# KINGDOM OF CAMBODIA NATION RELIGION KING

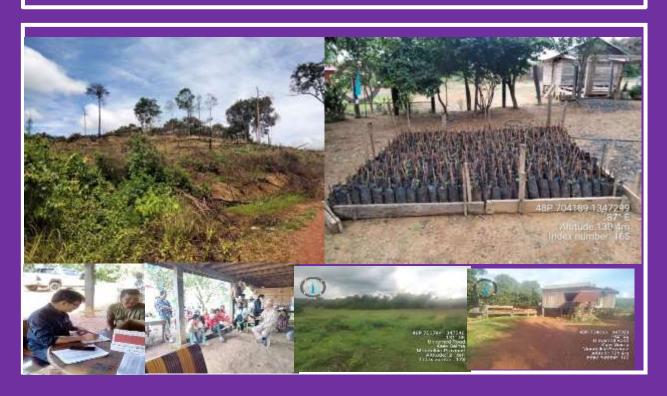
<u>په</u> 🗓 يو



Beneficiary Profile Report

O Rona Indigenous Community, Sre
Khtum Commune, Keo Seyma District,

Mondolkiri Province



PROJECT IP: P171331
AUGUST, 2023

### Contents

I.	Introduction	4
1	.1 LASED III in brief	4
II.	Data Collection Methodology	8
III.	Results	9
3	3.1 General Information	9
3	3.2 Crops Production Potential	12
	3.2.1 Cashew Tree Production	12
	3.2.2 Cassava production	14
	3.2.3 Rubber Production	14
	3.2.4 Paddy/Rice Production	15
	3.2.5 Horticulture Crop	16
	3.2.6 Impacts on Crop Production	16
	3.2.6.1 Soil Fertility	16
	3.2.6.2 Challenges	16
3	3.2 Animal and Husbandry Production Potential	17
	3.2.1 Animal Production Statistic	17
	3.2.2 Challenges	18
3	3.3 Fishery and Aquaculture Potential	19
	3.3.1 Traditional Fishery Practices	19
3	3.4 Agricultural Cooperative, Producer Group and Revolving Funds Group	19
3	5.5 Markets and Markets linkages	19
	3.5.1 Contract Farming Implementation	19
	3.5.2 Existing Markets	20
3	3.6 Extension and ICT	20
3	3.7 Economic Analysis	21
	3.7.1 On Farm Incomes	21
	3.7.2 Off Farm Incomes	21
	3.7.3 Household Food Security (HFS)	22
3	3.8 Training Needs Assessment (TNA)	23
3	3.9 Conclusion	26
3	3.10 Suggestions	27
IV.	ANNEXES	29
A	Annex 4.1: List of Interviewees in O Rona village	29

Annex 4.2: List of Families Planting Cashew Tree	33
Annex 4.3: List of Families Planting Cassava	35
Annex 4.4: List of Families Planting Upland Paddy/Rice	37
Annex 4.5: List of Families Raising Animals and Livestock	39
Annex 4.6: Training Needs Assessment Codes	43
Annex 4.7: Questionnaire of Beneficiary Profile Form	44
Annex 4.8 Additional questions	51
Annex 4.9 Some activities during data collection	55

#### 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.

	Т	able 1 1 Don	oficiary targeting								
	Table 1.1 Beneficiary targeting										
			IP's supports (IC	LTs and ICs)							
	SLC's support		Development support to	Titling ICL To							
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.											

<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.

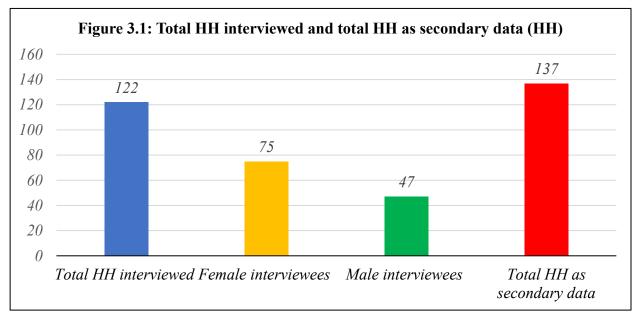
#### **II.** Data Collection Methodology

- 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.
- 12. The mission was conducted two times to collect the data in **O Rona indigenous** community/village, Sre Khtum commune, Keo Seyma district, Mondolkiri Province from 16 to 21 January 2023 as the first time and from 05-09 June, 2023 as the second time. This report has just prepared due to the team were consolidated and verified the first- and second-time data to avoid the overlapping.

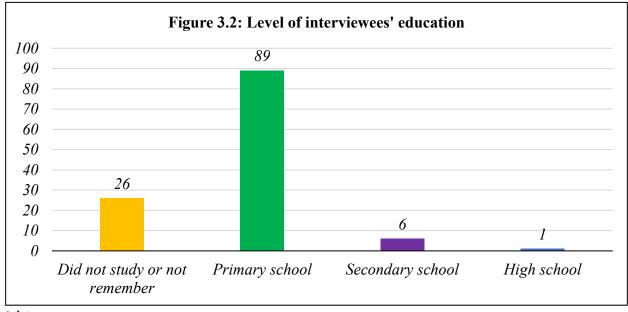
#### **III. Results**

#### 3.1 General Information

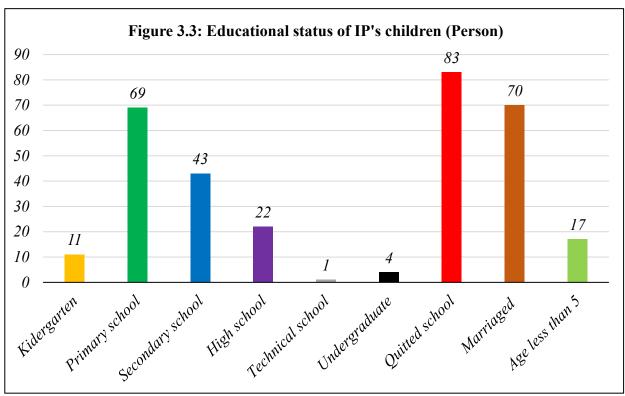
- 13. O Rona indigenous community is a village locates in Sre Khtum commune, Keo Seyma district, Mondolkiri Province, standing at North East side, about 100 km from Senmonorom town. The majority of citizen of this village are Pu norng Indigenous People (PIP).
- 14. According to the secondary data from village chief of **O Rona village**, the total population inside this village is 446 IPs (Includes 234 females and 212 males) equals to 137 households (HHs). However, once the mission team has completely interviewed of all families in **O Rona village** there are totally about 122 HHs (F75; 61.48%, M47; 38.52%) (See figure 3.1 below).



15. Therefore, the percentage of the households interviewed is approximately 89.05% of the total family in **O Rona indigenous community**.



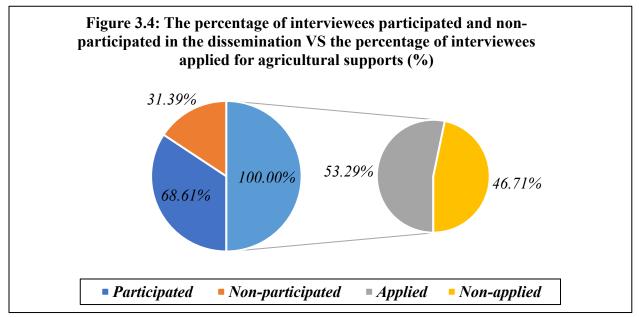
- 16. According to the data interviewed, the educational level of interviewees is considerably limited. There are about 64.96% (89 HHs) said that they finished their study at primary school while there are more than 29.94% said that they did not either remember of their study or did not study as stated in the figure 3.2 above.
- 17. Based on the interviewed data, there are approximately 320 IP's children which consist of 164 and 156 of girls and boys, respectively. At the same time, those children are mostly studying at primary school, some at secondary school, high school inside and outside the village. By the way, there are approximately 25.19% of those children have got marriage while there are four studying at university. However, there are approximately 60.58% (83 Persons) quitted school.



18. Since early year of starting the LASED III project, the MAFF team has already organized the dissemination among them so that **O Rona 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 almost 68.61% 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 53.29% 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 3.4 below).

19. 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.



- 20. 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 O Rona village largely as indicated in the agricultural support application requested.
- 21. Recently, the infrastructures inside **O Rona village IC** include the earth roads and gravel road, approximately 14.6 km and there is the DBST road about 3 km. Regarding to the water sources, there is one streams about 8 km length and one lake approximately 17,000 cubic meters. Some of the people inside the village used to catch fishes traditionally in this stream. For the

- educational infrastructure, there are one building of primary school named **Primary School O Rona** and there is also an indigenous community headquarter/community office.
- 22. As per observation, there are two buildings of health post located in this village where they have to travel about 7 km from the village to get the health services at the health post.



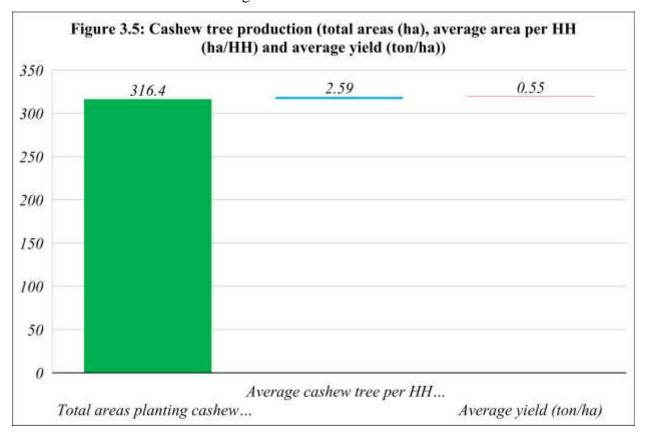
23. If we look at daily life and livelihood in general, the people in the indigenous community of **O**Rona village have been engaged in agriculture, including the cultivation of industrial crops (cashew and cassava), paddy/rice, vegetables, raising animals (mostly cattle, mice pigs and chickens), fishing 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 273 labor forces in agricultural sector.

