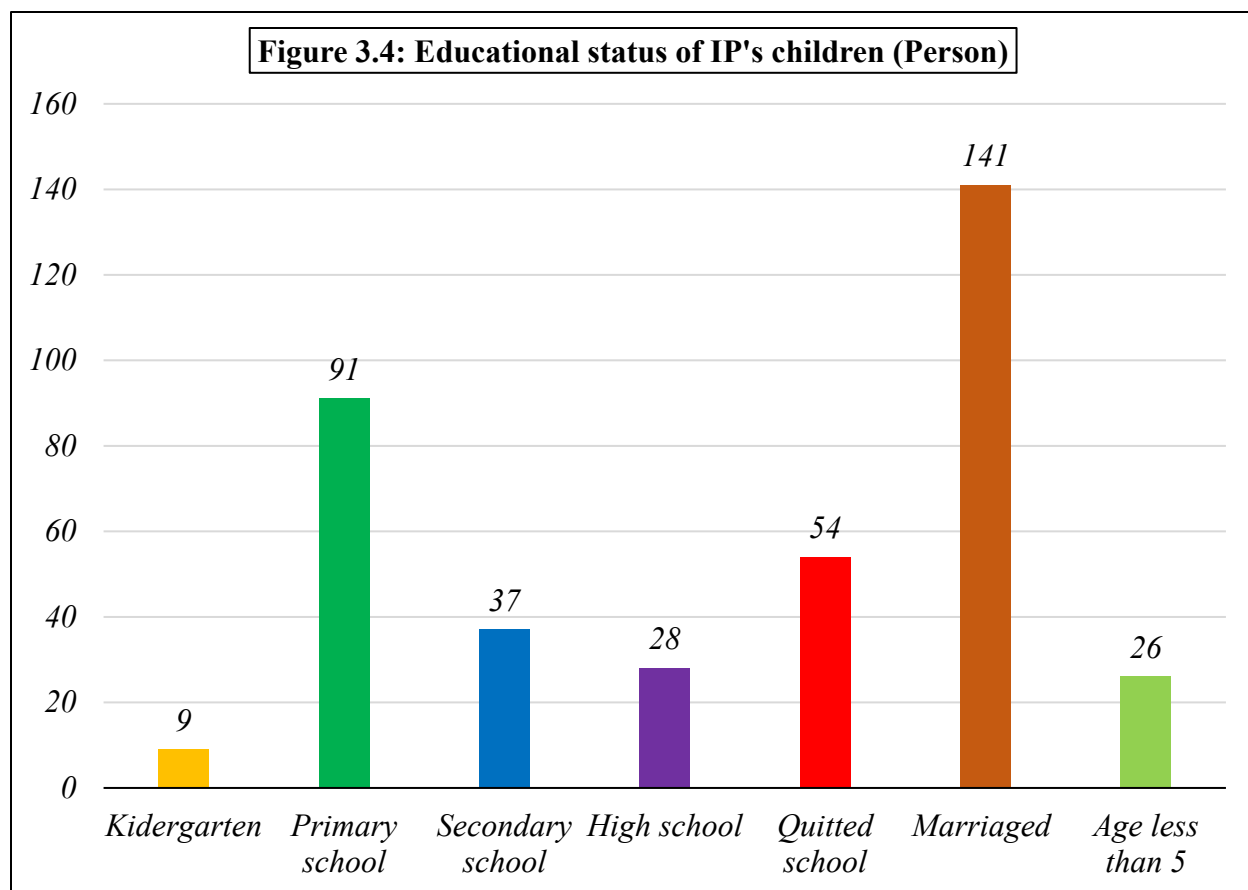
■ HH Interviewed ■ HH Non-interviewed

17. According to the data interviewed, the educational level of interviewees at illiteracy, primary school, secondary school, and high school rate is about 51.13% (68 Pers), 43.61% (58 Pers), 3.01% (04 Pers) and 2.25% (03 Pers) respectively (See figure 3.3: Interviewees' educational level).

Figure 3.3: Interviewees' Educational Level (Person)

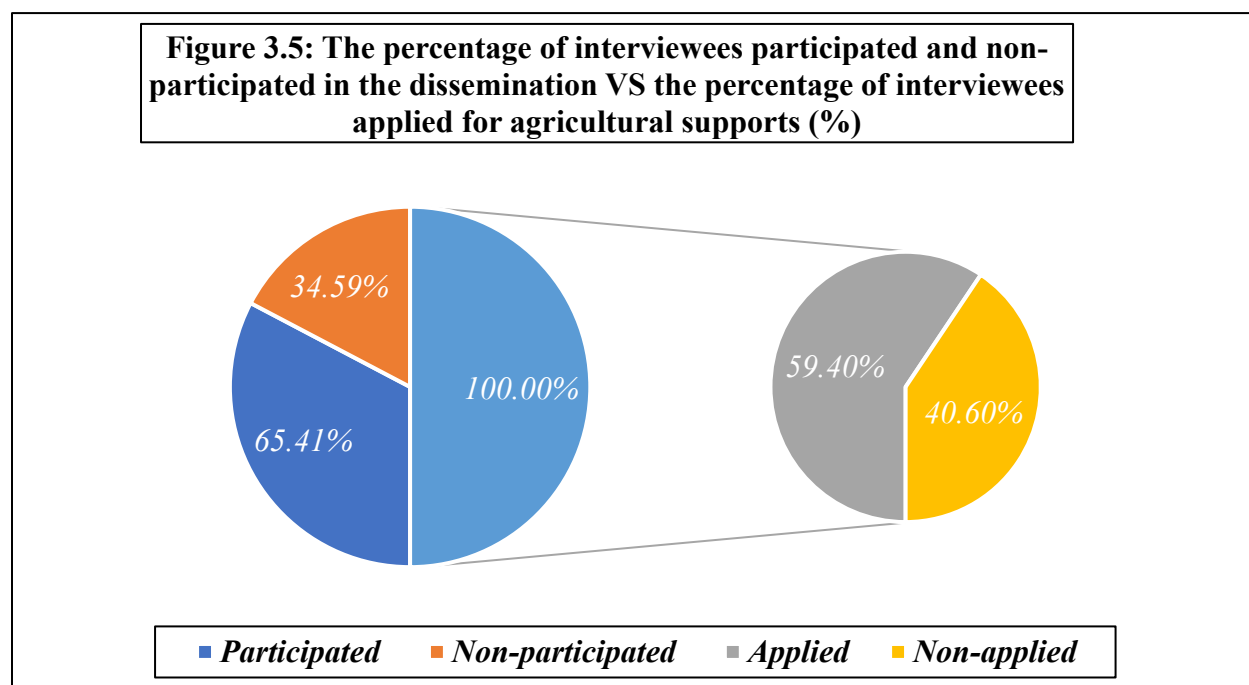


18. Based on the interviewed data, there are approximately 386 IP's children which consist of 182 and 204 of girls and boys, respectively. At the same time, those children are mostly studying at primary school, some at secondary school and some at secondary school and high school inside and outside the village. By the way, there are approximately 50.51% of those children were quitted the school and got marriage already (See the figure 3.4) while there is no either technical school or university student.



19. Since early year of starting the LASED III project, the MAFF team has already organized the dissemination among them so that **Ka Chanh village** has intentionally applied for agricultural supports since 2021. However, during the dissemination, some of IPs did not join because of some reasons related to their personal daily works, his/her family joined instead of them so that once the interview they have mentioned it. In fact, there are more than 65.41% of the total IP has been participated the dissemination days conducted by MAFF, PDAFF, MLMUPC, etc. However, during the interview, it is shown that the percentage of the interviewees responded that they have rationally applied for the agricultural supports with MAFF or PDAFF team is representatively almost 59.40% of the total interviewees. So, it means that they are willing to get more technical supports from MAFF on economic and livelihood development to promote their daily life. According to the interview, the technical supports in term of agriculture are raising animal (Chicken, duck and cow), aquaculture (fish raising), crops farming especially industrial crops such as cashew nut and cassava production, horticulture (safe vegetable farming, organic farming and fruits), contract farming and markets linkages training, agricultural processing techniques, nutrition sensitive agriculture, food safety, producers group establishment and other related technical supports (See Figure 3.5 below).

20. Essentially, agricultural marketing covers the services involved in moving an agricultural product from the farm to the consumer. These services involve the planning, organizing, directing and handling of agricultural produce in such a way as to satisfy farmers, intermediaries and consumers. In addition, numerous interconnected activities are involved in doing this, such as planning production, growing and harvesting, grading, packing and packaging, transport, storage, agro- and food processing, provision of market information, distribution, advertising and sale. Effectively, the term encompasses the entire range of supply chain operations for agricultural products, whether conducted through ad hoc sales or through a more integrated chain, such as one involving contract farming.



21. Rationally, even though the interviewees' answers had joined the dissemination day not hundred percent but they are willing to welcome the LASED III project inside the **Ka Chang village** largely as indicated in the agricultural support application requested.

22. Recently, the infrastructures inside **Ka Chanh village** include the earth roads and laterite roads, approximately 4.1 km and there is the DBST road about 0 km. Regarding to the water sources, there are one stream about 0.3 km length. Some of the people inside the village used to catch fishes traditionally in this stream. For the educational infrastructure, there is two building of primary school named **Primary School Ka Chanh** and there is also an indigenous community headquarter/community office. As per observation, there are two buildings of health post located in this village where they have to travel about 10 km from the village to get the health services at the health post near Lbang II office.



Photo 3.1: Physical Infrastructure of Ka Chanh village



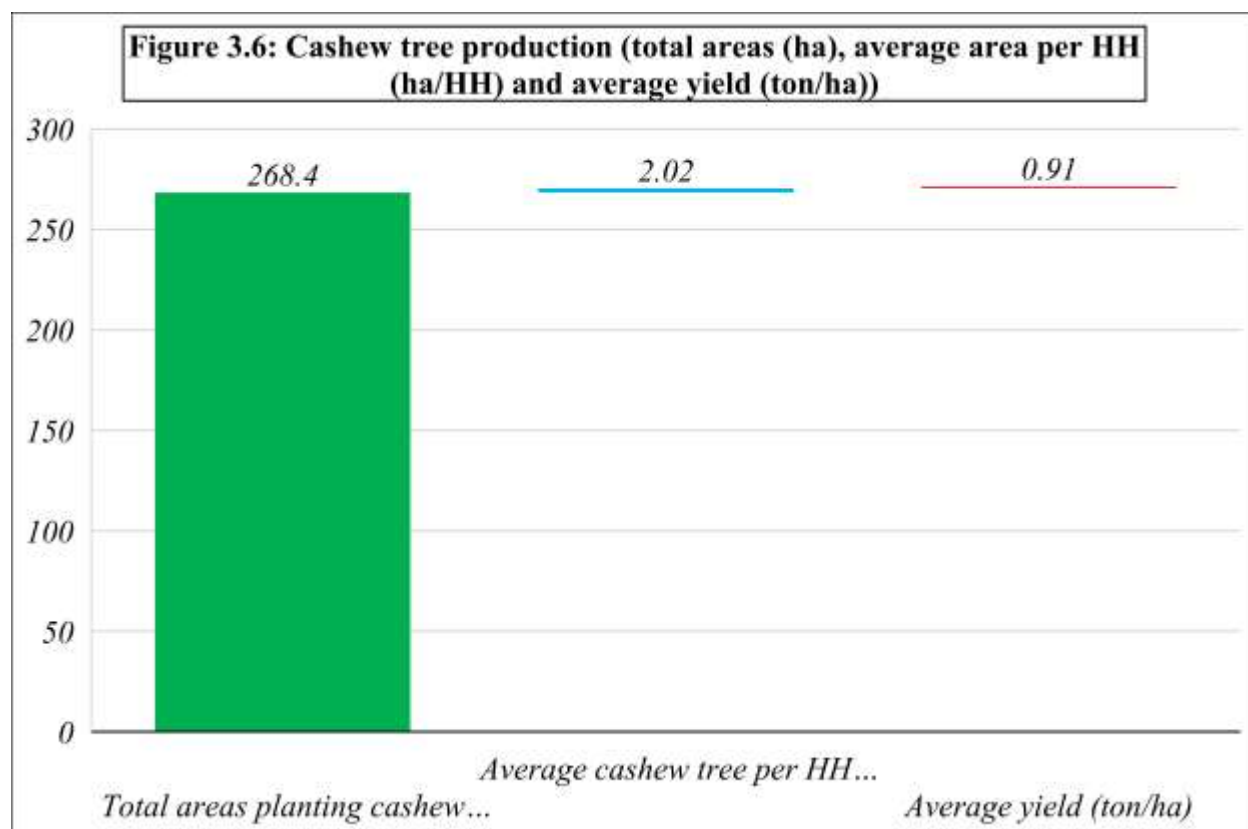
Photo 3.2: Portable water consumption and Ka Chanh IC office (b)

23. If we look at daily life and livelihood in general, the people in the indigenous community of **Ka Chanh village** have been engaged in agriculture, including the cultivation of industrial crops (cashew and cassava), paddy/rice, vegetables, raising animals (mostly cattle, mice pigs and chickens), fishing traditionally in the stream, beside that they are selling the labor force to moving grass, pick the cashew nut, clearance the forest, collect the rubber resin, Khmer traditional medicine, selling groceries, food and other materials, and construction in and outside the village, handicraft, teachers, dig a well for the people inside the village, harvest the cassava, etc. Additionally, there are about 320 labor forces in agricultural sector.

3.2 Crops Production Potential

3.2.1 Cashew Tree Production

24. According to the interview of all 133 HHs, it is indicated that total areas of cashew tree plantation is approximately 268.40 ha which means that there is approximately 2.02 ha per household in average. For the cashew tree's age is between 4 years old to 20 years old only. In 2022, the total cashew tree harvested areas was almost 100.00% of total planting areas which its yields harvested were approximately 245.30 tons. So, the average yield is approximately 0.91 tons per hectare. Economically, they sold the cashew nut with minimum prices and maximum prices 3500 and 4500 riels, respectively. For details of every household who plants cashew tree is attached in the annex 3.6 below of this report.



25. According to the Cashew nut Association of Cambodia (CAC) president Uon Silot said there are several varieties grown in Cambodia – M1 or SM1, M23, IM4, M10, H09, M7 and SAN1. Of these varieties, M23 is the most cultivated, accounting for more than 60 per cent of the total area dedicated to cashew farming. Eventually, an average of cashew nut yield in **Ka Chanh village** last year was 1.25 ton per hectare⁶ as average. However, according the Cambodian Cashew Nut Association (CAC), the average yield of cashew nuts is 1 to 1.5 tons per hectare,

⁶ This yield is according to the interview of all the respondents and it is showing about the old ages of its cashew tree in **Ka Chanh** IC village.

depending on soil quality, cultivation and crop maintenance as well as cashew variety while some areas can yield up to 3 tons per hectare. Seasonally, the cashew harvest season usually begins in February and lasts until the end of May, annually. Naturally, the cashew tree planted by its nut will be released the blossom of flowers at 3 to 5 years old.

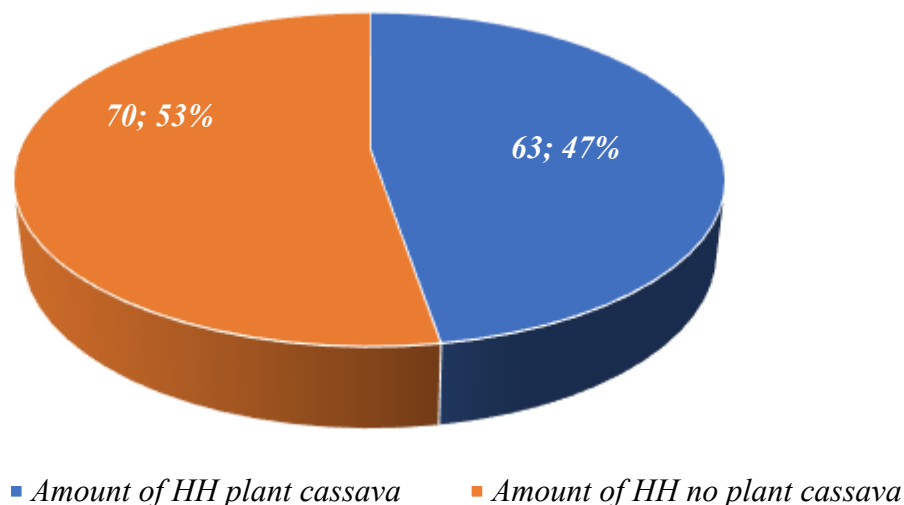
26. It is true that cashew nuts during the early harvest season get better prices. In recent year, cashew nuts currently cost 5500 riel per kilogram, while prices fluctuate. The price of last year's harvest started from 6000 riel per kilogram. However, the current price is still good if farmers follow the standard of care. In these few years ago, "despite the challenges faced by the Covid-19 pandemic, farmers can still get between \$ 1500 and \$ 2000 per ton," according the CAC, and "prices can drop to \$ 1 per kilogram, but farmers can still make a profit". Recently, most of the cashew nuts grown in the Kingdom of Cambodia are M23.

