# KINGDOM OF CAMBODIA NATION RELIGION KING

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Beneficiary Profile Report

Pun Chea Indigenous Community, O

Kreang Commune, Sambo District, Kratie

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 workshop<sup>1</sup> 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 sites<sup>2</sup> 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

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

<sup>&</sup>lt;sup>2</sup> 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)<sup>3</sup>; (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

<sup>&</sup>lt;sup>3</sup> According to the sub-decree No.72 dated on June 05<sup>th</sup>, 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 provinces<sup>4</sup> 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										
			IP's supports (ICLTs and ICs)								
	SLC's	support	Development support to	Titling ICLTs							
SLC/ICLT			already titled ICs	Titling - ICLTs							
	Existing New		(targeted)	(targeted)							
	14	12	30 (+3)	15							
Total	2	6	45								
Grand total 71 (+3)											
Source: PIM, 2022	Source: PIM, 2022.										

<sup>&</sup>lt;sup>4</sup> Such as Ratanakiri, Mondolkiri, Stung Treng, Kratie, Kompong Thom, Preah Vihear, Thboung Khmum, Kompong Speu, Odormeanchey, Banteaymeanchey, Siem Reap, Battambong, 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.

<sup>&</sup>lt;sup>5</sup> 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.

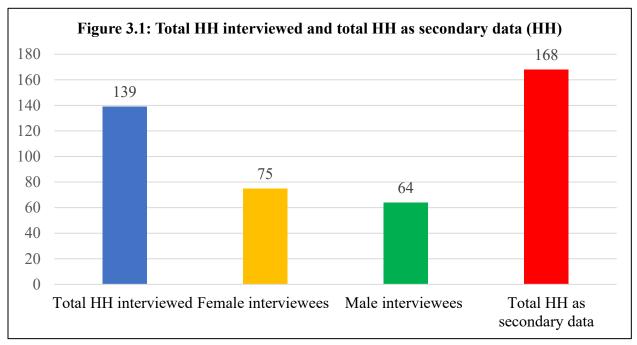
#### **II.** Data Collection Methodology

- 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.
- Krieng commune, Sambour district, Kratie province from 20 to 24 February 2023. However, the national mission team led by Mr. PHON RENO, Head of Agro-Industrial Unit under LASED III, has prepared the orientation meeting with sub-national implementing officials of LASED III under KRT PDAFF on February 19<sup>th</sup>, 2023 virtually as well to prepare the logistics and relevant materials before go to the community. In order to conduct the orientation meeting among ethics group and collect the data, two team from both national officers and sub-national officers was divided.

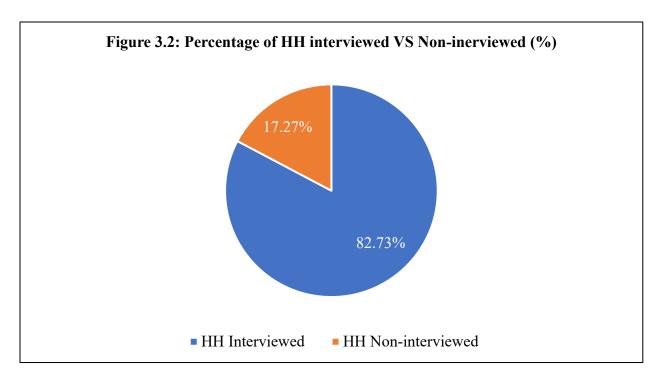
#### III. Results

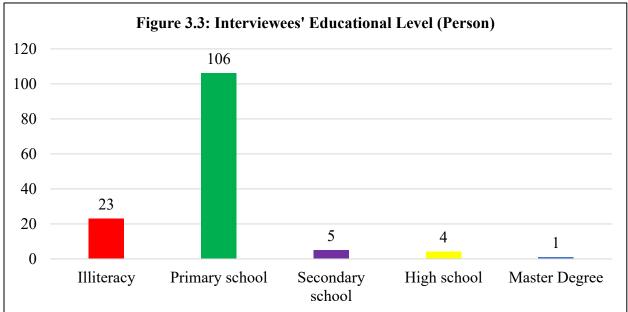
#### 3.1 General Information

- 13. Pun Chea indigenous community is a village locates in Ou Krieng commune, Sambour district, Kratie province, standing at North East side, about 80 km from Kratie town. The majority of citizen of this village are Pou norng Indigenous People (PIP). Geographically, its UTM numbers are 48P 615851-1446383 and 48P 616368-1445971 once the mission team pointed by using the Oppo Reno 3.
- 14. According to the secondary data from village chief of **Pun Chea village**, the total population inside this village is 799 IPs (Includes n.a females and n.a males) equals to 168 households (HHs). However, once the mission team has completely interviewed of all families in **Pun Chea village** there are totally about 139 HH (F75; 53.96%, M64; 46.04%) (See figure 3.1 below).

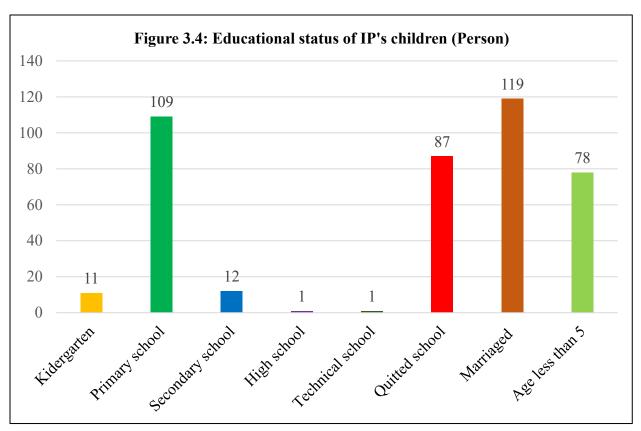


- 15. Therefore, the percentage of the households interviewed is approximately 82.73% of the total family in **Pun Chea indigenous community** or **Pun Chea village** while there are only 17.27% were not interviewed (See figure 3.2 below). In fact, **Pun Chea** is one among other four targeted IC villages in Kratie province included O Kok, Sre Ches and Ro Veang IC village.
- 16. In fact, Sambour is a district in Kratie Province, north-east Cambodia which its population was 41,732 people in 1998. It contains 52 villages that are located in ten communes.
- 17. According to the data interviewed, the educational level of interviewees at primary school, secondary school, high school, master degree and illiteracy rate is about 76.25% (106 Pers), 3.60% (05 Pers), 2.88% (04 Pers), 0.72% (01 Per) and 16.55% (23 Pers), respectively (See figure 3.3: Interviewees' educational level).



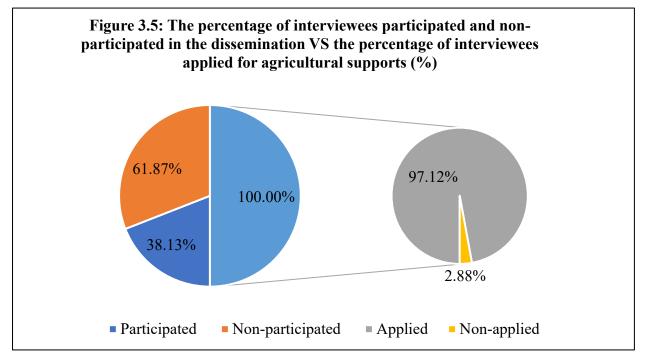


18. Based on the interviewed data, there are approximately 418 IP's children which consist of 219 and 199 of girls and boys, respectively. At the same time, those children are mostly studying at primary school, some at secondary school and some at secondary school and high school inside and outside the village. By the way, there are approximately 20.81% of those children were quitted the school and some are got marriage already (See the figure 3.4) while there is only one studying at university.



- 19. Since early year of starting the LASED III project, the MAFF team has already organized the dissemination among them so that **Pun Chea 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 approximately 38.13% 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 97.12% 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-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 **Pun Chea village** largely as indicated in the agricultural support application requested.
- 22. Recently, the infrastructures inside **Pun Chea village IC** include the earth roads and gravel road, approximately 8.8 km and there is no the DBST road. Regarding to the water sources, there are three streams about 20 km length and Mekong River around 10 km. Some of the people inside the village used to catch fishes traditionally in this stream. For the educational infrastructure, there is one building of primary school named **Primary School PUN CHEA** and there is also an indigenous community headquarter/community office. As per observation, there is one buildings of health post located in this village where they have to travel about 5-10 km from the village to get the health services at the health post near Ou Krieng commune office.



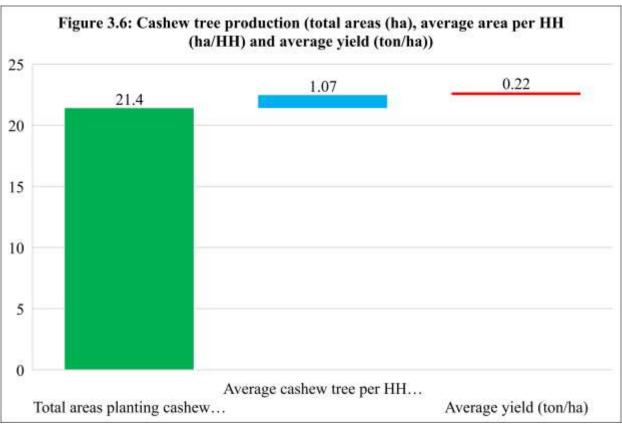
Photo 3.1: Physical Infrastructure and water source of Pun Chea village

23. If we look at daily life and livelihood in general, the people in the indigenous community of **Pun Chea village** have been engaged in agriculture, including the cultivation of paddy/rice, vegetables, raising animals (mostly cattle, mice pigs and chickens), fishing traditionally in the stream and Mekong River beside that they are selling the labor force to moving grass, 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, etc. Additionally, there are about 367 labor forces in agricultural sector.