#### 3.2 Crops Production Potential

#### 3.2.1 Cashew Tree Production

24. According to the interview of all 122 HHs, it is indicated that total areas of cashew tree plantation is approximately 316.40 ha which means that there is approximately 2.59 ha per household in average. For the cashew tree's age is between 1 years old to 13 years old only. In 2022, the total cashew tree harvested areas was about 314.40 ha which its yields harvested were approximately 174.01 tons. So, the average yield is approximately 0.55 tons per hectare. Economically, they sold the cashew nut with minimum prices and maximum prices 3000 and 4500 riels, respectively. For details of every household who plants cashew tree is attached in the annex 3.5 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.



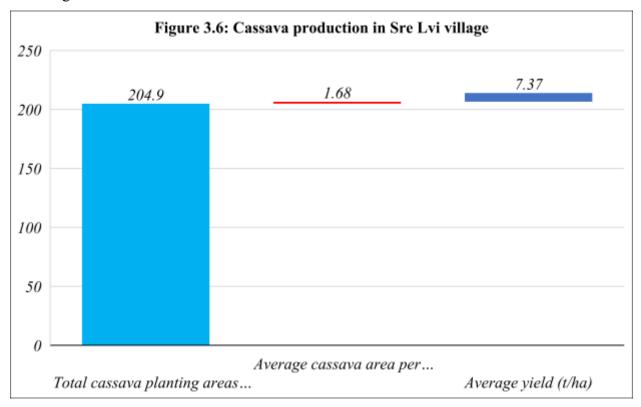
- 26. Eventually, an average of cashew nut yield in **O Rona village** last year was 0.90 ton per hectare<sup>6</sup>. However, according the Cambodian Cashew Nut Association (CAC), the average yield of cashew nuts is 1 to 1.5 tons per hectare, depending on soil quality, cultivation and crop maintenance 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.
- 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

<sup>&</sup>lt;sup>6</sup> This yield is according to the interview of all the respondents and it is showing about the old ages of its cashew tree in **O Rona** IC village.

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

28. According to the interviewed, it is found that there are approximately 204.90 ha of cassava crop which represented around 63.93% (78 HHs) grown it. In fact, the total yields produced about 1,509.45 tons of fresh cassava which means that its average yield is approximately 7.37 tons per hectare. Technically, this yield is extremely lower than the theory of cassava plantation aligned with the proper technique. The price fresh cassava chip sold between 300 to 450 riels per kilogram. Figure 3.6 below shows about the details of cassava production in O Rona village.

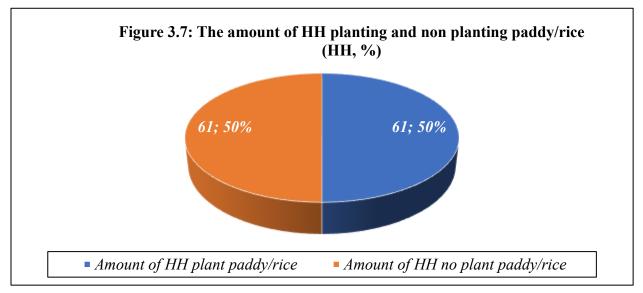


#### 3.2.3 Rubber Production

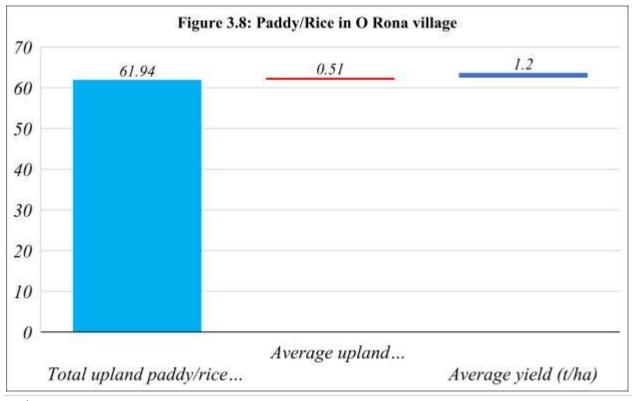
29. There are also approximately 14.75% (18 HHs) mentioned they are planting rubber. They said that they have least arable land to grow it. In fact, they want to grow it by clearance the communities' remained land. However, it reserves for next generation of their children. According to the interviewed, the total yield has recorded around 32.78 tons. While there are more than 85.25% (104 HHs) did not plant the rubber.

#### 3.2.4 Paddy/Rice Production

30. Besides growing cashew, there are approximately 61.94 hectares<sup>7</sup> of paddy/rice production (Rainy season paddy/rice) with the total quantity yields around 74.54 tons equally of both traditional planting method (upland rice) and rainfed lowland rice of all 61 HHs interviewed. Therefore, they have an average around 0.51 ha/HH which can produce rice approximately 1.20 tons per hectare. In the figure 3.7 below shows that there are about 50% (61 HHs) which grow rice while there are about 61% (61 HHs) did not grow rice.



31. Figure 3.8 below shows details of rice production per household, yield of rice per hectare and total rice planting areas.



#### 3.2.5 Horticulture Crop

- 32. 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 122 HHs in **O Rona village**, it is found that they are growing vegetables and tropical fruits such as coconut, longan, mango, papaya, etc.
- 33. However, they are living depends on nature, no technical support from local officers, lack of knowledge of agricultural farming, markets issue, pest and diseases invasion, etc.

#### 3.2.6 Impacts on Crop Production

#### 3.2.6.1 Soil Fertility

- 34. 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>8</sup>. An element is considered essential if it is required for plant metabolism and for completion of the plant's life cycle<sup>9</sup>. Typically, 17 elements are considered to meet these criteria and they are divided into macro-nutrients and micronutrients.
- 35. 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 lower than some other areas. In addition, it is answered that they spent 63,550,000.00 riels on the agricultural inputs for the farming production.

#### 3.2.6.2 Challenges

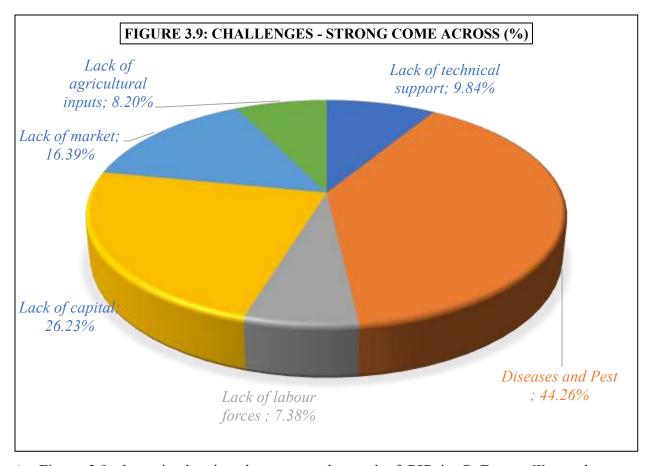
36. In order to get to know the existing challenges among the ethic people of **O Rona village**, the ranking/rating questions<sup>10</sup> is used to gather the information from the respondents. In this beneficiary profile survey, it is rated from 1-5, starting from "never come across" to "strongly come across", respectively, by using Likert scale measurement<sup>11</sup>.

<sup>&</sup>lt;sup>8</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>.

<sup>&</sup>lt;sup>9</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>10</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>11</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



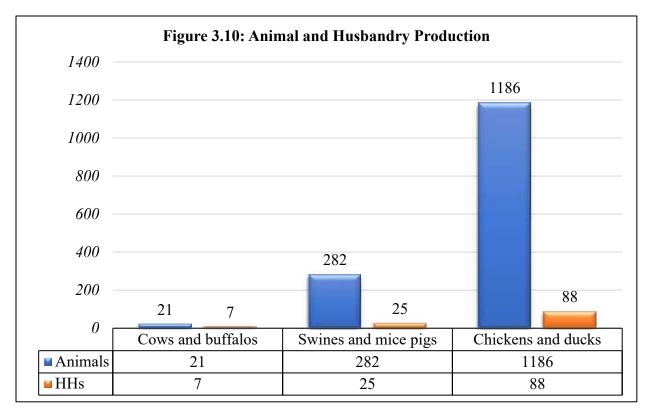
37. Figure 3.9 above is showing that among the total of **PIP** in **O Rona village**, there are approximately 44.26% (54 HHs), 9.84% (12 HHs), 7.38% (09 HHs), 26.23% (32 HHs), 16.39% (20 HHs) and 8.20% (10 HHs) have been slightly come across several challenges such as pest and diseases, lack of techniques, lack of labour forces, lack of capital, lack of market and lack of agricultural inputs, respectively.

#### 3.2 Animal and Husbandry Production Potential

#### 3.2.1 Animal Production Statistic

- 38. According to the interview with all 122 HHs in **O Rona village**, it is found the potential of animal production and husbandry as well. Moreover, the poultry and husbandry production totally are approximately 1489 animals which divided as below figure 3.10.
- 39. Actually, animal husbandry helps in the proper management of animals by providing proper food, shelter and protection against diseases to domestic animals. It provides employment to a large number of farmer and thereby increases their living standards. It helps in developing high yielding breeds of animals by cross breeding.

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.