3.2.2 Cassava production

27. There is only 63 HHs that have just have been cultivated the cassava industrial crop and its yield of fresh cassava chip was approximately 217.64 tons. In fact, there are more reasons included lack of varieties of cassava resistance with diseases, lack of NGOs and public sector support on its farming technique and other supports, no cultivation land, etc. On the other hands from the previous experiences, cassava is the second main economical crop among other indigenous communities to be grown annually. Normally, its yields were sold into two different forms includes (i) fresh cassava chip and (ii) dried cassava chip with following prices 600 riels per kilogram and 800 riels per kilogram, respectively. For details of every household plant cassava is attached in the annex 3.7 below.
28. Normally, the yield of cassava is between 15 and 25 tons per hectare while some areas its yield is 35 tons per hectare. According to the news released by ministry of commerce, in December 2021, the average price of dried cassava was between 786-869 riel per kilogram, while in December 2020 it was 667-875 riels in some areas of Cambodia. In addition, fresh cassava costs 260-360 riels, compared to 267-363 riels. Last year, in some areas, the price of fresh cassava was 310 riel and dried cassava was 810 riel per kilogram.
29. In addition, as per previous research shown that the moisture content on a wet basis of freshly harvested cassava roots can vary in the range 62.5–75.4% (Kajuna et al., 2001; Mlingi, 1995⁷). Actually, Cassava roots tend to develop water-soaked tissues and begin to deteriorate rapidly.

⁷ Pornpraipech, P., Khusakul, M., Singklin, R., Sarabhorn, P. and Areeprasert, C., 2017. Effect of temperature and shape on drying performance of cassava chips. *Agriculture and Natural Resources*, 51(5), pp.402-409. Available at: <https://doi.org/10.1016/j.anres.2017.12.004>.

Figure 3.7: The amount of HH planting and non planting cassava (HH, %)



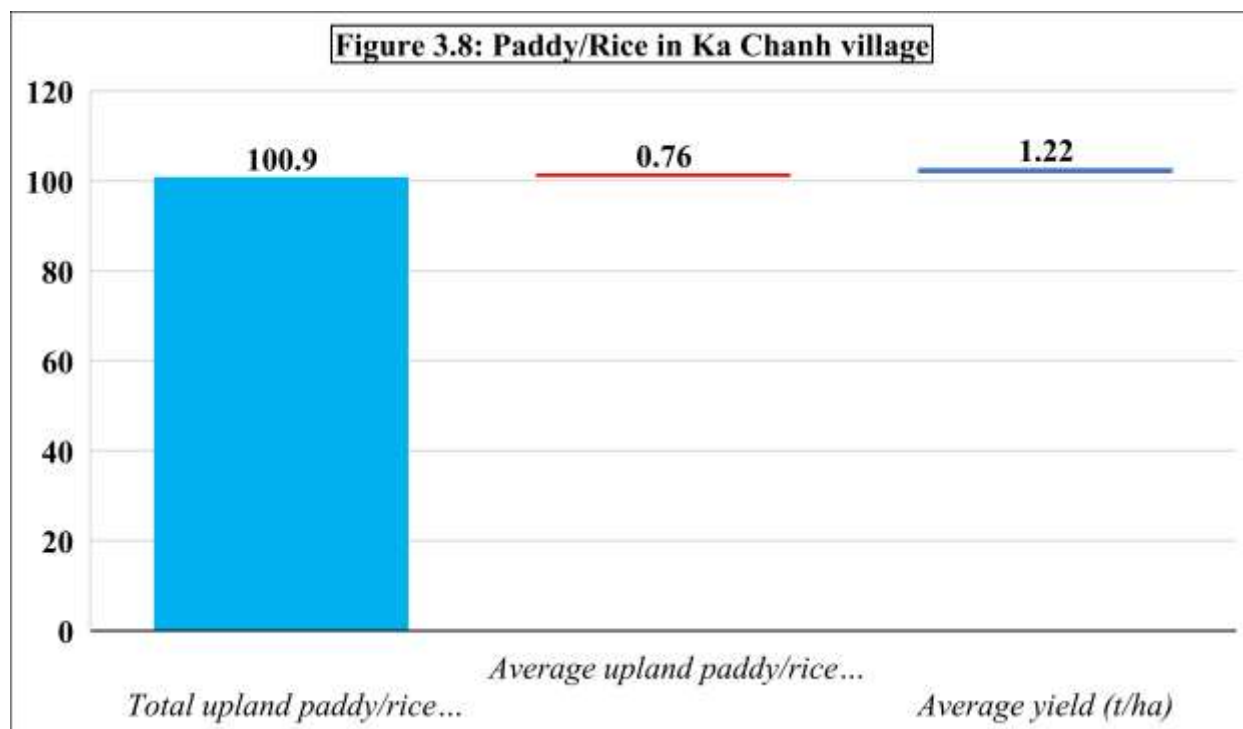
3.2.3 Rubber Production

30. As per interviewed, **Ka Chanh village** has about 06 HHs who have cultivated the rubber tree and its yield is around 22 tons. However, according to the planting techniques indicated in the report of General Directorate of Rubber shows that an average of rubber resin between 1920-2015 is approximately 1.141 tons/ha. In addition, the price of wet rubber resin they sold is about 2 500 riels per kilogram. In 2021, the price of dried rubber resin was 1 685\$/ton, according to MAFF's report.

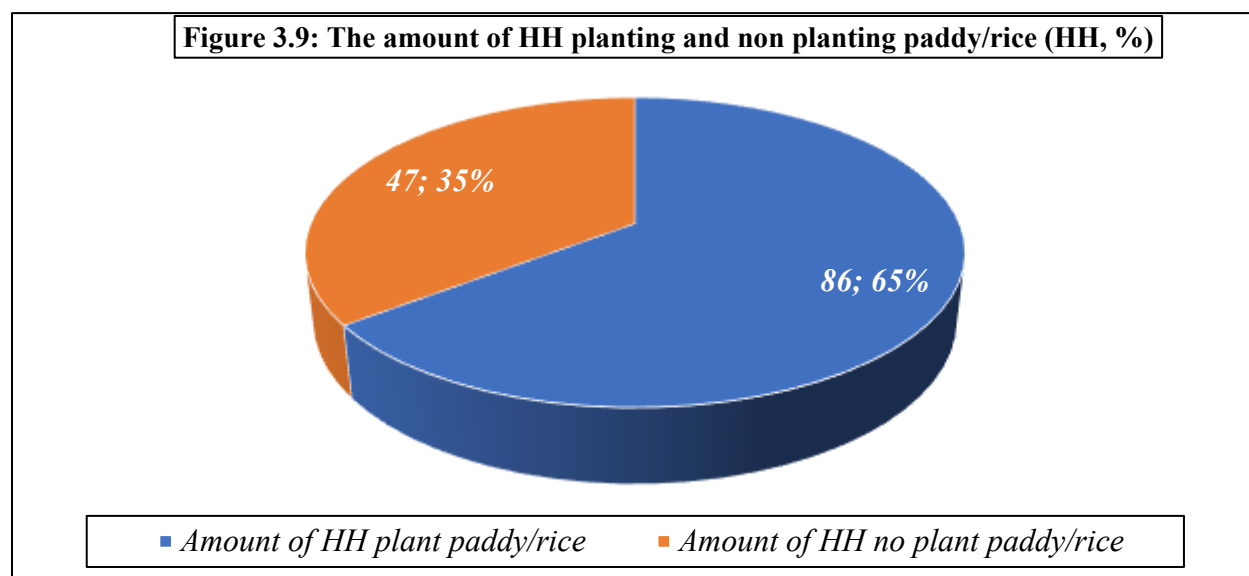
3.2.4 Paddy/Rice Production

31. Besides growing cashew, cassava and rubber, there are approximately 100.90 hectares of paddy/rice production (Rainy season paddy/rice) with the total quantity yields around 123.29 tons equally of both traditional planting method (upland rice) and rainfed lowland rice of 48 HHs out of 133 HHs of this village growing rice, according to the interview, and there are only 47 interviewees mentioned that they do not cultivate rice crops because of several reasons.
32. According to the figure 3.8 below shows that an average of upland paddy/rice area and an average of upland paddy/rice crop of the ethnic people are approximately 0.76 ha per HH and 1.22 ton/ha, respectively.
33. In addition, according to the General Directorate of Agriculture's report in 2022, paddy/rice yield for Cambodia was 3.42 tons per ha⁸.

⁸ The General Department of Agriculture stated that in 2022, rice cultivation spread over 3.40 million hectares, which is equivalent to 110.40 percent of the annual plan, with a total yield of 11.62 million tonnes.



34. According to the interview and it is mentioned in the figure 3.9 below, it is shown that 47 HHs among 133 HHs have not planted the rainfed upland paddy/rice crop while other households have been cultivated the paddy/rice traditionally with protective habits. However, some of them have expressed their mindset to update their practical in agricultural activities to increase the yields too.



3.2.5 Horticulture Crop

35. Vegetable is one among other edible crops of horticulture crop which is very essential for well-being consumption as foods and sources of trace elements required for human metabolism processes. According to the interview of all 133 HHs in **Ka Chanh village**, it is found that

there are few households cultivating the vegetables. However, the fruits tree is planting in the village too such as jackfruit tree, coconut, mango, lemon, etc. In addition, for related herb and spices, it is found that they are growing lemongrass leaves, turmeric, tamarind, basil leaf hot, basleaf, cucumber, red chili, spring onion, eggplant, small chili red, small chili green, papaya, galangal, turmeric, turmeric white, Khmer plai, sweet potato, pumpkin, bitter melon, morning glory, etc.

3.2.6 Impacts on Crop Production

3.2.6.1 Soil Fertility

36. Soil fertility and plant nutrition encompasses the management of essential elements necessary for plant growth, typically to achieve selected management objectives even though soil fertility plays a vital role in natural systems of plant production for human uses (e.g., food, feed, fibre, energy, and landscape esthetics)⁹. An element is considered essential if it is required for plant metabolism and for completion of the plant's life cycle¹⁰. Typically, 17 elements are considered to meet these criteria and they are divided into macro-nutrients and micronutrients.
37. According to the interview on the soil fertility of this village, it is found that the soil status is considerably good condition. If we look into the yield of crops inside the village, we can see that the yield is extremely higher than some other areas. In addition, it is answered that they spent 57,750,000.00 riels in average per household on the agricultural inputs for the farming production.

3.2.6.2 Challenges

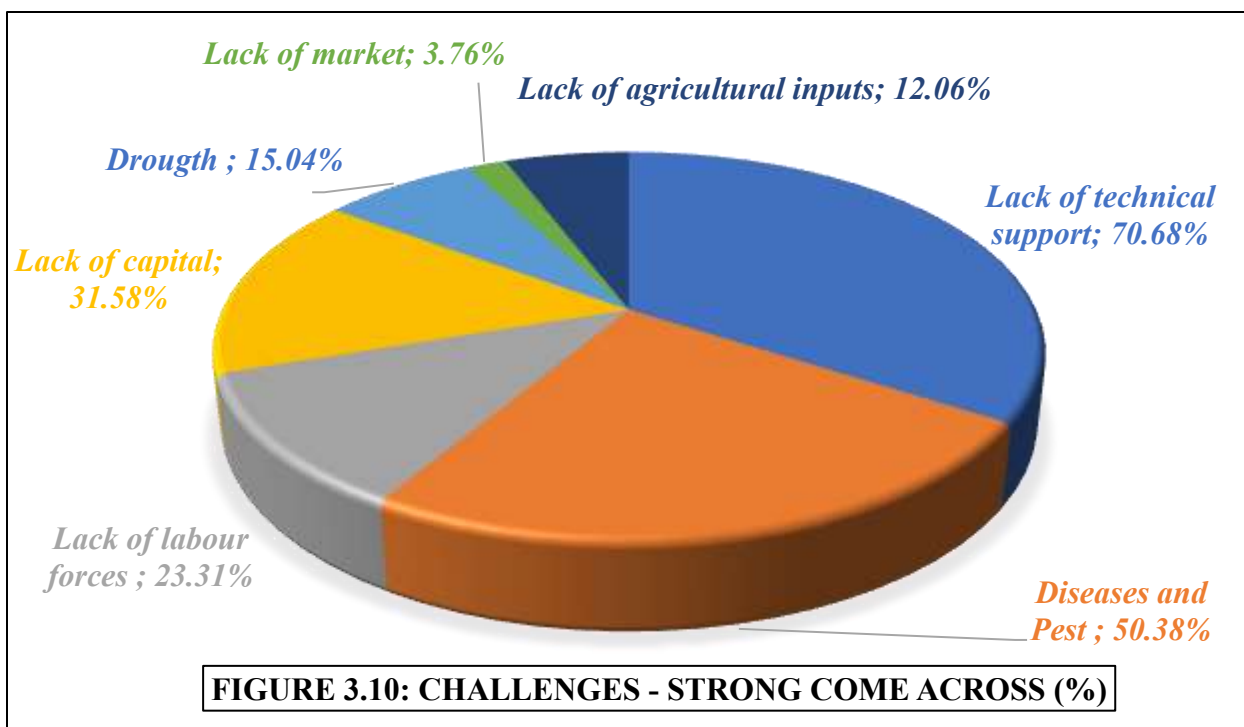
38. In order to get to know the existing challenges among the ethic people of **Ka Chanh village**, the ranking/rating questions¹¹ is used to gather the information from the respondents. In this beneficiary profile survey, it is rated from 1-5, starting from “**never come across**” to “**strongly come across**”, respectively, by using **Likert scale measurement**¹².

⁹ McGrath, J. M., Spargo, J., & Penn, C. J. (2014). Soil Fertility and Plant Nutrition. In Plant Health (pp. 166-184). Elsevier. <https://doi.org/10.1016/B978-0-444-52512-3.00249-7>.

¹⁰ Havlin, J.L., Beaton, J.D., Tisdale, S.L., 2005. Soil Fertility and Fertilizers: An Introduction to Nutrient Management. Upper Saddle River, NJ: Pearson Prentice Hall. Epstein, E., Bloom, A.J., 2005. Mineral Nutrition of Plants: Principles and Perspectives. Sunderland, MA: Sinauer Associates.

¹¹ Rating is a commonly used traditional method of performance appraisal. Under this approach, an employee is numerically rated from either 1-10 or 1-5 on various job performance criteria like attendance, attitude, performance, output, sincerity, dependability, initiative, etc.

¹² A Likert scale is a type of rating scale, often found on survey forms or questionnaires, that measures how people feel about something which can be useful in many different situations. A Likert scale, named after its inventor, the American social scientist **Rensis Likert**, is the most widely used psychometric approach to ask the audience about their opinion or feeling in survey research using usually 5 or 7 answer options range. Respondents can give a negative, neutral or positive response to a statement.

