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Project name	Dak Cheung Food Security Project
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Type of report	Project Final Evaluation – Final component
Brief abstract (description of project)	DFSP project is funded by EU for 3.75 years with two year extension for exit strategy, with the specific Objective: To Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks., Sekong Province working in 20 villages in Dak Cheung district.
Program (higher-level) Goal (to which the project contributes)	Overall Objective: To support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.
Project Purpose / Goal/ Specific Objective (for which project is accountable)	Specific Objective: To Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks.
Objectives / ERs (more specific outputs/ outcomes)	<p><b>Result 1:</b> Increased productivity of household staple foods, fats and protein production systems.</p> <p><b>Result 2:</b> Expanded income generating assets (livestock, coffee) of the poor, generating significant additional incomes.</p> <p><b>Result 3:</b> Improved women's food utilization skills and reduced women's labour burden.</p> <p><b>Result 4:</b> Strengthened village and District technical skills and capacities associated with project promoted food and income production systems.</p>
Evaluation Methodology	The EoP Evaluation included two components of assessment; (1) gender and (2) agriculture/livelihoods which provide the combined evidence for this final report. The methodology was to assess and document the project's achievements and performance against the criteria for standard evaluations and the project logical framework' To assess the impact of the project; To identify and document lessons learned and recommendations to improve future programming.
Summary of lessons learned (evaluation findings of interest to other audiences)	Gender and women empowerment were key points in the implementation strategy of DFSP project. Actually that strategy did enable to reposition women in a more empowered role (at both household and village levels) in village governance through giving them voices during the whole project cycle management and participating to all steps of project implementation, and particularly in village committees and capacity building sessions.

	<p>Poor households were the other focused group in the project strategy. Therefore project implementation has been carried out with activities prioritizing poor households but without excluding the better-off villagers which has finally given excellent results while maintaining village solidarity and avoiding internal conflicts.</p> <p>However, project activities and monitoring should be more intense and concentrated in DFSP target villages where food security remains at a critical level with an analysis of the reasons of slow activity progress and the identification of actions to be conducted. These villages need probably a longer period of project implementation.</p> <p>The promotion and development of new production systems (with coffee and fish productions) have been successful (in terms of adoption, economic impact and sustainability) thanks to the combination of favourable agro-ecological conditions, appropriate project support and farmers' interest for adopting these new systems in spite of many constraints related to Dakcheung context. Upland crops (particularly cassava) and vegetable productions have also given good economic results. On the other hand, constraints related to animal health as well as paddy rice production limitations should be analyzed and discussed with the farmers in the future in order to multiply the current impact of the related activities (animal vaccination campaign and irrigation infrastructures for paddy fields).</p>
Contribution to MDG(s)?	MDG 1 – Halving poverty, hunger and malnutrition levels, MDG 3 – Promote Gender Equality and Empower Women



**Dak Cheung Food Security Project**  
**End of Project Evaluation**  
**Final report**

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## LIST OF ACRONYMS

CLTS: Community Led Total Sanitation  
DAFO: District Agriculture & Forestry Office  
DFSP: Dakchung Food Security Project  
DPI: Department of Planning & Investment  
DRR: Disaster Risk Reduction  
HH: Household  
LANGOCA: Lao Australia NGO Cooperation Agreement  
LANN: Linking Agriculture, Natural Resource Management and Nutrition  
LWU: Lao Women Union  
MAF: Ministry of Agriculture & Forestry  
MDG: Millenium Development Goal  
MoFA: Ministry of Foreign Affairs  
NAFRI: National Agriculture & Forestry Research Institute  
NGPES: National Growth and Poverty Eradication Strategy  
NSEDP: National Socio-Economic Development Plan  
NTFPs: Non-Timber Forest Products  
PAFO: Provincial Agriculture & Forestry Office  
PWED: Partnerships for poverty reduction and women's empowerment in Dak Cheung project  
UXO: Unexploded Ordnance  
VWV: Village Veterinary Worker  
WASH: Water Sanitation Hygiene  
WINGs: Women Income Generation and Nutrition Groups

## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

1. Care International has been implementing since 1992 several rural development projects in Lao PDR and has been working in Sekong province since 2007.

2. The DFSP project started in April 2010 and has been implemented for 45 months (until December 2013). The project mainly financed by EU (with additional funding from MoFA Luxembourg and CARE) covered 20 poor villages from Dakcheung district of Talieng and Katu ethnic communities.

3. Dakcheung district – Sekong province, located in the Southern part of Laos, is one of the poorest districts in the country with 66% of its villages classified as poor and over 50% of the households under the poverty line. The population belongs to the Mon-Khmer ethno-linguistic group (mostly Talieng and Yae ethnic groups).

4. Villagers have been integrated to Dakcheung district town market for many years which has facilitated the development of cash crops production systems although village accessibility as well as access to district market and services is extremely difficult in rainy season.

Farming systems are mainly and historically based on upland rice and animal production systems, completed by small vegetable gardens and collection of wild products (NTFPs and wild animals). More recently paddy rice and coffee production systems have been developed.

The socio-economic differentiation depends mainly on productive capital and access to labour force. The food situation is quite weak and food security is not generally ensured due mainly to multiple hazards during the growing/raising cycle.

5. The evaluation mission has been organized with two consultancy expertises, the first one on food security issues and the second one on gender issues. Due to many constraints, the number of villages (4) where surveys have been conducted was quite low and probably do not represent the diversity of situations and farming systems as they were selected among the few accessible villages.

Both consultants have based their work on (i) a review of the existing literature, (ii) semi-direct interviews with key project (or government staff), (iii) plenary meetings at village level with groups of men/women and (iv) semi-direct interviews with individual male/female farmers and key female/male villagers (members or leaders of village committees and women groups).

### **RELEVANCE AND PROJECT DESIGN**

6. The DFSP overall objective is “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 in Lao PDR” and its specific objective is “to Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks”.

The activities of the DFSP project aim at (i) supporting food security and reducing vulnerability of the poor households, (ii) increasing sources of cash incomes of the poor households and (iii) reducing women' workload and facilitating gender equality and women empowerment.

All of these objectives are highly relevant with government strategy and plan (such as NGPES, NSEDP, Millennium Development Goal and strategic programs of MAF).

7. The DFSP project activities are generally highly relevant regarding villagers' needs and agro-ecological and economic environment.

The productive activities (aiming at improving and increasing paddy rice, coffee, vegetable, upland crops, fish and animal productions) are relevant as they contribute to improve food security and increase cash incomes. However, the construction of irrigation schemes and the animal vaccination campaigns seem to be the less relevant DFSP productive activities: on the one hand, performances of paddy production systems are limited by many other constraints than water control and on the other hand animal vaccination will be more relevant if associated with a whole package of activities related to animal production.

The other activities (construction of road/water supply infrastructures, reduction of women workload, training on nutrition, capacity building for villagers and district staff) are also very relevant as they respond to villagers' needs and priorities and they contribute to improve villagers' livelihoods (better food security and higher levels of cash income). However, the relevance (and impact) of training on nutrition would have been higher in the long term if that activity had been integrated in a broader component (related to health issues).

8. DFSP project has given a specific attention to gender issues through the establishment of women groups and the implementation of many project activities through women. That specific implementation method has revealed a very high level of relevance as it has enabled to reach a higher level of community participation and to facilitate community and rural development.

The project did supply most of the inputs and equipment on a free basis in order to facilitate activity implementation. Considering the different constraints for project implementation and the short implementation project period, that implementation method has been particularly relevant in order to reach the other targeted group (poor households).

The choice of promoting new agricultural systems with for some of them medium or long-term impacts (like coffee production) was not really relevant considering the short project implementation period and the constraints related to Dakcheung environment. However, these activities (like fish or coffee production, coffee processing and marketing) were definitely relevant. Moreover, CARE has already designed a new project (PWED), integrating the 20 target villages of DFSP project in order to keep on promoting and developing those new agricultural systems.

## **EFFECTIVENESS**

### *Increased productivity of household staple foods, fats and protein production systems (result 1)*

9. Four irrigation schemes systems have been built in 2 villages (for a total area of 31.8 ha) for 55 households (of which 28 are poor) with the contribution in labour and basic material of the

beneficiaries. Farmers have been supplied with rice seeds and have been trained on technical issues. A village water use and management committee has been organized in order to ensure technical and financial sustainability.

If the level of achievement of the planned activities is quite high (respectively 100% and nearly 70% in terms of respectively area and number of poor beneficiaries), the result in terms of increased paddy production has not been so important (under the baseline data for the rainy season 2012 and around 20 and 75% over the baseline during the dry season 2013 in the 2 villages beneficiaries). The expected result (75% in average over the baseline) will probably be reached only during growing seasons with favourable climatic conditions, even if it seems that the beneficiaries will prefer to grow dry season paddy rice (which gives generally better results). Actually the potential paddy production in Dakcheung villages is limited by the climatic conditions (low temperatures), animal and pest damages as well as inefficient fencing practices.

10. The project did support through cash for work system the digging of 218 fish ponds, of which 136 will benefit to poor households, by providing fingerlings, vegetable seeds for fish feeding and technical training. At the time of evaluation field work (one month before the end of the project), due in particular to delays in UXO clearance operations, 54 fish ponds were not yet fully completed.

Fish production is variable according to the level of adoption of fish production techniques and access to labour force. But we can consider that 80% of fish production systems are (or will be) operational. However, at the moment, many farmers have not yet collected any fish and as a result the activity is only potentially achieved (objective of 100 integrated fish production systems for poor households).

In order to avoid any spontaneous construction of fish ponds (with the risks related to the presence of UXOs), the project staff has wisely decided to support all farmers who want to develop fish production. The criterion for the expected result of that activity (related to spontaneous diffusion of fish production systems) was not any longer relevant.

11. 32 farmers were supplied with seeds or vegetative material in 2012 in order to promote and develop integrated upland systems (upland rice mixed with cassava, corn, peanut, sesame and potato) and diversify villagers' daily diet. In 2013, 242 new households did benefit from the same activity what seems to reflect a real interest for these cropping systems.

The results in terms of production and yield are very variable according to the crops. Actually only peanut and cassava (also used for pig feeding) have given very good results particularly through a large adoption and diffusion of production techniques. All the criteria of evaluation (achievement of planned activity and expected result) are fully achieved.

#### *Expanded income generating assets of the poor, generating significant additional incomes (result 2)*

12. The project has supported the establishment and the development since 2011 of 424 coffee plantations (220 poor households) if we consider the 219 coffee plantations established by former LANGOCA project and then handed over at seedling stage to DFSP project staff who did manage them from there on.

DFSP did not establish 400 new coffee plantations (the criterion of achievement of the activity related to coffee production was the establishment of 400 coffee plantations for 400 poor households) due to UXO constraints (UXO clearance costs and time).

At the end of project most of the coffee plantations have not yet given full production: some DFSP target villages who have just established their plantation will not be able to harvest before 2014/15 as LANGOCA and some other DFSP target villages have obtained their first (low volume) production last year.

The potential production will be variable (between villages and among villagers), depending mainly on farmers' experience and capacities as well as available family/external labour. Farmers who lack of experience will harvest an average production of 3 kg of red cherries per tree.

13. The project has contributed to improve coffee processing techniques (in 5 villages where farmers have been producing coffee for 5-6 years) by supplying coffee-mills and various equipment and training coffee producers on processing and marketing.

Cooperatives of coffee producers have been organized in 2011 in each of these 5 villages but today all villagers are members of those cooperatives. A village committee has also been organized in order to ensure the technical and financial maintenance of coffee-mills.

The amount of coffee processed was 12 t in 2012 and about 10 t in 2013 with a number of farmers using processing techniques estimated at 2/3 of the population. Generally farmers do not process all their production due to unfavourable climatic conditions (rainy conditions) which limits the economic benefit of processing techniques.

The estimated production of processed coffee is about 20% of the whole production in these 5 villages but processed coffee (with suitable weather conditions) can be sold at 12-13,000 K/kg while black coffee cherries (natural drying) are paid only 4000 K/kg.

14. The project has made specific efforts in order to improve animal health and reduce animal mortality by organizing animal vaccination campaigns, supplying equipment (in order to improve cold chain for vaccines), identifying, training and monitoring VVWs.

In 2013, in the 20 target villages, at least 325 households (around 35%) have expressed their interest for animal vaccination and have paid for vaccination services (both criteria of evaluation for the achievement of the activity related to animal vaccination and its expected result are fully satisfied). Actually, in 2013, around 80% of the poultry, 60% of the pigs and 10% of the cows/buffaloes have been vaccinated (according to the project staff).

We can estimate that the animal mortality rate has been decreased (for the vaccinated animals) by 40%, particularly for pigs and poultry. But that figure is only an estimated average as it seems that the animal mortality rate is still very variable between villages.

15. The initial project design was planning the construction or/and repair of 6 km of tracks as 3 villages (before project implementation) did not have road access.

But as logging companies did undertake those construction works, DFSP activities related to road infrastructures were thus limited but the project did improve market and village access through the construction of a bridge between Daknoy, Daksa and Daksieng and the disposal of 44 culverts on 10 sites for 6 villages. Access to district market and services is still considered as

a main priority (as many villagers wishing to buy a motorbike). The expected result related to road infrastructures repairs or construction (use of road infrastructures by at least 85% of the households to access markets) is definitely reached.

A village committee (for road infrastructures use and maintenance) has been organized and trained in order to ensure technical and financial sustainability of the works.

*Improved women's food utilization skills and reduced women's labour burden (result 3)*

16. Fifteen WINGs have been established and are operating in 15 target villages. The WINGs are in charge of organizing regular meetings where discussions deal with nutrition issues, daily problems and possible solutions. Around 4 to 5 meetings are organized every year with a high number of participants (70 to 80% of the female population) and a good level of participation. WINGs play also a key role in project implementation and coordination with project staff for some of the project activities.

17. Indeed the project did implement with the collaboration of the WINGs activities aiming at reducing women workload, by (i) supplying 6 motorized rice-mills (160 households in 6 villages) and organizing village committees for their use and maintenance, (ii) supporting the construction water rice-mills (under individual management or shared by 2 families) for 112 households in 4 villages) and (iii) providing 145 handcarts to 247 (156 poor) households (individual or collective ownership and management).

Through the WINGs, the project has also supported daily diet diversification by (i) providing 35 pigs (to 35 households) and 420 ducks to 175 (122 poor) households, (ii) a package of 4 fruit trees to 548 (274 poor) households and (iii) vegetable seeds from 8 different species to 274 (118 poor) households.

In particular, women have played a very important role in the establishment and development of the home gardens. And vegetable production has very much impacted on nutritional aspects (diversity of vegetables and longer period of production/consumption) and economic aspects (the economic value of the production of the home gardens has been multiplied by 3 to 3.5 for beneficiaries).

18. A study on current nutritional understandings and traditional practices has been undertaken in 2011. That study gave a comprehensive analysis of child weaning and nutritional intakes as well as the level of understanding of adult women of nutrition and food preparation techniques. Following that study, the project has then organized nutritional training based on the LANN model first for 2 WINGs staff and one district health staff and then a series of sessions on different aspects of nutrition. LANN training has been organized in 16 villages but has not yet been completed.

The first training sessions have been delivered to both men and women as participation was restricted to only 10 female participants per village from the third session. That step was not necessarily a positive management decision, as the program seeks to encourage gender equity and the diversification of male and female roles.

19. According to the gender consultant, all women reported that they had adopted the new cooking techniques introduced through the nutrition training provided by the DFSP and as a whole the nutrition training has been largely successful. But the food security consultant got a different opinion: trainees have acquired some knowledge on nutrition but have not really changed their behaviour in terms of food use or cooking techniques. Therefore the expected result (70% of WINGs members have increased understanding of food and nutrition in 15 villages) has not yet been achieved and will probably be reached only in the long term.

20. The project has constructed with the collaboration of the district staff and the contribution of villagers (in labour force) 3 gravity-fed systems in 3 villages for 266 (84 poor) households and repaired 5 additional systems in 5 other villages for 222 (112 poor) households.

A village water supply committee has been organized, trained and supplied with tools and equipment in order to ensure the technical (local capacity for repairing) and financial (villagers' contribution for covering repairs costs) sustainability of the water supply systems.

That activity did impact positively on the livelihoods of a large population and particularly on human health (access to clean drinking water) and on women workload.

#### *Strengthened village and district technical skills and capacities*

21. The project has contributed to strengthen district technical skills and capacities associated with project promoted food and income production systems (mainly related to agriculture, gender, nutrition and infrastructures fields). More than 30 district staff have joined at least one training session, mainly from DAFO, but also from the other concerned departments, with a very high level of satisfaction (estimated at 90% in average according to the "training cards" scores). In the same way, district staff capacities have also been strengthened through their participation to all consultancy missions with sometimes an additional theoretical training (particularly for data collection and data analysis) and their contribution to the redaction of several publications (reports, handbooks and videos).

As a whole, an important number of district staff has improved their skills in participatory research, problem analysis and intervention design and implementation. However, according to the project manager, district staff has still weak capacities and skills (particularly regarding follow-up & monitoring, data & problem analysis) that will have to be strengthened through future collaboration with new CARE project staff.

22. Villagers have benefited all along the project implementation period from capacity building activities (for the diverse components of the project) with theoretical and on-the-job training. It has resulted in a slow but regular improvement of villagers' technical skills and capacities.

Two on-site placements (in Paksong) have been specifically organized for strengthening capacities on coffee production and/or processing for 74 producers (33 women) from all target villages. Most of the producers who have been sent to Paksong have acquired much knowledge on coffee systems and apply now in their own plantations several techniques they did learn in Paksong.