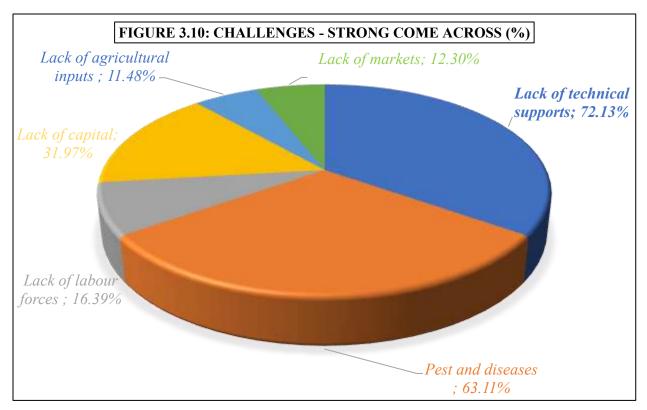


40. According to the interview with all of 122 respondents, it is found that the turnover into their family's economic from the animals and husbandry production is assumed approximately 88,985,000.00 riels (Equals to 21,525.16 USD<sup>12</sup>) as expressed into the animals' categories of cows (34,500,000.00 riels or 8,345.43 USD), pigs (46,885,000.00 riels or 11,341.32 USD), chickens (7,600,000.00 riels or 1,838.41 USD) while 15,700,000.00 riels or 3,797.77 USD is the production expenditure.

#### 3.2.2 Challenges

- 41. As mentioned in the paragraph 36 above, Likert scale measurement is used to rate the perceptions of all respondents in O Rona 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.
- 42. According to the interview, it is found that they answered they have come across the challenges on animal production for some reasons included less family raising animal, their village far from the urban area, pest invasion if any outbreak, unstable prices, etc. (See figure 3.11 below).
- 43. In addition, the major challenges identified in livestock farming systems are lack of pasture and quality feed, scarcity of water resources, climate change, undeveloped breeding and management of livestock, poor marketing and trade, and socioeconomic constraints.

<sup>&</sup>lt;sup>12</sup> 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 Fishery<sup>13</sup> Practices

44. According to the interview with all of 122 respondents, it is found that there is no family used to do aquaculture and few HHs cut fishes traditionally in the village, according to the interview.

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

45. According to the interview with those 122 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

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 **O Rona village**. In addition, either

<sup>&</sup>lt;sup>13</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).

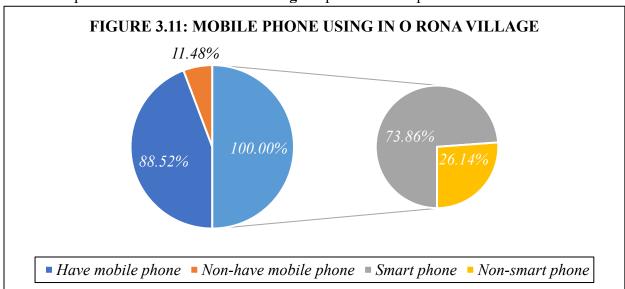
the training or orienting forum has never provided by both national institutions and PDAFF itself. Therefore, they should have been encouraged to be well disseminated about relevant legal documents of the contract farming implementation mechanism in terms of markets linkages promotion to direct buyers 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 108 HHs equals to about 88.52% who have had the mobile phones while about 14 HHs equals to 11.48% do not have the mobile phone. Totally, their mobile phone is calculated approximately 176 phones while it is estimated about 130 smartphone equals to 73.86%. Figure 3.11 below shows about the mobile phone utilization in **O Rona village** as per all 122 respondents interviewed.



- 49. However, there are around 17.21% of respondents 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 about 8.20% of them used to be trained by either relevant stakeholders from public sector or NGO on agricultural practices.

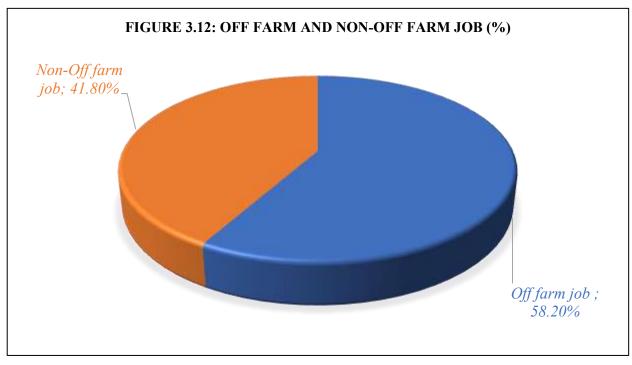
#### 3.7 Economic Analysis<sup>14</sup>

#### 3.7.1 On Farm Incomes

51. According to the interview of all 122 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 1,317,944,500.00 riels equals to 318,806.12 USD while it is also found that the production cost on agricultural farming is approximately 433,240,000.00 riels equal to 104,799.23 USD.

#### 3.7.2 Off Farm Incomes

52. By the way, besides agriculture farming activities, it is found that there are about 58.20% (71 HHs) have been working in other sector assumed as non-farm jobs<sup>15</sup> while there are about 41.80% (51 HHs) mentioned that they did not get the non-farm jobs as stated in Figure 3.12 below. According to the interview, the total revenue earns from non-farm job accounts approximately 312,264,000.00 riels equal to 75,535.56 USD.

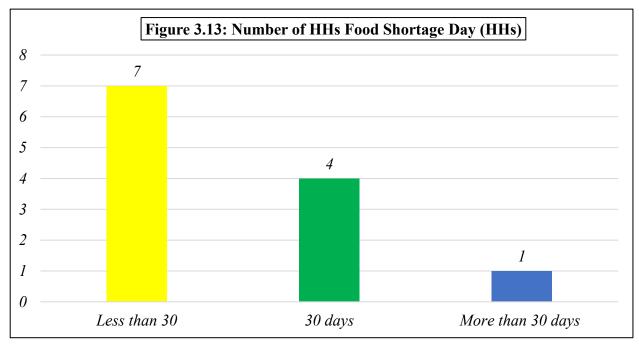


<sup>&</sup>lt;sup>14</sup> Economic analysis essentially entails the evaluation of costs and benefits. Economic analysis helps us to make decentralized decisions on the appropriate choices between competing uses of resources, with costs and benefits being defined and valued so as to measure impacts 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>15</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, find non-timber forest products, selling foods and other using materials, construction workers and the gift provided by their marriage children.

#### 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.
- 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 5.73% (07 HHs), 3.27% (04 HHs) and 0.81% (01 HHs) have answered that they used to face the insufficient food consumption from less than 10 days, 30 days and more than 30 days, respectively, as stated in the figure 3.13 below.

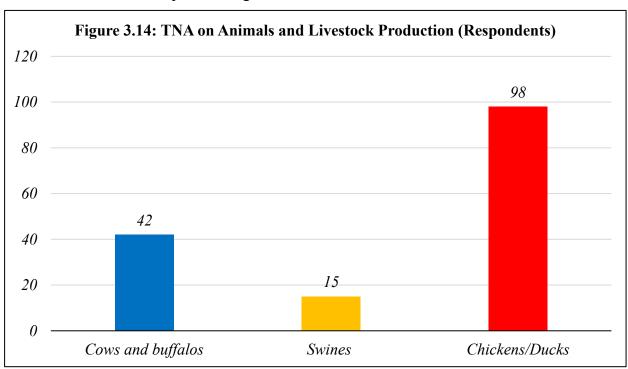


56. The Strategy will seek that food-insecure households increase availability and access to food through more productive and diversified agriculture and livestock production, sustainable fisheries and forestry, and from non- agricultural employment and income opportunities; that Cambodians improve use and utilization of their food resulting in reduced child and maternal malnutrition and enhanced human and economic development; and that improved food security related social protection and enhanced capacities of poor and vulnerable households to cope with risks and shocks increase the stability of their food supply. In particular, the Strategy will

seek establish evidence-based nutrition interventions in the health sector and nutrition education; nutrition actions across sectors; and integrated and community-based nutrition interventions.

#### 3.8 Training Needs Assessment<sup>16</sup> (TNA)

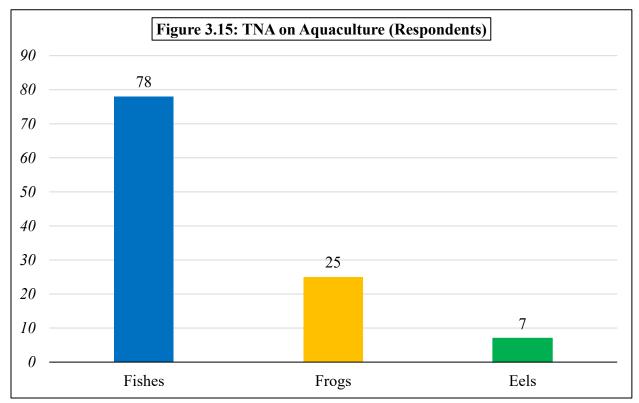
- 57. In this beneficiary profile survey, the TNA is divided into five categories such as (i) the assessment on the animal and livestock production, (ii) the assessment on the fishery and aquatic production, (iii) the evaluation on the crops production, (iv) the assessment on the nutrition sensitive 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.
- 58. According to the results of interview of all 122 respondents, it is found that, for the animal and livestock production, there are 42, 15, and 98 respondents want to get the training on cow/buffalo, swine, chicken and duck raising production, respectively, as stated in the figure 3.14 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.



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

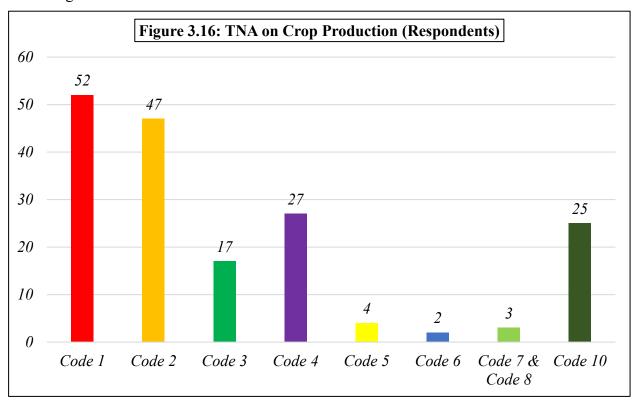
https://www.jica.go.jp/project/cambodia/0601331/pdf/english/3 TNA 01.pdf.