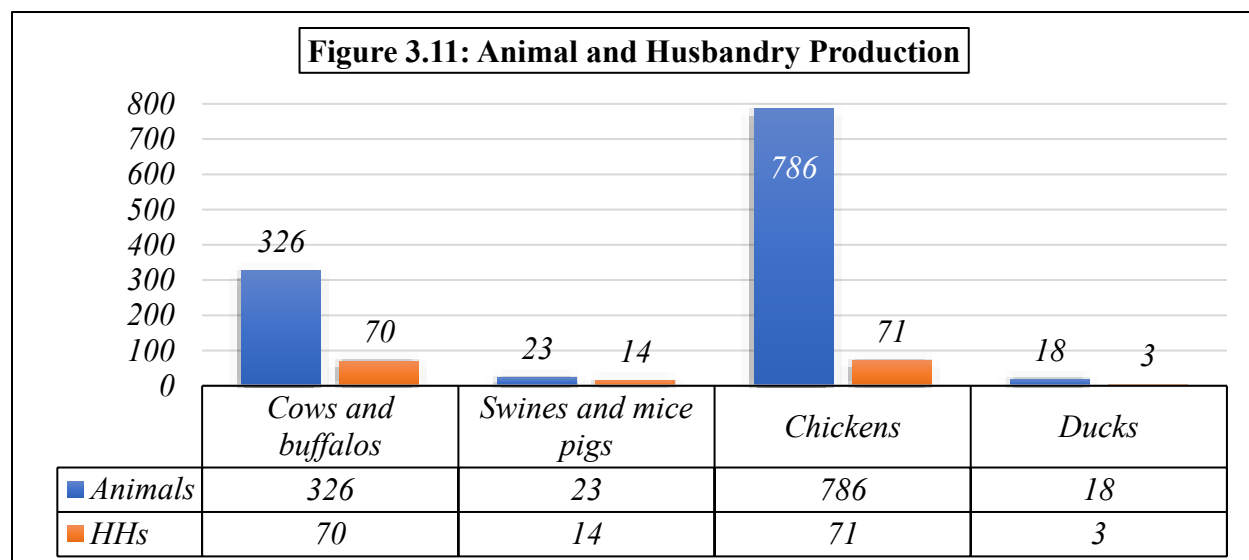


39. Figure 3.10 above is showing that among the total of **PIP** in **Ka Chanh village**, there are approximately 70.68% (94 HHs), 50.38% (67 HHs), 12.06% (16 HHs), 23.31% (31 HHs), 31.58% (42 HHs), 15.04% (20 HHs) and 3.76% (05 HHs) have been slightly come across several challenges such as lack of techniques, pest and diseases, lack of agricultural inputs, lack of labour forces, lack of capital, drought and and lack of markets, respectively.

3.2 Animal and Husbandry Production Potential

3.2.1 Animal Production Statistic

40. According to the interview with all 133 HHs in **Ka Chanh village**, it is found the potential of animal production and husbandry as well. Moreover, the poultry and husbandry production totally are approximately 1153 animals which divided as below figure 3.11.

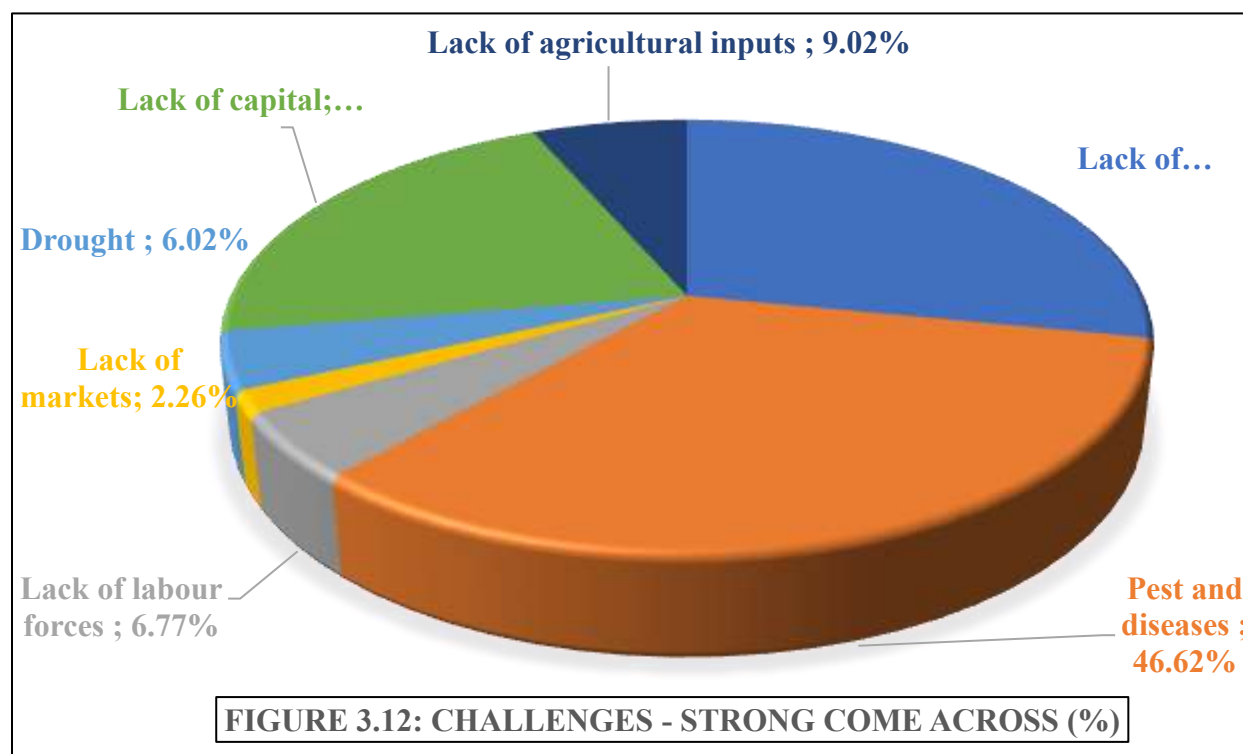


41. According to the interview with all of 133 respondents, it is found that the turnover into their family's economic from the animals and husbandry production is assumed approximately 77,550,000.00 riels (Equals to 18,759.07 USD¹³) as expressed into the animals' categories of cows and buffalos (74,900,000.00 riels or 6,301.40 USD), swines and mice pigs (2,050,000 riels or 495.89 USD) as well as chickens and others (600,000.00 riels or 145.14 USD) while the production's expenditure is about 8,405,000.00 riels or 2,033.14 USD.

3.2.2 Challenges

42. As mentioned in the paragraph 38 above, Likert scale measurement is used to rate the perceptions of all respondents in **Ka Chanh village** in terms of animal production's challenges occurred previously among their families. Logically, it is rated from 1-5, starting from "never come across" to "strongly come across", respectively.

43. Figure 3.12 below is showing that among the total of Prov ethic people in **Ka Chanh village**, there are approximately 39.10% (52 HHs), 46.62% (62 HHs), 29.32% (39 HHs), 6.02% (08 HHs), 2.26% (03 HHs), 9.02% (12 HHs) and 6.77% (09 HHs) have been strongly come across several challenges such as lack of techniques, pest and diseases, lack of capitals, drought, lack of market, lack of agricultural inputs and lack of labour forces, respectively. From this result, animal production and husbandry are mostly facing with technical constraint. Therefore, it is good to support them with suitable production.



¹³ Exchange rate: https://www.nbc.gov.kh/download_files/economic_research/off_ex_rate_kh/oer_08-08-2023.pdf.

3.3 Fishery and Aquaculture Potential

3.3.1 Traditional Fishery¹⁴ Practices

44. According to the interview with all of 133 respondents, it is found that there are approximately 28 HHs equals to about 21.05% used to fish or fish traditionally inside their village. Significantly, they totally spent on average about 40,000.00 riels of all fishing families on the fishing materials for traditional fisheries. However, none of them used to do aquaculture in the village, according to the interview.

3.4 Agricultural Cooperative, Producer Group and Revolving Funds Group

45. According to the interview, it is found that there is neither agricultural cooperative nor producers groups establishment in **Ka Chanh village**. However, once the team asked them about the establishment of producers group on cashew, cassava, rice, etc. they expressed to form up it in terms of market linkages with buyers.

3.5 Markets and Markets linkages

3.5.1 Contract Farming Implementation

46. As per interview all of them, it is found that both simple contract application and formal contract farming implementation are not applied yet in this **Ka Chanh village**. In addition, either the training or orienting forum has never provided by both national institutions and PDAFF itself. Therefore, they should have been encouraged to be well disseminated about relevant legal documents of the contract farming implementation mechanism in terms of markets linkages promotion to direct buyers domestically.

3.5.2 Existing Markets

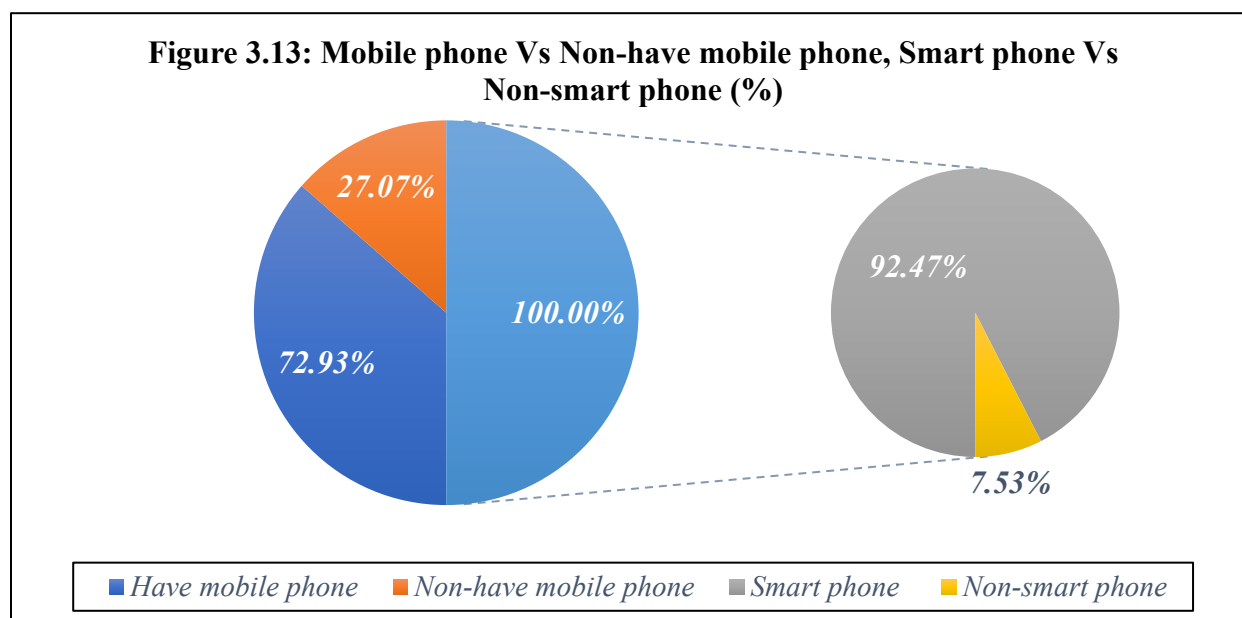
47. Nowadays, they are selling their agricultural products to the domestic middleman who have been collected the products to sell to the processing companies at the town and to the middleman of the neighbouring countries. As their practices, the middleman comes to pick up the cargos to their either warehouses or companies directly. In addition, some of them are selling their produces by themselves inside the village by using their own vehicles.

3.6 Extension and ICT

48. According to the interview, it is found that there are approximately 97 HHs equals to about 72.93% who have had the mobile phones while about 36 HHs equals to 27.07% do not have

¹⁴ Traditional fisheries involving fishing households (as opposed to commercial companies), using relatively small amount of capital and energy, relatively small fishing vessels, making short fishing trips, close to shore, mainly for local consumption. In some communities, traditional fishing community is a defined group of people who share identity and attachment toward one another and interact on an ongoing basis to perform activities along the fisheries value chain based on experiential knowledge accumulated over time and passed along generations (Berkas 2001; Johannes 2003; McGoodwin 2001).

the mobile phone. Totally, their mobile phone is calculated approximately 146 phones while it is estimated about 135 smartphone equals to 92.47%. Figure 3.13 below shows about the mobile phone utilization in **Ka Chanh village** as per all 133 respondents interviewed.



49. However, there are approximately 30 respondents equals to 11.28% had used their mobile phones to either search or watch the videos related to the agricultural extension programs; such as crops farming, aquatic application, animal and livestock raising, etc.; even though they have used mobile phone individually. In addition, they also search for the market application such as *CamAgriMarket app, Tonle Sap Mobile app, Chamka Mobile app, etc.*

50. By the way, according to the interview, it is found that there are more than 77.44% (30 HHs) who did not attend the training provided by either NGOs or governmental agency while there approximately 22.56% (30 HHs) who used to attend the training. The trainings covered on the technical crops farming and compost fertilizer making, fish aquatic farming and livestock farming.

3.7 Economic Analysis¹⁵

3.7.1 On Farm Incomes

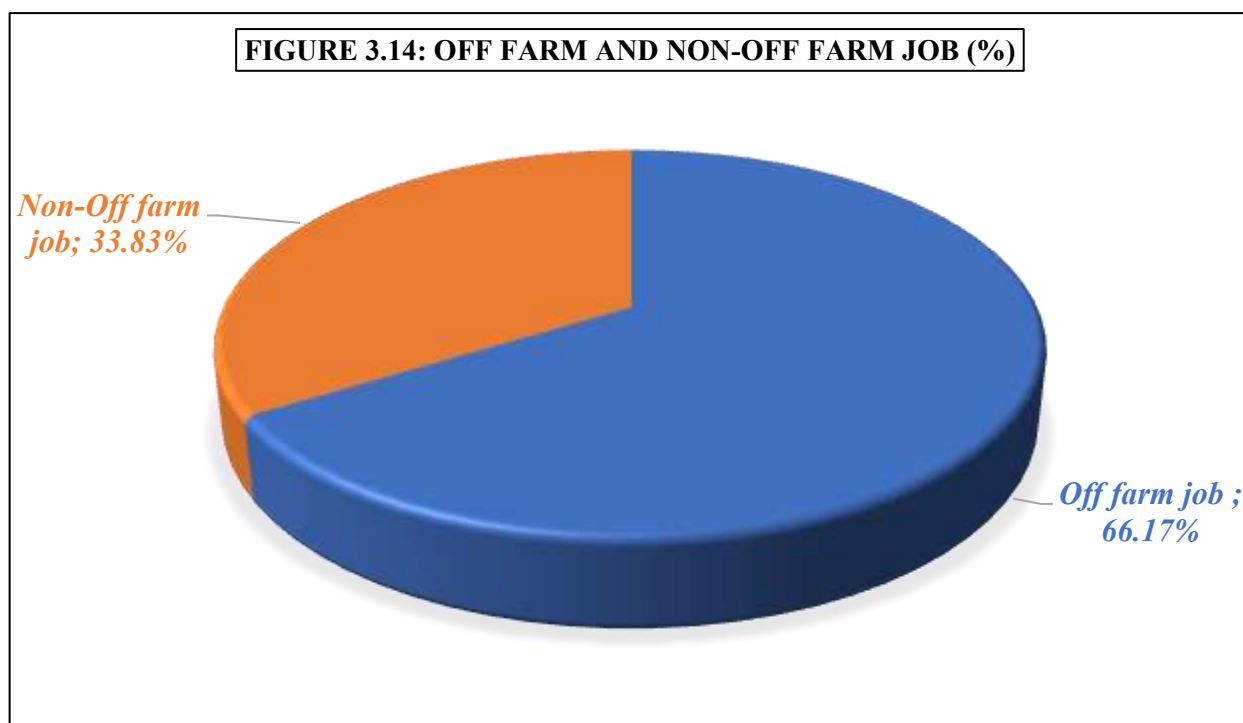
51. According to the interview of all 133 HHs, it is found that a huge income of villager in this villages come from agriculture farming activities. In fact, the total revenue from agricultural

¹⁵ Economic analysis essentially entails the evaluation of costs and benefits. Economic analysis helps us to make decentralized decisions on the appropriate choices between competing uses of resources, with costs and benefits being defined and valued so as to measure impacts of the projects on the broad development objectives of the country. (Source: Edomah, N., 2018. Economics of energy supply. Reference module in earth systems and environmental sciences, pp.1-16.)

products sold last year based on the interview was approximately 1,029,787,600.00 riels equals to 249,101.98 USD while it is also found that the production cost on agricultural farming is approximately 132,410,000.00 riels equal to 32,029.51 USD.