#### 3.2 Crops Production Potential

#### 3.2.1 Cashew Tree Production

- 24. According to the interview of all 139 HHs, it is indicated that total areas of cashew tree plantation is approximately 21.40 ha which means that there is approximately 1.07 ha per household in average among 20 HHs. For the cashew tree's age is between 1 years old to 5 years old only. In 2022, the total cashew tree harvested areas was about 3.70 ha which its yields harvested were approximately 0.81 tons. So, the average yield is approximately 0.22 tons per hectare. Economically, they sold the cashew nut with minimum prices and maximum prices 3500 and 4000 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.



- 26. Pun Chea IC village is likely interesting in cashew plantation for several reasons such as arable land availability, good prices and no need to care much more as other crops, received the dissemination from local authority of market demands increasing, etc. Cashew has been cultivated primarily for its food and medicinal importance, which involves the use of whole cashew fruit, i.e., the apple, kernel as well as a nut for various industrial purposes<sup>6</sup>.
- 27. 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 and Rubber production

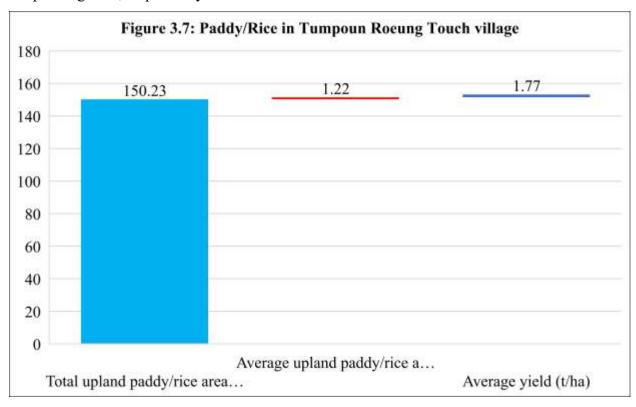
28. There is no HHs that have just have been cultivated the cassava and rubber tree because few reasons such as no land to cultivate, no varieties from local province supports, no knowledge

<sup>&</sup>lt;sup>6</sup> Several reasons are driving the increased demand for cashew nuts in established and emerging nations. Recognizing their health and nutritional advantages and preferring plant-based diets are factors. Cashews are a dairy alternative and a popular snack. They're also replacing peanuts.

of pest control, etc. However, it is observed that they want to cultivate cassava too if there have the support from the government.

#### 3.2.3 Paddy/Rice Production

29. Besides growing cashew, there are approximately 150.23 hectares<sup>7</sup> of paddy/rice production (Rainy season paddy/rice) with the total quantity yields around 217.37 tons equally of both traditional planting method (upland rice) and rainfed lowland rice of 123 HHs out of 139 HHs of this village growing rice, according to the interview, and there are about 16 interviewees mentioned that they do not cultivate rice crops because of several reasons<sup>8</sup>. According to the figure 3.7 below shows that an average of upland paddy/rice area and an average of upland paddy/rice crop of the ethic people are approximately 1.22 per HH and 1.77 ton/ha among the planting HHs, respectively.

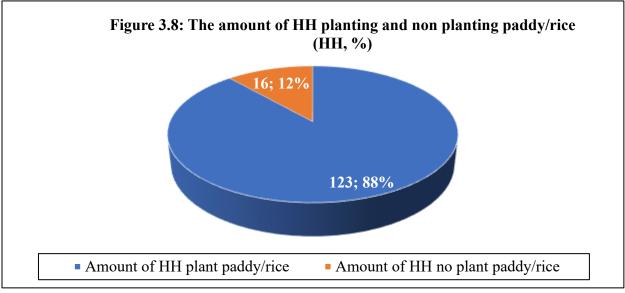


30. According to the interview and it is mentioned in the figure 3.8 below, it is shown that 16 HHs among 139 HHs have not planted the rainfed upland paddy/rice crop while other households have been cultivated the paddy/rice traditionally with protective habits. However, some of

<sup>&</sup>lt;sup>7</sup> Rice is traditionally planted by using old method and modern method.

<sup>&</sup>lt;sup>8</sup> They are living with their children and relatives, lack of cultivation lands, selling labor forces, etc.

them have expressed their mindset to update their practical in agricultural activities to increase the yields too.



#### 3.2.4 Horticulture Crop

31. 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 139 HHs in **Pun Chea 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 while other crops such as soybean, peanut and maize has approximately 6.75 ha in the Pun Chea IC village.

#### 3.2.5 Impacts on Crop Production

#### 3.2.5.1 Soil Fertility

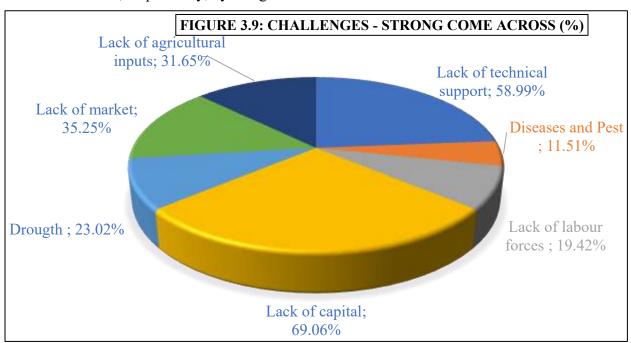
32. Soil fertility and plant nutrition encompasses the management of essential elements necessary for plant growth, typically to achieve selected management objectives even though soil fertility plays a vital role in natural systems of plant production for human uses (e.g., food, feed, fibre, energy, and landscape esthetics)<sup>9</sup>. An element is considered essential if it is required for plant

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

- metabolism and for completion of the plant's life cycle<sup>10</sup>. Typically, 17 elements are considered to meet these criteria and they are divided into macro-nutrients and micronutrients.
- 33. According to the interview on the soil fertility of this village, it is found that the soil status is considerably medium condition. If we look into the yield of crops inside the village, we can see that the yield is extremely lower than some other areas. In addition, it is answered that they spent 4,170,000.00 riels in average per household on the agricultural inputs for the farming production.

#### 3.2.5.2 Challenges

34. In order to get to know the existing challenges among the ethic people of **Pun Chea village**, the ranking/rating questions<sup>11</sup> 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**<sup>12</sup>.



<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> 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 criterions like attendance, attitude, performance, output, sincerity, dependability, initiative, etc.

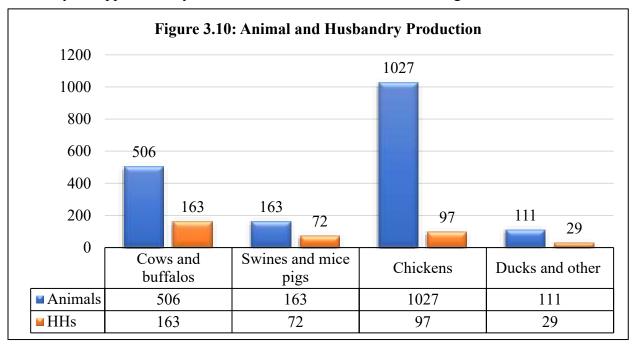
<sup>&</sup>lt;sup>12</sup> A Likert scale is a type of rating scale, often found on survey forms or questionnaires, that measures how people feel about something which can be useful in many different situations. A Likert scale, named after its inventor, the American social scientist *Rensis Likert*, 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.

35. Figure 3.9 above is showing that among the total of **PIP** in **Pun Chea village**, there are approximately 58.99% (82 HHs), 11.51% (16 HHs), 19.42% (27 HHs), 69.06% (96 HHs), 35.25 (49 HHs), 31.65% (44 HHs) and 23.02% (32 HHs) have been slightly come across several challenges such as lack of techniques, pest and diseases, lack of labour forces, lack of capital, lack of markets, lack of agricultural inputs and drought, respectively.

#### 3.2 Animal and Husbandry Production Potential

#### 3.2.1 Animal Production Statistic

36. According to the interview with all 139 HHs in **Pun Chea village**, it is found the potential of animal production and husbandry as well. Moreover, the poultry and husbandry production totally are approximately 1,807 animals which divided as below figure 3.10.



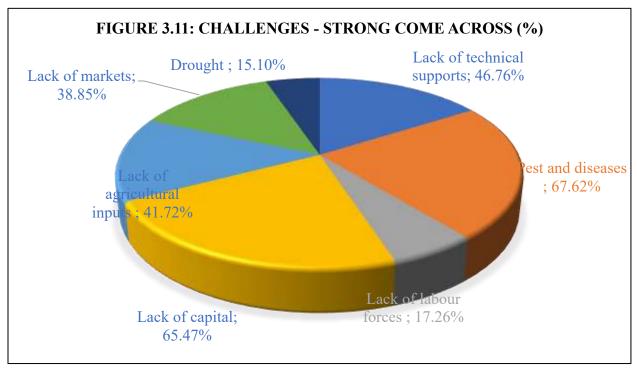
37. According to the interview with all of 139 respondents, it is found that the turnover into their family's economic from the animals and husbandry production is assumed approximately 120,920,000.00 riels (Equals to 12,250.12 USD<sup>13</sup>) as expressed into the animals' categories of cows and buffalos (90,900,000.00 riels or 21,988.38 USD), swines and mice pigs (24,400,000.00 riels or 5,902.27 USD) as well as chickens and others (5,620,000.00 riels or 1,359.45 USD) while the production's expenditure is about 23,291,000.00 riels or 5,634.01 USD.