59. Figure 3.15 below shows about the TNA on aquaculture, according to the results of interview of all 122 respondents. As results, it is found that there are 78, 25 and 7 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.

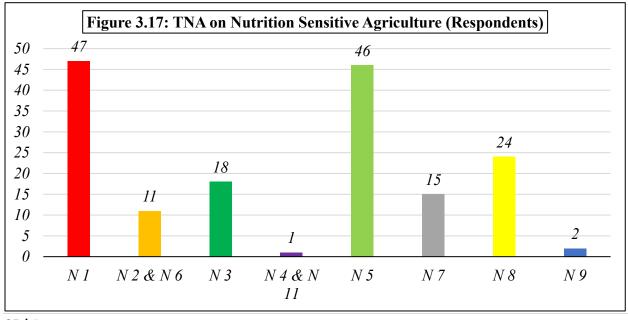


- 60. Based on the above results, it is found that the impression made on the interviewer often can outweigh their actual credentials. Their poise, attitude, basic social skills, and ability to communicate are evaluated along with their experiences and education. They have engaged in a conversation a mutual exchange of information and ideas. Therefore, the results above are considerably acceptable with several reasons in terms of technical translation into real practices among the needs of the ethic groups in particular to the terms of livelihood and economic development for this village.
- 61. 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 122 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, and Code 10 have been rationally rated as following results 52, 47, 17, 27, 4, 2, 3 and 25 responses, respectively. Figure 3.16 above indicates about the TNA on crops production based on the

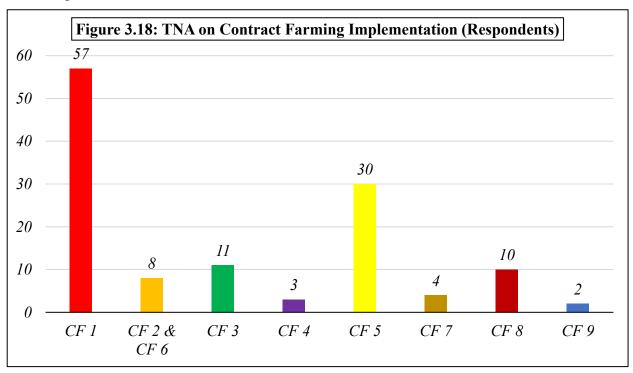
interview. Noticeably, each respondent is able to answer and chose more than one option during the interview.



62. 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 122 HHs on the TNA of NSA, it is found that the N 1, N 2 & N 6, N 3, N 4 & N 7, N 8 and N 9 have been rationally rated as following results 47, 11, 18, 1, 46, 15, 24 and 2 response, respectively. Figure 3.17 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.



63. 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 122 HHs on the TNA of CF implementation, it is found that the CF 1, CF 2 & CF 6, CF 3, CF 4, CF 5, CF 7, CF 8 and CF have been rationally rated as following results 57, 8, 11, 3, 30, 4, 10 and 2 response, respectively. Figure 3.18 below 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

- 64. After having interviewed with all 122 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 61.94 ha, total yields 74.54 tons, average land holding 0.51 ha/HH, average yield 1.20 ton per hectare), cashew tree (Total planting areas 316.40 ha, total yields 174.10 tons, harvested areas last year almost 100.00%, average land holding 2.59 ha/HH and average yield 0.55 ton/ha), (2) the potential animals and livestock production such as cows and buffalos (21 heads), swine and mice pigs (282 heads), chickens (1186 heads), and (3) the potential of other related agricultural practices.
- 65. For the poverty line in **O Rona village**, it is economically assumed that they are not living under poverty line<sup>17</sup> because of their daily income (in total approximately 26,880.05

<sup>&</sup>lt;sup>17</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

riels/day/HH (equals to 6.51 USD/day/HH) which is calculated based on on farm (19,867.61 riels/day/HH) and off farm (7,012.44 riels/day/HH)) is less than 2.67 USD per day per household<sup>18</sup>. In addition, 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.

66. 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

- 67. 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.
- 68. 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 19 negotiation for better markets guarantee.
- 69. 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

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:

 $<sup>\</sup>underline{https://documents1.worldbank.org/curated/en/099155111222239793/pdf/P1735940c0e8b508d0b80e0c7375c89d9c0.pdf.}\\$ 

<sup>&</sup>lt;sup>18</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.

<sup>&</sup>lt;sup>19</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.

- loaned or spent repeatedly among the producer groups. It can support the either land recipients or ethnic groups as well.
- 70. 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 **O Rona village** itself through the technical and professional skills Pu norng ided as well as the allowances supports suitably Pu norng ide 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 **O Rona village**.

## IV. ANNEXES

**Annex 4.1: List of Interviewees in O Rona village** 

No	Name	Sex	Age	Ethic group	Education level	Children	Son	Daughter	Village	Commune	District	Province
1	Beb Srenich	F	23	Pu norng	Primary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
2	Sreork Dol	F	44	Pu norng	Primary school	3	-	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
3	Sreorb Thol	F	65	Pu norng	Primary school	6	4	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
4	Saem Chhunheng	M	49	Pu norng	N/A	4	2	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
5	Ngit Eath	F	36	Pu norng	N/A	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
6	Chhit Sokhon	F	61	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
7	Nek Kanes	F	30	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
8	Pil Leam	M	33	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
9	Amperj Yek	F	51	Pu norng	Primary school	7	3	4	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
10	Chrouj Pum	M	53	Pu norng	N/A	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
11	Pem Brom	F	57	Pu norng	N/A	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
12	Vann Yem	F	50	Pu norng	N/A	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
13	Set Kimsan	F	51	Pu norng	N/A	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
14	Nhek Tan	F	46	Pu norng	N/A	4	1	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
15	Er Jok	F	22	Pu norng	Primary school	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
16	Kreok Lert	F	34	Pu norng	Primary school	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
17	Krel Taen	F	42	Pu norng	N/A	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
18	Kreov Meourn	F	50	Pu norng	N/A	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
19	Chun Sreyneang	F	26	Pu norng	Primary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
20	Yern Yorb	F	31	Pu norng	Primary school	2	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
21	Pheak Sienghai	F	41	Pu norng	Primary school	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
22	Mory Boren	F	ŒĔ	Pu norng	N/A	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
23	Sin Pov	F	43	Pu norng	N/A	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
24	Kork Brej	F	35	Pu norng	Primary school	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
25	En Sophea	F	29	Pu norng	Primary school	2	2	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
26	Nam Phally	F	51	Pu norng	Primary school	3	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
27	Nheav Dy	F	40	Pu norng	Primary school	3	-	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri

28	Khrouch Veasna	F	31	Pu norng	Secondary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
29	Kum Ny	F	29	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
30	Vis Ksoy	F	29	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
31	Hoa Chea	F	41	Pu norng	Primary school	2	2	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
32	Chhun Sary	F	31	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
33	Jrong Savet	F	39	Pu norng	Primary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
34	Phoy Peourn	M	58	Pu norng	N/A	5	3	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
35	Til Deng	M	43	Pu norng	N/A	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
36	Sreysor Sreytha	F	60	Pu norng	N/A	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
37	Phon Baren	M	49	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
38	Nhej Tro	F	45	Pu norng	Primary school	5	1	4	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
39	Khrel Dany	F	24	Pu norng	Primary school	-	-	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
40	Sy Thongbai	F	33	Pu norng	Primary school	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
41	Moa Sary	F	38	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
42	Kav Jork	F	57	Pu norng	Primary school	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
43	Sreurs Mach	F	43	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
44	Ry Chealy	F	30	Pu norng	Primary school	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
45	Ry Sokny	F	25	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
46	Ming Samart	F	21	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
47	Chak Pem	F	31	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
48	Tam Vanny	M	42	Pu norng	Primary school	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
49	Yem Thly	M	41	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
50	Touch Syda	F	31	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
51	Boul Somol	M	66	Pu norng	Primary school	3	3	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
52	Yen Sarith	M	40	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
53	Jret Thang	F	30	Pu norng	Primary school	2		2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
54	Bean Sithat	F	48	Pu norng	Primary school	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
55	Vann Sreynich	F	24	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
56	Nith Sreyneth	F	27	Pu norng	Primary school	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
57	Chhut Bunthai	F	37	Pu norng	Primary school	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
58	Pheang Chenan	F	44	Pu norng	Primary school	7	6	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
59	Kren Jern	F	28	Pu norng	Primary school	1		1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
60	Jret Herng	M	34	Pu norng	Primary school	2	2		O Rona	Sre Khtum	Keo Seyma	Mondolkiri
61	Bol Pov	M	37	Pu norng	Primary school	4	1	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri

62	Heang Pil	M	60	Pu norng	Primary school	8	4	4	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
63	Yang Tith	M	39	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
64	Tun Visal	M	50	Pu norng	Primary school	2		2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
65	Som Tann	M	55	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
66	Del Teamann	M	26	Pu norng	Primary school	1		1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
67	Kroy Prius	F	43	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
68	Vun Haj	M	47	Pu norng	Primary school	4	2	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
69	Hy Hen	F	44	Pu norng	Primary school	6	3	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
70	Sroung Jret	F	60	Pu norng	Primary school	5	4	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
71	Srey Keo	F	30	Pu norng	Primary school	1		1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
72	Lux Vannthan	M	35	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
73	Chhan Saron	M	50	Pu norng	Secondary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
74	Pil Him	F	31	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
75	Hem Pheourng	F	52	Pu norng	Did not study	6	3	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
76	Khel Kin	M	23	Pu norng	Primary school	-	-	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
77	Touch Channthorn	M	36	Pu norng	Secondary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
78	Kvet Sareourn	M	42	Pu norng	Primary school	4	2	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
79	Mej Seourn	F	57	Pu norng	Did not study	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
80	Proy Theourn	F	60	Pu norng	Did not study	9	2	7	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
81	Chham Nin	F	31	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
82	Pok Peav	F	70	Pu norng	Did not study	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
83	Poy Morn	F	47	Pu norng	Primary school	5	3	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
84	Keov Kimsean	F	53	Pu norng	High school	5	3	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
85	Horj Thork	M	36	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
86	Leng Say	F	41	Pu norng	Secondary school	5	4	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
87	Mey Sinat	M	54	Pu norng	Did not study	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
88	Lay Theourt	F	41	Pu norng	Primary school	4	1	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
89	Chrong Salort	F	42	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
90	Ker Khej	M	54	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
91	Kheoun Rounh	M	42	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
92	Yeourn Sophorn	M	32	Pu norng	Primary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
93	Hong Jak	M	71	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
94	Hean Sokly	F	44	Pu norng	Primary school	5	2	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
95	Yeng Bopha	F	32	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri

96	Ry Phally	F	30	Pu norng	Primary school	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
97	Hean Chann	M	26	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
98	Heang Hornh	M	68	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
99	Thol Therl	M	52	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
100	Chhorn Chhim	M	31	Pu norng	Primary school	3	2	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
101	Yeng Channthat	F	48	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
102	Souy Ratha	M	32	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
103	Chak Pleang	M	41	Pu norng	Primary school	4	1	3	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
104	Preng Peourn	M	40	Pu norng	Primary school	3	3	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
105	Yiv Heng	M	40	Pu norng	Primary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
106	Hour Ean	F	58	Pu norng	Primary school	ı	-	ı	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
107	Nheav Phourn	F	38	Pu norng	Primary school	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
108	Mi Klak	M	23	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
109	Hong Peourn	M	29	Pu norng	Primary school	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
110	Kreng Pey	F	37	Pu norng	Did not study	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
111	Poj Preing	M	61	Pu norng	Secondary school	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
112	Pung Via	M	24	Pu norng	Did not study	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
113	Sreork Pich	M	30	Pu norng	Secondary school	1	1	-	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
114	Srey En	F	65	Pu norng	Did not study	3	1	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
115	En Mi	M	50	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
116	En Nang	F	45	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
117	Thak Leang	F	56	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
118	Yek Leap	M	48	Pu norng	Primary school	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
119	Mourn Mal	M	52	Pu norng	Did not study	2	1	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
120	Morng Ing	M	63	Pu norng	Did not study	2	-	2	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
121	Eoung Sokheng	F	39	Pu norng	Did not study	1	-	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri
122	Treork Ngov	M	65	Pu norng	Did not study	4	3	1	O Rona	Sre Khtum	Keo Seyma	Mondolkiri

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

NI.	<b>N</b> T	C	Planting area	Cooksets	Yields	Sell QTY	Prices
No	Name	Sex	(ha)	Cashew's age	(t)	(t)	(Riel/kg)
1	Beb Srenich	F	1.00	3	-	-	-
2	Sreork Dol	F	8.00	6	3.00	3.00	4,000.00
3	Sreorb Thol	F	0.50	6	0.60	0.60	3,500.00
4	Saem Chhunheng	M	2.00	9	0.60	0.60	3,500.00
5	Ngit Eath	F	3.00	10	1.00	1.00	3,000.00
6	Chhit Sokhon	F	5.30	13	3.00	3.00	3,500.00
7	Nek Kanes	F	4.00	10	1.40	1.40	3,000.00
8	Pil Leam	M	1.80	9	0.50	0.50	4,000.00
9	Amperj Yek	F	5.00	10 12	1.72	1.72	3,500.00
10	Chrouj Pum	M F	3.50 1.00	12	1.20 0.50	1.20 0.50	3,500.00
11	Pem Brom Vann Yem	F	3.00		1.50	1.50	4,000.00
13	Set Kimsan	F	1.50		0.60	0.60	3,000.00
14	Nhek Tan	F	2.00		1.50	1.50	3,500.00 3,500.00
15	Er Jok	F	1.00	1	1.30	1.30	3,300.00
16	Kreok Lert	F	1.50	5	0.50	0.50	3,500.00
17	Krel Taen	F	1.00	5	1.00	1.00	3,500.00
18	Kreov Meourn	F	8.00	6	5.50	5.50	3,500.00
19	Chun Sreyneang	F	3.00	10	1.50	1.50	3,500.00
20	Yern Yorb	F	2.50	10	0.80	0.80	4,500.00
21	Pheak Sienghai	F	1.50	8	1.20	1.20	3,500.00
22	Mory Boren	F	1.00	6	0.60	0.60	3,500.00
23	Sin Pov	F	1.00	-	0.00	0.00	3,300.00
24	Kork Brej	F	4.00	9	1.00	1.00	3,500.00
25	En Sophea	F	2.00	10	0.80	0.80	3,500.00
26	Nam Phally	F	5.00	9	2.00	2.00	4,500.00
27	Nheav Dy	F	4.00	8	2.00	2.00	3,500.00
28	Khrouch Veasna	F	1.50	3	0.50	0.50	3,500.00
29	Kum Ny	F	3.00	3	0.60	0.60	3,500.00
30	Vis Ksoy	F	3.00	3	0.50	0.50	3,500.00
31	Hoa Chea	F	1.00	2	0.04	0.04	3,500.00
32	Chhun Sary	F	2.00	9	0.80	0.80	3,500.00
33	Jrong Savet	F	-	-	-	-	-
34	Phoy Peourn	M	4.00	-	1.00	1.00	4,000.00
35	Til Deng	M	1.50	-	1.00	1.00	4,000.00
36	Sreysor Sreytha	F	4.00	-	3.50	3.50	3,500.00
37	Phon Baren	M	3.00		0.70	0.70	3,000.00
38	Nhej Tro	F	3.00		3.00	3.00	-
39	Khrel Dany	F	1.00		1.00	1.00	-
40	Sy Thongbai	F	0.50		0.50	0.50	-
41	Moa Sary	F	8.00		2.50	2.50	4,000.00
42	Kav Jork	F	3.00		1.50	1.50	4,000.00
43	Sreurs Mach	F	7.00		2.00	2.00	4,000.00
44	Ry Chealy	F	2.00		2.00	2.00	- 4
45	Ry Sokny	F	2.00		1.60	1.60	4,500.00
46	Ming Samart	F	4.00		6.00	6.00	3,500.00
47	Chak Pem	F	2.50		- 2.00	- 2.00	4 000 00
48	Tam Vanny	M	3.50		2.00	2.00	4,000.00
49	Yem Thly	M	2.00		0.50	0.50	4,500.00
50	Touch Syda	F	11.00		3.70	3.70	3,000.00
51	Boul Somol	M M	2.00		1.00	1.00	2,000.00
32	Yen Sarith	IVI	-	-	-	-	-

53	Jret Thang	F	2.00	6	1.40	1.40	3,500.00
54	Bean Sithat	F	10.00	4	5.00	5.00	3,500.00
55	Vann Sreynich	F	-	•	-	-	
56	Nith Sreyneth	F	0.50	7	0.50	0.50	
57	Chhut Bunthai	F	0.50	,	0.50	0.50	
58	Pheang Chenan	F					
59	Kren Jern	F					
60	Jret Herng	M	3.00	8	4.00	4.00	
61	Bol Pov	M	3.00	0	1.00	1.00	
62	Heang Pil	M	2.00		1.50	1.50	3,500.00
63	Yang Tith	M	10.00		8.00	8.00	4,000.00
64	Tun Visal	M	10.00		0.00	0.00	1,000.00
65	Som Tann	M					
66	Del Teamann	M	1.00		0.50	0.50	4,500.00
67	Kroy Prius	F	0.50		0.50	0.50	1,500.00
68	Vun Haj	M	3.00		0.90	0.90	3,500.00
69	Hy Hen	F	3.00		0.50	0.50	3,300.00
70	Sroung Jret	F	1.00		2.25	2.25	
71	Srey Keo	F	1.00		2.23	2.23	
72	Lux Vannthan	M	3.00		1.50	1.50	4,500.00
73	Chhan Saron	M	5.00		1.30	1.30	4,000.00
74	Pil Him	F	1.00		1.00	1.00	4,000.00
75	Hem Pheourng	F	0.80		0.60	0.60	4,000.00
76	Khel Kin	M	1.50		1.00	1.00	4,000.00
77	Touch Channthorn	M	1.00		0.50	0.50	3,500.00
78	Kvet Sareourn	M	5.00		4.00	4.00	3,500.00
79	Mej Seourn	F	1.00		0.50	0.50	4,000.00
80	Proy Theourn	F	0.50		0.40	0.40	4,500.00
81	Chham Nin	F	2.00		1.00	1.00	3,500.00
82	Pok Peav	F	0.50		0.50	0.50	4,000.00
83	Poy Morn	F	8.00		5.60	5.60	3,000.00
84	Keov Kimsean	F	1.00	7	1.50	1.50	3,000.00
85	Horj Thork	M	2.00	,	1.50	1.50	4,000.00
86	Leng Say	F	2.00		1.30	1.50	4,000.00
87	Mey Sinat	M	7.00		1.00	1.00	3,500.00
88	Lay Theourt	F	2.00		1.50	1.50	4,000.00
89	Chrong Salort	F			- 1.50	- 1.30	4,000.00
90	Ker Khej	M	2.00		1.50	1.50	4,000.00
91	Kheoun Rounh	M	3.00		1.00	1.00	4,000.00
92	Yeourn Sophorn	M	5.00		1.00	1.00	4,000.00
93	Hong Jak	M	2.00		1.50	1.50	4,000.00
94	Hean Sokly	F	6.00		2.50	2.50	4,000.00
95	Yeng Bopha	F	3.00		1.50	1.50	4,000.00
96	Ry Phally	F	1.50		0.75	0.75	4,000.00
97	Hean Chann	M	1.50		- 0.73	0.73	7,000.00
98	Heang Hornh	M			-	_	<u>-</u>
99	Thol Therl	M	1.00		0.50	0.50	4,000.00
100	Chhorn Chhim	M	2.00		1.60	1.60	4,000.00
101	Yeng Channthat	F	3.00		3.00	3.00	4,000.00
101	Souy Ratha	M	2.00		1.00	1.00	4,000.00
103	Chak Pleang	M	10.00		3.00	3.00	4,000.00
103	Preng Peourn	M	2.00		0.75	0.75	4,000.00
104	Yiv Heng	M	2.00		1.40	1.40	4,000.00
105	Hour Ean	F	2.00		1.40	1.40	7,000.00
107	Nheav Phourn	F	0.50		0.30	0.30	4,000.00
107	Mi Klak	M	0.30		0.30	0.50	7,000.00
109	Hong Peourn	M	2.00		1.40	1.40	3,500.00
109	Hong Feouri	1V1	2.00		1.40	1.40	3,300.00