3.7.2 Off Farm Incomes

52. By the way, besides agriculture farming activities, it is found that there are about 66.17% (88 HHs) have been working in other sector assumed as non-farm jobs¹⁶ while there are about 33.83% (45 HHs) mentioned that they did not get the non-farm jobs as stated in Figure 3.14 below. According to the interview, the total revenue earns from non-farm job accounts approximately 417,270,000.00 riels equal to 100,936.14 USD.

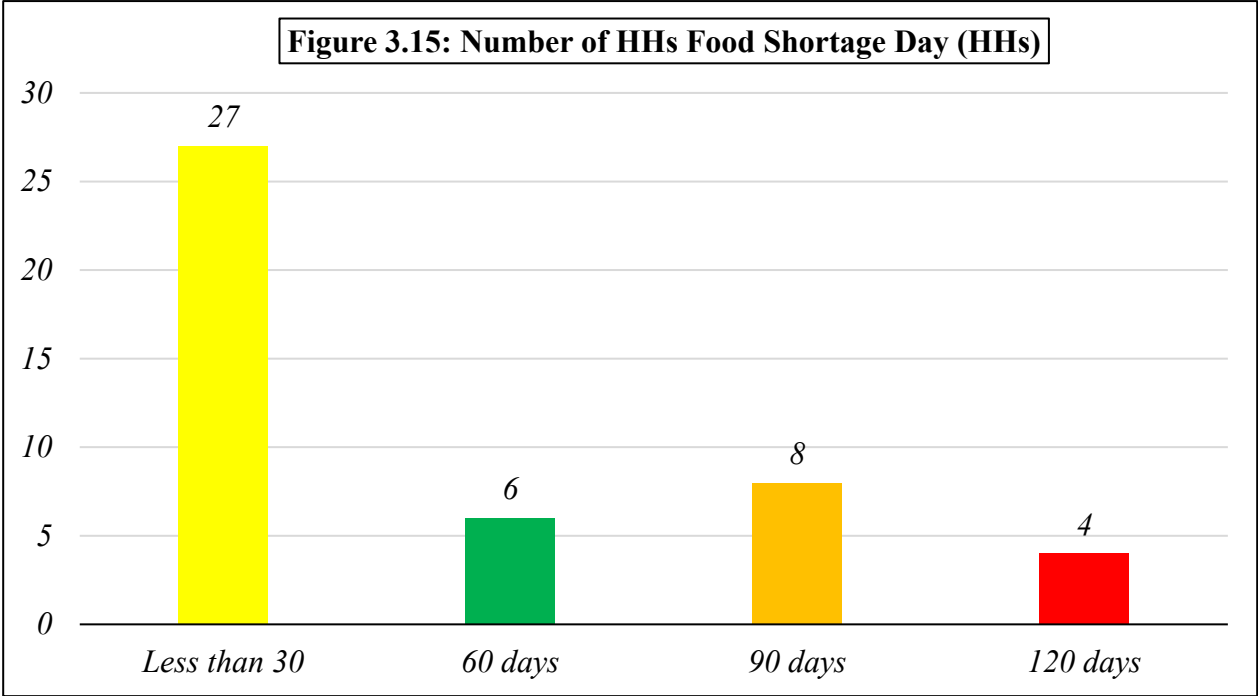


3.7.3 Household Food Security (HFS)

53. Household food security can be defined as a household having assured sets of entitlements from food production, cash income, reserves of food or assets and/or government assistance programmes such that in times of need they will be able to maintain sufficient nutritional intake for physical well-being. Recently, sustainable food system is a type of food system that provides household food consumption more efficiency in terms of food security and nutrition.

¹⁶ According to the non-farm jobs and incomes were selling labor to cut the farm grasses, commune clerk, village chief, commune councilor member, weaving traditional consumption materials such as Kapa for sale, wine jar making, find non-timber forest products, assist the tourists to visit the natural tourism at *Vireak Chey national park*, boat transporter, selling foods and other using materials, construction workers and the gift provided by their marriage children.

54. Food security occurs when all members of a household at all times have reliable access to food in sufficient quantity and quality to support an active and healthy life. While food security involves food availability, accessibility, utilization and stability, the majority of attention appears to be focused on the increasing number of foods in India that are available yet inaccessible to the population.
55. Regards to status of food security of this village, it was recorded 20.30% (27 HHs), 4.51% (06 HHs), 6.02% (08 HHs) and 3.01% (04 HHs) have answered that they used to face the insufficient food consumption from less than 30 days, 60 days, 90 days and 120 days, respectively, as stated in the figure 3.15 below.



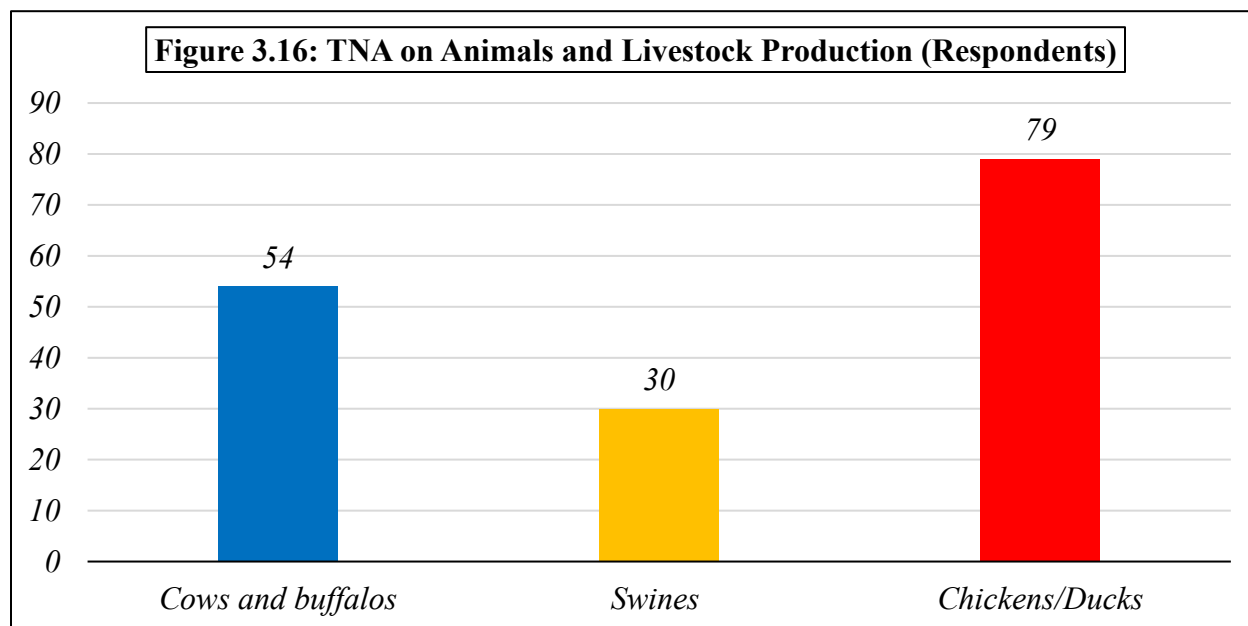
3.8 Training Needs Assessment¹⁷ (TNA)

56. In this beneficiary profile survey, the TNA is divided into five categories such as (i) the assessment on the animal and livestock production, (ii) the assessment on the fishery and aquatic production, (iii) the evaluation on the crops production, (iv) the assessment on the nutrition sensitive agriculture, and (v) the assessment on the contract farming implementation. For details of TNA questionnaires is attached in the annex 4.8 below of this report.

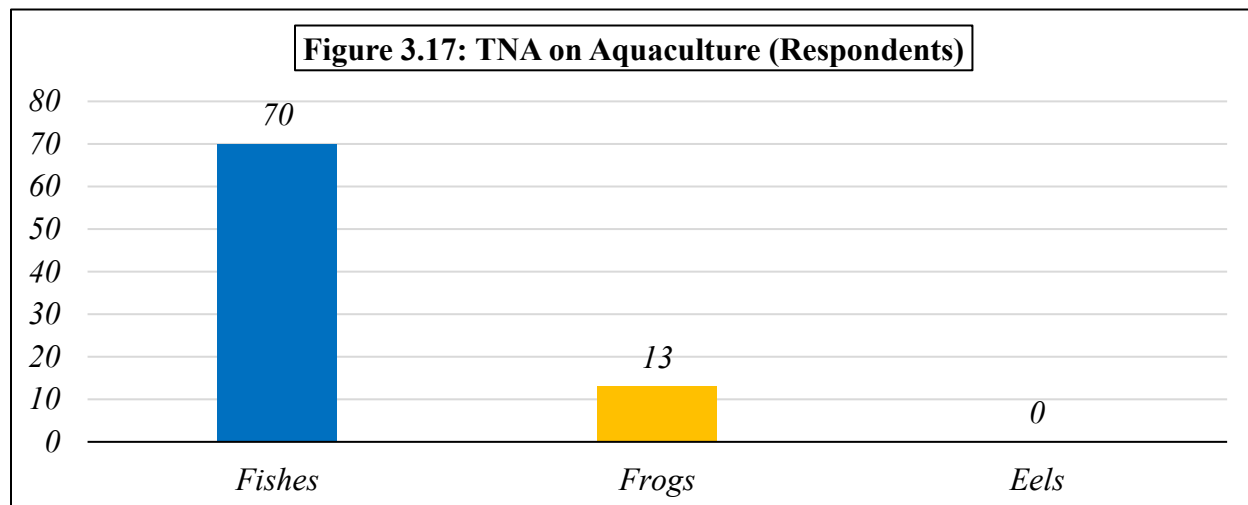
¹⁷ “Training Needs Assessment” (TNA) is **the method of determining if a training need exists and, if it does, what training is required to fill the gap**. TNA seeks to identify accurately the levels of the present situation in the target surveys, interview, observation, secondary data and/or workshop. Available at:

https://www.jica.go.jp/project/cambodia/0601331/pdf/english/3_TNA_01.pdf.

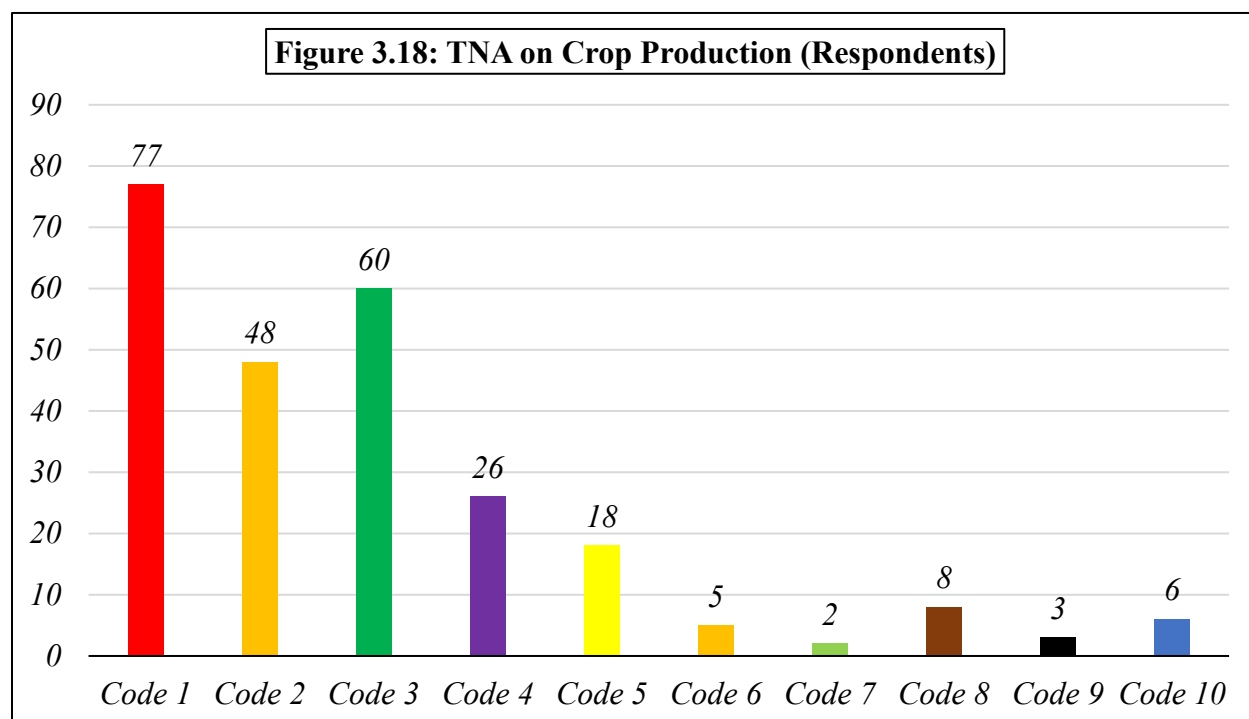
57. According to the results of interview of all 133 respondents, it is found that, for the animal and livestock production, there are 54, 30, and 79 respondents want to get the training on cow/buffalo, swine, chicken and duck raising production, respectively, as stated in the figure 3.16 below. Remarkably, the technical trainings shall have been covered on animals raising, breeding, feeds making, vaccination, diseases treatment, cage preparation, business planning preparation and other technical supports. In addition, each respondent is able to answer and chose more than one option during the interview.



58. Figure 3.17 above shows about the TNA on aquaculture, according to the results of interview of all 133 respondents. As results, it is found that there are 70, 13 and 0 respondents want to get the training on fishes, frogs and eels, respectively. Remarkably, the technical trainings shall have been covered on animals raising, breeding, feeds making, vaccination, diseases treatment, cage preparation, business planning preparation and other technical supports. In addition, each respondent is able to answer and chose more than one option during the interview.