#### 3.2.2 Challenges

38. As mentioned in the paragraph 34 above, Likert scale measurement is used to rate the perceptions of all respondents in Pun Chea village in terms of animal production's challenges

<sup>&</sup>lt;sup>13</sup> Exchange rate: https://www.nbc.gov.kh/download files/economic research/off ex rate kh/oer 08-08-2023.pdf.

- occurred previously among their families. Logically, it is rated from 1-5, starting from "never come across" to "strongly come across", respectively.
- 39. Figure 3.11 below is showing that among the total of Pou norng ethic people in Pun Chea village, there are approximately 46.22% (104 HHs), 40.44% (91 HHs), 26.67% (60 HHs), 25.78% (58 HHs), and 0.89% (02 HHs) have been strongly come across several challenges such as lack of techniques, pest and diseases, lack of labour forces, lack of capitals, and drought, respectively. From this result, animal production and husbandry are mostly facing with technical constraint. Therefore, it is good to support them with suitable production.



#### 3.3 Fishery and Aquaculture Potential

#### 3.3.1 Traditional Fishery<sup>14</sup> Practices

40. According to the interview with all of 139 respondents, it is found that there are approximately 111 HHs equals to about 79.85% used to fish or fish traditionally inside their village. Significantly, they totally spent on average about 112,397,000.00 riels and spent around 23,116,000 riels of all fishing families on the fishing materials for traditional fisheries. However, there is no family used to do aquaculture in the village, according to the interview.

<sup>&</sup>lt;sup>14</sup> 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 (Berkes 2001; Johannes 2003; McGoodwin 2001).

#### 3.4 Agricultural Cooperative, Producer Group and Revolving Funds Group

41. According to the interview with those 139 HHs, it is found that there is neither agricultural cooperative, producer group nor revolving funds group establishment. However, some of them expressed their interest to form up the producer group in terms of markets supply in large volume if the project enables them to match with local markets with suitable prices through the acceptable mechanism such as contract farming implementation mechanism as an example.

#### 3.5 Markets and Markets linkages

#### **3.5.1** Contract Farming Implementation

42. 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 **Pun Chea 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.

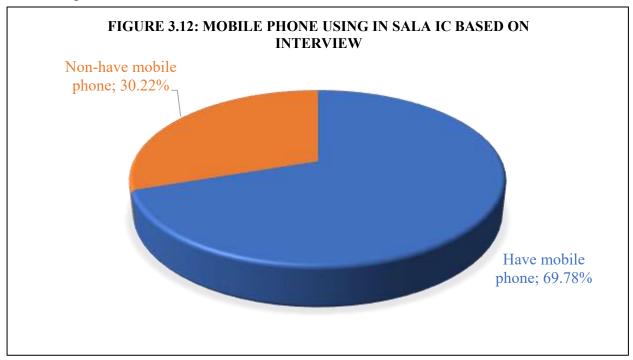
#### 3.5.2 Existing Markets

43. 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

- 44. According to the interview, it is found that there are approximately 97 HHs equals to about 69.78% who have had the mobile phones while about 42 HHs equals to 30.22% do not have the mobile phone. Totally, their mobile phone is calculated approximately 125 phones while it is estimated about 50 smartphone equals to 40.00%. Figure 3.12 below shows about the mobile phone utilization in **Pun Chea village** as per all 139 respondents interviewed.
- 45. However, there are approximately 22 respondents equals to 15.82% 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.*
- 46. By the way, according to the interview, it is found that there are more than 88.48% (123 HHs) who did not attend the training provided by either NGOs or governmental agency while there

approximately 11.52% (16 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 Analysis<sup>15</sup>

#### 3.7.1 On Farm Incomes

47. According to the interview of all 139 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 products sold last year based on the interview was approximately 182,655,000.00 riels equals to 44,183.60 USD while it is also found that the production cost on agricultural farming is approximately 41,491,000.00 riels equal to 10,036.28 USD.

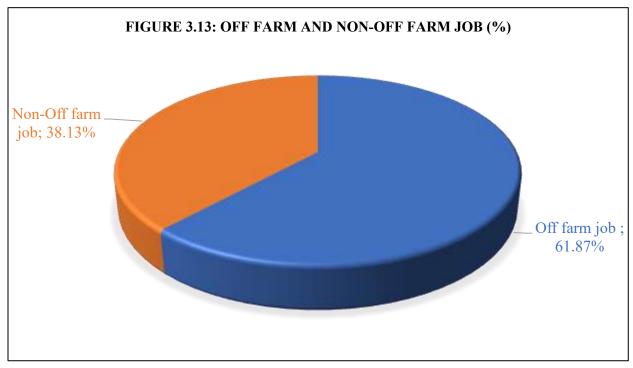
#### 3.7.2 Off Farm Incomes

48. By the way, besides agriculture farming activities, it is found that there are about 61.87% (86 HHs) have been working in other sector assumed as off-farm jobs<sup>16</sup> while there are about

<sup>&</sup>lt;sup>15</sup> 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.)

<sup>&</sup>lt;sup>16</sup> 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,

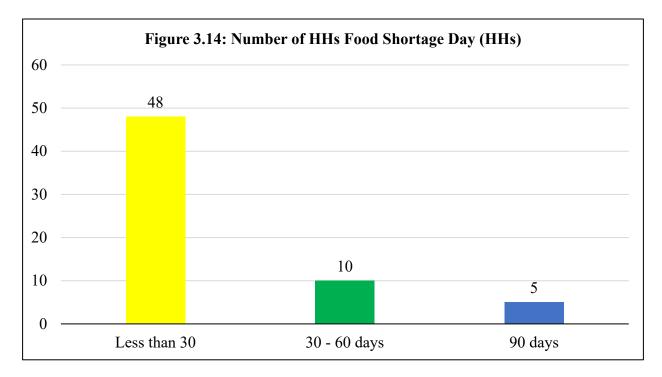
38.13% (53 HHs) mentioned that they did not get the non-farm jobs as stated in Figure 3.13 below. According to the interview, the total revenue earns from non-farm job accounts approximately 303,050,000.00 riels equal to 73,306.72 USD.



3.7.3 Household Food Security (HFS)

- 49. 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.
- 50. 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 Cambodia that are available yet inaccessible to the population.
- 51. Regards to status of food security of this village, it was recorded 34.53% (48 HHs), 7.19% (10 HHs) and 3.60% (05 HHs) have answered that they used to face the insufficient food consumption from less than 30 days, 30 60 days and 90 days, respectively, as stated in the figure 3.14 below.

find non-timber forest products, selling foods and other using materials, construction workers and the gift provided by their marriage children.

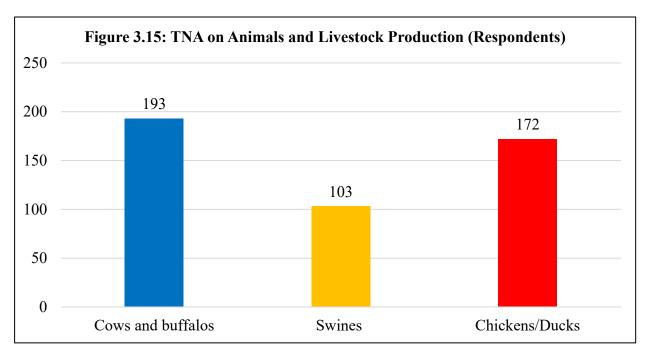


#### 3.8 Training Needs Assessment<sup>17</sup> (TNA)

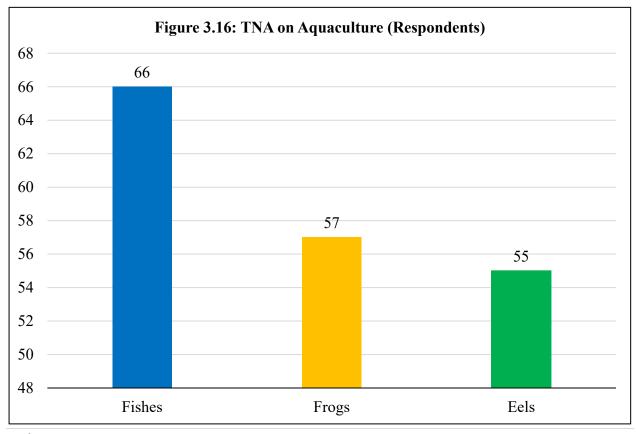
- 52. In this beneficiary profile survey, the TNA is divided into five categories such as (i) the assessment on the animal and livestock production, (ii) the assessment on the fishery and aquatic production, (iii) the evaluation on the crops production, (iv) the assessment on the nutrition sensitive 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.
- 53. According to the results of interview of all 139 respondents, it is found that, for the animal and livestock production, there are 193, 103, and 172 respondents want to get the training on cow/buffalo, swine, chicken and duck raising production, respectively, as stated in the figure 3.15 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.

https://www.jica.go.jp/project/cambodia/0601331/pdf/english/3 TNA 01.pdf.

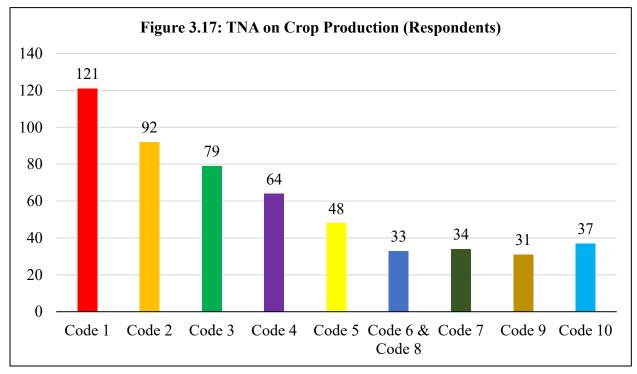
<sup>&</sup>lt;sup>17</sup> "Training Needs Assessment" (TNA) is **the method of determining if a training need exists and, if it does, what training is required to fill the gap**. TNA seeks to identify accurately the levels of the present situation in the target surveys, interview, observation, secondary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



54. Figure 3.16 below shows about the TNA on aquaculture, according to the results of interview of all 139 respondents. As results, it is found that there are 66, 57 and 55 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.