110	Kreng Pey	F	5.00		1.50	1.50	3,500.00
111	Poj Preing	M	6.00		4.20	4.20	3,500.00
112	Pung Via	M	6.00		4.20	4.20	3,500.00
113	Sreork Pich	M	3.50	11	6.50	6.50	3,500.00
114	Srey En	F	7.00	5	7.50	7.50	4,000.00
115	En Mi	M	2.00		1.00	1.00	3,500.00
116	En Nang	F	2.00		1.00	1.00	3,500.00
117	Thak Leang	F	2.00		1.00	1.00	3,500.00
118	Yek Leap	M	2.00		1.00	1.00	3,500.00
119	Mourn Mal	M	5.00		1.50	1.50	3,500.00
120	Morng Ing	M	0.50		1.00	1.00	-
121	Eoung Sokheng	F	8.00		2.50	2.50	4,000.00
122	Treork Ngov	M	3.00		1.50	1.50	4,000.00
	Total		316.40	-	174.01	174.01	-

**Annex 4.3: List of Families Planting Cassava** 

			Planting area	Yields	Sell QTY	Prices
No	Name	Sex	(ha)	(t)	(t)	(Riel/kg)
1	Beb Srenich	F	-	-	-	-
2	Sreork Dol	F	4.00	20.00	20.00	350.00
3	Sreorb Thol	F	1.00	8.00	8.00	400.00
4	Saem Chhunheng	M	0.50	5.00	5.00	400.00
5	Ngit Eath	F	3.00	8.00	8.00	400.00
6	Chhit Sokhon	F	10.00	55.00	55.00	380.00
7	Nek Kanes	F	2.00	10.00	10.00	430.00
8	Pil Leam	M	1.00	7.50	7.50	400.00
9	Amperj Yek	F	1.50	10.00	10.00	400.00
10	Chrouj Pum	M	-	-	-	-
11	Pem Brom	F	-	-	-	-
12	Vann Yem	F	-	-	-	-
13	Set Kimsan	F	-	-	-	-
14	Nhek Tan	F	0.50	0.35	0.35	350.00
15	Er Jok	F	1.00	4.00	4.00	400.00
16	Kreok Lert	F	-	-	-	-
17	Krel Taen	F	-	-	-	-
18	Kreov Meourn	F	5.00	75.00	75.00	350.00
19	Chun Sreyneang	F	1.00	12.00	12.00	380.00
20	Yern Yorb	F	-	-	-	-
21	Pheak Sienghai	F	8.00	50.00	50.00	400.00
22	Mory Boren	F	-	-	-	-
23	Sin Pov	F	1.00	7.00	7.00	450.00
24	Kork Brej	F	1.00	5.00	5.00	380.00
25	En Sophea	F	1.00	10.00	10.00	370.00
26	Nam Phally	F	-	-	-	-
27	Nheav Dy	F	ı	-	-	•
28	Khrouch Veasna	F	3.00	33.00	33.00	400.00
29	Kum Ny	F	5.00	28.00	28.00	360.00
30	Vis Ksoy	F	2.00	9.00	9.00	340.00
31	Hoa Chea	F	2.00	10.00	10.00	400.00
32	Chhun Sary	F	-			
33	Jrong Savet	F	-	-		-
34	Phoy Peourn	M	4.00	32.00	32.00	400.00
35	Til Deng	M	2.50	15.00	15.00	350.00
36	Sreysor Sreytha	F	-	-		-
37	Phon Baren	M	2.00	10.00	10.00	300.00
38	Nhej Tro	F	3.00	9.00	9.00	300.00

39	Khrel Dany	F	1.00	2.00	2.00	300.00
40	Sy Thongbai	F	1.00	7.00	7.00	350.00
41	Moa Sary	F	1.00	7.00	7.00	330.00
42	Kav Jork	F	-	-	<u> </u>	-
43	Sreurs Mach	F	4.00	20.00	20.00	370.00
44	Ry Chealy	F	1.00	20.00	20.00	450.00
45	Ry Sokny	F	3.00	30.00	30.00	440.00
46	Ming Samart	F	2.50	32.00	32.00	410.00
47	Chak Pem	F	1.50	9.00	9.00	420.00
48	Tam Vanny	M	5.00	66.00	66.00	370.00
49	Yem Thly	M	3.50	29.00	29.00	480.00
50	Touch Syda	F	8.00	50.00	50.00	380.00
51	Boul Somol	M	2.00	4.00	4.00	300.00
52	Yen Sarith	M	2.00	7.00	4.00	300.00
53	Jret Thang	F	4.00	20.00	20.00	440.00
54	Bean Sithat	F	4.00	20.00	20.00	440.00
55	Vann Sreynich	F	1.50	9.00	9.00	420.00
56	Nith Sreyneth	F	0.50	3.00	3.00	440.00
57	Chhut Bunthai	F	0.50	5.00	5.00	440.00
58	Pheang Chenan	F	2.00	16.00	16.00	440.00
59	Kren Jern	F	0.50	10.00	10.00	440.00
60	Jret Herng	M	3.00	30.00	30.00	410.00
61	Bol Pov	M	0.20	0.30	0.30	380.00
62	Heang Pil	M	0.20	0.50	0.50	360.00
63	Yang Tith	M	10.00	32.00	32.00	430.00
64	Tun Visal	M	10.00	32.00	32.00	+30.00
65	Som Tann	M				
66	Del Teamann	M	2.00	18.00	18.00	450.00
67	Kroy Prius	F	1.00	2.50	2.50	350.00
68	Vun Haj	M	1.00	2.50	2.30	330.00
69	Hy Hen	F				
70	Sroung Jret	F	6.50	42.00	42.00	440.00
71	Srey Keo	F	0.50	12.00	12.00	110.00
72	Lux Vannthan	M	3.00	12.00	12.00	415.00
73	Chhan Saron	M	2.00	20.00	20.00	350.00
74	Pil Him	F	1.00	3.00	3.00	300.00
75	Hem Pheourng	F	1.00	12.00	12.00	300.00
76	Khel Kin	M	-1100			
77	Touch Channthorn	M	1.00	4.00	4.00	300.00
78	Kvet Sareourn	M	6.00	60.00	60.00	440.00
79	Mej Seourn	F	2.20	22120	22700	112100
80	Proy Theourn	F				
81	Chham Nin	F	4.00	60.00	60.00	350.00
82	Pok Peav	F	0.70	2.80	2.80	350.00
83	Poy Morn	F	2.00	10.00	10.00	380.00
84	Keov Kimsean	F	1.00	4.00	4.00	350.00
85	Horj Thork	M	1.50	27.00	27.00	370.00
86	Leng Say	F				
87	Mey Sinat	M				
88	Lay Theourt	F	0.50	2.00	2.00	390.00
89	Chrong Salort	F	-	-	-	_
90	Ker Khej	M	3.00	20.00	20.00	300.00
91	Kheoun Rounh	M	3.00	20.00	20.00	420.00
92	Yeourn Sophorn	M	-		-	_
93	Hong Jak	M	-	-	-	-
94	Hean Sokly	F	-	-	-	_
95	Yeng Bopha	F	5.00	30.00	30.00	450.00
<u> </u>						

96	Ry Phally	F	-	-	-	-
97	Hean Chann	M	-	-	-	-
98	Heang Hornh	M	-	-	-	-
99	Thol Therl	M	0.50	2.00	2.00	350.00
100	Chhorn Chhim	M	1.00	10.00	10.00	370.00
101	Yeng Channthat	F	3.00	22.00	22.00	370.00
102	Souy Ratha	M	1.00	5.00	5.00	400.00
103	Chak Pleang	M	4.00	20.00	20.00	350.00
104	Preng Peourn	M	1.00	3.50	3.50	340.00
105	Yiv Heng	M	-	-	•	-
106	Hour Ean	F	-	1	ı	ı
107	Nheav Phourn	F	1.00	8.00	8.00	350.00
108	Mi Klak	M	1.50	3.00	3.00	400.00
109	Hong Peourn	M	2.00	1.50	1.50	400.00
110	Kreng Pey	F	-	1		
111	Poj Preing	M	5.00	10.00	10.00	350.00
112	Pung Via	M	2.00	4.00	4.00	400.00
113	Sreork Pich	M	2.50	12.00	12.00	350.00
114	Srey En	F	-	-	•	-
115	En Mi	M	4.00	60.00	60.00	350.00
116	En Nang	F	4.00	60.00	60.00	350.00
117	Thak Leang	F	4.00	60.00	60.00	350.00
118	Yek Leap	M	4.00	60.00	60.00	350.00
119	Mourn Mal	M	-	-		
120	Morng Ing	M	1.00	7.00	7.00	350.00
121	Eoung Sokheng	F	-	=	-	-
122	Treork Ngov	M	-	-	-	-
	Total		204.90	1,509.45	1,509.45	