Regarding the other project activities, the level of adoption of the promoted techniques is generally high (at least 60-70% of the trainees) but variable according to the activity, with for

example nearly 100% of adoption by the villagers for the techniques related to vegetable production or water/motorized rice-mills.

However, villagers' technical capacities still need to be consolidated through further technical follow-up and on-the-job training. Future interventions should assess and identify needs in terms of capacity strengthening and then address them. Exchanges farmer-to-farmer and between villages should be organized to complete the process of villagers' technical capacity building initiated during DFSP project implementation period.

## **EFFICIENCY**

23. A rural development project can hardly be efficient in Dakcheung villages due to the constraints related to its implementation context: limited village accessibility, remoteness and difficult work conditions, vehicle maintenance, high presence of UXOs and possible village resettlement due to potential mining projects

24. In addition, delays for identifying suitable project staff (and a consultant for the nutrition assessment), contracting UXO clearance companies and accessing wood for project office construction has limited even more the effective results of project activities, particularly the activities with medium or long-term impact.

25. But the quality and the commitment of the project staff, the project management and staff structure as well as the establishment of effective collaboration/coordination mechanisms with government authorities have contributed to solve partly the problems induced by that difficult context of intervention.

But considering the high number of constraints the staff has faced during project implementation, DFSP project has been quite efficient. Project efficiency would have been higher with a longer implementation period.

26. The initial budget has been slightly and wisely revised in order to adapt to the project implementation conditions and constraints.

In October 2013, 94.4% of the revised budget plan was already spent. More than 90% of all the sub-lines (except "other costs and services") have been spent without exceeding the revised budget plan (except for "local office").

## **IMPACT**

*Increased food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks (specific objective)*

27. Project productive activities have generally contributed to increase food production of adopting households. The impact of the project is particularly significant on fish production (potential fish production increase estimated at more than 200%) and cassava and peanut production (in upland fields), with an increase equivalent economic value of 57% for the adopting households.

On the other hand, the increase on paddy rice production (due to better water control with the construction of irrigation schemes infrastructures) is not so significant and has been difficult to assess (measured with only 2 cycles of production). Moreover paddy rice production depends on erratic climatic hazards and pest or animal damages and the ratio in terms of cultivated area between dry (with normally higher yields) and rainy season. We can estimate that according to the places, the seasons and the years, the project impact will vary between 0 (no increase) to 40% of increased paddy rice production.

28. The evaluation has reconsidered the calculation for household income (calculated in the baseline assessment), including all sources of income (in kind and cash): rice, upland crop, vegetable and coffee production; fish and animal production; off-farm incomes (collection of NTFPs, fishing and hunting and sale of labour force). The average household income for a poor household (8 persons with 3 adults) before project intervention has been estimated at about 2,020 US\$ per year.

Considering a certain number of assumptions and the potential production of certain medium or long-term activities, the average income for the same poor household after project intervention has been estimated at about 2,240 US\$ per year, what represents an increase of 10.9% and 21.0% if we do not take into account rice production (50% of the annual income).

The criterion of achievement (in terms of increased income) is not achieved (criterion too ambitious) but an increase of more than 10% for the poor households' incomes in only 3 years is already a success regarding the conditions of implementation.

29. 100% of women reported producing new types of food learned through WINGs, both in terms of food produced in the home vegetable gardens and in terms of cooking different varieties of food for household consumption.

That very high impact results mainly from a high level of participation of women (with the WINGs groups) in vegetable cultivation and related training sessions (on technical issues) and a significant upgrading of their knowledge on nutrition and cooking issues (through training on nutrition and transfer of knowledge during WINGs sessions).

*Support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 in Lao PDR (overall objective)*

30. The project has also impacted on the productive assets (paddy rice fields, coffee plantations, fish ponds and stock and animal capital) that poor households own.

Without considering any value for the land price (but only for improvements and plantations), the productive capital for an average poor household was estimated at about 840 US\$ before project intervention and 1,080 US\$ after project implementation. That important increase (more than 28%) in terms of productive capital for an average poor household will be however really effective once fish ponds and coffee plantations will give full production.

31. In addition, all the women (100%) during group discussions have reported an increase in food availability and an increase in cash income.

The women mention first vegetable production as an additional and significant source of food and income. Moreover women reported that now (due to project impact), the families have a better and more regular access to proteins, particularly through fish production.

Finally activities on coffee production (establishment of coffee plantations and promotion of improved coffee processing techniques) had significantly impacted on households' income, particularly in villages where the plantations have been established for several years.

However, the situation reported by women in Dak Vay village is a little bit less positive (project impact still low) due to recent village relocation, and recent establishment of fish ponds and coffee plantations (which have not yet given any benefits in terms of food or income).

## **SUSTAINABILITY**

32. The sustainability of the activities of a rural development project depends mainly on (i) the financial and technical capacities of district staff to ensure follow-up and monitoring after the end of the project, (ii) the capacity of village organizations and leaders to maintain the benefits of the project activities and (iii) the interest and motivation of individual farmers for keeping on implementing activities. For DFSP project, we can distinguish 4 main activities which have a higher likelihood for sustainability: productive activities, equipments and infrastructures, animal vaccination and women groups/nutrition issues.

33. In general, the sustainability of productive activities will be high due to a strong interest of farmers and the economic benefits of those activities.

However a regular follow-up and monitoring from DAFO staff (or possibly CARE new project staff) after the end of the project as well as the supply of barb wire might contribute to maintain and develop coffee and fish production systems.

However, the sustainability of some of these activities (or for some of the beneficiaries) will be limited by insufficient technical or economic results, the incapacity of farmers to select and keep seeds and vegetal material or climatic hazards or lack of care (for fish production).

34. The benefits provided by collective equipments and infrastructures are generally considered as very important by the whole population and shared among all the social groups of the community. Therefore these equipments and infrastructures should be successfully maintained by the villagers although irrigation infrastructures and to some less extent coffee mills did produce much more variable benefits for the community.

In addition, village committees established and organized by the project staff will contribute to strengthen the technical and financial sustainability of those equipments and infrastructures. Moreover, it seems that the Talieng communities show a certain level of solidarity (with the poor households) which enables them to find compromises and agreements among the villagers in order to maintain their collective equipments or infrastructures.

However, district staff (and CARE new project staff) will have again a key role (follow-up and monitoring) in strengthening the sustainability of these equipments and infrastructures.

35. The sustainability of animal vaccination campaigns is very much related to their impact. So far, the results (in terms of animal mortality reduction) seem to be very unequal from one village

to another one, resulting probably in unequal farmers' interest for keeping on vaccinating their animals. Extensive information provided by DAFO (and CARE new project) staff will be necessary for a better farmers' understanding on animal vaccination and health issues.

On the other hand, the personal qualities of VVWs and the economic benefit for the VVWs will be determining factors for the organization of animal vaccination campaigns and the participation of the farmers in those campaigns.

At last, the involvement of the DAFO staff in the procurement of vaccines, the organization of animal vaccination campaigns and the follow-up of VVWs will be also a factor facilitating the sustainability of that activity.

36. The action of WINGs groups has been extremely valuable for the implementation of project activities and has largely contributed to the project impact.

However, it seems that without any external support, women will hardly keep on maintaining those activities and probably WINGs meeting will not be organized any longer, as well as nutrition training. District LWU should make efforts in order to sustain in the long term the related activities.

## **LESSONS LEARNED**

37. Gender and women empowerment were key points in the implementation strategy of DFSP project. Actually that strategy did enable to reposition women in a more empowered role (at both household and village levels) in village governance through giving them voices during the whole project cycle management and participating to all steps of project implementation, and particularly in village committees and capacity building sessions.

38. Poor households were the other focused group in the project strategy. Therefore project implementation has been carried out with activities prioritizing poor households but without excluding the better-off villagers what has finally given excellent results while maintaining village solidarity and avoiding internal conflicts.

However, project activities and monitoring should be more intense and concentrated in DFSP target villages where food security remains at a critical level with an analysis of the reasons of slow activity progress and the identification of actions to be conducted. These villages need probably a longer period of project implementation.

39. The promotion and development of new production systems (with coffee and fish productions) have been successful (in terms of adoption, economic impact and sustainability) thanks to the combination of favourable agro-ecological conditions, appropriate project support and farmers' interest for adopting these new systems in spite of many constraints related to Dakcheung context. Upland crops (particularly cassava) and vegetable productions have also given good economic results. On the other hand, constraints related to animal health as well as paddy rice production limitations should be analyzed and discussed with the farmers in the future in order to multiply the current impact of the related activities (animal vaccination campaign and irrigation infrastructures for paddy fields).

## CONCLUSION AND RECOMMENDATIONS

40. The DFSP project can be considered as a good project (particularly if we consider the numerous constraints for project implementation). Most of the criteria of achievement have been satisfied without overspending the planned budget. The DFSP has made a significant positive impact on the livelihoods of all project target villages (improved food security and increased family income) even if the level of that impact has been higher in some sites.

41. The empowerment of women into the project design and implementation has resulted in significant changes in gendered relationships at household and community levels (strengthened position of women in decision-making processes) and finally contributed to the overall success of the project.

42. However, some project results (for medium/long-term impact activities) will be effective only after the end of project implementation; for example, the impact on food production or income generation is still potential for fish or coffee productions.

Therefore the main recommendation will be to keep on implementing, following-up and monitoring the same activities in the DFSP target villages (through the new CARE project budget) in order to ensure activities' results and sustainability.

43. Future action should be based on the following main components: (i) improved techniques for promoted cropping systems, particularly for pest management, fencing and seed improvement issues, (ii) increased post-harvest added value for coffee (processing and marketing), (iii) animal health and vaccination, (iv) strengthening of village committees and organization, (v) project monitoring and evaluation system and (vi) district staff capacity strengthening (training need assessment).

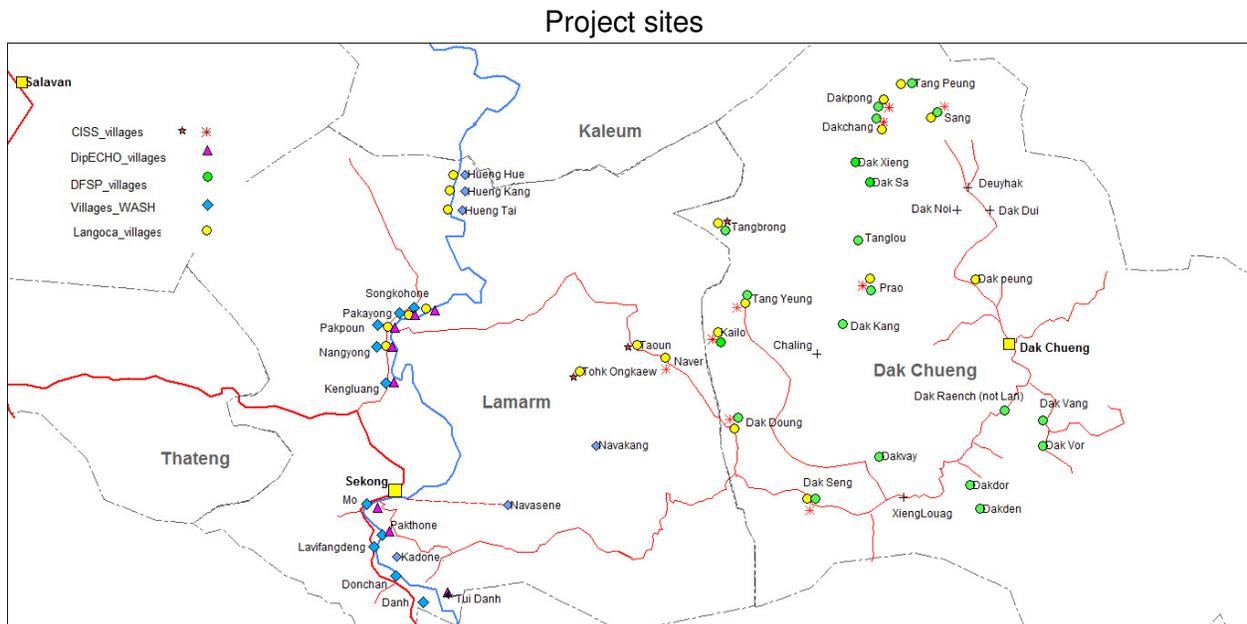
# INTRODUCTION

## 1. Project background

Care International has been implementing several successful projects in Lao PDR since 1992. Since 2007 CARE has been working in Sekong with the 7-year LANGOCA<sup>1</sup> project (initially 5 years with 2 year exit-stage extension) with the aim to link UXO clearance with livelihood development in rural areas. In September 2009 Typhoon Ketsana hit the province resulting in extensive flooding and wide spread crop damage from the wind. CARE responded with emergency programming including food distributions, NFIs, WaSH, and livelihood support.

In 2010, in addition to on-going emergency response programming, CARE started four new projects. This included a CLTS<sup>2</sup> pilot project (CISS), and WaSH<sup>3</sup> recovery project (following on from the emergency WaSH activities), a DRR<sup>4</sup> project and also a 3.75 year livelihoods project – the Dak Cheung Food Security Project (DFSP), as part of the on-going development programming. In 2012 CARE further extended programming in Dak Cheung district to include two livelihood projects and a Disaster Risk Reduction (DRR) project.

The DFSP project started in April 2010 and has been implemented for 45 months (until December 2013). DFSP project has been largely financed by EU and covered 20 targeted poor villages (see below the map of project sites) of Talieng and Katu ethnic groups with co-funding from MoFA Luxembourg. The total budget is 1,149,743 Euros with a total grant of 977,282 from EU, 123514 from MoFA Luxembourg and the rest from CARE.



<sup>1</sup> Lao Australia NGO Cooperation Agreement.

<sup>2</sup> Community-Led Total Sanitation

<sup>3</sup> Water Sanitation Hygiene

<sup>4</sup> Disaster Risk Reduction

The Overall Objective is “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.”

The Specific Objective is “to Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks”.

## 2. Context of intervention

Sekong, located in the southern part of Laos, is among the poorest provinces, and the government classifies two of its four districts as the 72 poorest in the country. Dakcheung district is one of these.

Dakcheung district has a total area of 217,900 ha and a total population of 19,804 inhabitants, of which 9,981 are female (DPI 2009 and Socio-Economic Atlas of Lao PDR). 66% of 80 villages are classified as poor and over 50% of the households are under the poverty line (according to the previous poverty criteria/NGPES).

The district is made up of 80 isolated, remote and poor villages in 8 sub-district areas (clusters of villages). Over an estimated 80% of the population belongs to the Mon-Khmer ethno-linguistic group, and most of them belong to the Talieng and Yae ethnic groups.

All target villages are connected with access roads. Villagers have been integrated to Dakcheung district town market for many years and middlemen can reach villages which facilitates the development and commercialization of cash crops such as coffee. However, village, market and services access is very difficult in rainy season. In the same way the road between Dakcheung and Sekong is not practicable during the rainy season. Connection with the provincial capital can be possible via Attapeu province at the start and end of the rainy season as the connecting road to the south is better (but unsurfaced). During the rainy season access is very limited other than travelling via Vietnam for those with ASEAN travel documents.

Farming systems are mainly and historically based on upland rice and animal production.

Upland rice is generally not associated with other crops (corn, taro, beans, cassava, etc.) like in Northern uplands of Lao PDR. On the other hand some farmers grow independent cassava fields.

Livestock is not really a source of income or meat (only for sacrifices and traditional ceremonies) but rather as a capital-savings (to cover unforeseen costs). But high level of animal mortality rates (very regular destructive epidemics), particularly for pigs and chickens can lead farmers in a decapitalization process.

The farming system is completed by small vegetable gardens during the dry season (mainly Chinese cabbage) and garlic, onion and chilli during the rainy season.

The diet is also supplemented by collection of wild products and hunting and fishing activities but NTFPs is very rarely a source of income.

Farmers according to their agro-ecological conditions and their land and labour availability in recent years have developed paddy production (only one cycle per year) with some local

irrigation systems (for the dry season production) and also coffee plantations (from their experience acquired during daily employment in Champassak province) thanks to the suitable soil and climatic conditions (high elevation, lower temperatures and high level of rainfall).

The socio-economic differentiation depends mainly on productive capital (paddy fields, coffee plantations, animal capital) and the capacity to mobilize (employ) labour force.

The food situation is quite weak and food security is not generally ensured as climatic hazards, pest and animal damages as well as animal mortality result in very low and variable levels of productivity of the production systems.

### 3. Methodology and limitations

#### 3.1. Methodology (see Appendix 6 – Evaluation report of the gender component)

The evaluation mission has been organized with two consultancy expertises, with a food security expert on the one hand and on the other hand a gender expert. Field work and data collection were conducted independently (surveys on food security issues with male villagers and surveys on gender and women activities with female villagers) and regular feed-back and discussions between both experts enable to have a good analysis of the situation in the village and the project activities and its impact. The organization of the evaluation mission with 2 experts was actually extremely valuable.

Due to many constraints (see below paragraph on limitations), the departure for Sekong province and then Dakcheung district had been delayed and the time spent at provincial, district and village levels has been extremely restricted. In addition, the villages where surveys have been conducted (Dakdor, Dakvor, Dakvang, Dakvay) have been selected among the few accessible villages and probably do not represent the diversity of situations and farming systems (the team did not visit any Katu villages).

For the food security expert, there were several types of surveys with different objectives:

- A group (of men) meeting in order (i) to identify according to the level of wealth the main current problems and constraints, (ii) to assess the most successful project activities and their qualitative results, (iii) the project activities that possible future interventions should have to undertake, sustain or develop;
- Semi-direct interviews with individual farmers (mainly poor households) in order to (i) characterize their farming systems, (ii) describe their participation in project activities and (iii) assess the impact of those activities on their livelihood;
- Semi-direct interviews with members or leaders of village committees organized by the project to sustain village equipment and infrastructures and organize animal vaccination campaigns;
- Semi-direct interviews with women (leaders of women groups) in order to discuss about women activities, mainly productive activities and assess the impact of those activities on their livelihood.