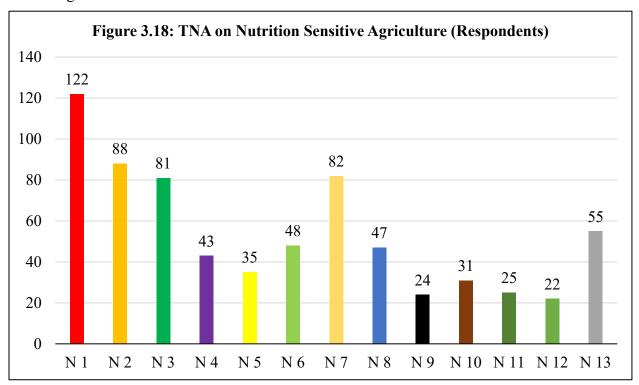


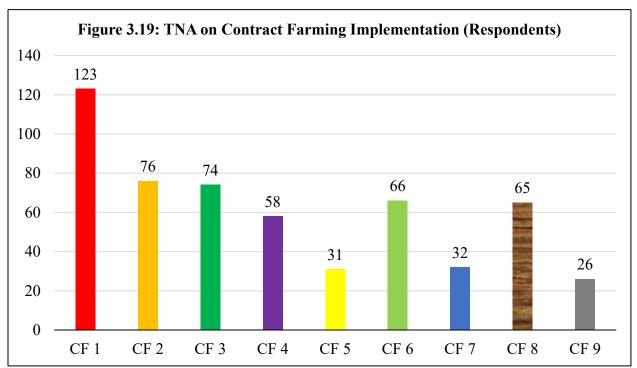
55. For TNA on crops production, it is orderly coded for each specific title from Code 1 to Code 10. According to the interview with all 139 HHs on the TNA of crops production, it is found that the Code 1, Code 2, Code 3, Code 4, Code 5, Code 6 & Code 8, Code 7, Code 9 and Code 10 have been rationally rated as following results 121, 92, 79, 64, 48, 33, 34, 31 and 37 responses, respectively. Figure 3.17 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.



- 56. 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 139 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 9, N 10, N 11, N 12 and N 13 have been rationally rated as following results 122, 88, 81, 43, 35, 48, 82, 47, 24, 31, 25, 22 and 55 responses, respectively. Figure 3.18 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.
- 57. 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 3, CF 4, CF 5, CF 6, CF 7, CF 8 and CF 9 have been rationally rated as following results 123, 76, 74, 58, 31, 66, 32, 65 and 26 responses, respectively. Figure 3.19 indicates about 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

58. After having interviewed with all 139 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 150.23 ha, total yields 217.37

tons, average land holding 1.22 ha/HH, average yield 1.77 ton per hectare), cashew tree (Total planting areas 21.40 ha, total yields 0.81 tons, harvested areas last year 3.70 ha, average land holding 1.07 ha/HH and average yield 0.22 ton/ha), (2) the potential animals and livestock production such as cows/buffalos (506 heads), swine and mice pigs (163 heads), chickens (1027 heads), ducks and others (111 heads), and (3) the potential of other related agricultural practices.

- 59. For the poverty line in **Pun Chea village**, it is economically assumed that they are slightly not living under poverty line<sup>18</sup> because of their daily income (in total approximately 12,439.55 riels/day/HH (equals to 3.01 USD/day/HH) which is calculated based on on farm (6,466.36 riels/day/HH) and off farm (5,973.19 riels/day/HH)) is more than 2.67 USD per day per household<sup>19</sup>. 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.
- 60. 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

61. 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.

<sup>&</sup>lt;sup>18</sup> 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 30<sup>th</sup>, 2023 from the source available at:

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

<sup>&</sup>lt;sup>19</sup> 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 ethic people group.

- 62. 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 farming<sup>20</sup> negotiation for better markets guarantee.
- 63. 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.
- 64. 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 **Pun Chea 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 **Pun Chea village**.

<sup>&</sup>lt;sup>20</sup> 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 Pun Chea village** 

No	Name	Sex	Age	Ethic group	Education level	Children	Son	Daughter	Village	Commune	District	Province
1	Ros Van	M	56	Pou norng	Primary school	8	5	3	Pun Chea	Ou Krieng	Sambour	Kratie
2	Yon Phearin	F	27	Pou norng	Primary school	3	3	-	Pun Chea	Ou Krieng	Sambour	Kratie
3	Toy Nhan	F	52	Pou norng	Did not study	6	5	1	Pun Chea	Ou Krieng	Sambour	Kratie
4	Ngoun Sreysieam	F	44	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
5	Kem Sreyneang	F	28	Pou norng	Primary school	0	0	0	Pun Chea	Ou Krieng	Sambour	Kratie
6	Chher Chha	M	51	Pou norng	Primary school	4	1	3	Pun Chea	Ou Krieng	Sambour	Kratie
7	Chreok Sreynin	F	21	Pou norng	Primary school	1	1	0	Pun Chea	Ou Krieng	Sambour	Kratie
8	Sok Men	F	30	Khmer	Primary school	1	1	0	Pun Chea	Ou Krieng	Sambour	Kratie
9	Ploy Pheara	M	30	Pou norng	Primary school	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
10	Ploy Thart	M	36	Pou norng	Did not study	7	0	7	Pun Chea	Ou Krieng	Sambour	Kratie
11	Houng Nat	F	38	Pou norng	Did not study	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
12	Ploy Sangvan	F	28	Pou norng	Did not study	2	2	0	Pun Chea	Ou Krieng	Sambour	Kratie
13	Chey Samorn	F	31	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
14	Tuy Lu	F	65	Pou norng	Did not study	7	2	5	Pun Chea	Ou Krieng	Sambour	Kratie
15	Kem Saron	F	42	Pou norng	Primary school	5	1	4	Pun Chea	Ou Krieng	Sambour	Kratie
16	Ploy Norn	F	50	Pou norng	Did not study	10	5	5	Pun Chea	Ou Krieng	Sambour	Kratie
17	Keov Leang	M	32	Pou norng	Primary school	3	0	3	Pun Chea	Ou Krieng	Sambour	Kratie
18	Mus Eoun	M	48	Pou norng	Primary school	7	3	4	Pun Chea	Ou Krieng	Sambour	Kratie
19	Tinh Vit	M	45	Pou norng	Secondary school	6	3	3	Pun Chea	Ou Krieng	Sambour	Kratie
20	Prang Sophal	M	30	Khmer	Secondary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
21	Hann Sokhem	F	34	Pou norng	Primary school	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
22	Srey Lang	F	54	Pou norng	Primary school	3	-	3	Pun Chea	Ou Krieng	Sambour	Kratie
23	Kin Peoun	M	42	Pou norng	Primary school	4	2	2	Pun Chea	Ou Krieng	Sambour	Kratie
24	Vann Tor	M	44	Pou norng	Primary school	5	2	3	Pun Chea	Ou Krieng	Sambour	Kratie
25	Meas Hang	F	38	Pou norng	Primary school	5	2	3	Pun Chea	Ou Krieng	Sambour	Kratie
26	Pov Moung	M	35	Khmer	Primary school	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
27	Vann You	M	47	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie

28	Teob Kea	F	43	Pou norng	Primary school	4	1	3	Pun Chea	Ou Krieng	Sambour	Kratie
29	Touy Krouch	M	78	Pou norng	Secondary school	2	-	2	Pun Chea	Ou Krieng	Sambour	Kratie
30	Antes Mom	F	33	Pou norng	Primary school	4	3	1	Pun Chea	Ou Krieng	Sambour	Kratie
31	Ngin Lita	F	26	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
32	Touy Phal	F	42	Pou norng	Did not study	7	4	3	Pun Chea	Ou Krieng	Sambour	Kratie
33	Sran Som	F	21	Pou norng	Primary school	1	1	0	Pun Chea	Ou Krieng	Sambour	Kratie
34	Antil Samy	F	36	Pou norng	Primary school	6	3	3	Pun Chea	Ou Krieng	Sambour	Kratie
35	Touy Sreykeo	F	39	Pou norng	Primary school	4	0	4	Pun Chea	Ou Krieng	Sambour	Kratie
36	Yon Samanh	F	23	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
37	Ploy Thar	M	41	Pou norng	Primary school	4	2	2	Pun Chea	Ou Krieng	Sambour	Kratie
38	Teoung Sangeourn	F	50	Pou norng	Primary school	8	3	5	Pun Chea	Ou Krieng	Sambour	Kratie
39	Antout Nea	M	71	Pou norng	High school	7	2	5	Pun Chea	Ou Krieng	Sambour	Kratie
40	Antil Mul	F	72	Pou norng	Did not study	5	3	2	Pun Chea	Ou Krieng	Sambour	Kratie
41	Chher Larm	M	39	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
42	Chhum Non	M	47	Pou norng	Primary school	4	3	1	Pun Chea	Ou Krieng	Sambour	Kratie
43	Kim Sarith	M	27	Pou norng	Primary school	4	3	1	Pun Chea	Ou Krieng	Sambour	Kratie
44	Taing Here	M	70	Pou norng	Did not study	5	3	2	Pun Chea	Ou Krieng	Sambour	Kratie
45	Yon Heang	M	25	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
46	Tam Reang	M	53	Pou norng	Primary school	5	1	4	Pun Chea	Ou Krieng	Sambour	Kratie
47	Ke Meng	M	53	Pou norng	Primary school	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
48	Tet Poy	M	33	Pou norng	Primary school	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
49	Angkreouk Yeous	M	69	Pou norng	Primary school	5	4	1	Pun Chea	Ou Krieng	Sambour	Kratie
50	Thong Ratanak	F	48	Khmer	High school	2	2	0	Pun Chea	Ou Krieng	Sambour	Kratie
51	Bun Neoun	F	55	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
52	Kim Sreyneth	F	28	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
53	Ros Meoun	M	67	Pou norng	High school	4	1	3	Pun Chea	Ou Krieng	Sambour	Kratie
54	Ploy Ath	F	28	Pou norng	Primary school	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
55	Ke Sreoun	F	55	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
56	Chreb	F	70	Pou norng	Primary school	1	1	-	Pun Chea	Ou Krieng	Sambour	Kratie
57	Yeoun Sreymoa	F	19	Pou norng	Primary school	1	1	-	Pun Chea	Ou Krieng	Sambour	Kratie
58	Yeoun Sreyhoiy	F	22	Pou norng	Primary school	1	1	-	Pun Chea	Ou Krieng	Sambour	Kratie
59	Nil Hai	F	41	Pou norng	Primary school	4	1	3	Pun Chea	Ou Krieng	Sambour	Kratie
60	Ngoun Chhoam	M	38	Pou norng	Primary school	4	3	1	Pun Chea	Ou Krieng	Sambour	Kratie
61	Pu Ter	M	38	Pou norng	Primary school	2	2	0	Pun Chea	Ou Krieng	Sambour	Kratie