**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	Beb Srenich	F				
2	Sreork Dol	F				
3	Sreorb Thol	F				
4	Saem Chhunheng	M	-	-	-	-
5	Ngit Eath	F				
6	Chhit Sokhon	F				
7	Nek Kanes	F				
8	Pil Leam	M	0.80	0.80	•	•
9	Amperj Yek	F	1.00	0.65	•	•
10	Chrouj Pum	M	1.00	1.00	-	-
11	Pem Brom	F	-	-	-	-
12	Vann Yem	F	-	-	•	•
13	Set Kimsan	F	0.20	0.15	-	-
14	Nhek Tan	F	-	-	-	-
15	Er Jok	F	1.00	0.50	-	-
16	Kreok Lert	F	0.50	0.50	-	-
17	Krel Taen	F	1.00	0.75	-	-
18	Kreov Meourn	F	1.50	-	-	-
19	Chun Sreyneang	F	1.00	1.38	-	-
20	Yern Yorb	F	0.50	1.20	-	-
21	Pheak Sienghai	F	-	-	-	-
22	Mory Boren	F	1.00	1.50	-	-
23	Sin Pov	F	0.50	0.50	-	-

24	Kork Brej	F	1.40	1.00	-	-
25	En Sophea	F	-	-	-	-
26	Nam Phally	F	-	-	-	-
27	Nheav Dy	F	-	-	-	-
28	Khrouch Veasna	F	-	-	-	-
29	Kum Ny	F	-	-	-	-
30	Vis Ksoy	F	-	-	_	_
31	Hoa Chea	F	0.30	-	_	_
32	Chhun Sary	F	1.00	1.00	_	_
33	Jrong Savet	F	0.50	-	_	_
34	Phoy Peourn	M	2.00	3.50	_	_
35	Til Deng	M	0.40	0.50	_	_
36	Sreysor Sreytha	F	2.00	5.00	_	_
37	Phon Baren	M	1.50	0.60	-	_
38	Nhej Tro	F	1.00	0.50	-	_
39	Khrel Dany	F	0.50	0.30	-	_
40	Sy Thongbai	F	- 0.50	- 0.30		
41	Moa Sary	F	-	-	<u> </u>	
42	Kav Jork	F	-	-	<u> </u>	<u> </u>
43	Sreurs Mach	F	1.00	2.70		-
43	Ry Chealy	F	1.00		-	
45	Ry Cheary Ry Sokny	F	0.50	0.26	-	-
45		F	0.50 2.10	0.36 0.60	-	-
	Ming Samart	F			-	-
47	Chak Pem		-	-	-	-
48	Tam Vanny	M	-	-	-	-
49	Yem Thly	M	- 0.50	- 0.70	-	-
50	Touch Syda	F	0.50	0.50	-	-
51	Boul Somol	M	-	-	-	-
52	Yen Sarith	M	-	-	-	-
53	Jret Thang	F	-	-	-	-
54	Bean Sithat	F				
55	Vann Sreynich	F	-	-	-	-
56	Nith Sreyneth	F				
57	Chhut Bunthai	F				
58	Pheang Chenan	F				
59	Kren Jern	F				
60	Jret Herng	M				
61	Bol Pov	M				
62	Heang Pil	M				
63	Yang Tith	M	1.00	0.70		
64	Tun Visal	M				
65	Som Tann	M				
66	Del Teamann	M	1.00	1.50		
67	Kroy Prius	F				
68	Vun Haj	M				
69	Hy Hen	F				
70	Sroung Jret	F	0.30	0.50		
71	Srey Keo	F				
72	Lux Vannthan	M	0.50			
73	Chhan Saron	M				
74	Pil Him	F	0.70	2.00	0.50	1,000.00
75	Hem Pheourng	F	0.80	1.00		•
76	Khel Kin	M				
77	Touch Channthorn	M				
78	Kvet Sareourn	M	1.00	2.00		
79	Mej Seourn	F				
80	Proy Theourn	F	1.50	2.70	1.30	1,000.00
00	110j Illeouili	1	1.50	2.70	1.50	1,000.00

81	Chham Nin	F	0.50	1.40		
82	Pok Peav	F				
83	Poy Morn	F	2.80	1.70		
84	Keov Kimsean	F				
85	Horj Thork	M	2.00	1.80		
86	Leng Say	F				
87	Mey Sinat	M				
88	Lay Theourt	F	1.00	1.50	-	-
89	Chrong Salort	F	0.50	1.00	-	-
90	Ker Khej	M	-	-	-	-
91	Kheoun Rounh	M	0.50	1.00	-	-
92	Yeourn Sophorn	M	-	-	-	-
93	Hong Jak	M	1.00	1.00	-	-
94	Hean Sokly	F	2.00	1.50	-	-
95	Yeng Bopha	F	1.50	1.50	-	-
96	Ry Phally	F	-	-	-	-
97	Hean Chann	M	-	-	-	-
98	Heang Hornh	M	2.00	2.50	-	-
99	Thol Therl	M	1.00	1.50	-	-
100	Chhorn Chhim	M	1.00	1.20	-	-
101	Yeng Channthat	F	1.00	1.50	-	-
102	Souy Ratha	M	0.14	0.60	•	•
103	Chak Pleang	M	1.00	1.20	•	•
104	Preng Peourn	M	0.50	0.75	•	•
105	Yiv Heng	M	3.00	4.50	1.00	1,000.00
106	Hour Ean	F	-	=	-	-
107	Nheav Phourn	F	-	=	-	-
108	Mi Klak	M	1.00	1.00		
109	Hong Peourn	M	1.00	1.00		
110	Kreng Pey	F	1.00	1.20		
111	Poj Preing	M				
112	Pung Via	M	1.00	1.00		
113	Sreork Pich	M	-	-	-	-
114	Srey En	F	2.00	1.50	3.00	1,000.00
115	En Mi	M	0.50	1.40		
116	En Nang	F	0.50	1.40		
117	Thak Leang	F	0.50	1.40		
118	Yek Leap	M	0.50	1.40		
119	Mourn Mal	M	1.00	1.20		
120	Morng Ing	M	-	-	-	-
121	Eoung Sokheng	F	-	-	-	-
122	Treork Ngov	M	-	=	-	-
	Total (t)		61.94	74.54	5.80	-

**Annex 4.5: List of Families Raising Animals and Livestock** 

No	Name	Sex	Cow	Buffalo	Swine/Mice Pig	Chicken	Duck
1	Beb Srenich	F	=	-	-	-	-
2	Sreork Dol	F	-	-	-	3	-
3	Sreorb Thol	F	3	-	-	20	-
4	Saem Chhunheng	M	-	-	-	-	-
5	Ngit Eath	F	-	-	-	5	-
6	Chhit Sokhon	F	-	-	-	3	100
7	Nek Kanes	F	-	-	1	-	-

8	Pil Leam	M	-	-	-	5	-
9	Amperj Yek	F	-	-	-	-	-
10	Chrouj Pum	M	-	-	1	3	-
11	Pem Brom	F	-	-	-	10	10
12	Vann Yem	F	-	-	-	5	8
13	Set Kimsan	F	-	-	-	2	-
14	Nhek Tan	F	-	-	4	5	-
15	Er Jok	F	-	-	2	-	-
16	Kreok Lert	F	-	-	-	3	-
17	Krel Taen	F	-	-	-	-	-
18	Kreov Meourn	F	-	-	10	-	-
19	Chun Sreyneang	F	-	-	40	20	-
20	Yern Yorb	F	-	-	5	3	-
21	Pheak Sienghai	F	-	-	40	20	-
22	Mory Boren	F	-	-	-	20	-
23	Sin Pov	F	-	-	-	10	-
24	Kork Brej	F	-	-	8	4	-
25	En Sophea	F	-	-	-	20	-
26	Nam Phally	F	-	-	-	50	-
27	Nheav Dy	F	-	-	2	10	-
28	Khrouch Veasna	F	-	-	-	-	-
29	Kum Ny	F	-	-	-	-	-
30	Vis Ksoy	F	2	-	-	10	-
31	Hoa Chea	F	-	-	-	10	-
32	Chhun Sary	F	-	-	-	2	-
33	Jrong Savet	F	-	-	-	5	-
34	Phoy Peourn	M	-	-	-	19	15
35	Til Deng	M	-	-	-	-	-
36	Sreysor Sreytha	F	-	-	4	-	-
37	Phon Baren	M	-	-	10	10	-
38	Nhej Tro	F	-	-	3	-	-
39	Khrel Dany	F	-	-	-	-	-
40	Sy Thongbai	F	-	-	-	-	-
41	Moa Sary	F	-	-	-	-	-
42	Kav Jork	F	-	-	-	17	5
43	Sreurs Mach	F	-	-	22	30	-
44	Ry Chealy	F	-	-	-	-	-
45	Ry Sokny	F	-	-	-	-	-
46	Ming Samart	F	-	-	-	35	-
47	Chak Pem	F	-	-	-	10	-
48	Tam Vanny	M	-	-	-	40	-
49	Yem Thly	M	1	-	-	6	=
50	Touch Syda	F	4	-	-	-	-
51	Boul Somol	M	-	-	-	-	=
52	Yen Sarith	M	-	ı	-	10	-
53	Jret Thang	F	-	-	8		=
54	Bean Sithat	F				5	
55	Vann Sreynich	F	-	-	-	10	-
56	Nith Sreyneth	F					
57	Chhut Bunthai	F					