At district level, the collection of data has been limited to one main meeting with the project manager, the senior staff (for activities of women groups and for construction works). Both senior staff (for crop and animal production) could not be interviewed as well as both district project coordinators. But many discussions with the project manager (at village and district levels) have been extremely valuable in order to understand and analyze project activities and impact.

At provincial level, we could only meet the provincial coordinators for the Provincial Agriculture and Forestry Office and for Lao Women Union but not the provincial vice-governor who is the chairman of the provincial steering committee.

For the gender expert, the fieldwork was conducted over a period of four days from November 12, 2013 to November 15, 2013 inclusive in 4 villages (the same villages as the food security expert).

The methodology used for the evaluation involved 2 basic activities in each village: (i) a meeting of all available village women to discuss changes in food availability, level of understanding and application of nutritional training delivered during the project, and changes in their level of income and their level of engagement with the WINGs groups, and then (ii) in-depth interviews with 4 women in each village to explore the impact of the project on their food security and level of empowerment in terms of participation in decision-making at the village level and agency at the household level in detail. Interviewees were selected on the basis of their level of income and status in the village, with at least 2 women in each village being from the poorest families, and 2 from those who are slightly better off.

In addition to the in-village activities, in-depth interviews were conducted with 2 key project staff, the project manager and the senior WINGs coordinator. The aim of these interviews was to understand the ways in which the project is implemented, including an analysis of the logics used to decide how project activities and support are distributed at the household level in each village. Distribution of project activities within the village is a complicated process of balancing household need with available household resources (land, access to water sources, and labor) to find the best fit of support and activities for assisting each household. The effectiveness of partnerships between project staff and government were also discussed in the interviews with CARE project staff.

### 3.2. Limitations

Many factors have limited the time spent at village, district and provincial of which:

- An injury of the food security expert and then the possible incidence of a typhoon (Typhoon Haiyan, which influenced rains in Dak Cheung at the start of the dry season) has delayed our departure to Sekong province by 8 days;
- Bad road and weather conditions have limited village accessibility and restricted the sample of villages surveyed;
- Two Lao officials from ministries have refused to sleep in the villages, resulting in restricted time spent at village level for villagers' surveys and data collection.

As a result, the number and the reliability (sample of villages probably not representing the diversity of villages and situations) of the qualitative and quantitative data collected is quite insufficient to conduct an evaluation work. At least two weeks of field work with a restricted team (11 persons in a village is definitely not suitable) would have been necessary to better understand project activities, result and impact.

However, the large contribution of the project staff (mainly the project manager and the senior staff in charge of the activities related to gender and women groups) has compensated (at least partly) these limitations.

## RELEVANCE AND PROJECT DESIGN

### 1. Relevance of project objectives regarding government strategy and plan

The DFSP project has as the overall objective “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR” and as specific objective “to increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks”.

The main objectives of the DFSP activities can be described as follows: (i) supporting food security and reducing vulnerability of the poor households, (ii) increasing sources of cash incomes of the poor households and (iii) reducing women’ workload and facilitating gender equality and women empowerment.

The DFSP objectives are clearly aligned with government strategy and plan (National Growth and Poverty Eradication Strategy – NGPES – and National Socio-Economic Development Plan – NSEDP), particularly through a specific focus on rural development and poverty alleviation with activities aiming at improving agricultural production (for food security and cash income) and service delivery at village level.

In the same way, the DFSP project has contributed to reach the Millennium Development Goal (MDG) 1 (eradication of extreme poverty and hunger) and the MDG 3 (promotion of gender equality and women’ empowerment).

In addition, the activities implemented by the DFSP project comply with at least 3 of 8 strategic programs of MAF which are (i) food security, (ii) commercialization and (iii) shifting stabilization and rural development. Another strategic program of MAF (irrigation) has been also partly covered by the DFSP project through the construction of a few irrigation schemes systems.

As a whole the DFSP project regarding the targeted villages and households objectives and its implemented activities are highly relevant with the government strategy and plan.

### 2. Relevance of project activities regarding villagers’ needs and agro-ecological and economic environment

#### 2.1. Construction of irrigation scheme systems for paddy rice production

The construction of irrigation schemes in order to increase rice production should be highly relevant considering that rice self-insufficiency appears as one of the main problems for the villagers (particularly for the poorest ones).

However, the specific climatic conditions of Dakcheung district (lower temperatures and high level of rainfall) limit the potential of rice production and yield. For example, double-season rice production is not yet possible with the absence of short-cycle rice seeds adapted to the local conditions. Some farmers who were considered better-off have stated that they gave up

producing paddy rice (although they have paddy fields) because “it is not worth producing paddy rice” and prefer to “develop their coffee plantation and buy rice with the sale of the coffee production”.

As a result, the lack of water control and management in the paddy fields is not the only (or the main) problem. If that activity has enabled the beneficiaries from irrigation schemes to shift from rainy season (where climatic hazards such as floods and heavy rain are higher) to dry season rice production with some positive results (see chapter on effectiveness), the action would have been more relevant to implement a set of activities (not only the construction of irrigation schemes) aiming at solving the different problems that limit rice production/yield.

## 2.2. Promotion and development of upland crops

In Dakcheung district, farmers do not generally associate other crops (such as taro, cassava, corn, beans, etc.) with upland rice like in the Northern upland rice cropping systems, and very few villagers (particularly among the poorest households) grow cassava or corn on separate upland fields. As a result, the source of carbohydrates for the villagers’ diet relies mainly on rice. The promotion of integrated upland rice cropping systems (through the distribution of peanut, sesame, corn, cassava and potato seeds or vegetal material) is indeed highly relevant in order to diversify the sources of carbohydrates and also to reduce villagers’ vulnerability (by reducing risks) and to improve food security.

## 2.3. Promotion and development of vegetable production (home gardens)

The source of nutrients and vitamins through the consumption of vegetables and fruits is quite scarce in Dakcheung villages. It mainly depends on some production of Chinese cabbage in dry season and the collection of wild vegetables and fruits in the forest.

As a result, the promotion and development of vegetable production (in the home gardens) is highly relevant for supporting food security and providing nutritional benefits.

## 2.4. Support to coffee production, processing and marketing

The agro-ecological conditions of Dakcheung (soil and climate) offer a high potential for coffee production. In spite of village remoteness, difficult road access and marketing conditions, coffee is definitely the most relevant cash crop in Dakcheung. In 5 target villages of the project, farmers had already developed successfully coffee production.

So all project activities related to coffee production, processing and marketing are highly relevant in order to generate new cash incomes or/and to create added value to the final product (increase of farm-gate prices through coffee processing).

These activities will be even more relevant once road conditions (between Sekong and Dakcheung district) will be optimal.

## 2.5. Promotion and development of fish production

The consumption of domestic animals is limited to a few times a year (even for well-off households) during traditional ceremonies and festivals. As a result the level of proteins in the daily diet of villagers is extremely low and depends mainly on wild fishes or animals.

The establishment of fish ponds and the development of fish production is indeed highly relevant regarding food security and nutritional aspects and possibly (and secondarily according to villagers) for income generation.

## 2.6. Support to animal production through animal vaccination

In Dakcheung villages (like in many other poor villages of the Lao uplands), animal capital is not really considered as a way to generate food or/and income but more surely as a source of savings. But a high level of animal mortality (as it has been reported by farmers in some villages and for some years, mainly for pigs and poultry) can result in a decapitalization process of the production systems.

The promotion of animal vaccination (through the selection and capacity building of Village Veterinary Workers – VVWs) in that context is highly relevant in order to support animal production, maintain animal capital and at the end improve food security and generate cash incomes.

However, that activity would have been more relevant if it was associated with activities aiming at improving the whole animal production systems, mainly related to animal food and husbandry.

Nevertheless it has to be noted that the project (through the distribution of pigs and ducks to the women) has attempted to improve pig husbandry techniques.

## 2.7. Construction and/or repair of infrastructures (water supply systems and road infrastructures)

Road access and improvement of road conditions are always considered by villagers as one of their main priorities (it is also a main priority of the government strategy). Road access is a key factor for rural development in remote areas. Dakcheung villagers have been integrated to Dakcheung district town market for years (according to the PAFO coordinator of the Provincial Steering Committee) and some villagers have also stated that they could move next to the main road (when it will be finalized) if the agro-ecological conditions for agricultural production are suitable.

In that context the construction and/or repair of road infrastructures is highly relevant for access to market and government services and rural development.

In the same way, access to sufficient and clean water is always presented by villagers as a key priority. So the construction and/or repair of village water supply systems are also highly relevant for reducing women workload and possibly improving villagers' health.

## 2.8. Activities related to women workload reduction

Women workload in Dakcheung villages is very high with domestic tasks (rice husking, collection of water and firewood, children care, etc.) but also with agricultural tasks (notably weeding and harvest).

The construction or repair of water supply systems, the distribution of handcarts, the supply of motorized or water rice-mill have been extremely appreciated by the women and also by the men. These activities are thus extremely relevant for reducing women workload but also for alleviating labour force constraints in the farming systems.

## 2.9. Training on nutrition

Nutritional problems seem to be quite important in Dakcheung villages and result not only from insufficient food production but also from (i) incorrect and unsuitable use of food items, (ii) unsuitable cooking practices and (iii) unequal distribution of food among family members.

The project has organized training modules for women (following an assessment of nutrition issues at village level) in order to improve villagers' practices related to their daily diet.

Regarding the problems related to nutrition, these training activities are highly relevant. But on the other hand regarding the challenge (see chapter on effectiveness) to change traditional habits on a very cultural aspect (food use and consumption, cooking practices), it would have been probably more relevant to integrate these activities in a broader component related to all health issues with the mobilization of a long-term senior health staff.

## 2.10. Capacity building (of villagers and district staff)

Capacity building of villagers and district staff is always a key issue in order to ensure sustainability of activities (by the villagers) and their follow-up and monitoring (by district staff).

The DFSP project has been designed with a specific focus on capacity building issues with one full component (result 4) on them, what is highly relevant.

The focus on building or strengthening skills on production techniques for farmers is definitely relevant as many new production systems (and their related techniques) have been promoted by the project.

In the same way, the association of district staff to all external consultancies (field work, data collection and analysis) is also an excellent means for building capacities.

## 3. Relevance of project implementation methods

### 3.1. Establishment of women groups and activity implementation through women groups

Apart the poor households, the DFSP project has focused considerably on the women not only through the organization of women groups and the implementation of activities related to reduction of women workload but also through the assignment of women as direct beneficiaries of some activities (duck and pig raising, vegetable production) and the promotion of gender equality by organizing technical training sessions with 50% female trainees and establishing

village committees (for use, management maintenance of village equipments and infrastructures) with an equal distribution of roles and responsibilities between men and women. If the women contribute highly to the technical and marketing tasks of the agricultural systems, the men still remain the family head and the manager of the production systems. In that way that ambitious and challenging project implementation method could have been questionable as the men could have been destabilized or even refuse the participation of women in the activities.

In fact, the men (in the Talieng villages as we did not visit the Katu target villages) have definitely accepted and supported that reallocation of roles and responsibilities among men and women for project implementation.

The men are also very satisfied with the activities related to reduction of women workload and the activities assigned to women (like vegetable production). They also desire the WINGs activities (women meeting and training on nutrition) to be sustained.

That particular project implementation method which associates the women as much as the men, seems to be finally highly relevant and has probably contributed by giving a voice to the women (capacity strengthening of women has been clearly identified by the provincial LWU as a very positive benefit from the DFSP project) to reach an higher level of community participation and as a result to facilitate community and rural development.

### 3.2. Free supply of agricultural inputs and equipment

The DFSP project has been designed in order to supply agricultural inputs (like seeds, fingerlings, coffee plants, etc.) and equipment (such as handcarts, rice or coffee-mills) without any financial contribution (in cash or through a credit system) from the villagers. The villagers were only providing their labour force (but benefiting from a cash for work system for most of the activities) for pond digging, construction/repair of irrigation schemes, water supply systems and road infrastructures.

That implementation method could have been highly questionable as the participation of farmers might not result from a certain interest and commitment with project activities. Moreover it could result in a complete lack of sustainability of the activities once the project is closed.

However, considering the short implementation project period (45 months), the constraints in Dakcheung district for project implementation (difficult village accessibility, needs for UXO clearance) and the focused group (poor households), that implementation method has been selected in order to facilitate the participation of villagers and particularly of the poorest households. In that context, we can finally consider that this implementation method was relevant.

As mentioned by the project manager, the possible negative consequences (mentioned above) of that implementation method must have been mitigated by a clear and fine identification of farmers' needs and interest and by specific efforts on technical capacity building and follow-up.

### 3.3. Promotion of new agricultural systems (with medium or long term impacts)

The promotion of new agricultural systems (fish production, coffee plantation in 15 villages, coffee processing in 5 villages and animal vaccination) with for some of them medium (fish production) or long-term impacts (coffee production) needed a longer period of project implementation to facilitate technical capacity building and follow-up and finally to produce significant results (in terms of cash income or food production) and ensure the sustainability of the activities. The level of district staff capacities as well as financial limitations could not guarantee the consolidation and follow-up of project activities in the future years.

Considering the quite short project implementation period and the constraints related to Dakcheung environment, that choice of promoting new agricultural systems was not relevant although the activities were definitely relevant.

On the other hand, CARE has already designed a new project, EU funded PWED project (that has been also approved) integrating the 20 target villages of DFSP project. In that way, CARE staff based in Dakcheung district will be able to keep on working on the achievement of the objectives of DFSP project.

## **EFFECTIVENESS** (see also Appendix 4 – Summary of project achievements)

### 1. Increased productivity of household staple foods, fats and protein production systems (Result 1)

#### 1.1. Construction/repair of irrigation schemes systems for paddy rice production

Four irrigation schemes systems have been built in 2 villages (2 in Dakdor and 2 in Dakden villages).

The selection of villages and beneficiaries has been done according to 3 main criteria: (i) technical feasibility, (ii) interest and willingness of farmers and (iii) financial profitability of irrigation infrastructures (potential increase of rice production), with a specific focus on poor households.

The beneficiaries have contributed to the construction of these irrigation schemes, providing their labour (cash for work system organized by the village committee) and basic material (sand, gravel, stones).

Farmers have been supplied with rice seeds (TDK 11) and their capacities (on technical aspects) have been strengthened through training sessions during a study tour in Sekong.

A village water use and management committee has been set up. It is composed of 4 or 5 members, of which 50% are women. That committee has been trained by DAFO staff on water use and management, and maintenance and repair of irrigation infrastructures. They should be able to undertake small repairs. A contribution of 20,000 K per ha per growing season is collected to all beneficiaries to ensure financial sustainability.

#### **The criterion of achievement of that activity was the construction/repair of irrigation schemes for a total of at least 30 ha and 80 HHs.**

The 4 irrigation schemes built cover a total area of 31.8 ha (criteria achieved) for a total of 55 households (criteria achieved at 69%) of which 28 were poor households.

#### **The criterion of achievement of the expected result (R1.1) related to that activity was an increase of paddy rice production by 75% over the baseline.**

The average yield (between dry and rainy season productions) was according to the baseline study 1.27 t/ha in Dakden village and 1.67 t/ha in Dakdor village.

It is difficult to measure the impact of irrigation infrastructures on paddy rice production as we have only 2 data (rainy season 2012 and dry season 2013) in each village, and so is not statistically significant.

However, the paddy production in both villages for the rainy season 2012 has been under the baseline data (0.44 t/ha in Dakden and 1.07 t/ha in Dakdor).

For the dry season 2013, the results are much better with an average yield of 2.02 t/ha in Dakdor (21% over the baseline data) and 2.23 t/ha in Dakden (76% over the baseline data).

It seems that the expected result was too ambitious and will probably not be achieved, except during growing seasons with favourable climatic conditions.

In fact the limited impact of the construction of irrigation infrastructures can be explained by various reasons:

- The production of two cycles of paddy rice on the same plot is not possible due to the length of the production cycle (slow vegetative development due to lower temperatures);
- Some of the farmers were already producing dry season paddy rice through traditional irrigation schemes (but with imperfect water control);
- The production of paddy rice is limited by numerous other constraints such as destruction by rodents, birds and domestic animals, floods (in rainy season) and heavy rain at the flowering stage resulting in not full grain filling (in rainy season).

However, it seems that the farmers who benefit from irrigation infrastructures are willing to shift from rainy season to dry season production (when there are less climatic hazards). Nevertheless, if during the rainy season, domestic animals are excluded from the paddy areas (according to collective village regulations), during the dry season, the rice farmer is responsible for fencing his paddy field which requires cash (if fences are made with barb wire) or labour force investment.

## 1.2. Fish production (in fish ponds)

The project has promoted fish production in 19 villages. The villages which had benefited from that activity were primarily the villages (15) which did not have yet any income from coffee production.

The selection of beneficiaries has been done according to 3 main criteria: (i) poor households, (ii) technical feasibility (lowland areas and water availability) and (iii) interested and active farmers.

That activity has been delayed by UXO clearance which was the initial and essential step before digging the pond.

Then the farmers dug their own pond (individual land and pond) through cash for work system. The size of the ponds is generally 50 to 100 m<sup>2</sup>.

Farmers were supplied with fingerlings (4 fingerlings per m<sup>2</sup>) of 5 main species and forage and vegetable seeds for fish feeding. Farmers were trained mainly on fishery techniques and fish feeding.