62	Mos Deourn	M	65	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
63	Toy Tep	M	62	Pou norng	Primary school	10	5	5	Pun Chea	Ou Krieng	Sambour	Kratie
64	Sun Sethy	M	45	Pou norng	Primary school	7	4	3	Pun Chea	Ou Krieng	Sambour	Kratie
65	Ploy Sieng	F	22	Pou norng	Primary school	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
66	Ting Kanha	F	24	Pou norng	Primary school	3	0	3	Pun Chea	Ou Krieng	Sambour	Kratie
67	Sour Rin	M	45	Pou norng	Primary school	8	3	5	Pun Chea	Ou Krieng	Sambour	Kratie
68	San reoung	F	63	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
69	Toy Sareoung	F	56	Pou norng	Primary school	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
70	Ngoun Nol	M	24	Pou norng	Primary school	0	0	0	Pun Chea	Ou Krieng	Sambour	Kratie
71	Tert Tey	F	29	Pou norng	Did not study	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
72	Pheah Ter	M	60	Pou norng	Did not study	5	1	4	Pun Chea	Ou Krieng	Sambour	Kratie
73	So Khim	F	51	Pou norng	Primary school	6	1	5	Pun Chea	Ou Krieng	Sambour	Kratie
74	Mos Reoun	M	54	Pou norng	Primary school	8	4	4	Pun Chea	Ou Krieng	Sambour	Kratie
75	Sun Yi	M	51	Pou norng	Did not study	5	1	4	Pun Chea	Ou Krieng	Sambour	Kratie
76	Mos Ra	M	53	Pou norng	Did not study	10	3	7	Pun Chea	Ou Krieng	Sambour	Kratie
77	Peat Li	M	39	Pou norng	Primary school	4	2	2	Pun Chea	Ou Krieng	Sambour	Kratie
78	Antis An	F	66	Pou norng	Did not study	4	3	1	Pun Chea	Ou Krieng	Sambour	Kratie
79	Toy Chet	M	40	Pou norng	Did not study	8	6	2	Pun Chea	Ou Krieng	Sambour	Kratie
80	Marang Sreyney	F	21	Pou norng	Secondary school	2	0	2	Pun Chea	Ou Krieng	Sambour	Kratie
81	Chea Sareoun	F	39	Pou norng	Did not study	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
82	Amrang Tris	F	50	Pou norng	Did not study	7	4	3	Pun Chea	Ou Krieng	Sambour	Kratie
83	Antert Thivith	M	34	Pou norng	Did not study	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
84	Sev Doy	M	30	Chre*	Primary school	0	0	0	Pun Chea	Ou Krieng	Sambour	Kratie
85	Din Sreya	F	21	Pou norng	Primary school	1	0	1	Pun Chea	Ou Krieng	Sambour	Kratie
86	Dim Hann	M	34	Khmer*	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
87	Hin Sampeoun	F	65	Pou norng	Primary school	8	5	3	Pun Chea	Ou Krieng	Sambour	Kratie
88	Hann Seyha	F	22	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
89	Nhart Sophy	M	38	Pou norng	Master Degree	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
90	Nhet Linin	F	33	Pou norng	High School	0	0	0	Pun Chea	Ou Krieng	Sambour	Kratie
91	Tam Sreyyeb	F	18	Pou norng	Primary school	1	1	0	Pun Chea	Ou Krieng	Sambour	Kratie
92	Toy Savin	F	25	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
93	Lim Nhon	M	55	Pou norng	Secondary school	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
94	Krev Chork	F	52	Pou norng	Did not study	5	2	3	Pun Chea	Ou Krieng	Sambour	Kratie
95	Nheah Neoun	F	63	Pou norng	Did not study	7	1	6	Pun Chea	Ou Krieng	Sambour	Kratie

İ	96	Toy Vai	M	45	Pou norng	Primary school	7	4	3	Pun Chea	Ou Krieng	Sambour	Kratie
	97	Yeb Sreyya	F	22	Pou norng	Primary school	1	1	0	Pun Chea	Ou Krieng	Sambour	Kratie
	98	Res Yan	M	50	Pou norng	Primary school	6	3	3	Pun Chea	Ou Krieng	Sambour	Kratie
	99	Tinh Nak	F	19	Pou norng	Primary school	0	0	0	Pun Chea	Ou Krieng	Sambour	Kratie
	100	Hum Da	F	21	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
	101	Yon Horm	F	40	Pou norng	Did not study	4	2	2	Pun Chea	Ou Krieng	Sambour	Kratie
	102	Chann Dom	M	25	Pou norng	Primary school	2	1	1	Pun Chea	Ou Krieng	Sambour	Kratie
	103	Khrouch Rom	M	66	Pou norng	Primary school	6	3	3	Pun Chea	Ou Krieng	Sambour	Kratie
	104	Ploy Ter	M	31	Pou norng	Primary school	2	2	0	Pun Chea	Ou Krieng	Sambour	Kratie
	105	Hann Kheng	M	32	Pou norng	Primary school	0	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	106	Plonh Seyha	M	25	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
	107	Mos Deourn	M	42	Pou norng	Primary school	3	2	1	Pun Chea	Ou Krieng	Sambour	Kratie
	108	Mos Thourn	M	36	Pou norng	Did not study	5	4	1	Pun Chea	Ou Krieng	Sambour	Kratie
	109	Srey Kea	F	23	Pou norng	Primary school	3	-	3	Pun Chea	Ou Krieng	Sambour	Kratie
	110	Mus Kha	M	57	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	111	Ngoung Sreymis	F	33	Pou norng	Primary school	5	1	4	Pun Chea	Ou Krieng	Sambour	Kratie
	112	Tuy Kalis	F	35	Pou norng	Did not study	3	1	2	Pun Chea	Ou Krieng	Sambour	Kratie
	113	Din Tinh	M	40	Pou norng	Primary school	4	4		Pun Chea	Ou Krieng	Sambour	Kratie
	114	Pen Thorn	F	41	Khmer	Primary school	5	4	1	Pun Chea	Ou Krieng	Sambour	Kratie
	115	King Bee	M	33	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	116	Kim Pheakdey	M	35	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	117	Kong Leap	F	32	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	118	Sok Chet	M	30	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	119	Yes Konn	M	27	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	120	Plearn Theany	M	40	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	121	Kheoun Sokha	F	35	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	122	Kheoun Rothchea	M	34	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	123	Sreang Ksom	F	22	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	124	Yourn Sihouy	F	31	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	125	Yourn Liheng	F	24	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	126	Hann Kheng	M	34	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	127	Hann Sreymoa	F	32	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	128	So Heng	F	55	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	129	Ngoun Sreysieam	F	25	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie
	130	Tuy Neoun	F	47	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie

131	Ek Sothy	F	52	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
132	Amrang Samon	F	34	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
133	Sun Ren	F	62	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
134	Ngoun Muy	M	38	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
135	Tuy Lik	F	36	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
136	Ploy Sangvang	F	35	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
137	Ploy Sangva	F	39	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
138	Din Ven	M	41	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
139	Sos Phut	M	46	Pou norng	Primary school	-	-	-	Pun Chea	Ou Krieng	Sambour	Kratie				
* TL	1	D -41-:		1: 441	i D Ch IC -::11-	* There have manifes said BID addies around a discontinuous Brown Class IC will as										

<sup>\*</sup> They have marriage with PIP ethics group and live together in Pun Chea IC village.