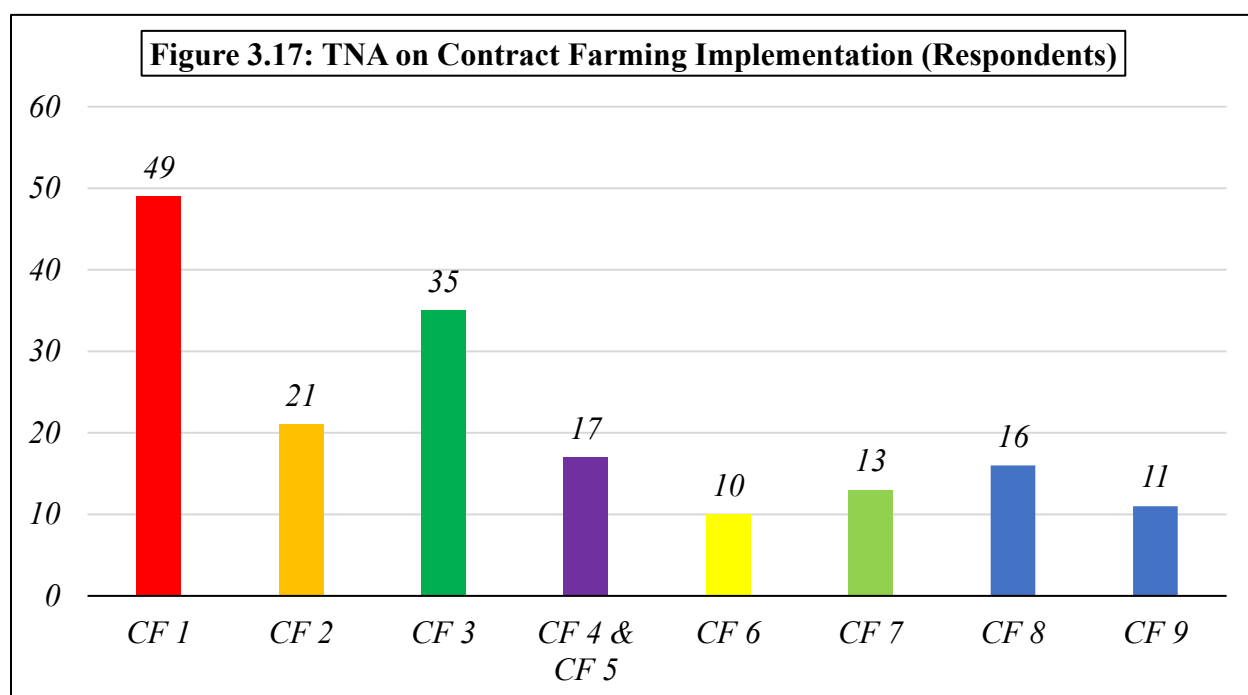
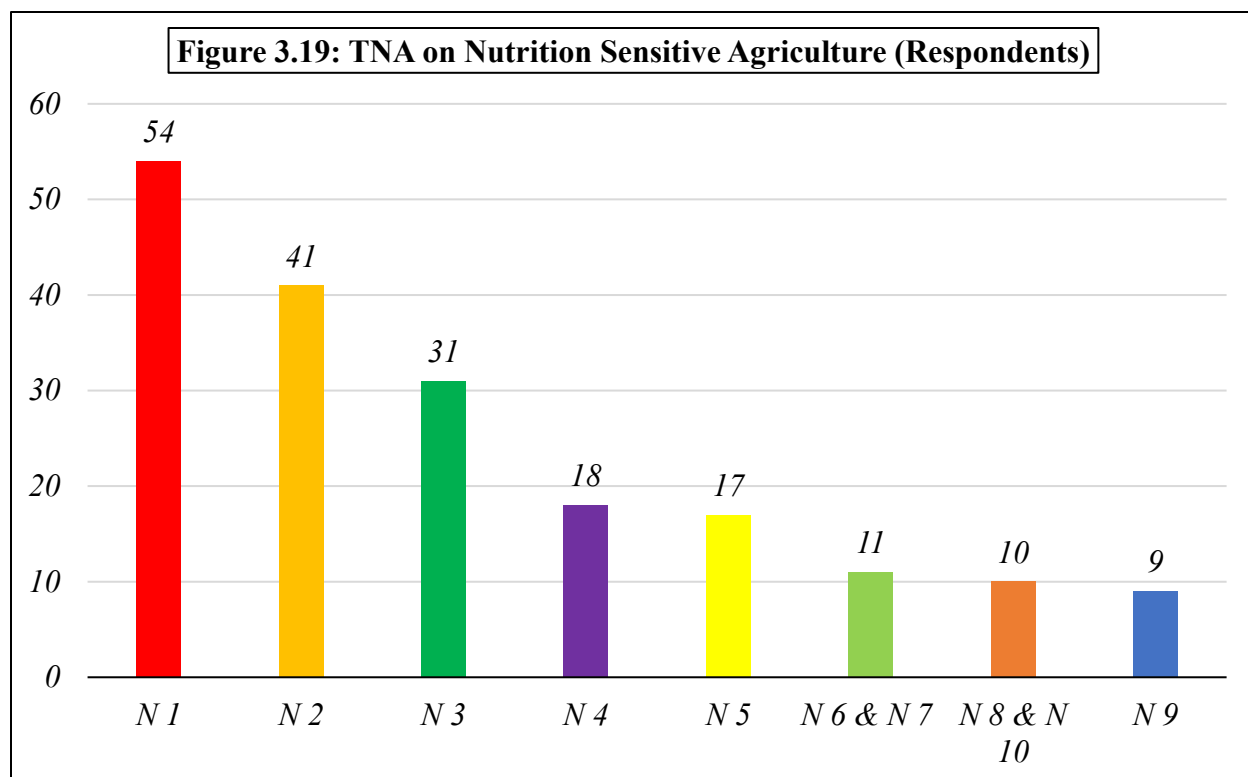


59. For TNA on crops production, it is orderly coded for each specific title from **Code 1 to Code 10**. According to the interview with all 133 HHs on the TNA of crops production, it is found that the **Code 1, Code 2, Code 3, Code 4, Code 5, Code 6, Code 7, Code 8, Code 9 and Code 10** have been rationally rated as following results **77, 48, 60, 26, 18, 5, 2, 8, 3 and 6** responses, respectively. Figure 3.18 indicates about the the TNA on crops production based on the interview. Noticeably, each respondent is able to answer and chose more than one option during the interview.



60. For TNA on nutrition sensitive agriculture (NSA), it is orderly coded for each specific title from **N 1 to N 13**. According to the interview with all 83 HHs on the TNA of NSA, it is found that the **N 1, N 2, N 3, N 4, N 5, N 6 & N 7, N 8 & N 10 and N 9** have been rationally rated as following results **54, 41, 31, 18, 17, 11, 10 and 9** responses, respectively. Figure 3.19 below indicates about the the TNA on NSA based on the interview. Noticeably, each respondent is able to answer and chose more than one option during the interview.

61. For TNA on Contract Farming (CF) implementation, it is orderly coded for each specific title from **CF 1 to CF 9**. According to the interview with all 83 HHs on the TNA of CF implementation, it is found that the **CF 1, CF 2, CF 8, CF 3, CF 4 & CF 7, CF 5 & CF 6 and CF 9** have been rationally rated as following results **79, 16, 11, 10, 3, 2, and 1** response, respectively. Figure 3.20 indicates about the the TNA on CF implementation based on the interview. Noticeably, each respondent is able to answer and chose more than one option during the interview.



3.9 Conclusion

62. After having interviewed with all 133 respondents and having compiled of all information into this beneficiary report, it is vitally and briefly concluded as following that (1) the potential crops production such as upland paddy/rice (Total planting areas 100.90 ha, total yields 123.29 tons, average land holding 0.76 ha/HH, average yield 1.22 ton per hectare), cashew tree (Total planting areas 268.40 ha, total yields 245.50 tons, harvested areas last year 266.40 ha, average

land holding 2.02 ha/HH and average yield 0.91 ton/ha), cassava (Total planting areas 65.70 ha with total yields sold in dried cassava chip 217.64 ton), (2) the potential animals and livestock production such as cows/buffalos (326 heads), swine and mice pigs (23 heads), chickens (786 heads), and ducks (18 heads), and (3) the potential of other related agricultural practices.

63. For the poverty line in **Ka Chanh village**, it is economically assumed that they are not living under poverty line¹⁸ because of their daily income (in total approximately 27,081.01 riels/day/HH (equals to 6.55 USD/day/HH) which is calculated based on on farm (18,485.48 riels/day/HH) and off farm (8,595.53 riels/day/HH)) is more than 2.67 USD per day per household¹⁹. However, there are some people inside the village still facing the problems on food security consumption via household due to several reasons such as the age, the land shortages, etc. during the interviewed. In overall, the people are considerably living above the poverty line.
64. At the same time, it is totally concluded that the percentage of know-how on the technology application via the mobile phone to access either the agricultural farming documents or markets information and so on even though they had had the smartphone is tremendously low level. In addition, it is remarkably concluded that the opportunities to get the agricultural technical trainings is such more than they were being since the past decades. Truly, it means that they used to be instructed about the agricultural techniques as mentioned above as well.

3.10 Suggestions

65. Through the TNA results, the LASED III project shall formulate the adequately strategy to support them in terms of technical and practical supports relatively. For instances, the supporting of livestock production and animal production to increase their productivity and vegetation farming as they are doing presently.

¹⁸ The Cambodia Poverty Assessment 2022: Toward a More Inclusive and Resilient Cambodia shows the country has made remarkable progress in reducing poverty over the past decade, but that some recent gains have been threatened by the impact of the COVID-19 pandemic on the economy. Cambodia has updated the poverty line based on the Socio-Economic Survey 2019-2020, where the national minimum is set at 10,951 riels (about \$ 2.7) per person per day. Accessed on Jan 30th, 2023 from the source available at:

<https://documents1.worldbank.org/curated/en/099155111222239793/pdf/P1735940c0e8b508d0b80e0c7375c89d9c0.pdf>.

¹⁹ This is to remark that this data does not reflects to the whole national assessment by using this collected data from each 81 HHs in **Psang IC village**. However, this data is purposively used under the LASED III only. In addition, it is just using the national data for comparison to assume the current status economic of this ethnic people group.

66. In terms of markets and markets linkages, the LASED III project shall firstly define the group of interest to form up the legal producer groups officially in order to get the benefits of business matching platform preparation and contract farming²⁰ negotiation for better markets guarantee.
67. It is economically useful to help farmers increase their incomes by enabling them to sell their products at higher prices. In addition, it allows farmer members to negotiate as a group and help small farmers in both output and input markets. At the same time, the revolving fund is established to carry out specific activities, and the primary advantage of this fund is it may be loaned or spent repeatedly among the producer groups. It can support the either land recipients or ethnic groups as well.
68. To promote the sustainable exit strategy in the future, the LASED III shall promote the commune extension workers who will be selected from the domestic and inside **Ka Chanh village** itself through the technical and professional skills provided as well as the allowances supports suitably provide to them during the periods of the project implementing. In addition, the existing mechanism under LASED III project such as village extension workers (VEWs), village animal health workers (VAHWs) and Agricultural Development Facilitators (ADFs) shall be engaged regionally to support them in terms of agriculture and economic development inside the whole **Ka Chanh village**.

²⁰ Contract farming (CF) is increasingly seen as an effective mechanism to maximize the inclusion of and benefits for small-scale farmers, while giving some control over production to agribusinesses without requiring land ownership. In Cambodia, CF takes many forms and involves food and industrial crops, yet the different CF models and contract types have not been identified. Farmers and contractors have encountered many problems in obtaining reliable benefits from and sustaining CF schemes.

IV. ANNEXES

Annex 4.1: List of Interviewees in Ka Chanh village

No	Name	Sex	Age	Ethnic group	Education level	Children	Son	Daughter	Village	Commune	District	Province
1	Roeun Chanthy	M	29	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
2	Nong Kontang	F	26	Prov	Primary school	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
3	Ngoul Thol	M	31	Prov	Primary school	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
4	Chanda	F	22	Prov	High school	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
5	Kamphng Loul	M	46	Prov	Did not study	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
6	Phng Phlouty	M	34	Prov	Did not study	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
7	Porng Tuy	F	38	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
8	Sui Prangve	M	50	Prov	Did not study	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
9	Kim Phanghuy	M	43	Prov	Primary school	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
10	Sek Souy	M	40	Prov	Secondary school	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
11	Hem Mang	M	57	Prov	Primary school	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
12	Ki Phli	F	45	Prov	Primary school	6	3	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
13	Hang Lorn	M	56	Prov	Primary school	7	4	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
14	Blang Chounh	M	37	Prov	Primary school	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
15	Deum Bati	M	40	Prov	Primary school	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
16	Sek Pouy	M	37	Prov	Primary school	3	3	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
17	Thy Bongro	M	35	Prov	Primary school	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
18	Rouy Choeung	F	60	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
19	Chant Krapeu	M	47	Prov	Did not study	6	2	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
20	Thay Moy	M	57	Prov	Primary school	4	1	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
21	Buong Meng	M	41	Prov	Did not study	4	-	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
22	Chamang Sopheak	M	35	Prov	Primary school	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
23	Chrak Horn	M	51	Prov	Primary school	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
24	Kanser Nangkhat	F	45	Prov	Did not study	3	3	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri

25	kavouy Sangoy	F	36	Prov	Did not study	4	-	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
26	Klu Chamea	F	40	Prov	Did not study	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
27	Dim Chatri	F	35	Prov	Did not study	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
28	Mim CheMao	F	45	Prov	Did not study	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
29	Plen sommlieng	F	30	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
30	Din Bing	M	45	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
31	Chroev Haloung	F	39	Prov	Did not study	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
32	Sek Pol	F	35	Prov	Did not study	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
33	kavory Yan	M	30	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
34	Champleu Beung	M	37	Prov	Primary school	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
35	Champleu Huonh	M	33	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
36	Ngol Lol	M	40	Prov	Primary school	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
37	Khout Bam	M	45	Prov	Did not study	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
38	Phleng Sreang	M	30	Prov	Primary school	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
39	Saly Sinen	M	27	Prov	Primary school	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
40	Mil Pril	M	45	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
41	Trom Lamkheng	M	41	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
42	Chao Kanay	M	45	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
43	Krapeu Saruon	M	48	Prov	Secondary school	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
44	Krin Savann	M	43	Prov	Did not study	3	-	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
45	Lal Blal	M	32	Prov	High school	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
46	Mim Kapung	F	33	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
47	Champhlieng Taluen	M	36	Prov	Did not study	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
48	Vich Thit	M	60	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
49	Klong Bunthong	M	42	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
50	Ky Lisan	M	42	Prov	Did not study	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
51	Vich Kheng	M	65	Prov	Did not study	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
52	Krit Sary	M	63	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
53	Kret Yi	M	56	Prov	Did not study	4	3	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
54	Lam Kavuooy	M	59	Prov	Did not study	5	1	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
55	Mil Tel	M	45	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri

56	Saruoy Samuoy	F	60	Prov	Did not study	6	4	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
57	Thangdam Take	F	55	Prov	Did not study	4	3	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
58	Kachi Sayen	F	75	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
59	Sary Niv	M	37	Prov	Did not study	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
60	Yon Kasaou	M	56	Prov	Did not study	4	4	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
61	Poun Vantha	M	47	Prov	Did not study	5	2	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
62	Haem Bo	M	37	Prov	Did not study	4	1	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
63	Lim Nol	M	45	Prov	Did not study	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
64	Chran Nguo	M	32	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
65	Plen Long	M	52	Prov	Did not study	6	2	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
66	Thorn Hlam ng	M	30	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
67	Maleuy Chankrasa	M	25	Prov	Did not study	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
68	John Hul	M	40	Prov	Did not study	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
69	John Born	M	37	Prov	Did not study	3	3	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
70	Kang Chaveang	M	49	Prov	Did not study	4	1	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
71	Mao Champleung	F	32	Prov	Did not study	4	1	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
72	Ke Heap	F	32	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
73	Keo Tol	F	36	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
74	Tut Keo	M	57	Prov	Did not study	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
75	Chao Mao	M	57	Prov	Did not study	6	3	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
76	Mao Chanthao	M	28	Prov	Did not study	1	-	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
77	Thlok Duong	F	60	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
78	Mao Chanthoeun	M	30	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
79	Kieng Khanthy	M	37	Prov	Did not study	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
80	Luon Thuon	M	41	Prov	Did not study	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
81	Kapit Svay	M	29	Prov	Did not study	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
82	Kev Barang	M	23	Prov	Did not study	-	-	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
83	Lay Sangluo	M	37	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
84	Nhik Nhok	M	45	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
85	Ka Lev	F	46	Prov	Did not study	6	4	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
86	Phleang Sokkhoeun	M	30	Prov	Did not study	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri

87	Som Nay	M	42	Prov	Did not study	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
88	Kavuoy Ayvan	F	29	Prov	Did not study	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
89	Savy Sok	M	31	Prov	Secondary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
90	Som Bunthoeun	M	45	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
91	Chao Khean	M	56	Prov	Did not study	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
92	Techsa Chavan	M	60	Prov	Did not study	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
93	San Kry	F	45	Prov	Primary school	9	4	5	Ka Chanh	Lbang II	Lumphat	Ratanakiri
94	Klaul Vin	M	53	Prov	Secondary school	5	2	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
95	Neng Saroeun	M	31	Prov	Primary school	1		1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
96	Thiv Salan	F	43	Prov	High school	4	3	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
97	Chanra Chaima	F	26	Prov	Primary school	1	1		Ka Chanh	Lbang II	Lumphat	Ratanakiri
98	Kret Savann	M	45	Prov	Primary school	3		3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
99	Chantrieng Chamble	F	40	Prov	Primary school	4	3	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
100	Chhnas Huonh	F	24	Prov	Primary school	1	1		Ka Chanh	Lbang II	Lumphat	Ratanakiri
101	Soeung Sophea	M	41	Prov	Primary school	1	1		Ka Chanh	Lbang II	Lumphat	Ratanakiri
102	Che Roumbaung	F	53	Prov	Primary school	8	4	4	Ka Chanh	Lbang II	Lumphat	Ratanakiri
103	Yong Tramoung	M	55	Prov	Primary school	5	2	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
104	Leang Yin	F	45	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
105	Teng Samath	M	40	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
106	Khloum Bachaet	M	50	Prov	Primary school	3	3	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
107	Yin Sopheak	M	55	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
108	Yin Sok	M	34	Prov	Primary school	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
109	Khuon Samnang	F	34	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
110	Kreng Bieng	F	38	Prov	Primary school	3	3	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
111	Am Brak	F	40	Prov	Primary school	5	2	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
112	Thy Phearum	M	70	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
113	Smien Riem	M	80	Prov	Primary school	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
114	Smien Ngev	F	42	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
115	Som Bev	F	44	Prov	Primary school	4	2	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
116	Thie Moeung	M	49	Prov	Primary school	4	3	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
117	Kong Chhorvy	F	78	Prov	Primary school	5	3	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
118	Eam Chandy	F	36	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
119	Roeun Sokchea	F	20	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri

120	Tuy Chuch	M	64	Prov	Primary school	8	6	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
121	Ying Yem	M	35	Prov	Primary school	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
122	Rong Saveth	F	40	Prov	Primary school	4	1	3	Ka Chanh	Lbang II	Lumphat	Ratanakiri
123	Ban Ratana	M	26	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
124	Toy Mary	F	40	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
125	Toy Man	F	47	Prov	Primary school	3	1	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
126	Ammreang Chanchanty	M	28	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
127	Ros Yin	M	58	Prov	Primary school	2	2	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
128	Vuthy	F	52	Prov	Primary school	2	-	2	Ka Chanh	Lbang II	Lumphat	Ratanakiri
129	Kem Neang	F	27	Prov	Primary school	1	1	-	Ka Chanh	Lbang II	Lumphat	Ratanakiri
130	Kriev Chech	F	51	Prov	Primary school	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
131	Sok Nget	F	32	Prov	Primary school	3	2	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
132	Nguon Rim	M	30	Prov	Primary school	2	1	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri
133	Seang Teng	M	69	Prov	Primary school	6	5	1	Ka Chanh	Lbang II	Lumphat	Ratanakiri

Annex 4.2: List of Families Planting Cashew Tree

No	Name	Sex	Planting area (ha)	Cashew's age	Yields (t)	Sell QTY (t)	Prices (Riel/kg)
1	Roeun Chanthy	M	2.00	2	-	-	-
2	Nong Kontang	F	2.00	8	2.50	2.50	4,150.00
3	Ngoul Thol	M	3.00	8	0.50	0.50	4,000.00
4	Chanda	F	5.00	4	3.00	3.00	4,500.00
5	Kamphng Loul	M	-	-	-	-	-
6	Phng Phlouy	M	-	-	-	-	-
7	Pong Tuy	F	-	-	-	-	-
8	Sui Prangve	M	-	-	-	-	-
9	Kim Phanghuy	M	2.00	8	1.00	1.00	4,000.00
10	Sek Souy	M	2.00	10	1.50	1.50	4,000.00
11	Hem Mang	M	3.00	20	1.50	1.50	3,100.00
12	Ki Phli	F	2.00	15	0.50	0.50	4,100.00
13	Hang Lorn	M	3.00	15	0.50	0.50	4,000.00
14	Blang Chounh	M	1.00	20	1.50	1.50	4,200.00
15	Deum Bati	M	0.60	20	0.30	0.30	4,100.00
16	Sek Pouy	M	2.00	20	5.00	5.00	4,100.00
17	Thy Bongro	M	0.50	9	0.30	0.30	4,100.00
18	Rouy Choeung	F	1.00	20	1.50	1.50	4,000.00
19	Chant Krapeu	M	1.00	15	1.50	1.50	4,050.00
20	Thay Moy	M	1.00	20	1.80	1.80	4,000.00
21	Buong Meng	M	1.00	10	0.50	0.50	4,100.00
22	Chamang Sopheak	M	1.00	20	0.50	0.50	4,100.00
23	Chrak Horn	M	2.50	15	3.00	3.00	4,150.00
24	Kanser Nangkhat	F	0.50	17	0.40	0.40	4,000.00
25	kavouy Sangoy	F	-	-	-	-	-
26	Klu Chamea	F	0.50	20	0.20	0.20	4,000.00
27	Dim Chatri	F	-	-	-	-	-
28	Mim CheMao	F	0.50	7	0.40	0.40	4,000.00
29	Plen sommlieng	F	1.00	12	1.25	1.25	4,000.00
30	Din Bing	M	2.00	20	2.50	2.50	4,100.00
31	Chroev Haloung	F	-	-	-	-	-
32	Sek Pol	F	1.50	15	2.00	2.00	4,000.00
33	kavory Yan	M	1.00	15	0.60	0.60	4,000.00
34	Champleu Beung	M	5.00	12	6.50	6.50	4,050.00
35	Champleu Huonh	M	4.00	8	4.00	4.00	4,100.00
36	Ngol Lol	M	4.00	9	4.90	4.90	4,100.00
37	Khout Bam	M	2.50	20	3.35	3.35	4,100.00
38	Phleng Sreang	M	0.50	15	0.65	0.65	4,100.00
39	Saly Sinen	M	-	-	-	-	-
40	Mil Pril	M	1.50	20	1.50	1.50	4,000.00
41	Trom Lamkheng	M	10.00	12	7.00	7.00	4,000.00
42	Chao Kanay	M	2.00	15	1.20	1.20	4,200.00
43	Krapeu Saruon	M	0.50	9	0.50	0.50	4,100.00
44	Krin Savann	M	10.00	9	9.00	9.00	4,200.00
45	Lal Blal	M	1.50	10	1.00	1.00	4,200.00
46	Mim Kapung	F	2.00	12	1.50	1.50	4,200.00
47	Champhlieng Taluen	M	0.70	7	0.50	0.50	4,200.00
48	Vich Thit	M	-	-	-	-	-
49	Klong Bunthong	M	2.00	8	1.00	1.00	4,200.00

50	Ky Lisan	M	2.00	6	0.70	0.70	4,000.00
51	Vich Kheng	M	1.00	15	1.50	1.50	4,100.00
52	Krit Sary	M	1.80	12	2.50	2.50	4,200.00
53	Kret Yi	M	2.00	10	2.60	2.60	4,200.00
54	Lam Kavuoy	M	2.00	15	1.00	1.00	4,200.00
55	Mil Tel	M	3.00	10	2.00	2.00	4,200.00
56	Saruoy Samuoy	F	-	-	-	-	-
57	Thangdam Take	F	3.00	15	2.00	2.00	4,200.00
58	Kachi Sayen	F	0.50	12	0.60	0.60	4,200.00
59	Sary Niv	M	3.00	4	1.70	1.70	4,200.00
60	Yon Kasaou	M	6.00	15	5.00	5.00	4,200.00
61	Poun Vantha	M	4.00	8	2.00	2.00	4,100.00
62	Haem Bo	M	3.00	8	2.50	2.50	4,000.00
63	Lim Nol	M	1.50	8	0.80	0.80	4,000.00
64	Chran Nguo	M	3.00	8	1.20	1.20	4,100.00
65	Plen Long	M	4.00	15	4.00	4.00	4,100.00
66	Thorn Hlam ng	M	-	-	-	-	-
67	Maleuy Chankrasa	M	1.00	10	0.50	0.50	4,000.00
68	John Hul	M	4.00	12	2.00	2.00	4,000.00
69	John Born	M	4.00	10	3.00	3.00	4,000.00
70	Kang Chaveang	M	1.50	7	1.00	1.00	4,000.00
71	Mao Champleung	F	1.00	10	0.70	0.70	4,200.00
72	Ke Heap	F	1.00	7	0.30	0.30	4,200.00
73	Keo Tol	F	1.50	6	0.40	0.40	4,500.00
74	Tut Keo	M	2.00	10	0.60	0.60	4,200.00
75	Chao Mao	M	6.00	10	6.80	6.80	4,100.00
76	Mao Chanthao	M	2.00	8	0.80	0.80	4,100.00
77	Thlok Duong	F	1.00	8	0.20	0.20	4,100.00
78	Mao Chanthoeun	M	3.00	10	4.50	4.50	4,300.00
79	Kieng Khandy	M	1.00	7	1.20	1.20	4,200.00
80	Luon Thuon	M	2.00	10	1.00	1.00	4,000.00
81	Kapit Svay	M	1.00	7	1.30	1.30	4,000.00
82	Kev Barang	M	1.00	10	0.70	0.70	4,000.00
83	Lay Sangluo	M	14.00	7	10.00	10.00	4,000.00
84	Nhik Nhok	M	3.50	10	1.00	1.00	4,100.00
85	Ka Lev	F	2.50	20	3.60	3.60	3,500.00
86	Phleang Sokkhoeun	M	0.50	8	1.00	1.00	4,000.00
87	Som Nay	M	2.00	7	2.00	2.00	4,000.00
88	Kavuoy Ayvan	F	1.00	17	0.75	0.75	4,000.00
89	Savy Sok	M	1.50	14	2.50	2.50	3,500.00
90	Som Bunthoeun	M	1.00	11	1.00	1.00	4,000.00
91	Chao Khean	M	1.50	15	2.00	2.00	3,500.00
92	Techsa Chavan	M	1.00	12	1.70	1.70	4,000.00
93	San Kry	F	0.50	15	1.00	1.00	3,500.00
94	Klaul Vin	M	1.00	15	1.00	1.00	4,000.00
95	Neng Saroeun	M	1.00	8	1.50	1.50	4,500.00
96	Thiv Salan	F	3.00	20	2.00	2.00	3,500.00
97	Chanra Chaima	F			-	-	
98	Kret Savann	M	5.00	6	2.00	2.00	3,500.00
99	Chantrieng Chamble	F					
100	Chhnas Huonh	F			-	-	
101	Soeung Sophea	M	1.20	4	0.60	0.60	5,000.00
102	Che Roumbaung	F			-	-	-
103	Yong Tramoung	M	1.00	5	1.20	1.20	4,200.00

104	Leang Yin	F	0.50	10	0.80	0.80	4,200.00
105	Teng Samath	M	-	-	-	-	-
106	Khloum Bachaet	M	-	-	-	-	-
107	Yin Sopheak	M	5.00	7	4.85	4.85	4,200.00
108	Yin Sok	M	3.00	10	4.00	4.00	4,200.00
109	Khuon Samnang	F	7.00	10	12.35	12.35	4,200.00
110	Kreng Bieng	F	2.50	10	2.89	2.89	4,200.00
111	Am Brak	F	1.00	15	1.50	1.50	4,100.00
112	Thy Phearum	M	-	-	-	-	-
113	Smien Riem	M	1.60	15	1.76	1.76	4,000.00
114	Smien Ngev	F	3.00	10	3.10	3.10	4,000.00
115	Som Bev	F	2.00	12	2.20	2.20	4,000.00
116	Thie Moeung	M	5.00	10	5.90	5.90	4,200.00
117	Kong Chhorvy	F	0.50	10	0.45	0.45	4,100.00
118	Eam Chandy	F	1.00	8	0.30	0.30	4,000.00
119	Roeun Sokchea	F	1.00	10	0.30	0.30	4,000.00
120	Tuy Chuch	M	1.00	10	1.20	1.20	4,100.00
121	Ying Yem	M	4.00	10	6.00	6.00	-
122	Rong Saveth	F	5.00	15	5.96	5.96	4,000.00
123	Ban Ratana	M	-	-	-	-	-
124	Toy Mary	F	3.00	10	3.50	3.50	41,000.00
125	Toy Man	F	1.00	4	0.50	0.50	4,700.00
126	Ammreang Chanchanty	M	2.00	7	1.90	1.90	-
127	Ros Yin	M	-	-	-	-	-
128	Vuthy	F	3.00	10	3.00	3.00	4,000.00
129	Kem Neang	F	1.50	5	1.50	1.50	4,000.00
130	Kriev Chech	F	3.00	10	3.54	3.54	4,100.00
131	Sok Nget	F	-	-	-	-	-
132	Nguon Rim	M	6.00	5	7.00	7.00	4,000.00
133	Seang Teng	M	3.00	10	4.00	4.00	4,000.00
Total (ha, t)			268.40	-	245.30	245.30	-

Annex 4.3: List of Families Planting Cassava

No	Name	Sex	Planting area (ha)	Dried Cassava Sell QTY (t)	Prices (Riel/kg)
1	Roeun Chanthay	M	-	-	-
2	Nong Kontang	F	1.00	8.00	720.00
3	Ngoul Thol	M	0.50	6.00	700.00
4	Chanda	F	0.50	8.00	700.00
5	Kamphng Loul	M	-	-	-
6	Phng Phlouty	M	-	-	-
7	Pong Tuy	F	0.50	1.50	700.00
8	Sui Prangve	M	1.00	3.00	720.00
9	Kim Phanghuy	M	-	-	-
10	Sek Souy	M	-	-	-
11	Hem Mang	M	0.50	1.00	700.00
12	Ki Phli	F	0.50	3.00	700.00
13	Hang Lorn	M	0.50	3.00	700.00
14	Blang Chounh	M	-	-	-
15	Deum Bati	M	-	-	-
16	Sek Pouy	M	1.00	4.00	700.00
17	Thy Bongro	M	0.50	3.00	700.00
18	Rouy Choeung	F	0.50	2.00	700.00
19	Chant Krapeu	M	1.00	2.00	700.00
20	Thay Moy	M	0.50	3.00	700.00

21	Buong Meng	M	0.50	3.00	700.00
22	Chamang Sopheak	M	3.00	5.00	750.00
23	Chrak Horn	M	1.00	2.00	720.00
24	Kanser Nangkhat	F	0.50	1.00	720.00
25	kavouy Sangoy	F	2.00	3.00	730.00
26	Klu Chamea	F	0.50	1.00	720.00
27	Dim Chatri	F	0.50	1.50	720.00
28	Mim CheMao	F	0.50	1.00	740.00
29	Plen sommlieng	F	-	-	-
30	Din Bing	M	-	-	-
31	Chroev Haloung	F	-	-	-
32	Sek Pol	F	-	-	-
33	kavory Yan	M	-	-	-
34	Champleu Beung	M	1.50	6.00	800.00
35	Champleu Huonh	M	0.80	3.50	750.00
36	Ngol Lol	M	-	-	-
37	Khout Bam	M	1.50	2.00	700.00
38	Phleng Sreang	M	0.50	2.24	740.00
39	Saly Sinen	M	1.00	3.00	740.00
40	Mil Pril	M	-	-	-
41	Trom Lamkheng	M	-	-	-
42	Chao Kanay	M	-	-	-
43	Krapeu Saruon	M	0.50	3.00	800.00
44	Krin Savann	M	-	-	-
45	Lal Blal	M	-	-	-
46	Mim Kapung	F	-	-	-
47	Champhlieng Taluen	M	2.00	10.00	800.00
48	Vich Thit	M	-	-	-
49	Klong Bunthong	M	1.00	3.00	700.00
50	Ky Lisan	M	1.00	10.00	700.00
51	Vich Kheng	M	0.30	1.00	600.00
52	Krit Sary	M	1.00	3.00	800.00
53	Kret Yi	M	3.00	12.00	800.00
54	Lam Kavuooy	M	-	-	-
55	Mil Tel	M	-	-	-
56	Saruoy Samuoy	F	-	-	-
57	Thangdam Take	F	0.40	1.00	800.00
58	Kachi Sayen	F	-	-	-
59	Sary Niv	M	-	-	-
60	Yon Kasaou	M	-	-	-
61	Poun Vantha	M	-	-	-
62	Haem Bo	M	-	-	-
63	Lim Nol	M	-	-	-
64	Chran Nguo	M	1.00	3.00	700.00
65	Plen Long	M	1.00	2.00	700.00
66	Thorn Hlam ng	M	1.00	4.00	700.00
67	Maleuy Chankrasa	M	1.00	5.00	700.00
68	John Hul	M	1.00	4.00	700.00
69	John Born	M	0.50	2.00	700.00
70	Kang Chaveang	M	-	-	-
71	Mao Champleung	F	1.00	3.00	700.00
72	Ke Heap	F	-	-	-
73	Keo Tol	F	-	-	-
74	Tut Keo	M	-	-	-
75	Chao Mao	M	1.00	4.00	600.00
76	Mao Chanthao	M	2.00	8.00	750.00
77	Thlok Duong	F	1.00	3.00	700.00