### **The criterion of achievement of that activity was the establishment and development of integrated vegetable/forage/fish production systems for 100 poor households.**

So far, 164 fish ponds have been dug and stocked with fingerlings. The project has so far supplied a total of 58,129 fingerlings (of which 30% died before releasing them in the pond).

At the end of the project (54 fish ponds have not yet been completed), 218 individual fish ponds will be established (of which 136 for poor households).

The development of fish production (fish growth rate and size of fishes) is unequal according to the beneficiaries according to their level of adoption of suitable techniques (mainly for animal feeding) and their capacity to allocate labour force for fish feeding.

However, we can consider that fish production systems are (or will be) operating for 80% of the beneficiaries, with a fish production varying between 10 and 5 fishes per kg. As a result the criterion of 100 poor households is fully achieved.

However, at the moment, many farmers have not yet collected any fish (due to delays in activity implementation): fish development takes at least 8 months. As a result we can conclude that the criterion is only potentially fully achieved.

**The criterion of achievement of the expected result (R1.2) related to that activity was the adoption of improved integrated fishery techniques by 50 non-targeted households and the increase of their fish production without subsidy.**

According to the project staff, 70 farmers who did have already fish ponds have adopted integrated fishery techniques (criterion fully achieved).

But in order to avoid spontaneous pond construction (with the risks related to the presence of UXOs), the project has wisely decided to support technically and financially all farmers who want to develop fish production in order to dissuade spontaneous pond construction.

In that way the criterion for that expected result is not achieved but the high risks related to UXO presence makes that criterion quite irrelevant.

### 1.3. Promotion and development of upland crops

The project has promoted the production of upland crops (mainly cassava, corn, peanut, sesame and potato) and the development of integrated upland systems (upland rice mixed with these crops) in order to diversify the sources of carbohydrates for villagers' daily diet.

The selection of villages and beneficiaries has been done according to (i) villages/households that mainly rely on upland rice, (ii) households which are not self-sufficient in rice and (iii) interested and active farmers (including some medium or well-off farmers to be considered as model farmers).

The objective of the project staff was to identify suitable crops and seeds through a consultancy from a national expert of NAFRI and then trials in farming conditions.

32 households (from 16 villages) were supplied with seeds or vegetative material in year 1 (2012). In 2013, 242 households received upland crops seeds or vegetative material. But that large diffusion process did not result only from the success of that activity but also probably from the free procurement of seeds and vegetative material.

In 2012, the project organized on-the-job training sessions for the 32 beneficiaries and exchanges between farmers in 2013 with the other beneficiaries.

**The criterion of achievement of that activity was the adoption by 90% of target farmers of one or more improved varieties of upland crops.**

The results in terms of production and yield are very variable according to the crops.

Sesame has given very bad results and farmers have no more interest in that production.

The level of potato production depends mainly on damages by wild animals. Farmers like potatoes but do not keep any tuber for the next growing season: the level of adoption is quite low.

Corn has given variable results but farmers do not like it much: they would like the project to supply them with other seeds.

On the contrary, peanut and cassava have given very good results. The level of adoption of these 2 cropping systems is very high (maybe because farmers did have already some experience with these 2 crops). Production techniques (including the capacity for seed and vegetative material selection) have been largely diffused. Both products are appreciated as source of food but cassava is also used for pig feeding as peanut can be sold. The criterion for that activity and for these two crops is fully achieved.

**The criterion of achievement of the expected result (R1.3) related to that activity was the increased production of upland crops for 90% of targeted farmers**

All of the beneficiaries of that activity have confirmed an increased production of peanut and cassava (criterion fully achieved).

2. Expanded income generating assets (livestock, coffee) of the poor, generating significant additional incomes (Result 2)

2.1. Promotion and development of coffee production

The project has promoted and developed coffee production in 15 target villages (the other 5 villages had already coffee plantations) through (i) supply of seeds and (ii) technical assistance for nursery and then plantation establishment (mainly through on-the-job training at each production stage but also technical training in Paksong for 49 farmers from 10 villages).

The beneficiaries were selected according to (i) their willingness and interest and (ii) land availability and suitability for coffee production.

The land used for coffee plantation was generally former upland rice fields (where farmers had an usufruct right on land). Once the plantation was established the land status became private (status socially recognized by the community).

**The criterion of achievement of that activity was the establishment of 400 coffee plantations (of 0.25 ha each) by 400 poor households.**

The DFSP has contributed to the establishment since 2011 of 205 coffee plantations (111 for poor households). LANGOCA project had already supported the plantation of 219 coffee gardens (109 for poor households) in DFSP target villages.

Considering these 2 actions the criterion of 400 coffee gardens for poor households has not been achieved (only 55% of achievement).

Actually the LANGOCA coffee plantations were handed over at seedling stage and DFSP project team did manage from there on, so in terms of technical support for the whole coffee cycle production.

Moreover, if the average area of the 424 coffee plantations is indeed 0.25 ha, the area of each plantation is variable, depending on land and labour availability. As a result the criterion achievement is probably lower than 55%.

The fact that DFSP did not establish 400 new coffee plantations can be explained by UXO constraints, UXO clearance costs and time to do it; so it was wisely decided to only combine both areas of coffee plantations from LANGOCA and DFSP projects to reach the criterion of 400 households.

**The criterion of achievement of the expected result (R2.1) related to that activity was the establishment of 350 coffee plantations (of 0.25 ha each).**

Considering LANGOCA and DFSP projects, that criterion is fully achieved with the establishment of 424 new coffee plantations. The same remark can be made for the area of each plantation.

The LANGOCA/DFSP target villagers have already harvested last year but the full production potential will only be obtained in 2013/14.

The DFSP target villages who have just established their plantation will not be able to harvest before 2014/15.

The level of production potential is variable between villages and villagers and depends mainly on (i) the adoption of improved production techniques, (ii) the villagers' experience in coffee production (most of them have been daily workers in Paksong before) and (iii) their capacity to mobilize labour force for fencing and weeding.

We can estimate that the potential production in villages where farmers lack of experience is limited at 3 kg of red cherries per tree (with 3000 trees per ha).

## 2.2. Promotion of coffee processing techniques

The project has promoted improved coffee processing techniques in 5 villages (where farmers have been growing coffee for 5-6 years) through (i) the supply of coffee-mills, (ii) the supply of various equipment in order to improve coffee drying, especially with rainy conditions and (iii) a training and study tour (in Paksong) for 25 farmers from the 5 villages on coffee processing and marketing.

During the first year (2011), 5 cooperatives have been organized in the 5 villages with 95 members. For the years 2012 and 2013, all villagers became members of that cooperative and have the right to use the coffee processing equipment.

A village committee (3 to 5 members) has been organized in order to maintain and repair the coffee-mill. It has been trained by district staff and is now able to undertake small repairs (spare parts are available at district level). A contribution of 3 Kips per kg of milled coffee has been decided by the villagers in order to ensure financial sustainability of that committee (1/3 for the village committee administration costs and 2/3 for repairs and maintenance costs).

**The criterion of achievement of that activity was the increase of the cash incomes of at least 100 coffee producers through the adoption of processing techniques.**

In 2011, only the members of the cooperative (95 farmers) did process their coffee. The amount of coffee processed was 12 t in 2012 and about 10 t in 2013 with a number of farmers using processing techniques estimated at 2/3 of the population (about 170 farmers).

Generally farmers do not use processing techniques for all their production as coffee processing requires sunshine and rainy conditions can result in production losses.

That constraint limits the benefit of coffee processing techniques as most of the farmers decide to sell part of their production as black cherries (natural drying) at only 4000 K/kg.

The estimated production of processed coffee is about 20% of the whole production of these 5 villages.

Nevertheless, processed coffee with suitable weather conditions can be sold at 12-13,000 K/kg, which represents a significant added value for the producers.

**There was no expected result related to that activity.**

2.3. Animal vaccination and Village Veterinary Workers (VVs)

The project has contributed to improve animal health and reduce animal mortality rate through (i) providing one large fridge to the DAFO and 3 small fridges to 3 clusters of villages (in order to ensure an efficient cold chain for the supply of vaccines), (ii) identifying VVs in each target village (2 in small village, 4 in big villages with 50% of women VVs), (iii) training VVs (with theoretical sessions at district level and then practical sessions during animal vaccination campaign) on financial and technical aspects, (iv) planning and organizing with district staff animal vaccination campaigns twice a year.

The criteria of selection of VVs were (i) personal qualities such as self-confidence, leadership and reliability as well as (ii) basic knowledge in arithmetic. Literacy in Lao language was not required to be a VV. In 2013, it seems that VVs have acquired technical capacities and are able to plan, organize and budget vaccination campaigns.

The project has organized animal vaccination campaigns free of charge during the first year (2011) in order to generate farmer demand and willingness. For 2012 and 2013, farmers must pay the cost of services and the project has elaborated a “vaccination strategy” in order to produce a small financial benefit for VVs and make that activity financially sustainable.

**The criterion of achievement of that activity was the emergence of a farmer demand and willingness for livestock vaccination services through efficacy demonstration.**

**The criterion of achievement of the expected result (R2.2) related to that activity was at least 150 households are paying full amounts for pig vaccination services by the end of the project.**

In 2013, in the 20 target villages, at least 325 households (around 35%) have expressed their interest in animal vaccination and have paid for vaccination services (both criteria are fully achieved). During our field work, all farmers interviewed have stated that they vaccinate their livestock twice a year.

In 2013, around 80% of the poultry, 60% of the pigs and 10% of the cows/buffaloes (generally more difficult to catch and living in the upland forests) have been vaccinated.

We can estimate that the animal mortality rate has been decreased (for the vaccinated animals) by 40%, particularly for pigs and poultry. But that figure is only an estimated average as it seems that the animal mortality rate is still very variable between villages, depending on the emergence of diseases/epidemics for which the animals were not vaccinated.

## 2.4. Construction/repair of road infrastructures

Before project implementation, only 3 villages did not have road access. But road infrastructures have been built by logging companies (for Tanglou and Tangbrong) and Dakxieng moves to a new location close to the road. There was indeed no need any more to build road infrastructures.

In addition KfW company conducted a survey in 2011 for the secondary roads Dak Cheung to Tangbrong and Dak Cheung to Dak Vor and beyond. Last year they did the UXO clearance and this year (2014) construction should start; so most of the needs of DFSP villages are covered and DFSP road infrastructures activities are reduced to culvert building where KfW company will not work.

**As a result the criterion of achievement for that activity (improved physical market access through construction/repair of 6 km track and bridge) was no longer relevant.**

However, the project has contributed to improve market and village access through the construction of a bridge between Daknoy, Daksa and Daksieng and the disposal of 44 culverts on 10 sites for 6 villages.

For all works, survey and design were undertaken by project and district staff and villagers provided their labour force through cash for work system.

In the same way as irrigation infrastructures, a village committee was set-up, trained and supplied with equipment and tools but villagers did not bring any financial contribution to that committee.

**The criterion of achievement of the expected result (R2.3) related to that activity was: 85% of households in communities with improved road access utilize road to access markets.**

The villagers in Dakcheung district have been integrated to the market for years. So village and market access is still considered as a main priority. Road repair or construction even improves travel by foot and many villagers have expressed to buy (with potential future cash income from coffee production) a motorbike.

Undoubtedly, 100% of households use road infrastructures to access markets (criterion fully achieved).

## 3. Improved women's food utilization skills and reduced women's labour burden (Result 3)

### 3.1. Establishment of Women Income Generation and Nutrition Groups (WINGs) (see also Appendix 6 – Evaluation of the gender component)

**The criterion of achievement for that activity was the establishment of WINGs in 15 villages.**

That criterion is definitely achieved as 15 WINGs have been established and are operating in 15 target villages (the other 5 villages had previously addressed gender programs through other

approached, e.g. gender negotiation training with the LANGOCA project and will form WINGs this year under the new EU funding).

The WINGs are in charge of organizing the 2-month meetings. Actually due to lack of time and village accessibility for the project staff, 4 to 5 meetings are organized every year. The number of participants is quite high (around 70-80%) of the female population and the level of participation is quite good.

Apart from discussion around nutritional issues (10 women trained on these issues must exchange and transfer knowledge to the rest of the group), most of the discussion focuses on daily problems and possible solutions (to be negotiated by the WINGs committee with the village men and authorities).

There are 4 villages (all located to the north of Dakcheung) that are very difficult to access where poverty levels and food insecurity are still critical. The project staff report that these villages have experienced improvements in their food security, but that extreme difficulties in accessing the villages has impeded the level of support that project staff can offer outside of the main dry season, as well as limiting the access that those villagers have to markets to sell their products.

WINGs play also a key role in project implementation and coordination with project staff for some activities (activities related to reduction of women workload, pig and duck production, vegetable and fruit production).

The process of establishment of the WINGs involves the following steps:

- Project staff calls a meeting of all adult women to ask if they are interested in forming a WINGs group, and if the women are interested, the project staff then guides the women to select group leaders based on the criteria that leaders must be able to read and write Lao language and be respected members of the community.  
Project staff then identifies in a participative way the activities which are the greatest burden or workload for women. The project staff then discusses solutions to address this. As the process of meetings and discussion continued and women saw that activities were implemented in response to their collective opinions, income generation activities suitable for the women were also identified;
- Once a plan for implementing the activity has been developed, the project team return to the village to discuss the management of the activity with the villagers, asking them to develop a plan for management and sustainability of the activity;
- After agreement is reached, the villagers establish who within the WINGs groups will manage the activity with rules governing the activity;
- The WINGs leaders are responsible for running the workload reduction activities implemented under the project and for coordinating with project staff in case of any technical problems with the activity.

Income generation activities are managed in a slightly different way because they are administered on a household-by-household basis. Requests for income generating support such as supply of livestock (pigs and ducks), fruit trees, vegetable seeds, banana plantations, and so on, are made during the WINGs meeting. Following the requests, the project technical staff

examines the resources of each household to assess their capacity to implement the activity or support they have requested. If there is a good fit between the request and the capacity of the household to implement the activity the activity is supplied with training from technical staff on how to implement it successfully. If there is not a good fit between the request and the capacity of the household to implement the activity, project staff return to discuss alternative options with the household members, working collaboratively until an agreement is reached.

6 motorized rice-mills have been provided to 6 villages (160 households) where there was an important need for rice-milling (high production of rice) and where villagers were able to pay rice-mill services.

A village committee has been trained for use, maintenance and repair of rice-mill and a contribution of 1000 Kips/bag has been decided in order to ensure the financial sustainability of that committee (that contribution can vary according to the level of poverty of the families).

In 4 villages (112 households) where there were water sources suitable for powering mills, the project has supported the construction of water rice-mills (individual or shared by 2 families).

The reduction of workload can be estimated at 4 hours per day per family (for both motorized and water rice-mills).

145 handcarts have been supplied to 247 households (156 poor), sometimes to individual families and sometimes shared by 2 or 3 families. Originally WINGs were requesting up to 5 handcarts but the WINGs project team tried to explain them the potential conflicts that it could create but finally in order to avoid disempowerment of the WINGs, the project decided to find a compromise with an average number of 2 or 3 handcarts per family. which can create some conflicts (according to a statement of a Dak Vang villager, it has sometimes indeed created conflicts).

In general, priority is given to poor families which have suitable conditions for using it. The impact in terms of workload reduction is difficult to estimate but seems to be quite high as villagers reported to use handcarts for very different tasks (firewood and water collection, transport of harvests, etc.).

Through the WINGs, the project has supported animal production with the distribution of 35 pigs (1 animal per household) and 420 ducks to 175 households (122 poor households).

Priority was also given to the poor households but pigs were only given to families able to produce animal food.

In the same way a package of 4 fruit trees (mango, jackfruit, longan, guava) was provided to 548 households (274 poor households) with the priority given to the nutrition group members (around 150 women) and the families who lack of fruits in their diet. These fruit trees have not yet given any production but the potential is quite significant in terms of fruits and possible cash income.

Last but not least the women groups were the main vector for the establishment and development of home gardens. Seeds from 8 different crops (Chinese cabbage, spinach, long bean, green bean, cucumber, coriander, salad and morning glory) have been provided to 274

households (118 poor households). Except morning glory, all families are able to select and keep seeds for the next growing season.

Vegetable production is very well appreciated by men and women and it has positively impacted on nutritional aspects (diversity of vegetables and longer period of production/consumption, up to 5 months) and economic aspects (the economic value of vegetable production is estimated at 200-250% of the one before project implementation).

### 3.2. Training on nutrition issues (see also Appendix 6 – Evaluation report of the gender component)

#### **The criterion of achievement for that activity was: nutrition training models developed and undertaken through WINGs in 15 villages.**

In mid 2011, a study was undertaken by an international consultant detailing current nutritional understandings and traditional practices associated with food, infant weaning and feeding and associated health issues in CARE targeted villages. The resulting report (published in August 2011) gives a comprehensive description of child weaning, nutritional intake for children, young people, pregnant mothers and other adults and the level of understanding of adult women of nutrition and food preparation techniques.

Nutritional training for DFSP is based on the LANN (Linking Agriculture, Natural Resource Management and Nutrition) model which is in use across Lao PDR and now also in Burma. Training was conducted in December 2011 on the revised kick off sessions, and in November 2012 for the new 'evening class' sessions that focus on specific food groups.

2 WINGs staff and one district health staff have attended one-week training on LANN.

LANN training has then been organized in 16 villages but has not yet been completed.

LANN training involves a series of sessions, each of which deals with a different aspect of nutrition (sessions are divided into topics such as 'fats', 'proteins' and so on). The program begins with a 'start-up session', which aims to introduce the program and give an overview of the nutritional topics to be covered in the sessions that will follow.