**Annex 4.2: List of Families Planting Cashew Tree** 

<b>3</b> . T	NT.	C	Planting area		Yields	Sell QTY	Prices
No	Name	Sex	(ha)	Cashew's age	(t)	(t)	(Riel/kg)
1	Ros Van	M	-	-	-	-	-
2	Yon Phearin	F	0.30	2	-	-	-
3	Toy Nhan	F	-	-	-	-	-
4	Ngoun Sreysieam	F	-	-	-	-	-
5	Kem Sreyneang	F	-	-	-	-	-
6	Chher Chha	M	-	-	-	-	-
7	Chreok Sreynin	F	1.00	3	-	-	-
8	Sok Men	F	-	-	-	-	-
9	Ploy Pheara	M	-	-	-	-	-
10	Ploy Thart	M	-	-	-	-	-
11	Houng Nat	F	-	-	-	-	-
12	Ploy Sangvan	F	-	-	-	-	-
13	Chey Samorn	F	-	-	-	-	-
14	Tuy Lu	F	-	-	-	-	-
15	Kem Saron	F	-	-	-	-	-
16	Ploy Norn	F	-	-	-	-	-
17	Keov Leang	M	-	-	-	-	-
18	Mus Eoun	M	3.00	-			-
19	Tinh Vit	M	-	-	-	-	-
20	Prang Sophal	M	0.50	1	-	-	-
21	Hann Sokhem	F	-	-	-	-	-
22	Srey Lang	F	-	-	-	-	-
23	Kin Peoun	M	0.20	5	0.05	0.05	4,000.00
24	Vann Tor	M	-	-	-	-	-
25	Meas Hang	F	-	=	-	-	=
26	Pov Moung	M	-	-	-	-	=
27	Vann You	M	-	-	-	-	-
28	Teob Kea	F	-	-	-	-	-
29	Touy Krouch	М	-	-	-	-	-
30	Antes Mom	F	-	<b>-</b> ,	-	-	-
31	Ngin Lita	F	-	-	-	-	-
32	Touy Phal Sran Som	F F	-	-	-	-	-
34	Antil Samy	F	-	-	-	-	-
	Touy Sreykeo		-	-	-	-	-
35	Yon Samanh	F F	-	-	-	-	=
37	Ploy Thar	M	-	-	-	-	=
38	Teoung Sangeourn	F	<u>-</u>	-	-	-	=
39	Antout Nea	M	-	-	-	-	=
40	Antil Mul	F	-	-	-	-	-
41	Chher Larm	M	-	-	-	-	-
42	Chhum Non	M	2.00	5	0.04	0.04	4,000.00
43	Kim Sarith	M	-	-	-	-	7,000.00
44	Taing Here	M	-	-	-	-	
45	Yon Heang	M	0.90	2	-	-	<u> </u>
46	Tam Reang	M	-		-	-	
47	Ke Meng	M	<u>-</u>	-	-	-	
48	Tet Poy	M	3.00	1		-	
49	Angkreouk Yeous	M	-	-	-	-	-
50	Thong Ratanak	F	-	-	-	-	-
51	Bun Neoun	F	-	-	-	_	_
52	Kim Sreyneth	F	-	-	-	_	_
J 2	121111 STOYHOUI					1	

53	Ros Meoun	M	-	_	-	-	_
54	Ploy Ath	F	_	_	_	_	_
55	Ke Sreoun	F	_	_	_	_	_
56	Chreb	F	_	_	_	_	_
57	Yeoun Sreymoa	F	-	-	-	-	_
58	Yeoun Sreyhoiy	F	-	-	_	-	_
59	Nil Hai	F	-	-	_		_
60	Ngoun Chhoam	M	_	_	_		_
61	Pu Ter	M	_	-	-	-	_
62	Mos Deourn	M	_	-	-	-	_
63	Toy Tep	M	1.00	3	0.15	0.15	3,500.00
64	Sun Sethy	M	-	-	-	-	3,300.00
65	Ploy Sieng	F	-	-	_	-	_
66	Ting Kanha	F	-	-	_	-	_
67	Sour Rin	M	_	-	-	_	_
68	San reoung	F	_	-	_		_
69	Toy Sareoung	F	0.50	3	0.02	0.02	3,000.00
70	Ngoun Nol	M	-	-	-	-	- 3,000.00
71	Tert Tey	F	_	_	_	_	_
72	Pheah Ter	M	_	-	-	_	_
73	So Khim	F	-	-	-	_	_
74	Mos Reoun	M	_		_	_	_
75	Sun Yi	M	_		_	_	_
76	Mos Ra	M	1.00	1	_	_	_
77	Peat Li	M	-	-	-	-	
78	Antis An	F	-		-	<u>-</u> -	
79	Toy Chet	M	-	-	-	<u>-</u>	
80	Marang Sreyney	F	-	-	-	-	-
81	Chea Sareoun	F	0.30	7	-		_
82	Amrang Tris	F	-	-		<u>-</u>	_
83	Antert Thivith	M	-	<u>-</u>	-	<u>-</u> -	_
84	Sev Doy	M	-	<u>-</u>	-	<u> </u>	-
85	Din Sreya	F	-	-	-	-	-
86	Dim Hann	M	-		-		
87	Hin Sampeoun	F	-	<u>-</u>		<u>-</u>	_
88	Hann Seyha	F	-	<u>-</u>	-	<u>-</u>	-
89	Nhart Sophy	M	-		-	<u>-</u>	
90	Nhet Linin	F	<u>-</u>	<u>-</u>	-	<u> </u>	
91	Tam Sreyyeb	F	-		-		
92	Toy Savin	F	-	<u>-</u>	-	<u>-</u> -	-
93	Lim Nhon	M	-	-			-
94	Krev Chork	F	1.00	6	0.50	0.50	4,000.00
95	Nheah Neoun	F	-	-	-		4,000.00
96	Toy Vai	M	-	-	-	-	-
97	Yeb Sreyya	F	-	-	-	-	-
98	Res Yan	М	-	-	-	<u>-</u> -	-
99	Tinh Nak	F	-	<u>-</u>	-	<u>-</u>	-
100	Hum Da	F	-	<u>-</u>	-	<u>-</u> -	-
101	Yon Horm	F	-	-	-	-	-
101	Chann Dom	М	-	-	-	-	-
102	Khrouch Rom	M	0.50	-		-	-
103	Ploy Ter	M					
104	Hann Kheng	M	-	<del>-</del>	-	-	-
103	Plonh Seyha	M	-	-	-	-	-
107	Mos Deourn	M	0.50	1	-	-	
107	Mos Thourn	M					-
108		F	1.00	- 2	-	-	-
109	Srey Kea	Г	1.00	2	-	-	-

110	Mus Kha	M	-	-	-	-	-
111	Ngoung Sreymis	F	-	-	-	-	-
112	Tuy Kalis	F	-	-	-	-	-
113	Din Tinh	M	-	-	-	-	-
114	Pen Thorn	F	-	-	-	-	-
115	King Bee	M	-	-	-	-	-
116	Kim Pheakdey	M	-	-	-	-	-
117	Kong Leap	F	1.00	3	-	-	-
118	Sok Chet	M	-	-	-	-	-
119	Yes Konn	M	-	-	-	-	-
120	Plearn Theany	M	-	-	-	-	-
121	Kheoun Sokha	F	-	-	-	-	-
122	Kheoun Rothchea	M	-	-	-	-	-
123	Sreang Ksom	F	-	-	-	-	-
124	Yourn Sihouy	F	-	-	-	-	-
125	Yourn Liheng	F	-	-	-	-	-
126	Hann Kheng	M	-	-	-	-	-
127	Hann Sreymoa	F	-	•	-	-	=
128	So Heng	F	3.00	-			-
129	Ngoun Sreysieam	F	-	•	-	-	-
130	Tuy Neoun	F	0.50	1	-	-	-
131	Ek Sothy	F	-	•	-	-	-
132	Amrang Samon	F	-	•	-	-	-
133	Sun Ren	F	0.20	5	0.05	0.05	4,000.00
134	Ngoun Muy	M	-	-	-	-	-
135	Tuy Lik	F	-	-	-	-	-
136	Ploy Sangvang	F	-	-	-	-	-
137	Ploy Sangva	F	=	-	-	-	=
138	Din Ven	M	=	-	-	-	=
139	Sos Phut	M	=	-	-	-	=
	Total (ha, t)		21.40	-	0.81	0.81	-

**Annex 4.3: List of Families Planting Upland Paddy/Rice** 

No	Name	Sex	Planting area (ha)	Yields (t)	Sell QTY (t)	Prices (Riel/kg)
1	Ros Van	M	-	-	-	-
2	Yon Phearin	F	0.50	1.50	Ī	-
3	Toy Nhan	F	0.50	1.50	Ī	-
4	Ngoun Sreysieam	F	1.00	2.50	-	-
5	Kem Sreyneang	F	0.50	2.50	-	-
6	Chher Chha	M	2.00	2.45	-	-
7	Chreok Sreynin	F	0.50	1.20	-	-
8	Sok Men	F	0.50	1.60	-	-
9	Ploy Pheara	M	0.50	1.20	-	-
10	Ploy Thart	M	0.50	1.20	-	-
11	Houng Nat	F	0.50	1.28	-	-
12	Ploy Sangvan	F	0.50	1.40	-	-
13	Chey Samorn	F	0.50	1.20	-	-
14	Tuy Lu	F	0.50	2.40	-	-
15	Kem Saron	F	0.50	4.80	Ī	-
16	Ploy Norn	F	1.00	4.00	-	-
17	Keov Leang	M	0.50	0.56	-	-
18	Mus Eoun	M	2.00	2.50	-	-
19	Tinh Vit	M	1.00	3.00	0.25	1,000.00
20	Prang Sophal	M	-	-	-	-
21	Hann Sokhem	F	-	-	-	-