78	Mao Chanthoeun	M	1.00	4.00	700.00
79	Kieng Khanthy	M	-	-	-
80	Luon Thuon	M	1.00	3.00	700.00
81	Kapit Svay	M	-	-	-
82	Kev Barang	M	0.50	1.50	700.00
83	Lay Sangluo	M	-	-	-
84	Nhik Nhok	M	1.00	6.00	700.00
85	Ka Lev	F	-	-	-
86	Phleang Sokkhoeun	M	-	-	-
87	Som Nay	M	1.50	2.00	600.00
88	Kavuoy Ayvan	F	1.50	5.00	600.00
89	Savy Sok	M	0.50	0.90	700.00
90	Som Bunthoeun	M	1.70	3.00	700.00
91	Chao Khean	M	1.00	3.50	700.00
92	Techsa Chavan	M	0.50	2.00	700.00
93	San Kry	F	-	-	-
94	Klaul Vin	M	1.00	3.00	700.00
95	Neng Saroeun	M	1.50	5.00	700.00
96	Thiv Salan	F		-	-
97	Chanra Chaima	F		-	-
98	Kret Savann	M		-	
99	Chantrieng Chamble	F	1.00	-	
100	Chhnas Huonh	F	-	-	-
101	Soeung Sophea	M	-	-	-
102	Che Roumbaung	F		-	
103	Yong Tramoung	M	-	-	-
104	Leang Yin	F	-	-	-
105	Teng Samath	M	-	-	-
106	Khouloum Bachaet	M	0.50	-	700.00
107	Yin Sopheak	M	-	-	-
108	Yin Sok	M	-	-	-
109	Khuon Samnang	F	-	-	-
110	Kreng Bieng	F	-	-	-
111	Am Brak	F	-	-	-
112	Thy Phearum	M	-	-	-
113	Smien Riem	M	-	-	-
114	Smien Ngev	F	-	-	-
115	Som Bev	F	-	-	-
116	Thie Moeung	M	-	-	-
117	Kong Chhorvy	F	-	-	-
118	Eam Chandy	F	-	-	-
119	Roeun Sokchea	F	-	-	-
120	Tuy Chuch	M	-	-	-
121	Ying Yem	M	-	-	-
122	Rong Saveth	F	-	-	-
123	Ban Ratana	M	2.00	-	-
124	Toy Mary	F	-	-	-
125	Toy Man	F	2.00	1.50	680.00
126	Ammreang Chanchanty	M	-	-	-
127	Ros Yin	M	1.00	2.50	700.00
128	Vuthy	F	3.50	8.00	730.00
129	Kem Neang	F	-	-	-
130	Kriev Chech	F	-	-	-
131	Sok Nget	F	-	-	-
132	Nguon Rim	M	1.00	4.00	700.00
133	Seang Teng	M	-	-	-
Total (t)			65.70	217.64	-

Annex 4.4: List of Families Planting Upland Paddy/Rice

No	Name	Sex	Planting area (ha)	Yields (t)	Sell QTY (t)	Prices (Riel/kg)
1	Roeun Chanthy	M	-	-	-	-
2	Nong Kontang	F	-	-	-	-
3	Ngoul Thol	M	-	-	-	-
4	Chanda	F	-	-	-	-
5	Kamphng Loul	M	1.00	1.00	-	-
6	Phng Phlouy	M	-	-	-	-
7	Pong Tuy	F	-	-	-	-
8	Sui Prangve	M	1.00	1.70	-	-
9	Kim Phanghuy	M	-	-	-	-
10	Sek Souy	M	-	-	-	-
11	Hem Mang	M	1.50	1.50	-	-
12	Ki Phli	F	1.50	2.00	-	-
13	Hang Lorn	M	2.00	3.00	-	-
14	Blang Chounh	M	-	-	-	-
15	Deum Bati	M	-	-	-	-
16	Sek Pouy	M	1.50	2.00	-	-
17	Thy Bongro	M	0.50	1.00	-	-
18	Rouy Choeung	F	0.50	0.80	-	-
19	Chant Krapeu	M	1.00	2.00	-	-
20	Thay Moy	M	-	-	-	-
21	Buong Meng	M	3.00	5.00	2.00	1,000.00
22	Chamang Sopheak	M	1.00	1.54	-	-
23	Chrak Horn	M	-	-	-	-
24	Kanser Nangkhat	F	0.50	0.70	-	-
25	kavouy Sangoy	F	1.00	1.30	-	-
26	Klu Chamea	F	1.00	1.40	-	-
27	Dim Chatri	F	0.50	0.35	-	-
28	Mim CheMao	F	0.50	0.70	-	-
29	Plen sommlieng	F	1.00	1.20	-	-
30	Din Bing	M	0.50	1.40	-	-
31	Chroev Haloung	F	0.50	1.00	-	-
32	Sek Pol	F	1.00	2.10	-	-
33	kavory Yan	M	1.00	1.80	-	-
34	Champleu Beung	M	1.50	1.00	-	-
35	Champleu Huonh	M	-	-	-	-
36	Ngol Lol	M	-	-	-	-
37	Khout Bam	M	1.50	2.00	0.50	1,000.00
38	Phleng Sreang	M	-	-	-	-
39	Saly Sinen	M	-	-	-	-
40	Mil Pril	M	0.50	1.00	-	-
41	Trom Lamkheng	M	2.00	8.00	7.00	1,100.00
42	Chao Kanay	M	1.00	1.20	-	-
43	Krapeu Saruon	M	-	-	-	-
44	Krin Savann	M	1.00	1.20	-	-
45	Lal Blal	M	-	-	-	-
46	Mim Kapung	F	-	-	-	-
47	Champhlieng Taluen	M	-	-	-	-
48	Vich Thit	M	1.50	2.00	1.00	1,000.00
49	Klong Bunthong	M	1.00	1.20	-	-
50	Ky Lisan	M	1.00	1.30	0.30	1,000.00
51	Vich Kheng	M	1.00	1.40	-	-
52	Krit Sary	M	1.00	1.40	-	-

53	Kret Yi	M	1.00	1.50	0.50	1,000.00
54	Lam Kavuoy	M	1.00	1.80	-	-
55	Mil Tel	M	1.50	2.00	0.30	1,000.00
56	Saruoy Samuoy	F	0.50	0.50	-	-
57	Thangdam Take	F	-	-	-	-
58	Kachi Sayen	F	-	-	-	-
59	Sary Niv	M			-	-
60	Yon Kasaou	M	1.50	3.00	1.00	1,000.00
61	Poun Vantha	M	2.00	2.40	1.00	1,000.00
62	Haem Bo	M	1.50	2.00	-	-
63	Lim Nol	M	1.00	1.50	-	-
64	Chran Nguo	M	1.00	1.50	-	-
65	Plen Long	M	2.00	2.50	-	-
66	Thorn Hlam ng	M	1.00	1.50	-	-
67	Maleuy Chankrasa	M	-	-	-	-
68	John Hul	M	-	-	-	-
69	John Born	M	0.50	0.80	-	-
70	Kang Chaveang	M			-	-
71	Mao Champleung	F	-	-	-	-
72	Ke Heap	F	1.00	1.00	-	-
73	Keo Tol	F	-	-	-	-
74	Tut Keo	M	0.50	0.60	-	-
75	Chao Mao	M	3.50	5.00	-	-
76	Mao Chanthao	M	1.50	1.00	1.00	1,200.00
77	Thlok Duong	F	1.00	1.00	-	-
78	Mao Chanthoeun	M	-	-	-	-
79	Kieng Khanthy	M	1.00	1.50	-	-
80	Luon Thuon	M	-	-	-	-
81	Kapit Svay	M	-	-	-	-
82	Kev Barang	M	0.60	0.80	-	-
83	Lay Sangluo	M	-	-	-	-
84	Nhik Nhok	M	2.00	1.60	-	-
85	Ka Lev	F	2.00	1.80	-	HH consumption
86	Phleang Sokkhoeun	M	-	-	-	-
87	Som Nay	M	1.00	2.00	-	HH consumption
88	Kavuoy Ayvan	F	0.50	0.50	-	HH consumption
89	Savy Sok	M	1.00	1.00	-	HH consumption
90	Som Bunthoeun	M	-	-	-	-
91	Chao Khean	M	-	-	-	-
92	Techsa Chavan	M	2.00	3.00	-	HH consumption
93	San Kry	F	1.00	2.50	-	-
94	Klaul Vin	M	1.00	1.70	-	-
95	Neng Saroeun	M	2.00	0.80	5.00	1,000.00
96	Thiv Salan	F	3.00	7.00	3.50	1,000.00
97	Chanra Chaima	F			-	-
98	Kret Savann	M	1.00	3.00	-	-
99	Chantrieng Chamble	F			-	-
100	Chhnas Huonh	F		-	-	-
101	Soeung Sophea	M	0.50	1.00	-	-
102	Che Roumbaung	F	-	-	-	-
103	Yong Tramoung	M	-	-	-	-
104	Leang Yin	F	-	-	-	-
105	Teng Samath	M	0.50	-	-	-
106	Khloum Bachaet	M	-	-	-	-
107	Yin Sopheak	M	0.50	-	-	-

108	Yin Sok	M	-	-	-	-
109	Khuon Samnang	F	-	-	-	-
110	Kreng Bieng	F	0.50	0.60	-	-
111	Am Brak	F	0.50	0.60	-	-
112	Thy Phearum	M	-	-	-	-
113	Smien Riem	M	0.80	0.70	-	-
114	Smien Ngev	F	0.50	0.60	-	-
115	Som Bev	F	-	-	-	-
116	Thie Moeung	M	1.00	1.00	-	-
117	Kong Chhorvy	F	1.00	0.70	-	-
118	Eam Chandy	F	1.00	0.90	-	-
119	Roeun Sokchea	F	-	-	-	-
120	Tuy Chuch	M	0.50	0.30	-	-
121	Ying Yem	M	0.50	1.00	-	-
122	Rong Saveth	F	1.00	0.80	-	-
123	Ban Ratana	M	-	-	-	-
124	Toy Mary	F	2.00	0.80	-	-
125	Toy Man	F	2.00	-	-	-
126	Ammreang Chanchanty	M	1.50	0.80	-	-
127	Ros Yin	M	1.00	-	-	-
128	Vuthy	F	2.00	-	-	-
129	Kem Neang	F	2.00	-	-	-
130	Kriev Chech	F	2.00	-	-	-
131	Sok Nget	F	2.00	0.80	-	-
132	Nguon Rim	M	0.50	0.70	-	-
133	Seang Teng	M	2.00	-	-	-
Total (t)			100.90	123.29	23.10	-

Annex 4.5: List of Families Raising Animals and Livestock

No	Name	Sex	Cow	Buffalo	Swine/Mice Pig	Chicken	Duck
1	Roeun Chanthy	M	-	-	1	-	-
2	Nong Kontang	F	11	-	-	-	-
3	Ngoul Thol	M	4	-	2	-	-
4	Chanda	F	6	-	-	3	-
5	Kamphng Loul	M	-	-	-	-	-
6	Phng Phlout	M	-	-	-	-	-
7	Pong Tuy	F	-	-	-	2	-
8	Sui Prangve	M	-	-	-	6	-
9	Kim Phanghuy	M	5	-	-	17	-
10	Sek Souy	M	-	-	-	-	-
11	Hem Mang	M	10	-	-	6	-
12	Ki Phli	F	4	-	-	-	-
13	Hang Lorn	M	-	-	-	4	-
14	Blang Chounh	M	1	-	-	-	-
15	Deum Bati	M	-	-	-	5	-
16	Sek Pouy	M	1	-	-	5	-
17	Thy Bongro	M	-	-	-	2	-
18	Rouy Choeung	F	2	-	-	-	-
19	Chant Krapeu	M	-	-	-	3	-
20	Thay Moy	M	-	-	-	2	-

21	Buong Meng	M	-	-	-	3	2
22	Chamang Sopheak	M	-	-	-	10	-
23	Chrak Horn	M	-	-	-	-	-
24	Kanser Nangkhat	F	-	-	-	-	-
25	kavouy Sangoy	F	-	-	-	-	-
26	Klu Chamea	F	-	-	-	-	-
27	Dim Chatri	F	-	-	-	-	-
28	Mim CheMao	F	-	-	-	-	-
29	Plen sommlieng	F	-	-	-	-	-
30	Din Bing	M	-	-	-	-	-
31	Chroev Haloung	F	-	-	-	2	-
32	Sek Pol	F	-	-	-	-	-
33	kavory Yan	M	-	-	-	-	-
34	Champleu Beung	M	-	-	-	-	-
35	Champleu Huonh	M	5	-	2	-	-
36	Ngol Lol	M	-	-	-	-	-
37	Khout Bam	M	1	-	-	-	-
38	Phleng Sreang	M	-	-	-	-	-
39	Saly Sinen	M	-	-	-	-	-
40	Mil Pril	M	-	-	-	-	-
41	Trom Lamkheng	M	4	4	-	-	-
42	Chao Kanay	M	4	-	-	-	-
43	Krapeu Saruon	M	-	-	-	5	-
44	Krin Savann	M	15	-	-	-	-
45	Lal Blal	M	-	-	-	10	-
46	Mim Kapung	F	3	-	-	-	-
47	Champhlieng Taluen	M	7	-	-	-	-
48	Vich Thit	M	-	-	-	-	-
49	Klong Bunthong	M	-	-	-	-	-
50	Ky Lisan	M	12	-	-	-	-
51	Vich Kheng	M	-	-	1	5	-
52	Krit Sary	M	-	-	-	-	-
53	Kret Yi	M	-	-	2	-	-
54	Lam Kavouy	M	2	-	1	10	-
55	Mil Tel	M	12	-	-	-	-
56	Saruoy Samuoy	F	5	-	-	-	-
57	Thangdam Take	F	-	-	-	-	-
58	Kachi Sayen	F	-	-	-	-	-
59	Sary Niv	M	-	1	-	5	-
60	Yon Kasaou	M	-	-	-	-	-
61	Poun Vantha	M	8	-	-	3	-
62	Haem Bo	M	-	-	-	10	-
63	Lim Nol	M	-	-	-	10	-
64	Chran Nguo	M	-	-	-	15	-
65	Plen Long	M	5	-	-	20	-
66	Thorn Hlam ng	M	-	-	-	10	-
67	Maleuy Chankrasa	M	1	-	-	6	-
68	John Hul	M	2	-	-	10	-
69	John Born	M	8	-	-	10	-

70	Kang Chaveang	M	-	-	-	5	-
71	Mao Champleung	F	-	-	-	10	-
72	Ke Heap	F	-	-	-	15	-
73	Keo Tol	F	-	-	-	20	-
74	Tut Keo	M	-	-	-	10	-
75	Chao Mao	M	3	-	-	10	-
76	Mao Chanthao	M	4	-	-	10	-
77	Thlok Duong	F	-	-	-	15	-
78	Mao Chanthoeun	M	-	-	-	8	-
79	Kieng Khanthy	M	-	-	-	10	-
80	Luon Thuon	M	-	-	2	15	-
81	Kapit Svay	M	-	-	-	20	-
82	Kev Barang	M	15	-	-	-	-
83	Lay Sangluo	M	-	-	-	50	-
84	Nhik Nhok	M	5	-	-	10	-
85	Ka Lev	F	2	5	-	-	-
86	Phleang Sokkhoeun	M	2	-	-	-	-
87	Som Nay	M	2	-	-	15	-
88	Kavuoy Ayvan	F	3	-	-	20	-
89	Savy Sok	M	2	-	-	15	-
90	Som Bunthoeun	M	-	-	-	-	-
91	Chao Khean	M	2	-	-	20	-
92	Techsa Chavan	M	-	-	-	10	-
93	San Kry	F	-	1	-	10	-
94	Klaul Vin	M	7	-	1	10	-
95	Neng Saroeun	M	4	1	2	10	-
96	Thiv Salan	F	7	2	-	5	4
97	Chanra Chaima	F		-			-
98	Kret Savann	M	4	-	-	10	-
99	Chantrieng Chamble	F	5	-	-		-
100	Chhnas Huonh	F	4	-	-	-	-
101	Soeung Sophea	M	-	-	-	30	-
102	Che Roumbaung	F		-			-
103	Yong Tramoung	M	-	-	-	10	-
104	Leang Yin	F	-	-	-	10	-
105	Teng Samath	M	-	-	-	5	-
106	Khloum Bachaet	M	-	-	-	-	-
107	Yin Sopheak	M	8	-	4	15	12
108	Yin Sok	M	-	-	-	-	-
109	Khuon Samnang	F	1	-	-	-	-
110	Kreng Bieng	F	-	-	-	10	-
111	Am Brak	F	-	-	-	3	-
112	Thy Phearum	M	-	-	-	-	-
113	Smien Riem	M	4	-	-	10	-
114	Smien Ngev	F	-	-	1	-	-
115	Som Bev	F	-	-	-	-	-
116	Thie Moeung	M	1	-	-	10	-
117	Kong Chhorvy	F	-	-	-	-	-
118	Eam Chandy	F	-	-	-	-	-