Mother and child health trainings have been delivered as a component of the nutrition training.

The start-up nutrition training and the first nutrition module has been delivered in 16 of the DFSP villages and was attended by both men and women. Following the initial two training sessions, participation was restricted to only 10 female participants per village.

This step was not necessarily a positive management decision, as the program seeks to encourage gender equity and the diversification of male and female roles; moreover, including men in the nutrition training may facilitate cultural change in household food preparation practices more so than if the woman in the household was communicating the new knowledge to her husband without the reinforcement of the project staff. Implementing the nutritional training in all sites across the project area at the regularity originally intended in the log frame has been hampered by the challenges of access to those villages north of Dak Cheung.

**The criterion of achievement of the expected result (R3.2) related to that activity was: 70% of WINGs members in 15 villages have increased understanding of food and nutrition that include diverse, nutritious, locally-available food.**

According to the gender consultant, all women reported that they had adopted the new cooking techniques introduced through the nutrition training provided by the DFSP. More importantly, there was evidence of very good understanding of the nutritional needs of children and young people as the consultant asked questions about the distribution of food at the household level to see if women understood that children and young people have high nutritional needs because they are in a growth phase of physical and intellectual development. Overall the nutrition training has been largely successful.

The food security consultant (who did interview a few women) has a quite different opinion: so far, the women have acquired some knowledge on nutrition (for example they are able to mention the different food groups) but have not really changed their habit/behaviour in terms of food use or cooking techniques (for example, sodium glutamate is still very popular).

The expected result is not yet achieved and will probably be reached only in the long term.

### 3.3. Construction/repair of water supply systems

**The criterion of achievement for that activity is the construction of village water supply systems in 3 villages.**

The project has constructed with the collaboration of the concerned technical district office three gravity-fed systems in 3 villages (Tangpeung, Daksa and Tangprong). The above criterion of activity achievement is thus satisfied.

Like for other infrastructure works, survey and design were undertaken by project and district staff as farmers contributed in labour force (but without any financial compensation) to the construction of the water supply system.

A village water supply committee has been organized. Its members have been trained (on maintenance and repair) and supplied with tools and equipment. According to village agreements, a financial contribution has been decided in order to finance future repairs (from 500 to 1000 Kips per family every 3 months according to the level of poverty).

In addition the project has repaired 5 water supply systems in 5 villages where there was not enough water in dry season or/and there was an important population growth (the previous water supply system was not adequately designed for the current population).

**The criterion of achievement of the expected result (R3.1) related to that activity was: at least 100 households have access to in-village clean water by the end of the project, reducing women's workloads.**

That criterion is fully achieved as in the 3 villages where a water supply system has been built, a total number of 266 households (84 poor households) have now access to clean water.

For the other 5 villages where water supply systems have been repaired, the number of beneficiaries is 222 households (112 poor households).

4. Strengthened village and district technical skills and capacities associated with project promoted food and income production systems (Result 4)

- 4.1. Strengthened district technical skills and capacities

**The criterion of achievement for that activity is the strengthening of the skills in participatory research, problem analysis and intervention design and implementation of approximately 20 DAFO and LWU staff.**

The project has contributed to strengthen district technical skills through theoretical, on-the-job training and study tours mainly on production techniques, coffee processing and marketing, infrastructures (water supply systems, irrigation and road infrastructures) construction and maintenance, nutrition and gender. More than 30 district staff have joined at least one training session, mainly from the District Agriculture and Forestry Office, but also from Dakcheung Lao Women Union (4 staff), the District Health Office and the District Transport and Communications Office.

In addition, that district staff has always taken part in the national or/and international consultancies (baseline survey, mid-term review study, nutrition assessment, expertise missions on upland crops, fish production and animal vaccination) with sometimes an initial theoretical training, particularly for data collection and data analysis tasks.

In that way, we can state that more than 20 DAFO and LWU staff have improved their skills in participatory research, problem analysis and intervention design and implementation (criterion achieved).

**The criteria of achievement of the expected result related to that activity were: district staff ‘training cards’ show at least 65% satisfaction with on-the-job training received from technical experts (R4.3) and at least 5 publications, jointly authored with district staff, are produced (R4.4).**

Both criteria are fully achieved. For the first criterion, all of trained district staff show “training cards” with scores higher than 80% with an average of 90%.

For the second criterion, district staff has taken part in at least 6 publications:

- Vaccination assessment report;
- Mid-term review report;
- Handbook on water supply system maintenance;
- Handbook on irrigation infrastructures maintenance;
- Videos on (i) integrated fish production systems; (ii) WINGS, (iii) Coffee (iv) cooking (x2) (v) Village vet systems.

However, according to the project manager, the district staff still has weak capacities and skills, particularly regarding follow-up and monitoring and data/problem analysis. Future and regular collaboration between CARE senior and district staff during the on-going CARE projects should enable to improve these weaknesses.

#### 4.2. Strengthened village technical skills and capacities

Villagers have benefited all along the project implementation period from technical assistance and follow-up for the diverse activities (vegetable, upland crop, rice and coffee production, fishery, animal vaccination, etc.) with theoretical and on-the-job training. It has resulted in a slow (particularly for farmers who have a lack of experience) but regular improvement of villagers' technical skills and capacities.

**The criterion of achievement for villagers' capacity building was: female and male farmers from 15 villages improve technical production and marketing skills through on site placements.**

That criterion has been fully achieved through:

- A technical training on coffee production (nursery establishment, plantation, fertilization, use of bio-insecticide, pruning) for 49 villagers (19 women) from 10 villages in Paksong;
- A training and study tour in Paksong for 25 villagers (14 women) from 5 other villages on production techniques, pruning, roasting, coffee processing and marketing.

**The criteria of achievement of the expected result related to that activity were: at least 85% of trainees who attend practical training in coffee production, picking, processing and sale from Boloven Coffee Producer Association report applying one or more learning (R4.1) and at least 60% of households report applying learning's acquired from project supported trainings in food and income strategies (R4.2).**

The first criterion is fully achieved as more or less all the trainees apply at least one learning. That evaluation would not be probably so positive if the criterion considered the whole package of production techniques trained in Paksong, particularly for the group of 49 villagers who did not have before much knowledge and experience on coffee production.

The second criterion is mainly achieved but the level of adoption of the promoted techniques differs according to the activity. We can estimate it (for the beneficiaries of the different activities) as follows:

- Water and motorized rice-mills: nearly 100%;
- Coffee production: about 75%;
- Fish production: 60-70% (but with 2 villages with a much lower score, due to their complete inexperience in fishery);
- Vegetable production (in home gardens): 95% (very high level of adoption and satisfaction);
- Upland crops production: 70% (particularly if we consider cassava and peanut production that have been very successful);
- VVWs: 70% if we consider their capacity to organize animal vaccination campaigns and to vaccinate animals, much less if we consider their level of knowledge on animal health.

However, those positive data mask the fact that villagers' technical capacities will have to be consolidated (particularly for new production systems) through further technical follow-up and on-the-job training. CARE district staff will have the opportunity during PWED project implementation to assess and identify the needs in terms of technical capacity strengthening and to address them. Exchanges farmer-to-farmer (with model or leader farmers) and between villages (with different levels of experience) should be organized to complete the process of villagers' technical capacity building initiated during DFSP project implementation period.

## **EFFICIENCY**

It is difficult to design and implement an efficient rural development project in Dakcheung villages regarding the following constraints:

- Bad weather and road conditions limiting the village accessibility (as we could experienced during the evaluation mission) and for some months making it impossible;
- Remoteness and difficult conditions of work that can discourage qualified staff to work for a rural development project in Dakcheung district;
- Presence of many UXOs, requiring UXO clearance before implementation of many activities;
- On-going and future mining projects, resulting in village resettlement.

### Collaboration/coordination with district/provincial authorities

It seems that the coordination with district and provincial (through the Provincial Steering Committee) authorities is good and facilitated the collaboration with technical district departments. The district staff tries as much as possible to get regular information from district authorities on mining and resettlement plans. But these plans are likely to change regularly and result also in changes in the project implementation plan.

The initial planned activity on road construction (activity 2.4) has been redefined in road repair (culvert and bridge) once Dakxieng was resettled.

### Staffing

The identification of a gender senior staff and an international consultant (for the nutrition assessment) took quite a long time and has delayed the activities related to WINGs and nutrition. At the moment it seems that the project staff (at least the senior staff) is qualified and motivated and wants to keep on working in Dakcheung CARE projects. Salaries and incentives seem to be quite high and probably encourage the qualified staff to keep on working in Dakcheung and as a result to limit staff turnover that could have some consequences on project efficiency.

Project management was quite difficult to assess as the evaluation team met very few project and district government staff but it seems good, particularly in terms of collaboration/coordination with the different levels (village authorities, district staff and authorities, provincial counterparts and authorities).

### Vehicles

The cars of DFSP project and/or provincial program operation office are quite old. The very bad road conditions have resulted in many costs for car maintenance and repair, what has led to some modifications in the initial budget planned as the related budget line was already consumed in June 2012 (mid-term review report). The construction of the road Sekong-Dakcheung is still on-going although it was planned to be finished for some years already. That fact has of course complicated the constraints related to transportation and village access.

The new project motorbikes (Honda Wave) are in the evaluator's opinion not suitable for these road conditions. Actually DFSP bought small off-track motorbikes but they were difficult to maintain in Dak Cheung, staff were not used to the manual clutch (and particularly the local

female staff who were not particularly keen to use it. So a mix of Honda Waves and off-track could be a good compromise.

### UXO

The importance of UXOs in the Dakcheung uplands, the need for anticipated UXO clearance and in some cases the long negotiation process with UXO clearance companies have delayed the implementation of some activities such as fish pond establishment and coffee plantations.

These activities partly because of UXO constraints will give effective results (food production or/and cash income) after the end of the project.

### Project office

Project office and accommodation has just been built. Delays were resulting from problems of accessing of wood due to the fact that the district saw-mill was operating very irregularly and not prioritizing the district requests (in the MoU it was agreed that the district would provide the wood for the buildings).

### Budget (see table below)

Sub-budget lines	Initial budget plan (€)	Revised budget plan (€)	Total expenditures in Oct 2013 (€)	Balance in Oct 2013 (€)	Ratio expenditures/ revised budget plan (%)
Human resources	501,542	519,236	506,301	12,935	97.5%
Travel	18,948	18,506	17,841	665	96.4%
Equipment and supplies of which direct benefits for villagers	111,768	126,248	122,138	4,110	96.7%
	81,152	91,127	85,513	5,614	93.8%
Local office	64,861	88,171	91,006	-2,835	103.2%
Other costs/ services of which direct benefits for villagers	153,793	115,317	85,908	29,409	74.5%
	15,570	12,315	12,543	-228	101.9%
Other of which direct benefits for villagers	187,277	170,628	156,334	14,294	91.6%
	179,460	166,329	153,647	12,682	92.4%
Direct eligible costs of which direct benefits for villagers	1,038,189	1,038,106	979,528	58,578	94.4%
	276,182	269,771	251,703	18,068	93.3%

The initial budget has been slightly and wisely revised in order to adapt to the project implementation conditions and constraints.

In October 2013, 94.4% of the revised budget plan (“sub-total direct eligible costs”) has been spent.

More than 90% of all the sub-lines (except “other costs and services”) have been spent without exceeding the revised budget plan (except for “local office” with expenditures representing 103% of the revised budget plan).

The ratio budget for field activities and farmers/total budget has been quite constant: 26.6% (initial budget plan), 26.0% (revised budget plan), 25.6% (expenditures in October 2013).

As a whole, DFSP project has been quite efficient considering the high number of constraints the staff has faced during project implementation. Delays (for staffing, UXO clearance, etc.) have limited the effective results of some activities, which have medium or long-term impact.

Project efficiency will be higher with a longer implementation period. Future CARE interventions in the same target villages could correct these weaknesses.

## **IMPACT** (see also Appendix 4 – Summary of project achievements)

1. Increased food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks (specific objective)
  - 1.1. Increased food production of at least 20% by adopting households for project supported food production activities supported through R1.1, R1.2 & R1.3 (P1.1)
    - 1.1.1. Paddy rice production (with irrigation small-scale infrastructures)

It is difficult to assess the increase of rice production with only 2 cycles of production (2 data for Dakden and Dakdo villages). Moreover paddy rice production depends also on erratic climatic hazards and pest or animal damages that increase also the variability of rice production.

However, the average paddy rice production (50% in dry season and 50% in rainy season) was 1.27 t/ha in Dakden and 1.67 t/ha in Dakdor.

Considering the two available data for each village, we will have an average production of 1.34 t/ha in Dakden (5% of increase) and 1.55 t/ha in Dakdor (decrease of 7%).

But if we consider that most of the farmers have now (with better water control) shifted from rainy season to dry season (25% of the production in the rainy season and 75% in the dry season), we obtained the following results: an average yield of 1.78 t/ha in Dakden (40% of increase) and also 1.78 t/ha in Dakdor (but only an increase of 7%).

### 1.1.2. Fish production

The initial number of fish ponds was estimated to 100 with a production of 140 fish per pond (average area of 50 m<sup>2</sup> per pond) and a productivity of 9 fish per kg.

With the promotion of improved techniques for fish feeding, that productivity has increased to 7 fish per kg.

By the end of the project, the number of new fish ponds will be 218 with an average area of 50m<sup>2</sup> per pond (140 fish) and a productivity of 0 for about 20% of the fish ponds and 8 fishes per kg for the other 80%.

As a result, the initial fish production in the 20 target villages was 1556 kg as the potential fish production (not yet reached as some fish ponds are not yet been completed and in other ones, fish development is not yet completed) will be 5052 kg what represents a large increase of fish production (+ 225%).

### 1.1.3. Upland crops production

The initial upland crops production was estimated for an average household at a value of 1,500,000 Kips. The average productions of cassava and peanut (distributed by the project) were respectively estimated at 450 kg (1,000 Kips/kg) and 20 kg (20,000 Kips/kg) per household, what represents an additional source of food with an economic value of 850,000

Kips. The increase (due to the project activity) in upland crops production (considering only the two successful productions, cassava and peanut) is so estimated at 57%.

- 1.2. At least 50% increased income over baseline for 70% of households classified as poor is projected within 2 years by the end of the project (P1.2) (see also Appendix 5 – Details of the economic calculations)

The evaluation has reconsidered the calculation for household income (186,000 kips for a poor household calculated in the baseline assessment) as it might take only into account the cash income. Even in a self-sufficient economy, the only way to assess the household income is to give an economic value (through village or local prices) to every food items produced (or collected) by the family but not sold. It is the only way to be able to compare for example the traditional farming systems based on upland rice production (for consumption) and the recently developed farming systems based on coffee production (only for sale). The estimated average household income for the poor households (before project intervention) as follows:

- Rice (7 months of self-sufficiency for an average household of 8 persons with 3 adults): 8,400,000 kips;
- Upland crops: 750,000 kips;
- Collection of NTFPs, fishing and hunting: 2,000,000 kips;
- Sale of labour force (80 to 120 days): 2,500,000 kips;
- Animal consumption (2 pigs and 4 chickens): 1,200,000 kips;
- Vegetable production (dry and rainy season): 1,250,000 kips;
- Fish production (only 20 fish ponds for the poor households – 140 fishes and 9 fishes per kg): 21,000 kips (average per poor household);
- Coffee (only in 5 villages – 0.1 ha per poor household in these 5 villages – 3 kg per tree sold as black cherry): 40,000 kips (average per poor household);

Total average income for a poor household of 8 persons: 16,161,000 kips.

The whole group of poor households has been considered (445 poor households in 2013) as a whole as it was very time-consuming to check the distribution of activities and because the project team has made efforts to share the benefits of the activities equally between all households.

It can be assumed that the income generated by the sale of labour and NTFP collection, hunting and fishing activities will remain unchanged (although this has not been verified). We will actually consider the predicted incomes 2 years after the end of project evaluation (as mentioned in the logframe – criterion of evaluation) once fish and coffee production activities will give full economic benefits (potential production) to the households. The other sources of income (for the poor households) at the end of the project are as follows:

- Rice (increased production for 28 households in Dakden and Dakdo): 8,532,000 kips;
- Upland crops (121 poor household beneficiaries): 981,000 kips (average per poor household);
- Animal consumption (with a vaccination rate of 60% for pigs and 80% for chickens and a decrease of the animal mortality from 50% down to 30% for both pigs and chickens): 1,504,000 kips;

- Vegetable production (118 poor household beneficiaries): 1,979,000 kips (average per poor household);
- Fish production (136 new fish ponds for poor households): 155,000 kips (average per poor household);
- Coffee production (with an increased production for the 5 villages up to 5 kg per tree and 20% of the production sold as white cherries (processed coffee) and 220 new coffee plantations for the poor households): 268,000 kips (average per poor household).

Total average income (after project intervention) for an average poor household of 8 persons: 17,920,000 kips.

The income for an average poor household has increased by 10.9% and 21.0% if we do not take into account rice production (first source of income).

The main increase for poor household income results from coffee and fish production as they are new production systems but upland crops and vegetable production have also largely contributed to the increase of the household income.

The criterion (of 50% of increase) is clearly not achieved but that criterion was definitely too ambitious and an increase of the average income of the poor households of more than 10% in only 3 years regarding the conditions of implementation can be already considered as a success.

### 1.3. At least 75% of women produce new types of food learned through WINGs (P1.3)

In all villages visited for the evaluation, 100% of women reported producing new types of food learned through WINGs, both in terms of food produced in the home vegetable gardens and in terms of cooking different varieties of food for household consumption.