22	Srey Lang	F	5.00	3.00	7.00	1,000.00
23	Kin Peoun	M	1.50	1.00	-	-
24	Vann Tor	M	1.50	1.00	-	-
25	Meas Hang	F	0.50	2.00	-	-
26	Pov Moung	M	1.00	2.00	-	-
27	Vann You	M	-	-	-	-
28	Teob Kea	F	0.50	0.50	-	-
29	Touy Krouch	M	1.50	2.00	-	-
30	Antes Mom	F	0.50	2.00	-	-
31	Ngin Lita	F	1.00	0.50	-	-
32	Touy Phal	F	2.00	0.90	_	-
33	Sran Som	F	2.00	3.00	_	-
34	Antil Samy	F	1.00	0.90	_	-
35	Touy Sreykeo	F	1.50	1.00	_	-
36	Yon Samanh	F	1.50	1.25	_	_
37	Ploy Thar	M	1.00	1.85	_	_
38	Teoung Sangeourn	F	1.00	2.25	_	_
39	Antout Nea	M	1.00	0.90	_	_
40	Antil Mul	F	1.00	1.00	_	_
41	Chher Larm	M	1.00	1.50	-	
42	Chhum Non	M	4.00	3.00	-	
43	Kim Sarith	M	2.00	1.00	-	
44	Taing Here	M	2.00	0.75	<u>-</u>	-
45	Yon Heang	M	2.00	1.00	<u>-</u>	-
46	Tam Reang	M	0.50	2.00	-	=
47	Ke Meng	M	0.80	1.50		=
48	Tet Poy	M	6.00	2.00	2.50	2 500 00
49	Angkreouk Yeous	M	1.00	1.00	2.30	2,500.00
50	-	F				-
51	Thong Ratanak Bun Neoun	F	0.50	1.00	-	-
52	Kim Sreyneth	F	0.50	1.00	-	-
53	Ros Meoun	М	2.00	3.00	-	-
54	Ploy Ath	F			-	-
55	Ke Sreoun	F	2.00	1.00	-	-
56	Chreb	F	- 0.50		-	-
		F	0.50	1.00	-	-
57 58	Yeoun Sreymoa	F	2.00	1.00	-	-
	Yeoun Sreyhoiy		2.00	1.00	-	-
59	Nil Hai	F	1.00	1.50	-	-
60	Ngoun Chhoam	M	1.00	1.00	-	-
61	Pu Ter	M	1.50	1.60	-	-
62	Mos Deourn	M	1.00	1.00	-	-
63	Toy Tep	M	1.00	2.50	-	-
64	Sun Sethy	M	1.00	2.00	-	-
65	Ploy Sieng	F	0.50	1.00	-	-
66	Ting Kanha	F	1.00	1.50	-	-
67	Sour Rin	M	0.70	1.65	-	-
68	San reoung	F	1.50	3.50	-	-
69	Toy Sareoung	F	1.00	2.00	-	-
70	Ngoun Nol	M	1.50	2.00	-	-
71	Tert Tey	F	0.03	0.06	-	-
72	Pheah Ter	M	1.50	1.00	-	-
73	So Khim	F	1.50	3.00	-	-
74	Mos Reoun	M	1.00	3.00	-	-
75	Sun Yi	M	1.00	1.10	-	-
76	Mos Ra	M	-	-	-	-
77	Peat Li	M	1.00	1.50		
78	Antis An	F	3.00	1.50	-	-

79	Toy Chet	M	1.00	1.50	-	-
80	Marang Sreyney	F	1.00	1.70	-	-
81	Chea Sareoun	F	1.00	2.50	-	-
82	Amrang Tris	F	0.50	2.00	-	-
83	Antert Thivith	M	1.00	3.50	1.00	700.00
84	Sev Doy	M	1.00	0.72	-	-
85	Din Sreya	F	2.00	1.08	-	-
86	Dim Hann	M	-	-	=	-
87	Hin Sampeoun	F	0.70	0.90	=	-
88	Hann Seyha	F	1.00	0.50	-	_
89	Nhart Sophy	M	1.00	0.90	-	_
90	Nhet Linin	F	1.00	0.90	-	_
91	Tam Sreyyeb	F	0.50	0.75	-	_
92	Toy Savin	F	1.00	2.00	_	_
93	Lim Nhon	M	2.00	1.80	_	
94	Krev Chork	F	1.50	3.00	-	_
95	Nheah Neoun	F	1.00	1.50	_	_
96	Toy Vai	M	4.00	5.00	0.25	900.00
97	Yeb Sreyya	F	-	-	-	700.00
98	Res Yan	M	0.50	1.13	-	
99	Tinh Nak	F		-	-	<u> </u>
100	Hum Da	F	0.50	0.75	-	<u>-</u>
101	Yon Horm	F	0.50	0.75		-
101	Chann Dom	M	1.00	1.00	-	<u> </u>
	Khrouch Rom	M			-	<u>-</u>
103			2.00	1.50	-	<u>-</u>
104	Ploy Ter	M	1.00	1.00	-	-
105	Hann Kheng	M	2.00	3.00	-	-
106	Plonh Seyha	M	0.50	0.50	<u> </u>	
107	Mos Deourn	M	-	-	-	-
108	Mos Thourn	M	3.00	3.00	-	-
109	Srey Kea	F	1.00	1.00		
110	Mus Kha	M	2.00	2.00		
111	Ngoung Sreymis	F	1.00	1.50		
112	Tuy Kalis	F	1.00	1.50		
113	Din Tinh	M	3.00	3.00	-	-
114	Pen Thorn	F	0.50	2.50		
115	King Bee	M	0.50	2.50	-	-
116	Kim Pheakdey	M	2.00	2.45	-	-
117	Kong Leap	F	0.50	1.20	-	-
118	Sok Chet	M	0.50	1.60	-	-
119	Yes Konn	M	0.50	1.20	-	-
120	Plearn Theany	M	0.50	1.20	-	-
121	Kheoun Sokha	F	0.50	1.28	-	-
122	Kheoun Rothchea	M	0.50	1.40	-	-
123	Sreang Ksom	F	0.50	1.20	-	-
124	Yourn Sihouy	F	0.50	2.40	-	
125	Yourn Liheng	F	0.50	4.80	-	
126	Hann Kheng	M	1.00	4.00	-	-
127	Hann Sreymoa	F	0.50	0.56	-	-
128	So Heng	F	2.00	2.20	-	-
129	Ngoun Sreysieam	F	1.00	3.00	0.25	1,000.00
130	Tuy Neoun	F	-	-	-	
131	Ek Sothy	F	-	-	-	
132	Amrang Samon	F	5.00	8.00	7.00	1,000.00
133	Sun Ren	F	1.50	1.00	-	-
	Ngoun Muy	M	1.50	1.00	-	_
134	Ngoun Muy	171	1.50	1.00	=	

136	Ploy Sangvang	F	1.00	2.00	=	=
137	Ploy Sangva	F	-	-	-	-
138	Din Ven	M	0.50	0.50	-	-
139	Sos Phut	M	1.50	2.00	-	-
			150.23	217.37	18.25	-

Annex 4.4: List of Families Raising Animals and Livestock

3.7			G	D 00 1	Swine/Mice	GI I I	ъ.
No	Name	Sex	Cow	Buffalo	Pig	Chicken	Duck
1	Ros Van	M	-	1	-	_	<del>-</del>
2	Yon Phearin	F	-	-	1	5	
3	Toy Nhan	F	-	2	-	-	-
4	Ngoun Sreysieam	F	5	5	-	3	6
5	Kem Sreyneang	F	-	-	2	10	5
6	Chher Chha	M	1	2	-	10	-
7	Chreok Sreynin	F	10	5	-	20	10
8	Sok Men	F	-	20	-	20	-
9	Ploy Pheara	M	-	-	2	5	6
10	Ploy Thart	M	2	2	2	5	-
11	Houng Nat	F	-	1	-	3	-
12	Ploy Sangvan	F	2	1	2	3	-
13	Chey Samorn	F	-	2	2	9	-
14	Tuy Lu	F	1	2	2	3	2
15	Kem Saron	F	-	3	1	-	-
16	Ploy Norn	F	4	2	-	3	-
17	Keov Leang	M	-	-	-	2	3
18	Mus Eoun	M	-	-	1	16	-
19	Tinh Vit	M	2	10	-	20	-
20	Prang Sophal	M	3	-	10	20	-
21	Hann Sokhem	F	-	-	3	-	-
22	Srey Lang	F	-	3	-	50	-
23	Kin Peoun	M	3	4	1	-	-
24	Vann Tor	M	1	1	3	-	-
25	Meas Hang	F	-	-	-	-	-
26	Pov Moung	M	-	1	1	-	-
27	Vann You	M	1	-	-	-	-
28	Teob Kea	F	-	1	1	3	-
29	Touy Krouch	M	-	-	-	5	-
30	Antes Mom	F	-	1	-	3	-
31	Ngin Lita	F	-	-	-	-	-
32	Touy Phal	F	-	2	2	-	-
33	Sran Som	F		5	2	2	-
34	Antil Samy	F	1	4	1	5	-
35	Touy Sreykeo	F	-	2	1	5	-
36	Yon Samanh	F	1	3	3	20	-
37	Ploy Thar	M	4	6	4	10	-
38	Teoung Sangeourn	F	3	3	-	5	-
39	Antout Nea	M	3	2	1	5	2
40	Antil Mul	F	-	2	2	9	-
41	Chher Larm	M	6	1	-	5	-