119	Roeun Sokchea	F	7	-	-	20	-
120	Tuy Chuch	M	-	-	-	-	-
121	Ying Yem	M	-	-	-	5	-
122	Rong Saveth	F	-	-	-	-	-
123	Ban Ratana	M	-	-	1	3	-
124	Toy Mary	F	4	8	2	20	-
125	Toy Man	F	4	6	1	5	-
126	Ammreang Chanchanty	M	4	-	-	10	-
127	Ros Yin	M	-	-	-	15	-
128	Vuthy	F	1	3	-	-	-
129	Kem Neang	F	5	10	-	-	-
130	Kriev Chech	F	5	4	-	20	-
131	Sok Nget	F	5	7	-	-	-
132	Nguon Rim	M	3	2	-	50	-
133	Seang Teng	M	5	6	-	3	-
Total			266	60	23	786	18

Annex 4.6: Training Needs Assessment Codes

1. Crops Production's codes	
Code 1	Cultivation techniques (soil preparation, net house preparation, seed selection, irrigation preparation)
Code 2	An understanding the use of pesticides and fertilizers and technical standards
Code 3	Breeding or grafting techniques (including cashews, cassava, etc.)
Code 4	Integrated Pest Management (IPM) techniques and treatments on various crops
Code 5	An understanding of safe vegetables and safe vegetable growing techniques
Code 6	An understanding of organic crops and organic farming techniques
Code 7	An understanding of planting techniques in line with Good Agricultural Practices (GAP)
Code 8	An understanding drip irrigation and sprinkler irrigation
Code 9	Organizing production groups or farming communities and other related work
Code 10	Agricultural business planning preparation
2. Nutrition Sensitive Agriculture's Codes	
N 1	Training on food safety and nutrition
N 2	Training on agricultural product processing and preservation technology
N 3	Training on promoting gender equality and women's nutrition
N 4	Training on intensive agriculture and agricultural diversification
N 5	Training on hygiene and food hygiene practices
N 6	Training on home school garden and food safety education for school children
N 7	Training on communicable diseases pandemic, health effects and nutrition
N 8	Training on fundamental basics of nutrition
N 9	Training on gender equity, women's leadership and agricultural works
N 10	Training on post-harvest of nutrition losses in value chain
N 11	Training on strategy and multi-sectors on malnutrition interventions
N 12	Training on food fortification
N 13	Training on post-harvest safe handling
3. Contract Farming Implementation's Codes	
CF 1	Training on general guideline of contract farming
CF 2	Training on monitoring and verification of relevant documents during implementing the contract farming
CF 3	Training on quality control and preparation
CF 4	Training on development of human resource training plan and partiKIPation in the implementation of contract agricultural production
CF 5	Training on procedure for requesting and preparation of relevant documents requesting the implementation of contract farming
CF 6	Training on dispute resolution in contract farming
CF 7	Training on packaging and labeling
CF 8	Training on market access and smallholder farmers' connectivity
CF 9	Training on the concept of agri-business cluster

Annex 4.7: Questionnaire of Beneficiary Profile Form

A. To be completed by interviewer

1. Name:, Gender: ☐ Male ☐ Female
2. Interview date (DD/MM/YY):
3. Location:(village),(commune),(district),(Province).
4. Phone number: and

B. To be completed by interviewee

Part I: General information

1. Name:, Gender: ☐ Male ☐ Female
2. Indigenous People: ☐ Tompoun ☐ Pou Nong ☐ Mil ☐ Prov
☐ Other:
3. Family status: ☐ Single ☐ Marriage ☐ Divorce ☐ Separate
4. Children: (People) (Son: (People), Daughter: (People).
5. Children who are studying:
 - ❖ Kindergarten: (People) (Son: (People), Daughter: (People).
 - ❖ Primary school: (People) (Son: (People), Daughter: (People).
 - ❖ Secondary school: (People) (Son: (People), Daughter: (People).
 - ❖ High school: (People) (Son: (People), Daughter: (People).
 - ❖ Technical school: (People) (Son: (People), Daughter: (People).
 - ❖ Undergraduate: (People) (Son: (People), Daughter: (People).
6. Children who stop study: (People) (Son: (People), Daughter: (People).
7. Under-age school children: (People) (Son:(People), Daughter: (People).
8. Agriculture labor force: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐

9. Have you applied to the LASED III project already in term of agricultural support? ☐ Yes ☐

No

10. Have you participated in dissemination already? ☐ Yes ☐ No

11. Which institutions provide the dissemination?

☐ Ministry of Agriculture, Forestry and Fisheries

☐ Ministry of Land Management, Urban Planning and Construction

☐ Provincial Department of Agriculture, Forestry and Fisheries

☐ Provincial Department of Land Management, Urban Planning and Construction

☐ Local authority

☐ Other:

Part II: Agricultural potential

2.1 Industrial crops

2.1.1 Cashew tree ☐ Yes ☐ No (If so, please verify below:)

☐ Younger than the harvest year

☐ No land to grow

☐ Land not yet cleared

☐ Other:

2.1.1.1 Cashew production: (h.a), Yield: (t), Price:
(Riel/kg)

2.1.2 Cassava: (h.a)

2.1.2.1 Quantity sell: (h.a), Fresh cassava's price:
(Riel/kg)

2.1.2.2 Quantity sell: (h.a), Dried chip cassava's price:
(Riel/kg)

2.1.3 Rubber: (h.a), Yield: (t), Price: (Riel/kg)

2.1.4 Rice: (h.a), Yield: (t), Have you sold the rice? ☐ Yes ☐ No (Please verify)

☐ Only household consumption

☐ Also sold some

☐ No land to grow

☐ Land not yet cleared

☐ Other:

2.1.4.1 Sold quantity: (h.a), Yield: (t), Price: (Riel/kg)

2.2 Horticulture

2.2.1 Vegetable: (h.a), Yield: (t), Price: (Riel/kg)

2.2.2 Fruits tree: (h.a), Yield: (t), Price: (Riel/kg)

2.3 Challenges

2.3.1 What is the condition of your land? ☐ Good ☐ Average ☐ Bad

2.3.2 Challenges

Choose any answer you come across Please tick (✓) on the only answer! Level 1 is not strongly challenged to level 5 is strongly challenged	1	2	3	4	5
Drought					
Diseases on other crops					
Lack of techniques in cultivation					
Lack of labor to support agricultural work					
Lack of capital					
Lack of sales' market					
Lack of agricultural inputs (fertilizers and pesticides, seeds, etc.)					

2.4 Livestock ☐ No ☐ Yes (If so, please verify below:)

2.4.1 Cow:, Buffolo:, Pig:, Chicken:, Duck:, Other:

2.4.1.1 Cow's sell quantity:, Total price: (Riel)

2.4.1.2 Buffolo's sell quantity:, Total price: (Riel)

2.4.1.3 Chicken's sell quantity:, Total price: (Riel)

2.4.1.4 Duck's sell quantity:, Total price: (Riel)

2.4.1.5 Other:, Total price: (Riel)

2.4.2 Challenges

Choose any answer you come across Please tick (✓) on the only answer! Level 1 is not strongly challenged to level 5 is strongly challenged	1	2	3	4	5
Drought					
Other animal diseases					
Lack of technique in raising					
Lack of labor to raise livestock					
Lack of capital for animal husbandry raising					

Lack of sales' market					
Lack of production inputs (food, vaccines, veterinary drugs, etc.)					

2.5 Aquaculture (raising fish, frogs, eels, snakes, etc.)

2.5.1 Do you do aquaculture? ☐ No ☐ Yes (If so, please verify below)

2.5.2 Sell quantity: (kg), Price: (Riel/kg)

2.5.3 Do you want to do aquatic farming? ☐ Yes ☐ No (If so, please verify below)

2.5.4 Please provide your reasons why do not want to do the aquatic farming:

.....

2.6 Markets

2.6.1 Who do you sell your agricultural products to?

- ☐ Processing company
- ☐ Medium or large broker in local or province
- ☐ Village collectors
- ☐ Agricultural cooperative to which it is a member (If the respondent is a member of the agricultural cooperative)
- ☐ Others (Please specify:)

2.6.2 Where do your buyers bring your agricultural products to?

- ☐ Export abroad (usually exported to Vietnam)
- ☐ Local processing
- ☐ Resale to exporters (usually exported to Vietnam)

2.6.3 Where sources do you know the price of agricultural products from?

- ☐ By phone
- ☐ By telegram
- ☐ Direct contact with local buyers (Establish a regular quote team)
- ☐ By relevant ministries and institutions
- ☐ By organizing a matching forum from relevant ministries and institutions

2.6.4 Have you ever attended a contract farming training course?

- ☐ No
- ☐ Yes

2.6.5 Which ministry or institution is organized by?

- ☐ Provincial Department of Agriculture, Forestry and Fisheries

- ☐ Department of Agro-Industry
- ☐ NGOs
- ☐ Private sector engaged in contract farming

2.6.6 Transportation

- ☐ Bulldozer ☐ Tractor ☐ Motorcycles ☐ Horse-drawn carriage ☐ Car

2.6.7 Challenges

- ☐ Low selling price
- ☐ Lack of buyers
- ☐ Lack of market information
- ☐ Lack of drying facilities
- ☐

Other:

(Specify.....)

2.7 Agricultural economic analysis (Annual)

2.7.1 Total income from agriculture (Riel)

2.7.2 Total expenditure on agricultural production (cultivation, aquaculture, etc.)
(Riel)

2.7.3 Non-agricultural work ☐ No ☐ Yes (Please specify:.....)

2.7.4 Non-agricultural income (Please specify:.....) (Riel)

2.7.5 Expenses and income: ☐ Enough ☐ Not enough

2.7.6 How many months do you estimate the shortage (in days / months)?

2.8 Extension and Information Technology

2.8.1 Have you ever attended a short course in agricultural skills? ☐ Yes ☐ No

2.8.2 Training by which party:

.....
.....

2.8.3 Do you have a cell phone? ☐ Yes ☐ No

2.8.4 Total number of phones: (Units) 4.1 Smart phones units

2.8.5 Have you ever used a smartphone to learn agricultural techniques? ☐ Yes ☐ No

2.8.6 Have you ever used a smartphone to buy or sell agricultural products? ☐ Yes ☐ No

2.9 Community infrastructure

2.9.1 Rubber road number: (Line), Length: (Km)

2.9.2 Road number: (Line), Length: (Km)

2.9.3 Red gravel road number: (Line), Length: (Km)

- 2.9.4 Lake , Size: (Cubic meter)
- 2.9.5 River , Length: (Km)
- 2.9.6 School (Building)
- 2.9.7 Health Center (Building)

2.10 Training Needs Assessment

A. Animals and Livestock Production

Please select the training course below, giving priority by ticking (✓)						
Techniques/Animals	Cow	Buffalo	Pig	Chicken	Ducks	Other
Animal husbandry feeding						
Breeding						
Feeds making						
Vaccination						
Disease treatment						
Production preparation (Cage)						
Business planning preparation						
Others						

B. Aquaculture

Please select the training course below, giving priority by ticking (✓)					
Techniques/Aquaculture	Cat fish	Frog	Eel	Others	Others
Raising in plastic bags					
Breeding					
Feeds making					
Vaccination					
Disease treatment					
Production preparation (Reservoir)					
Business planning preparation					
Others					

C. Crops Production

Please select the training course below, giving priority by ticking (✓)

- ☐ Cultivation techniques (soil preparation, net house preparation, seed selection, irrigation preparation)
- ☐ An understanding the use of pesticides and fertilizers and technical standards
- ☐ Breeding or grafting techniques (including cashews, cassava, etc.)
- ☐ Integrated Pest Management (IPM) techniques and treatments on various crops
- ☐ An understanding of safe vegetables and safe vegetable growing techniques
- ☐ An understanding of organic crops and organic farming techniques
- ☐ An understanding of planting techniques in line with Good Agricultural Practices (GAP)
- ☐ An understanding drip irrigation and sprinkler irrigation
- ☐ Organizing production groups or farming communities and other related work
- ☐ Agricultural business planning preparation

D. Nutrition Sensitive Agriculture

Please select the training course below, giving priority by ticking (✓)

- ☐ Training on food safety and nutrition
- ☐ Training on agricultural product processing and preservation technology
- ☐ Training on promoting gender equality and women's nutrition
- ☐ Training on intensive agriculture and agricultural diversification
- ☐ Training on hygiene and food hygiene practices
- ☐ Training on home school garden and food safety education for school children
- ☐ Training on communicable diseases pandemic, health effects and nutrition
- ☐ Training on fundamental basics of nutrition
- ☐ Training on gender equity, women's leadership and agricultural works
- ☐ Training on post-harvest of nutrition losses in value chain
- ☐ Training on strategy and multi-sectors on malnutrition interventions
- ☐ Training on food fortification
- ☐ Training on post-harvest safe handling

E. Contract Farming Implementation

Please select the training course below, giving priority by ticking (✓)

- ☐ Training on general guideline of contract farming
- ☐ Training on monitoring and verification of relevant documents during implementing the contract farming

- ☐ Training on quality control and preparation
- ☐ Training on development of human resource training plan and participation in the implementation of contract agricultural production
- ☐ Training on procedure for requesting and preparation of relevant documents requesting the implementation of contract farming
- ☐ Training on dispute resolution in contract farming
- ☐ Training on packaging and labeling
- ☐ Training on market access and smallholder farmers' connectivity
- ☐ Training on the concept of agri-business cluster

Annex 4.8 Additional questions

I. Agriculture Cooperative

1. Does your indigenous community establish the agriculture cooperative?

- ☐ No
- ☐ Yes (Please specify in the following question)

2. What is the name that agriculture cooperative?

.....

3. How many members in that agriculture cooperative? (Please attach the photo, if applicable)

Amount of member: (Number of women:)

4. What careers does that agriculture cooperative do?

.....

5. What challenges does that agriculture cooperative come across?

.....

II. Producer Group

6. Does your producer group establish the agriculture cooperative?

- ☐ No
- ☐ Yes (Please specify in the following question)

7. What is the name that producer group?

.....

8. How many members in that producer group? (Please attach the photo, if applicable)

Amount of member: (Number of women:)

9. What careers does that producer group do?

.....

.....

.....

.....

.....

10. What challenges does that producer group come across?

.....

.....

.....

.....

.....

III. Revolving Funds Group

11. Does your revolving funds group establish the agriculture cooperative?

- ☐ No
- ☐ Yes (Please specify in the following question)

12. What is the name that revolving funds group?

.....

13. How many members in that revolving fund group? (Please attach the photo, if applicable)

Amount of member: (Number of women:)

14. What careers does that revolving funds group do?

.....

.....

.....

.....

.....

15. What challenges does that revolving funds group come across?

.....

.....

.....

.....

.....

IV. Other Farmer Group

16. Does your other farmers group establish the agriculture cooperative?

- ☐ No
- ☐ Yes (Please specify in the following question)

17. What is the name that other farmers group?

.....

18. How many members in other farmers group? (Please attach the photo, if applicable)

Amount of member: (Number of women:)

19. What purposes do that other farmer groups do?

.....

.....

.....

.....

.....

20. What challenges does that revolving funds group come across?

.....

.....

.....

.....

.....

21. In order to develop the agriculture cooperative/producer group/revolving funds group, what do you want LASED III project support?

- ☐ Education and training
- ☐ Financial support
- ☐ Business agreement making
- ☐ Contract Farming making
- ☐ Facilitate the private and development partner in the local

- ☐ Physical infrastructure support
- ☐ Other (Please specify:)

V. Fisheries

22. Do you catch fishes traditionally?

- ☐ No
- ☐ Yes (Please specify in the following question)

23. How much do you earn from the traditional fishing?

Please specify: (Riel)

24. Do you spend on traditional fishing materials?

- ☐ No
- ☐ Yes (Please specify in the following question)

25. How much do you spend it?

Please specify: (Riel)

Thank you!