The supply of vegetable seeds and training in cultivation and seed saving has been enthusiastically welcomed by all women participating in the WINGs groups (which include all women in each village) and success in cultivating home vegetable gardens has been high (in Dak Vay, where the available labor pool is low, women have adopted a mixed cultivation strategy of planting the vegetables in the rice fields for the rice season, but will revert back to home vegetable cultivation once the harvest season is complete).

The results of this evaluation in terms of the uptake of nutrition training by women in the discussion groups were interesting because they contradict results from previous evaluations (the mid-term review and the nutrition study). All women who had participated in nutrition training (10 women in each village) were able to recall the content of the nutrition training and recite the food groups as well as report on the types of food and cooking methods taught during the nutrition training.

All women who had participated in training reported that they had passed their training and knowledge on to others in the village, that they and their friends and relatives has adopted the new cooking techniques and that they were very happy with the taste and improved nutrition for their families. According to the WINGs senior manager, this shift is due to the adoption of the recommendations of the earlier reports and changes in training techniques as a result of those recommendations.

2. Support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR (Overall Objective)

- 2.1. Increased productive asset ownership of 70% of poor households within project core villages by at least 30% over baseline through a) reduced livestock mortality, b) paddy and fishpond creation and c) coffee garden establishment (G1) (see also Appendix 5 – Detail of the economic calculations)

Land price has not been considered (as traditionally land community did not have any value) but only the improvements made on the land (irrigation infrastructures, coffee plantation and fish ponds).

The value of coffee and paddy fields is estimated at 5 seasons of production and the value of fish ponds at 2 years of production.

The productive assets (average for poor households) before project intervention were:

- Rice fields (0.1 ha per average poor household with an average yield of 1.5 t/ha): 5,000,000 kips;
- Coffee plantation (only 0.1 ha per poor household in only 5 target villages): 201,000 kips (average per poor household);
- Fish ponds: 42,000 kips (average per poor household);
- Animal capital (value of 2 adult pigs and 6 chickens): 1,500,000 kips

Total productive assets value (average per poor household): 6,743,000 kips

After project intervention the same productive assets (average for poor households in the 20 target villages) are as follows:

- Rice fields (value increased by 100% with irrigation infrastructures for 28 poor households in Dakden and Dakdor): 5,315,000 kips (average per poor household);
- Coffee plantation (potential value for the plantations which did not give yet any production): 1,340,000 kips (average per poor household);
- Fish ponds (potential value): 311,000 kips (average per poor household);
- Animal capital (increased capital due to decrease of animal mortality rate): 1,692,000 kips

After project intervention total productive assets value (average for poor households): 8,657,000 kips.

The average increase in terms of productive capital for the poor is 28.4% which is very close from the criterion of 30% of increase.

This is mainly due to the large number of fish ponds and coffee plantations established. However, that score (of +28.4%) represents only a potential increase in terms of productive capital and will be really effective once fish ponds and coffee plantations will give full production.

- 2.2. At least 70% of women report increased household food availability and/or income (G2) (see also Appendix 6 – Evaluation report of the gender component)

In each of the villages visited for the evaluation a group meeting of all village women was called. Table 1, below, shows the number of women attending each meeting and the percentage of women who reported that they had increased availability for food and income.

Table 1: Percentage of women reporting increases in food and income availability.

<i>Village</i>	<i>Number of women attending the meeting</i>	<i>% of women reporting increased food availability</i>	<i>% of women reporting increased income</i>
Dak Dor	21	100	100
Dak Vay	11	100	100
Dak Vor	24	100	100
Dak Vang	32	100	100

According to the group discussions, the vegetable production in the home gardens has greatly increased in terms of volume and diversity. This diversification of vegetable varieties in the household diet represents a significant improvement in household nutrition.

In terms of income generation, many women commented that the training they had received from the project on the types of vegetables that are popular in the market had enabled them to focus on cultivating those vegetables and therefore increase their incomes.

Most women reported that prior to the project they made virtually no income from vegetable sales. At the time of the evaluation women in Dak Dor, Dak Vor and Dak Vang reported earning between 50,000 and 100,000 kip per month from vegetable sales. The situation in Dak Vay was less positive, with women reporting that they were not cultivating vegetables in their home gardens at the time of the evaluation because it was rice harvest time and vegetable cultivation was occurring in the upland rice fields. The overall level of food security in Dak Vay was not as positive as the other villages that were visited, though it had improved from the baseline situation at the beginning of the project. The key reason for this is that the village had relocated just 2 years prior to the evaluation. In addition, being located away from the main road contributes to isolation. With time it is likely that the food security situation in Dak Vay will improve to the levels seen in other more established villages.

When asked about their level of consumption of meat and fish, the women in Dak Dor, Dak Vor and Dak Vang all reported that they had good access to these protein sources. Those households with fishponds in particular had ready access to fish as the activity was going very well. In Dak Vay, there were 5 women who attended the meeting (out of a total of 11 women who attended) who reported not having eaten meat or fish at all over the past week. Clearly the food security situation in Dak Vay is still critical.

The key factor driving the difference in the level of wealth and food security between the three villages which were better off (Dak Dor, Dak Vor and Dak Vang) and Dak Vay, where poverty and food security are still critical, was the length of time that coffee plantations had been established.

The DFSP was able to support those villagers with already established coffee plantations by training producers in more effective growing techniques processing techniques.

The resulting increase in incomes from coffee production has been significant (raising incomes from around 6 million kip per year to 30 million kip<sup>5</sup> per year in households with enough labor to cultivate more than 2 ha of coffee).

Even in households with little access to labour, incomes can be as much as 10 million kip per year, which is a significant boost to the household economy above rice production only, and more than the household could make without added value from coffee processing.

In Dak Vay, coffee plantations are not yet mature, but it is hoped that in another 2 years time the people in Dak Vay will see similar improvements in their incomes and food security.

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<sup>5</sup> 30million kip is equivalent to 2,700 Euros (11,000 kip/Euro) or 3,750 US\$ (8,000 kip/US\$)

## SUSTAINABILITY

The sustainability of the activities of a rural development project depends mainly on three aspects at 3 different levels:

- At district level, the financial and technical capacities of district staff to ensure follow-up and monitoring after the project was handed over;
- At community/village level, the capacity of village organizations and/or model/leader farmers to maintain the benefits of the project activities and to generate in some cases diffusion to other beneficiaries;
- At household level, the interest and motivation of farmers for keeping on implementing activities.

For that project, 4 types of activities can be identified for which sustainability must be discussed: (i) agricultural/productive activities, (ii) equipments and infrastructures, (iii) animal vaccination and VVWs and (iv) women groups and nutrition issues.

### 1. Productive activities (coffee, upland crops, vegetable and fish production)

In general, farmers have expressed a strong interest for all these activities (except corn they do not like and sesame because the production is more or less nil).

That interest is even higher for productions which have already given effective results (food production and/or cash incomes), such as coffee (in the 5 villages which did have already coffee plantation), vegetables, peanut and cassava.

We can assume that the interest for coffee (in the other 15 villages) and fish production will be much higher once these production systems will give effective benefits for the farmers which will result in a common effort (higher investment in labour force) in order to improve techniques and increase the production.

In general, after 3 years of project implementation, the level of adoption of improved techniques is slow, particularly for coffee and fish production but could be accelerated by regular follow-up and monitoring from DAFO staff (and of course CARE new project staff).

A financial investment in barb wire could result in higher levels of production (notably for coffee) and could have a significant impact on the sustainability of coffee plantations.

For upland crops, farmers will probably stop to grow sesame or corn (due to lack of interest), they will not be able to replant potatoes as they do not select and keep any tubers for the next growing season. The same problem exists for morning glory production in the home gardens.

At the end of the project, we can estimate that 20% of fish ponds will not give any production (so that activity will be abandoned by the farmers) due to climatic hazards (flooded ponds) or lack of care (for fish feeding).

## 2. Equipments and infrastructures (road, irrigation and water supply infrastructures, motorized or water rice-mills and coffee mills)

The villagers have expressed a very high interest for the benefits provided by these equipments and infrastructures, notably for road and water supply infrastructures as well as motorized or water rice-mills. That interest is probably not so high for irrigation infrastructures that do not create so high economic benefits.

The interest for using and maintaining coffee-mills is quite variable among the villagers, depending on the proportion of processed coffee by each farmer. In addition, the economic benefits created by processing techniques depend also on climatic conditions and will be variable between years.

However, the project has made special efforts in order to make these equipments and infrastructures have as much sustainability as possible through (i) training technical district staff on their use, maintenance and repair, (ii) organizing village committee responsible for each of these equipments and infrastructures, (iii) training village committee members for maintaining and repairing, (iv) ensuring the availability of spare parts at district level and (v) facilitating the establishment of regulations in order to ensure their financial sustainability (contribution collected to each household to cover the costs related to possible repairs).

In addition, in villages where the project did not facilitate the organization of village committees, similar community organizations have emerged spontaneously (mainly for water supply and road infrastructures).

Moreover, it seems that the Talieng communities (we did not visit any Katu village) show a certain level of solidarity (with the poor households) and villagers are able to find compromise and agreement in order to maintain their collective equipments or infrastructures and avoid conflicts (the better-off villagers supporting the poorest households and accepting that they do not pay or pay less) that generally result in failure or break down of village committee structures and absence of financial sustainability.

However, in the future years, the district staff (and CARE new project staff) will have a key role to play in terms of follow-up and monitoring to ensure gradual disengagement of external stakeholders and strengthen the sustainability of these equipments and infrastructures.

## 3. Animal vaccination and VVWs

So far, the vaccination campaigns have been planned and organized to a great extent by the district and project staff. In all villages, farmers have stated that they did vaccinate their animals, however it does not mean that there is a high interest for animal vaccination.

The sustainability of the activity is very difficult to measure as in some villages, farmers have stated that animal mortality rate have declined from nearly 100% to nearly 0% since they vaccinated their animals. In another village, the head of village told me that “vaccinated or not vaccinated the animals died equally”.

The impact of the animal vaccination campaigns will be surely the main factor of sustainability of that activity. However, as the same head of village said, “the VVWs still lack of knowledge and

capacities; he just knows how to vaccinate, that's all" and "we (all the villagers) would like to know more about animal health, animal diseases, clear understanding of vaccination or treatment, etc."

To ensure more sustainability of that activity, the DAFO (and CARE new project) staff will have in the future years to give extensive information to the villagers about animal health and for example explain very clearly that vaccination does not mean no animal mortality.

The other factor that can endanger the sustainability of that activity is related to the VVWs themselves and so is variable according to the village. The economic benefit for the VVWs, the personal qualities (leadership, motivation, reliability, etc.) of the VVWs will be determining factors for the organization of animal vaccination campaigns and the participation of the other villagers in those campaigns.

At last, the involvement of the DAFO staff in the procurement of vaccines, the organization of animal vaccination campaigns and the follow-up of VVWs will be also a factor facilitating the sustainability of that activity.

#### 4. Women groups and nutrition issues

WINGs groups have been particularly effective in planning, implementing and managing the activities related to women's workload and agricultural production. However, the food security consultant thinks that without any external (project) support, if women will keep on maintaining those activities, they will abandon WINGs meeting and related activities such as the activities related to nutrition issues. The project (or/and district LWU) should keep on maintaining the organization of WINGs meeting in order to sustain in the long term these activities.

## **LESSONS LEARNED** (see also Appendix 6 – Evaluation report of the gender component)

The strategy of the DFSP project was based on supporting poor households and gender and women empowerment.

For women that strategy has significantly contributed to the repositioning of women from a subordinated position both at the household and village levels to a more empowered position and to participate in village governance in the form of management committees for project activities. This is a very positive outcome and one that should inform future programming, not only within CARE but also in other organizations.

For example, one of the unexpected outcomes of increased women's empowerment is that many children (both girls and boys) are able to stay in school and complete secondary school as well as high school.

The increased access to income has contributed to this outcome, as has the support for women's voices in household decision making processes as it is the women who were strongly determined that their children's lives would be better than their own.

The focus of the project design on poor households in a very difficult context (accessibility, village resettlement, unfavourable climatic conditions), has finally given excellent results in terms of increase of family income and improvement of food security for those households.

The project implementation has been carried out in a smooth way with activities mainly benefiting to poor households without excluding the better-off (that maintains the village solidarity or organization, avoids internal conflicts and finally ensures more success for activity implementation).

However, in some DFSP target villages (particularly villages with difficult access) where food security has remained at a critical level, project activities and monitoring must be more intense and concentrated than in sites where project activities are progressing well. Close monitoring of sites where progress is slow, analysis of the causes for slow progress and remedial action from project staff may assist those sites in reaching a satisfactory level. These villages need probably a longer period of project implementation.

The other important point of the strategy regarding the support to crop and animal production was the extension of new agricultural systems (with coffee and fish productions). Though it is always difficult to establish new production systems (particularly with poor upland populations), the combination of favourable agro-ecological conditions, appropriate technical (training) and financial support and willingness of farmers for developing their food production and income generation systems has given excellent results in terms of adoption, a high level of sustainability and a potential good impact on poverty and food security.

If upland crops (particularly cassava) and vegetable productions have also been well adopted and have given good economic results, the constraints of the animal vaccination and paddy rice production (irrigation) activities have been insufficiently analyzed and discussed with the farmers and therefore have given mitigated results.

## **CONCLUSION AND RECOMMENDATIONS** (see also Appendix 6 – Evaluation report of the gender component)

The DFSP project can be considered as a good project (score of 4 on a scale of 5) particularly when considering the numerous constraints for project implementation, the short period of project implementation and the focus on poor households as project beneficiaries. Most of the criteria of achievement have been satisfied (for objectives, results and activities) without overspending the planned budget.

Some sites have reached a significantly higher level of food security and income generation than others, but all sites have benefited from increased food security and income levels from the baseline situation. The DFSP has made a significant positive impact on the lives of villagers in the Dak Cheung District.

Labor-saving technologies such as the rice mills and handcarts are greatly appreciated by project participants. The greatest improvements in wellbeing are seen among families where women's empowerment has been achieved to some extent because these families distribute their labor power more equitably and efficiently to achieve greater outcomes for the household.

By integrating women's empowerment into the project design and implementation, the DFSP has enabled significant shifts in gendered relationships both at the level of the household and the village. The empowerment of women to have a voice in decision-making processes at these two levels has enabled positive outcomes for children and well as adults in the target villages and significantly contributed to the overall success of the project in reaching its aims and objectives.

However, due to the short period of project implementation and the characteristics of some activities (aiming at promoting new production systems) with medium or long-term impact, project results will be effective only after the end of project implementation. For example, for coffee and fish productions, we can only talk of potential impact on food production or income generation. That is why the main recommendation will be to keep on implementing, following-up and monitoring the same activities in the DFSP target villages (through the new CARE project budget) in order to ensure activities' results and sustainability.

The main recommendations will be to:

- Keep on following-up and monitoring the level of adoption of production techniques (particularly for fish and coffee productions) and keep on strengthening farmers' technical capacities through exchanges with successful farmers;
- Undertake an assessment on problems related to pest disease (mainly for rice but also for coffee productions) and identify solutions to be promoted and diffused;
- Identify solutions for fencing constraints (maybe with procurement on credit of barb wire);
- Keep on following and monitoring farmers' capacities for seed selection (mainly for vegetable and upland crops production) and identify improved seeds (rice and upland crops) suitable for Dakcheung agro-ecological conditions through seed trials;

- Identify and develop activities aiming at improving coffee processing (in addition to coffee milling) particularly for humid conditions;
- Improve coffee value chain (through developing contacts with traders);
- Keep on following and monitoring VVWs' capacities and animal vaccination campaigns and develop farmers' awareness on animal vaccination benefits through improving general knowledge of farmers on animal health;
- Keep on following and monitoring technical and financial village committee sustainability (with possible additional training);
- Develop a monitoring and evaluation system for project staff in order to achieve an efficient and valuable follow-up of project activities at village level;
- Undertake an assessment of district staff capacities (mainly from the agriculture and health offices and from Lao Women Union).

## **APPENDIXES**

## Appendix 1 – Terms of Reference of the food security and gender consultancies

### 1. Introduction

The Dak Cheung Food Security Project (DFSP) funded by the European Union Started in April 2010, working in 20 villages in Dak Cheung District with the goal to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.

The field activities, including evaluation, are planned to conclude by December 2013.

A Final evaluation is required at this time. The evaluation, whilst focusing on the food security objectives will include an additional gender evaluation component which will feed into the final report. It is therefore anticipated that the evaluation will be **conducted by 2 consultants:**

1	EoP Evaluation - Food security / <u>Final report</u>	<ul style="list-style-type: none"><li>• Technical field base review of food security/agriculture/livelihood -related project components.</li><li>• Report on food security components, with a focus to evaluate against all log frame sections and indicators.</li><li>• Incorporate the food security technical findings with those of the gender report, and other relevant documentation into the final evaluation report.</li><li>• Evaluation of non-field components of the project e.g. monitoring systems, capacity buildings, coordination with partners, project management.</li></ul>
2	EoP Evaluation – Gender component	<ul style="list-style-type: none"><li>• Technical field base review of gender-related project components.</li><li>• Report on Women’s groups/women workloads components, with a focus to evaluate against all relevant log frame sections and indicators.</li></ul>

The results of this evaluation will contribute to the accountability process for the project as well as the completion of the Final donor report for the EU.

**The report will be translated into Laos and shared with project participants,** host government, other development partners, the donor, CARE Germany, and relevant CARE members.

The findings will be used to improve the quality of future activities, the design of future projects, and to inform CARE Laos' long term program design and quality improvement. Lessons learned and good practice identified will be highlighted, and used for future program design.