<del></del>	11	6	-	50	-
43 Kim Sarith M	-	-	4	15	-
44 Taing Here M	-	2	-	40	-
45 Yon Heang M	5	2	-	20	-
46 Tam Reang M	-	2	4	-	-
47 Ke Meng M	2	3	1	1	-
48 Tet Poy M	10	15	2	-	-
49 Angkreouk Yeous M	4	-	-	6	-
50 Thong Ratanak F	-	-	-	-	-
51 Bun Neoun F	-	1	1	4	-
52 Kim Sreyneth F	1	1	1	5	-
53 Ros Meoun M	2	-	-	10	-
54 Ploy Ath F	2	1	1	-	-
55 Ke Sreoun F	-	-	-	-	-
56 Chreb F	1	1	-	-	-
57 Yeoun Sreymoa F	2	-	-	-	-
58 Yeoun Sreyhoiy F	2	-	-	-	-
59 Nil Hai F	3	3		5	-
60 Ngoun Chhoam M	_	-	-	3	-
61 Pu Ter M	5	3	-	10	-
62 Mos Deourn M	-	-	-	-	-
63 Toy Tep M	_	-	-	5	-
64 Sun Sethy M	1	2	2	-	-
65 Ploy Sieng F	_	_	2	3	2
66 Ting Kanha F	5	-	2	3	5
67 Sour Rin M	-	1	4	5	-
68 San reoung F	2	4	1	10	2
69 Toy Sareoung F	6	6	2	20	-
70 Ngoun Nol M	-	-	4	-	-
71 Tert Tey F	-	-	-	-	-
72 Pheah Ter M	-	-	9	25	-
73 So Khim F	2	-	1	60	-
74 Mos Reoun M	4	3	1	50	-
75 Sun Yi M	-	1	-	10	-
76 Mos Ra M	2	2	1	15	
77 Peat Li M	2	2	3	4	
78 Antis An F	-	-	-	-	-
79 Toy Chet M	-	-	1	10	-
80 Marang Sreyney F	-	-	-	-	-
81 Chea Sareoun F	2	5	-	10	-
82 Amrang Tris F	6	2	-	6	-
83 Antert Thivith M	3	2	-	30	5
84 Sev Doy M	-	1	2	3	-
85 Din Sreya F	-	3	-	5	-
86 Dim Hann M	-	-	-	3	-
87 Hin Sampeoun F	2	2	1	3	-
88 Hann Seyha F	-	-	-	5	-
89 Nhart Sophy M	1	2	1	10	-
90 Nhet Linin F	1	1	-	-	-
91 Tam Sreyyeb F	_	1	2	5	_

92	Toy Savin	F	1	1	1	3	_
93	Lim Nhon	M	-	6	-	3	3
94	Krev Chork	F	2	6	3	5	-
95	Nheah Neoun	F	1	2	1	2	-
96	Toy Vai	M	1	3	2	5	_
97	Yeb Sreyya	F	-	-		-	
98	Res Yan	M	2	3	1	3	_
99	Tinh Nak	F		-	-	-	_
100	Hum Da	F	2	1	1	4	-
101	Yon Horm	F	4	_	-	-	_
102	Chann Dom	M	4	2	-	5	_
103	Khrouch Rom	M	6	6	10	10	_
104	Ploy Ter	M	1	1	-	-	<u>-</u>
105	Hann Kheng	M		4	1	10	
106	Plonh Seyha	M	2	·	-	5	
107	Mos Deourn	M	-	_	-	-	_
108	Mos Thourn	M	2	4		5	
109	Srey Kea	F	1	3	4		
110	Mus Kha	M	6	4			
111	Ngoung Sreymis	F	0	<b>T</b>		3	
112	Tuy Kalis	F			2	3	
113	Din Tinh	M	6	8	1	4	2
114	Pen Thorn	F	0	0	1		2
115	King Bee	M	-	_	2	10	5
116	Kim Pheakdey	M	1	2	-	10	-
117	Kim Flicakdey  Kong Leap	F	10	5	-	20	10
118	Sok Chet	M	-	20	-	20	-
119	Yes Konn	M	-	-	2	5	6
120	Plearn Theany	M	2	2	2	5	-
121	Kheoun Sokha	F	-	1	-	3	<u>-</u>
121	Kheoun Rothchea	M	2	1	2	3	
123	Sreang Ksom	F	-	2	2	9	_
	Yourn Sihouy	F		2	2	3	2
124	Yourn Liheng	F	1 -	3	1	-	2
123		М	4	2		3	-
120	Hann Kheng Hann Sreymoa	F	-	-	-	2	3
128	So Heng	F			1	16	
128	Ngoun Sreysieam	F	2	10		20	-
130	Tuy Neoun	F	3		10		-
	•	F		-	3	20	-
131	Ek Sothy	F	-	3		50	-
132	Amrang Samon	F	2	4	- 1		-
	Sun Ren		3	1	3	-	-
134	Ngoun Muy	M				-	-
135	Tuy Lik	F	-	- 1	- 1	-	-
136	Ploy Sangvang	F F	- 1	1	1	-	-
137	Ploy Sangva		1	- 1	- 1	-	-
138	Din Ven	M	-	1	1	3	-
139	Sos Phut	M	- 212	- 202	1.62	5	- 70
*O.1	Total		213	293	163	1,027	79
*Oth	er animals are 32 heads	S.					

**Annex 4.5: Training Needs Assessment Codes** 

1. Cr	ops 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	ode 7 An understanding of planting techniques in line with Good Agricultural Practices (GAP)					
Code 8						
Code 9	Organizing production groups or farming communities and other related work					
Code 10	Agricultural business planning preparation					
2. Nu	trition 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. Co	ntract 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					
	1 6					

# **Annex 4.6: 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: $\square$ Male $\square$ Female
2. Indigenous People: $\Box$ Pou norng $\Box$ Pou norng $\Box$ Pou Nong $\Box$ Pou norng $\Box$ Mil $\qed$ Pou
norng
☐ 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: $\Box 1 \Box 2 \Box 3 \Box 4 \Box 5 \Box 6 \Box 7 \Box 8 \Box 9 \Box$
9. Have you applied to the LASED III project already in term of agricultural support? $\Box$ Yes $\Box$
No
10. Have you partiKIPated in dissemination already? ☐ Yes ☐ No
11. Which institutions Pou norngide the dissemination?
☐ Ministry of Agriculture, Forestry and Fisheries
☐ Ministry of Land Management, Urban Planning and Construction
☐ Pou norngincial Department of Agriculture, Forestry and Fisheries
☐ Pou norngincial Department of Land Management, Urban Planning and Construction
☐ Local authority
☐ Other:
Part II: Agricultural potential
2.1 Industrial crops
2.1.1 Cashew tree $\square$ Yes $\square$ 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? $\square$ Yes $\square$ 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/l	kg)		
2.2.2 Fruits tree: (h.a), Yield: (t), Price:	(	Riel/l	kg)		
2.3 Challenges					
2.3.1 What is the condition of your land? $\Box$ Good $\Box$ Average		□ Ba	d		
2.3.2 Challenges					
Choose any answer you come across					
Please tick (✓) on the only answer!	1	2	3	4	5
Level 1 is not strongly challenged to level 5 is strongly challenged					
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	, Duc	k:	, (	Other:	
2.4.1.1 Cow's sell quantity:, Total price:			(Ri	el)	
2.4.1.2 Buffolo's sell quantity:, Total price:					
2.4.1.3 Chicken's sell quantity:, Total price:					
2.4.1.4 Duck's sell quantity:, Total price:			(R	iel)	
2.4.1.5 Other:, Total price:	(Riel)				
2.4.2 Challenges					
Choose any answer you come across					
Please tick (✓) on the only answer!	1	2	3	4	5
Level 1 is not strongly challenged to level 5 is strongly challenged					
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	$\square$ 5.1 Do you do aquaculture? $\square$ No $\square$ Yes	(If	so,	please	verify	7
b	pelow)					
2	2.5.2 Sell quantity: (kg), Price: (Riel/k	(g)				
2	2.5.3 Do you want to do aquatic farming? $\square$ Yes $\square$ No	(If	so,	please	verify	7
b	pelow)					
2	2.5.4 Please Pou norngide your reasons why do not want to do the aquation	farn	ning:			
•						
2	.6 Markets					
2	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 responde	nt is	a m	ember	of the	;
a	gricultural cooperative)					
	☐ Others (Please specify:		)			
2	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	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 institution	ns				
2	2.6.4 Have you ever attended a contract farming training course?					
	□No					
	□Yes					
2	2.6.5 Which ministry or institution is organized by?					

☐ Pou norngincial Department of Agriculture, Forestry and Fisheries
☐ Department of Agro-Industry
$\square$ 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
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? $\square$ Yes $\square$ 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? $\Box$ Yes $\Box$ No
2.8.6 Have you ever used a smartphone to buy or sell agricultural products? $\square$ Yes $\square$ 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 train	ning course	below, giv	ing prior	ity by ticki	ng (✓)	
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	ng course be	elow, giving	priority by ti	cking (✓)	
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 $(\checkmark)$
$\square$ Cultivation techniques (soil preparation, net house preparation, seed selection, irrigation
preparation)
$\square$ 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 $(\checkmark)$
☐ 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 $(\checkmark)$
☐ 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 partiKIPation in the
implementation of contract agricultural production
$\square$ 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 4.7 Additional questions
I. Agriculture Cooperative
1. Does your indigenous community establish the agriculture cooperative?
$\square$ 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)
	nount of member: (Number of women:)
	What careers does that producer group do?
·	white careers acces that produced group acc
••••	
••••	
••••	
10.	What challenges does that producer group come across?
••••	
•••	
• • • •	
• • • •	
• • • •	
Ш	. 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)
An	nount of member:
	)
	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?
10 II
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