58         Pheang Chenan         F         20           59         Kren Jern         F         2           60         Jret Herng         M         8         20           61         Bol Pov         M         6         6           61         Bol Pov         M         6         6           62         Heang Pil         M         60         6           63         Yang Tith         M         60         6           64         Tun Visal         M         60         6           65         Som Tann         M         10         6           66         Del Teamann         M         10         6           67         Kroy Prius         F         10         6           68         Vun Haj         M         10         6           69         Hy Hen         F         12         5           71         Srey Keo         F         12         5           71         Srey Keo         F         7         12         5           73         Chhan Saron         M         -         -         -         4         -           75	
60         Jret Herng         M         8         20           61         Bol Pov         M             62         Heang Pil         M             63         Yang Tith         M              64         Tun Visal         M  <	
61       Bol Pov       M         62       Heang Pil       M         63       Yang Tith       M         64       Tun Visal       M         65       Som Tann       M         66       Del Teamann       M         67       Kroy Prius       F         68       Vun Haj       M         69       Hy Hen       F         70       Sroung Jret       F         71       Srey Keo       F         72       Lux Vannthan       M         73       Chhan Saron       M       -         74       Pil Him       F       -       -       4         75       Hem Pheourng       F       -       -       10       -         76       Khel Kin       M       -       -       -       5       -         78       Kvet Sareourn       M       -       -       -       -       -       -	
62         Heang Pil         M         60           63         Yang Tith         M         60           64         Tun Visal         M         60           65         Som Tann         M         10           66         Del Teamann         M         10           67         Kroy Prius         F         10           68         Vun Haj         M         10           69         Hy Hen         F         12         5           70         Sroung Jret         F         12         5           71         Srey Keo         F         F         9           73         Chhan Saron         M         -         -         4         -           74         Pil Him         F         -         -         1         -         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         -         -           78         Kvet Sareourn         M         -         -         -         -         -	
63       Yang Tith       M       60         64       Tun Visal       M       60         65       Som Tann       M       10         66       Del Teamann       M       10         67       Kroy Prius       F       10         68       Vun Haj       M       10         69       Hy Hen       F       12       5         70       Sroung Jret       F       12       5         71       Srey Keo       F       7       12       5         72       Lux Vannthan       M       9       9         73       Chhan Saron       M       -       -       4       -         74       Pil Him       F       -       -       1       -         75       Hem Pheourng       F       -       -       -       10       -         76       Khel Kin       M       -       -       -       5       5         78       Kvet Sareourn       M       -       -       -       -       -       -	
64         Tun Visal         M           65         Som Tann         M           66         Del Teamann         M           67         Kroy Prius         F           68         Vun Haj         M           69         Hy Hen         F           70         Sroung Jret         F           71         Srey Keo         F           72         Lux Vannthan         M           73         Chhan Saron         M           74         Pil Him         F           7         -         -           75         Hem Pheourng         F           76         Khel Kin         M           77         Touch Channthorn         M           78         Kvet Sareourn         M	
65         Som Tann         M           66         Del Teamann         M           67         Kroy Prius         F           68         Vun Haj         M           69         Hy Hen         F           70         Sroung Jret         F           71         Srey Keo         F           72         Lux Vannthan         M           73         Chhan Saron         M           74         Pil Him         F           75         Hem Pheourng         F           76         Khel Kin         M           77         Touch Channthorn         M           78         Kvet Sareourn         M	
66         Del Teamann         M         10           67         Kroy Prius         F	
67       Kroy Prius       F         68       Vun Haj       M         69       Hy Hen       F         70       Sroung Jret       F         71       Srey Keo       F         72       Lux Vannthan       M         73       Chhan Saron       M       -       -       -       4       -         74       Pil Him       F       -       -       10       -         75       Hem Pheourng       F       -       -       -       10       -         76       Khel Kin       M       -       -       -       5       -         77       Touch Channthorn       M       -       -       -       -       -         78       Kvet Sareourn       M       -       -       -       -       -       -	
68         Vun Haj         M         10           69         Hy Hen         F         12         5           70         Sroung Jret         F         12         5           71         Srey Keo         F         -         -         -           72         Lux Vannthan         M         9         -         -         -         4         -           73         Chhan Saron         M         -         -         -         4         -           74         Pil Him         F         -         -         -         10         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         -         -         -           78         Kvet Sareourn         M         -         -         -         -         -         -         -	
69         Hy Hen         F           70         Sroung Jret         F           71         Srey Keo         F           72         Lux Vannthan         M           73         Chhan Saron         M           74         Pil Him         F           75         Hem Pheourng         F           76         Khel Kin         M           77         Touch Channthorn         M           78         Kvet Sareourn         M	
70         Sroung Jret         F         12         5           71         Srey Keo         F         -	
71         Srey Keo         F           72         Lux Vannthan         M           73         Chhan Saron         M         -         -         -         4         -           74         Pil Him         F         -         -         -         1         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -         -	
72         Lux Vannthan         M         9           73         Chhan Saron         M         -         -         -         4         -           74         Pil Him         F         -         -         -         1         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -         -	
73         Chhan Saron         M         -         -         -         4         -           74         Pil Him         F         -         -         -         1         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -         -	
74         Pil Him         F         -         -         1         -           75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -	
75         Hem Pheourng         F         -         -         -         10         -           76         Khel Kin         M         -         -         -         5         -           77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -         -	
76       Khel Kin       M       -       -       -       5       -         77       Touch Channthorn       M       -       -       -       5       5         78       Kvet Sareourn       M       -       -       -       -       -	
77         Touch Channthorn         M         -         -         -         5         5           78         Kvet Sareourn         M         -         -         -         -         -         -	
78 Kvet Sareourn M	
79   Mej Seourn	
80 Proy Theourn F 2 -	
81 Chham Nin F - 12 20 -	
82 Pok Peav F 10 -	
83 Poy Morn F 30 -	
84 Keov Kimsean F - 3 6 -	
85 Horj Thork M 30	
86 Leng Say F 15 -	
87 Mey Sinat M 6 - 10 20	1
88 Lay Theourt F 5 -	
89 Chrong Salort F	
90 Ker Khej M 5 -	
91 Kheoun Rounh M 10 - 10	
92         Yeourn Sophorn         M         -         -         -         -         -	
93   Hong Jak   M   -   -   50   -	
94   Hean Sokly   F   -   -   5   -	
95 Yeng Bopha F 5 -	
96 Ry Phally F	
97 Hean Chann M	
98 Heang Hornh M	
99 Thol Therl M 6 -	
100 Chhorn Chhim M 10 -	
101 Yeng Channthat F	
102 Souy Ratha M 20 -	
103 Chak Pleang M 30 -	
104 Preng Peourn M	
105 Yiv Heng M 20 -	
106 Hour Ean F 20 -	
107 Nheav Phourn F	

108	Mi Klak	M	-	-	-	3	-
109	Hong Peourn	M	-	-	-	-	-
110	Kreng Pey	F	-	-	-	5	-
111	Poj Preing	M	-	-	-	20	-
112	Pung Via	M	-	-	-	-	-
113	Sreork Pich	M	-	-	-	5	-
114	Srey En	F	-	-	-	5	-
115	En Mi	M	-	-	12	20	-
116	En Nang	F	-	-	12	20	-
117	Thak Leang	F	-	-	12	20	-
118	Yek Leap	M	-	-	12	20	-
119	Mourn Mal	M	-	ı	-	5	-
120	Morng Ing	M	-	-	-	-	-
121	Eoung Sokheng	F	-	-	-	-	-
122	Treork Ngov	M	-	-	-	17	5
	Total		18	3	282	1,013	173

**Annex 4.6: 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	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. 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
CT 4	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
GE #	implementation of contract agricultural production
CF 5	Training on procedure for requesting and preparation of relevant documents
CE (	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: $\square$ Male $\square$ Female
2. Indigenous People: $\Box$ Tumpoun $\Box$ Tumpoun $\Box$ Pou Nong $\Box$ Tumpoun $\Box$ Mil
Tumpoun
☐ 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 Tumpounide the dissemination?						
☐ Ministry of Agriculture, Forestry and Fisheries						
☐ Ministry of Land Management, Urban Planning and Construction						
☐ Tumpounincial Department of Agriculture, Forestry and Fisheries						
☐ Tumpounincial 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/	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? $\Box$ 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.)						
	l .	ı	I.	I .	II.	
2.4 Livestock ☐ No ☐ Yes (If so, please verify below:)						
2.4.1 Cow:, Buffolo:, Pig:, Chicken:	, Duc	k:	,	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:			(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					l
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? $\square$ No $\square$ Yes	(If	so, j	please	verify	r
below)					
2.5.2 Sell quantity: (kg), Price: (Riel/	κg)				
2.5.3 Do you want to do aquatic farming? $\Box$ Yes $\Box$ No	(If	so, p	olease	verify	r
below)					
2.5.4 Please Tumpounide your reasons why do not want to do the aquatic		_			
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					
$\square$ Agricultural cooperative to which it is a member (If the responde	nt is	a m	ember	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					
$\square$ By organizing a matching forum from relevant ministries and institution	ons				
2.6.4 Have you ever attended a contract farming training course?					
□ No					
□Yes					
2.6.5 Which ministry or institution is organized by?					

☐ Tumpounincial Department of Agriculture, Forestry and Fisheries
☐ Department of Agro-Industry
□ NGOs
☐ Private sector engaged in contract farming
2.6.6 Transportation
$\square$ Bulldozer $\square$ Tractor $\square$ Motorcycles $\square$ Horse-drawn carriage $\square$ Car
2.6.7 Challenges
☐ Low selling price
☐ Lack of buyers
☐ Lack of market information
☐ Lack of drying facilities
$\square$ 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? $\Box$ Yes $\Box$ 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 priori	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 $(\checkmark)$
☐ 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
$\square$ 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
$\square$ 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
$\square$ 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 4.8 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)
An	nount of member: (Number of women:)
9.	What careers does that producer group do?
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:(Number of women:
	)
	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?
☐ 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?
$\square$ 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?
$\square$ No
☐ Yes (Please specify in the following question)
25. How much do you spend it?
Please specify: (Riel)
Thanks you!

**Annex 4.9 Some activities during data collection** 