The review process will include a participatory and gendered approach wherever possible.

## 2. Background

### 2.1 CARE in Sekong

Since 2007 CARE has been working in Sekong with the 7-year LANGOCA<sup>6</sup> project (initially 5 years with 2 year exit-stage extension) with the aim to link UXO clearance with livelihood development in rural areas. In September 2009 Typhoon Ketsana hit the province resulting in extensive flooding and wide spread crop damage from the wind. CARE responded with emergency programming including food distributions, NFIs, WaSH, and livelihood support.

In 2010, in addition to on-going emergency response programming, CARE started four new projects. This included a CLTS<sup>7</sup> pilot project (CISS), and WaSH<sup>8</sup> recovery project (following on from the emergency WaSH activities), a DRR<sup>9</sup> project and also a 3.7 year livelihoods project – the Dak Cheung Food Security Project (DFSP), as part of the on-going development programming. In 2012 CARE further extended programming in Dak Cheung district to include two livelihood projects and a Disaster Risk Reduction (DRR) project.

### 2.2 DFSP (Dak Cheung Food Security Project) - EU

The Laos DFSP started in April 2010 and is in year 3 of the 3.7 year implementation.

The Goal of the **Overall Objective** Program is “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.”

The **Specific Objective** is to: To Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks.

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<sup>6</sup> Lao Australia NGO Cooperation Agreement.

<sup>7</sup> Community-Led Total Sanitation

<sup>8</sup> Water Sanitation Hygiene

<sup>9</sup> Disaster Risk Reduction

(Annex 4 details the remainder of the log frame)

### 3. Purpose of the consultancies

The overall objectives of this three-stage evaluation are:

1. To assess and document the project's achievements and performance against the below criteria for standard evaluations and the project logical framework.
2. To assess the impact of the project
3. To identify and document lessons learned and recommendations to improve future programming.

The above is to be done in relation to the roles contracted – i.e.

- (1) EoP Evaluation - Food security / Final report
- (2) EoP Evaluation – Gender component

#### ***The criteria for this evaluation are:***

1. Relevance, Effectiveness, Efficiency
  - Relevance: The extent to which the project suited the priorities of the target group, and the priorities and policies of other stakeholders including the donor
  - Effectiveness: The extent to which the project achieved its objectives
  - Efficiency: The extent to which the project was managed with respect to achieving the best possible value for money from inputs of funds, staff and other resources
2. Higher level changes (Impact): The positive and negative changes produced by the project, directly or indirectly, intended or unintended, for women and men and for the most vulnerable.
3. Sustainability: To assess whether the benefits of the project are likely to continue after the project ends.
4. Monitoring and learning: The effectiveness of project monitoring and learning processes.
  
5. Assessment of the effectiveness of a specific technical approach or methodology used (where relevant)
6. Assessment of the mode of delivery, such as the partnership approach adopted
7. Assessment of the specific management arrangements, such as staffing structure, quality of partnership relationships, technical assistance provided

8. Assessment of contributions to women's empowerment, with reference to specific domains of change (agency, relationship, structure<sup>10</sup>) (where relevant)

Note: Through the above process the assessment should enable a **review of the project logframe and achievement against indicators. A number of the higher-level objectives and indicators will only be assessed/measured by this work so it imperative that appropriate information is captured to enable this** (full log frame is annexed):

*See annex 5 for breakdown by consultancy*

The documents (full evaluation, with gender report annexed) when completed will be shared with the donor and key project stakeholders e.g. Provincial Steering Committee (and translated into Laos language) to enable broad shared learning, and the opportunity to develop approaches to development support (and so content should be constructive and appropriate for this audience).

Criteria should be assessed with reference to gendered benefits, and with a view to analyzing lessons learned. In addition, criteria should be analysed with reference to ethnicity, pro-poor orientation, disability, UXO.

## **4. Methodology**

The evaluation will be divided into two parts, these will be conducted by 2 consultants:

Consultancy 1: (1) EoP Evaluation - Food security / Final report

Consultancy 2: (2) EoP Evaluation – Gender component

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<sup>10</sup> CARE's women's empowerment frame work considers the need for agency, relationship, structure to be 3 key focuses to be addressed in combination to support women's empowerment, and the evaluation in relation to gender should consider impact in relation to this structure.

1	EoP Evaluation - Food security / <u>Final report</u>	<ul style="list-style-type: none"> <li>• Technical field base review of food security/agriculture/livelihood -related project components.</li> <li>• Report on food security components, with a focus to evaluate against all log frame sections and indicators.</li> <li>• Incorporate the food security technical findings with those of the gender report, and other relevant documentation into the final evaluation report.</li> <li>• Evaluation of non-field components of the project e.g. monitoring systems, capacity buildings, coordination with partners, project management.</li> </ul>
2	EoP Evaluation – Gender component	<ul style="list-style-type: none"> <li>• Technical field base review of gender-related project components.</li> <li>• Report on Women’s groups/women workloads components, with a focus to evaluate against all relevant log frame sections and indicators.</li> </ul>

The consultants will be required to refine the outlined methodology for the evaluation process, in coordination with CARE staff.

A mix of quantitative and qualitative tools and methods will be used, and a participatory approach should be adopted, capturing the perspectives of key stakeholders.

The methodology, tools and scheduling used must be gender and target group sensitive.

Outline of expected methodology:

- Document review:
  - Project documents, including proposal, baseline study, other evaluation studies such as mid-term report; annual reports
  - Review of log frame (noting that reporting on the achievements against a number of indicators are reliant on this evaluation)
  - Results of project monitoring, reviews, reflection processes, and annual assessments
  - Donor evaluation guidelines
  - CARE policies, for example CARE International Evaluation Policy, CARE International Gender Policy, CARE Australia Partnership Policy and child protection policy
  - CARE Laos’ program strategies, such as Gender Strategy, Partnership Strategy, Women’s Empowerment Framework.
  - CARE Laos’ long term program strategy summary documents, and framework
- Initial review of relevant stakeholders with whom to meet
- Field visits - to meet beneficiaries, village, district, and provincial stakeholders (including relevant government staff)
- Submit draft documentation

- Presentation of findings to relevant partners
- Finalise report based on feedback
- (in the case of technical gender evaluation components, full handover of evaluation document to final evaluation consultant)

## 5. Roles and responsibilities

In consultation with CARE staff, the consultant is responsible for:

- Refining the research methodology
- Implementing the agreed methodology
- Analysing data /information achieved
- Documenting /reporting in English
- Ensure coordination with government partner evaluation staff

CARE will ensure effective administrative support for the assessment, and provide inputs into the research process, as determined by the agreed methodology. CARE will also make available preparatory documentation on the project, as per section 4, above.

## 6. Deliverables

Deliverables of this consultancy comprise:

- 1 *Application*
  - Clear indication of which consultancy is being applied for
  - Brief document of introduction, 2 pages or less demonstrating how the candidate meets the selection criteria
  - CV (including minimum of 2 references)
  - Daily rate for consultant
  - Other anticipated costs not covered by CARE

It should be noted that CARE does not pay a separate per diem/DSA on top of the daily rate.

CARE will also pay for accommodation at pre-selected guesthouse, based on receipts.

- 2 *Workplan*

If selected, a basic work schedule (agreed start, finish, travel dates etc) should be submitted to and agreed by the CARE Sekong Provincial Coordinator, prior to authorisation for the consultant to travel.

- 3** *Post research briefings* Briefing of key findings with the project/programme staff  
Briefing or workshop of key findings with key partners and beneficiaries
- Draft report* Draft report submitted for comments from key CARE staff
- 5** *Final report*
1. Final report of the evaluation, based on feedback from the initial draft. The report should cover, but is not restricted to:
    - a) Cover sheet (see annex 1)
    - b) Executive Summary (1-2 pages, only with final submission, include recommendations)
    - c) Introduction and background
    - d) Summary of methodology, including limitations
    - e) Results, analysis and discussion, as per criteria outlined in section 3, and against project objectives and indicators where relevant
    - f) This must include a discussion of gendered benefits and approaches, as well as analysis of other specified themes.
    - g) Analysis of key lessons learned
    - h) Conclusion and recommendations
    - i) References
    - j) Annexes – Including tools used in the evaluation.

The reports will be submitted in English electronically in Word format. An initial draft will be submitted to ACD programs and Provincial Programme Coordinator for comment. The draft final report will be submitted to and accepted by the ACD Programs, CARE Lao PDR prior to final payment and within two weeks of completing field work.

This report should annex all supporting documentation needed to carry trainings and activities developed during the consultancy

## **7. Timing**

To commence in October. The table below shows the approximate schedule.

Month	Nov				December			
Date starting (Sunday)	1st	8 <sup>th</sup>	15 <sup>th</sup>	22 <sup>th</sup>	1 <sup>st</sup>	8 <sup>th</sup>	15 <sup>th</sup>	22 <sup>nd</sup>
Week	1	2	3	4	1	2	3	4
(Rainy season)								
<b>Both consultants</b>								
Document review	x							
Travel to Sekong	x							
Planning with field team		x						
First period of field visit			x					
<b>Food security consultant</b>								
Additional field visit to villages			X					
Report preparation					R	R		
Draft report				↑				
Final report				↑		F		
<b>Gender consultant</b>								
Report preparation			R					
Draft report			D					
Final report				F				

NOTES:

- a) Gender consultancy finished in time for report to be utilised by food security consultant (both will work as a team in same villages for first part of the field visit)
- b) Exact timing will be determined so that field work for consultants of the evaluation /government counterparts will travel to the field together.
- c) For the evaluation the consultants will be joined by staff from MoU government partners (Ministry and/or Provincial Agriculture and Forestry Office / and/or MoFA to be confirmed). It is expected that they will observe, ask their own questions if necessary and produce their own independent report.
- d) CARE field translator will be available to support translation as needed.

Suggested timeframes:

### Consultancy 1: (1) EoP Evaluation - Food security / Final report

Item	Specific task	Days	Cumulative
1	Pre-field activities		
	Project literature review - CARE to support with documents.  Draft plan for PRA tools	2	2
	<b>Pre evaluation briefing with EU Delegation in Vientiane</b>	<b>0.5</b>	<b>2.5</b>
2	Field activities		
	Travel to Sekong Province	0.5	3
	Briefing with CARE staff / government staff evaluation representatives including review of stakeholders/ field trip planning. Finalise PRA tools	2	45
	Meeting Sekong based stakeholders (e.g. PAFO/DAFO, LWU, UXO Laos) – as per PRA needs.	0.5	5.5
	Travel Dak Chueng. Meet DAFO / governor’s office rep.	1	6.6
	Travel to selected target villages/ stakeholders	5	11.5
	Meetings with relevant stakeholder (non field based)	2	13.5
	Post field debrief with CARE staff / Travel from Sekong	1	14.5
3	Report writing		
	Write / Submit Draft Report prepared in English (incorporating element of the gender review  (followed by time for feedback from CARE Laos	4	18.5
	Feedback on first draft report		

	Finalise report (taking into account comments from CARE)	2	20.5
	Debrief with EU Delegation in Vientiane	0.5	21
<b>Total</b>	<b>Days</b>	<b>21</b>	

Suggested timeframes:

### Consultancy 2: (2) EoP Evaluation – Gender component

Item	Specific task	Days	Cumulative
1	Pre-field activities		
	Project literature review - CARE to support with documents.	2	2
	Draft plan for PRA tools		
	Pre evaluation briefing with EU Delegation in Vientiane	0.5	2.5
2	Field activities		
	Travel to Sekong Province	0.5	3
	Briefing with CARE staff / government staff evaluation representatives including review of stakeholders/ field trip planning. Finalise PRA tools	2.5	5.5
	Meeting Sekong based stakeholders (e.g. PAFO/DAFO, LWU, UXO Laos) – as per PRA needs.	0.5	6
	Travel Dak Chueng. Meet DAFO / governor’s office rep.	1	7
	Travel to selected target villages/stakeholders	5	8
	Post field debrief with CARE staff / Travel from Sekong	1	13
3	Report writing		
	Write / Submit Draft Report prepared in English (followed by time for feedback from CARE Laos)	2	15
	Feedback on first draft report		
	Finalise report (taking into account comments from CARE)	1	16
<b>Total</b>	<b>Days</b>	<b>16</b>	

## 8. Selection criteria

Note this is generic for both consultants – where relevant experience or qualification should relate to the specifics within the ToR.

- 1     Experience     At least 3 years experience in development and/or humanitarian response programming, with a focus on SE Asia preferable.  
  
                          Demonstrated research and reporting skills  
                          Demonstrated successful experience in PLA (participatory Learning Appraisals) methodology or similar, gender sensitive evaluation projects  
                          Relevant technical experience (e.g. gender, agriculture, livelihoods, WASH, development, etc.) as appropriate
  
- 2     Qualification    Relevant graduate/ post graduate qualifications
  
- 3     Technical skills    Research, survey (e.g. PRA/PLA), stakeholder interviews (ranging from field level to national level stakeholders), report writing, presentation
  
- 4     Language            Excellent written and spoken English language skills.  
  
                          Experience in Lao PDR and Lao language skills are desirable
  
- 5     References         A minimum of two referee contacts who have managed the proposed consultant previously

As a matter of course, all consultants are subject to the following policies:

- CARE Lao Child Protection Policy
- Terrorist Check Safety and Security Management Plan
- CARE Code of Conduct

## **Appendix 2 – List of documents reviewed for the food security consultancy**

CARE Australia – Strong Women, Strong Communities: CARE’s holistic approach to empowering women and girls in the fight against poverty

CARE Australia policy on evaluation of projects and programs – October 2005

CARE Deutschland-Luxemburg – DFSP Final project document – June 2009

CARE International evaluation policy – October 2005

CARE International gender policy – February 2009

CARE International in Lao PDR Gender Strategy – 2011-2015

CARE International – DFSP Annual report – 2012

CARE International – DFSP Financial report – October 2013

CARE International – DFSP Interim report – March 2013

CARE International – DFSP Monthly report – October 2013

Karren John – DFSP Monitoring report and background conclusion sheet – August 2010

Karren John – DFSP Monitoring report and background conclusion sheet – May 2012

Malam Linda – DFSP End of project evaluation – Gender component – December 2013

Moloney Jill – Participatory diagnostic on current nutritional understandings and traditional practices associated with food, infant weaning and feeding and associated health issues – August 2011

Sittivong Koutiane – DFSP Baseline assessment report – January 2011

Sittivong Koutiane – DFSP Mid-term review report – November 2012

Wardle Chris – Comments on ROM recommendations for DFSP

### Appendix 3 – Daily timesheet

Date	Place	Days worked	Activity
04/11/13	Vientiane	1	Literature review and discussion with project manager
05/11/13	Vientiane	1	Literature review and discussion with project manager
06/11/13	Vientiane	1	Literature review and discussion with project manager
07/11/13	Vientiane	1	Literature review and discussion with project manager
08/11/13	Vientiane	1	Literature review and discussion with project manager
09/11/13	Vientiane	0	No work
10/11/13	Vientiane	0	No work
11/11/13	Vte/Pak/Sek	0.5	Travel to Sekong
12/11/13	Sek/Dakch	1	Travel to Dakcheung district – Data collection in Dak Do village
13/11/13	Dakcheung	1	Data collection in Dak Vay village
14/11/13	Dakcheung	1	Data collection in Dak Vo village
15/11/13	Dakcheung	1	Data collection in Dak Vang village
16/11/13	Dakcheung	0	No work
17/11/13	Dakcheung	1	Review of project activity reports
18/11/13	Dakcheung	1	Review of activity achievement with the project senior staff
19/11/13	Dakcheung	1	Data collection in Dak Do and Dak Vo (with women)
20/11/13	Dak/Sek	1	Travel back to Sekong – Interview of M. Seumsee Soulita (Head of Provincial Steering Committee – PAFO)
21/11/13	Sek/Pak/Vte	0.5	Interview of Provincial vice-director of LWU (Mrs. Keosomvang) and Mrs. Vilayvanh (LWU – member of Provincial Steering Committee) – Travel back to Vientiane
22/11/13	Vientiane	1	Data analysis
23/11/13	Vientiane	1	Data analysis
24/11/13	Vientiane	0	
25/11/13	Vientiane	1	Redaction of draft report (and later final report)
26/11/13	Vientiane	1	Redaction of draft report (and later final report)
27/11/13	Vientiane	1	Redaction of draft report (and later final report)
28/11/13	Vientiane	1	Redaction of draft report (and later final report)
29/11/13	Vientiane	1	Redaction of draft report (and later final report)
TOTAL		21 days	

**Appendix 4 – Summary of project achievements regarding evaluation criteria of the logframe**

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	LEVEL OF ACHIEVEMENT
<b>Overall Objective: To support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.</b>	<b>G1: Productive asset ownership of 70% of poor households within project core villages is increased by a minimum average of 30% over baseline through a) reduced livestock mortality, b) paddy and fishpond creation and c) coffee garden establishment.</b>	<b>95%</b>
	<b>G2: Minimum of 70% of women report increased household food availability and/or income</b>	<b>100%</b>
	<b>Average level of achievement of overall objective</b>	<b>97%</b>
<b>Specific Objective: To Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks.</b>	<b>P1.1 Adopting households report increased food production of at least 20% for project supported food production activities supported through R1.1, R1.2 &amp; R1.3.</b>	<b>90%</b>
	<b>P1.2 Minimum of 50% increase over baseline in annual income of 70% of households classified as poor is projected within 2 years by the EoP Evaluation.</b>	<b>22%</b>
	<b>P1.3 Minimum of 75% of women producing new types of food learned through WINGs.</b>	<b>100%</b>
	<b>Average level of achievement of specific objectives</b>	<b>71%</b>
<b>Result 1: Increased productivity of household staple foods, fats and protein production systems.</b>	<b>R1.1 Increase paddy rice production in target villages by 75% over baseline</b>	<b>32%</b>
	<b>R1.2. 50 non-targeted households increase production of fish/forage /vegetable through adopting improved integrated production model without pond construction subsidy</b>	<b>Non-relevant criteria of evaluation</b>
	<b>R1.3 90% of farmers adopting project promoted high yielding varieties of upland crops demonstrate increased production of these crops</b>	<b>100%</b>
	<b>Average level of achievement of Result 1</b>	<b>66%</b>
<b>Result 2: Expanded income generating assets (livestock, coffee) of the poor,</b>	<b>R2.1 Minimum of 350 HHs have successfully established at least 0.25 Ha each of close cropped Catimor coffee</b>	<b>100%</b>

generating significant additional incomes.	gardens.	
	R2.2 Minimum of 150 HHs are paying full amounts for pig vaccination services by EoP.	100%
	R2.3 85% of households in communities with improved road access utilize road to access markets	100%
	Average level of achievement of Result 2	100%
Result 3: Improved women's food utilization skills and reduced women's labor burden.	R3.1 Minimum of 100 households have access to in-village clean water by EoP, reducing women's workloads.	100%
	R3.2 70% of WINGs members in 15 villages have increased understanding of food and nutrition that include diverse, nutritious, locally-available food	75%
	Average level of achievement of Result 3	87%
Result 4: Strengthened village and District technical skills and capacities associated with project promoted food and income production systems.	R4.1 Minimum of 85% of trainees attending practical training in coffee production, picking, processing and sale from Boloven Coffee Producer Associations report applying one or more learnings.	100%
	R4.2 Minimum of 60% of HHs report applying learning's acquired from project supported trainings in food and income strategies.	80%
	R4.3 District staff 'training cards' show at least 65% satisfaction with on-the-job training received from technical experts.	100%
	R4.4 Minimum of 5 publications, jointly authored with District staff, are produced.	100%
	Average level of achievement of Result 4	95%
	Average level of achievement of expected results	87%
<b>Result 1: Increased productivity of household staple foods, fats and proteins production.</b>		
Activity 1.1: Construct/repair SSI systems able to irrigate a total of at least 30 Ha benefiting a minimum of 80 HHs.		84%
Activity 1.2: Integrated fish/forage/vegetable pond systems established and successfully operating with a minimum of 100 poor households.		100%
Activity 1.3: Minimum of 150 farmers adopt one or more improved varieties of key upland crops (rice, cassava and maize).		100%

Level of achievement of activities related to Result 1		95%
<b>Result 2: Expanded income generating assets (livestock, coffee) of the poor, generating significant additional incomes.</b>		
Activity 2.1: Minimum of 400 poor households have each established min. of 0.25 Ha of close planted Arabica (Catimor) coffee gardens.		55%
Activity 2.2: Minimum of 100 households have increased cash returns on labor from coffee production through adoption of wash processing methods.		100%
Activity 2.3: Generate farmer demand and willingness to pay for livestock vaccination services through efficacy demonstration.		100%
Activity 2.4: Improve physical market access through construction/improvement of approximately 6 km of track and bridge construction and repair.		Activity not relevant any longer
Level of achievement of activities related to Result 2		85%
<b>Result 3: Improved women's food utilization skills and reduced women's labor burden.</b>		
Activity 3.1 Women's Income Generation and Nutrition Groups (WINGs) established and operating in 15 villages.		100%
Activity 3.2 Nutrition training models developed and undertaken through WINGs in 15 villages.		60%
Activity 3.3 Village water supply systems constructed in minimum of three core villages.		100%
Level of achievement of activities related to Result 3		87%
<b>Result 4: Strengthened village and district technical skills and capacities associated with project promoted food and income production systems.</b>		
Activity 4.1: Skills in participatory research, problem analysis and intervention design and implementation of approximately 20 DAFO and LWU staff strengthened		100%
Activity 4.2: Fe/male farmer from 15 villages improve technical production and marketing skills through on site placements		100%
Level of achievement of activities related to Result 4		100%
Level of achievement of activities		92%

## Appendix 5 – Detail of the economic calculations for overall (G1) and specific objectives (P1.2)

We have considered a total number of 916 households and 445 poor households.

Specific objective P1.2 (Increased annual income for the poor households)

All calculations are done per poor household

We have considered the following sources of incomes

### Rice

Situation before project: 7 months of self-sufficiency \* 20 kg/month \* 6 persons (3 adults and 5 children consuming only 60%) \* 10,000 kips/kg = 8,400,000 kips.

Situation after project: same situation for 417 poor households and increase in rice production (self-sufficiency) of 25% for 28 poor households what gives the following formula:

$$(417*8,400,000 + 28*8,400,000*1.25)/445 = 8,532,000 \text{ kips}$$

### Upland crops

Situation before project: 750 000 kips per year;

Situation after project: surplus of 850 000 kips of income for 121 poor households what gives the following formula:

$$(324*750000+121*(750000 + 850000))/445 = 981 \text{ 000 kips/year}$$

### NTFPs

Same situation before and after project: around 2,000,000 kips per year

### Sale of labour force

Same situation before and after project: 100 days \* 25000 = 2,500,000 kips per year

### Animal production

Situation before project: 2 pigs \* 500,000 kips + 4 chickens \* 50,000 kips = 1,200,000 kips/year

With 50% of mortality rate before project, that was actually corresponding to 4 pigs and 8 chickens

If respectively 80% and 60% of that stock was now vaccinated for the chickens and the pigs, and with a reduced animal mortality down to 30%, the animal production will be after the project as follows:

- for the chickens:  $8*0.2*0.5 + 8*0.8*0.7 = 5.28$  animals;
- for the pigs:  $4*0.4*0.5 + 4*0.6*0.7 = 2.48$  animals;

what generates an annual income of  $(5.28*50000)+(2.48*500000) = 1,504,000$  kips per year

### Vegetable production

Situation before project: 1,250 000 kips per year;

Situation after project: 4,000,000 kips per year 118 poor households (same income for the other ones) what gives the following formula:

$$(327*1250000+118*4000000)/445 = 1,979,000 \text{ kips/year}$$

### Fish production

Situation before project: 20 fish ponds (poor households) \* 140 fish/pond \* 9 fish/kg \* 30,000 kips/kg =  $20/445 * 140/9 * 30000 = 21,000$  kips per year

Situation after project: 20 former fish ponds \* 140 fish/pond \* 7 fish/kg \* 30,000 kips/kg + 136 additional fish ponds for poor households (with 20% of failure) \* 140 fish/pond \* 8 fish/kg \* 30,000 kips/kg =  $(20 * 140/7 * 30000 + 136*0.8 * 140/8 * 30000)/445 = 155,000$  kips per year

### Coffee production

Situation before project: 124 poor households (from 5 villages) had 0.1 ha of coffee plantation (with 300 trees per ha and 3 kg per tree of red cherries, sold as black cherries (weight reduced at 1.2 kg) at 4,000 kips/kg =  $124/445 * 0.1 * 300 * 1.2 * 4000 = 40,000$  kips per year.

Situation after project: these 124 plantations have increased their production up to 5 kg of red cherries per tree of which 4 kg are sold as black cherries (actually 1.6 kg) at 4,000 kips/kg and 1 kg is sold as white cherries (weight reduced to 0.33 kg) at 13,000 kips/kg.

In addition 220 coffee plantations (for poor households) of 0.25 ha each give 3 kg of red cherries (1.2 kg of black cherries) sold at 4,000 kips/kg, what gives the following formula:

$$(124 * 0.1 * 300 * (1.6 * 4000 + 0.33 * 13000) + 220 * 0.25 * 300 * 1.2 * 4000)/445 = 268,000 \text{ kips per year}$$

Overall objective G1 (Increased productive assets ownership for the poor households)

All calculations are done per poor household.

Land price has not been considered (as traditionally land community did not have any value) but only the improvements made on the land (irrigation infrastructures, coffee plantations and fish ponds) as well as the increase in terms of animal capital (due to the reduction of animal mortality).

### Rice fields

The capital related to paddy fields is estimated at 5 seasons of production with:

- before project implementation: 0.1 ha (per poor household) \* 1,500 kg/ha (of unmilled rice) / 1.5 (ratio milled/unmilled rice) \* 10,000 kips/kg \* 5 seasons = capital of 5,000,000 kips for paddy land per poor household;
- after project implementation: 417 households with the same capital and 28 others with irrigation infrastructure (capital increased by 100%), what gives the following formula:  
 $(417 * 5,000,000 + 28 * 10,000,000)/445 = 5,315,000$  kips per poor household.

### Coffee plantations

The capital related to coffee plantations is also estimated at 5 seasons of production. By using the data above related to coffee production before and after project implementation (respectively 40,000 and 268,000 kips), we obtain (by multiplying by 5 seasons of production) the following data for the levels of capital (in terms of coffee plantations for the poor households):

- before project implementation: 201,000 kips per poor household;
- after project implementation: 1,340,000 kips per poor household.

### Fish ponds

The capital related to fish ponds is estimated at 2 seasons of fish stocks (or production). production. As for coffee, we use the data above related fish production (respectively 21,000 and 155,000 kips before and after project implementation) and multiply them by 2 (seasons) in order to obtain the levels of capital (in terms of fish ponds for the poor households):

- before project implementation: 42,000 kips per poor household;
- after project implementation: 311,000 kips per poor household.

### Animal capital

The average animal capital for the poor households (before project implementation) has been estimated at the value of 6 chickens ( $6 * 50,000$  kips) and 2 big pigs ( $2 * 600,000$  kips), what gives a total capital of 1,500,000 kips per poor household.

After project implementation (animal vaccination rate of 60% for pigs and 80% for chickens and animal mortality rates reduced from 50% down to 30%), that animal capital has increased by:

- for chickens:  $(6*0.2*0.5 + 6*0.8*0.7) - 6*0.5 = 0.96$  additional chickens what corresponds to a surplus of animal capital of 48,000 kips;
- for pigs:  $(2*0.4*0.5 + 2*0.6*0.7) - 2*0.5 = 0.24$  additional pigs what corresponds to a surplus of animal capital of 144,000 kips; and then
- An additional animal capital of 192,000 kips per poor household, what gives a total average animal capital after project implementation of 1,692,000 kips per poor household.

## **Appendix 6 – End of project evaluation – Gender component – December 2013**

**Consultant: Dr. Linda Malam ([lindamalam@rocketmail.com](mailto:lindamalam@rocketmail.com))**

### **Executive Summary**

This report aims to evaluate and document the achievements of the Dak Cheung Food Security Project (hereafter referred to as DFSP) with a specific focus on gender. (This will be used as a resource for the final report which also includes a technical evaluation of food security interventions). The DFSP has two primary objectives: first, “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR”; second, “to increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market-based shocks.” Meeting these objectives has involved coordinating and implementing a range of activities across an area characterised by geographic and ethnic diversity, lacking in road infrastructure and highly contaminated by UXO. It has been a very challenging project to implement. There are 20 target villages in the project. Each village represents a unique environment in terms of the cross cutting factors of geography, ethnicity, road access and UXO contamination.

Despite such challenges, the DFSP has largely met its objectives. Food security has been supported and improved in all target villages, some with more success than others, but all have improved above the baseline situation. Successful gender mainstreaming was key component of the project’s design and implementation, and the project has significantly contributed to women’s empowerment in the target villages. The project is highly relevant to both the Lao government and to the populations of the target villages, a fact that has ensured that the recipients of project assistance are highly interested in the continuation of project activities beyond the life of the project. The sustainability of most project activities is high because of the high level of commitment to the activities supplied by the project. On the whole, project activities have been very effective and produced excellent positive impacts on food security and income levels for project participants. Project implementation has faced significant challenges to efficient delivery of activities and support. When compared to the cost of other projects in less challenging contexts the DFSP could perhaps be seen as less efficient, however this would not be a fair conclusion to reach. Given the challenging environment (characterized by lack of road infrastructure, geographic and ethnic diversity and high levels of UXO contamination), the DFSP has been very efficiently managed and has achieved high levels of success.

One outstanding characteristic of the DFSP is the level to which gender mainstreaming has been achieved. In this regard, lessons learned from the project should be widely disseminated so that other projects and organizations can benefit from the positive practices seen in the DFSP. The stipulation that 50% of all training participants must be women, the establishment of Women’s Income and Nutrition Groups in 15 of the 20 villages (as per the project design) as the conduit for a significant number of project support and activities and the focus of project

activities on reducing the workloads of women (and consequently children) has enabled women in the target villages to exercise a much greater level of agency in household and village-wide decision-making processes. Moreover, the gender-related project activities have contributed to the transformation of the unequal gendered power structure at the household and village levels in the most successful villages and have created a space for women to form and consolidate strong relationships of support and solidarity. In short, the DFSP has made significant contributions to the level of women's empowerment in the target villages.

## Introduction and Background

Lao PDR is a land-locked nation in South East Asia. Surrounded by China, Vietnam, Cambodia, Thailand and Myanmar. Regional roads are currently being developed, upgraded and expanded to create more opportunities for market access of local produce. Administratively, Lao PDR has 17 provinces and 137 districts. The Government previously identified 72 'poor' districts and 47 of these (including Dak Cheung, which is located within Sekong Province, highlighted in Figure One, below) were identified as the 'poorest'. However in 2009, the Government revised the poverty criteria and there is no longer a classification of 'poorest'. The revised classification uses the criteria that if 51% of total villages are 'poor' then the district will be classified as 'poor'.

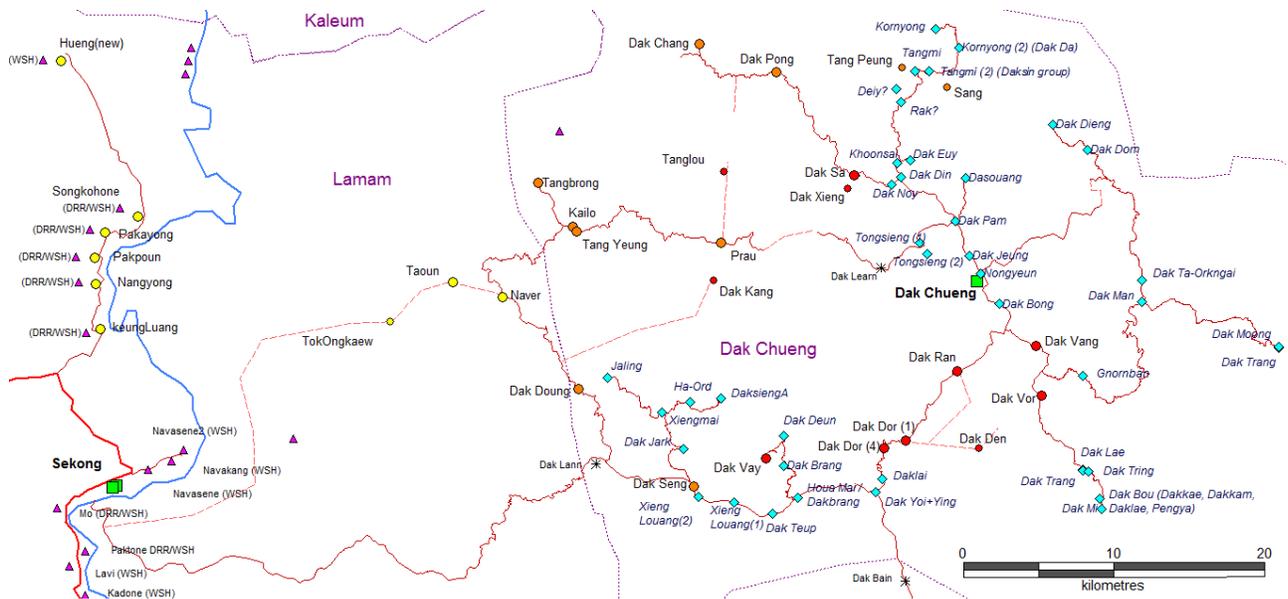
Sekong Province has an area of 8,338.8 square kilometers. The total population is 101,364, of whom 51,521 are female (2010 provincial statistics). Sekong borders Vietnam to the east, Attapeu Province to the south, Champasack Province to the west and Saravane Province to the north (see figure one, below). Sekong Province has four districts, two of which are identified as poor, including Dak Cheung District. Dak Cheung District is a mountainous district, covering an area of 217,900 hectares and has a total population of 19,809, of whom 9,981 are female. Sixty six percent of the 80 villages are classified as poor and 55% of total households are 'poor'. Hai (shifting/rotating/swidden) cultivation with a fallow cycle of four years remains the active livelihood activity and rice is the staple food. Limited introduction of agriculture and livestock raising has resulted in some albeit limited total increase in yields of rice (relative to the limit of the intervention) and coffee production and large numbers of raised animals dying every year. (Information in this section from Sitthivong, K (2011). Dak Cheung Food Security Project Baseline Assessment Report, 18 February 2011. [Available from Sekong office of CARE International in Lao PDR]).

Figure 1: Map of Laos with Sekong Province Highlighted



Road infrastructure in Dak Cheung District is poor, with road access to many villages being very limited during the rainy season. Road linkages from Dak Cheung to other districts are also poorly developed. There are two roads linking Dak Cheung to other districts; one to Attapeu, which is in quite good condition but can be blocked during rain because there are several places where the roads ford a river; and one to Sekong, which is in very poor condition and is impassable when there is rain. The construction of a new road between Dak Cheung and Sekong has been underway for over 5 years now, and the project has faced numerous delays. Construction can only occur during the dry season, and each year progress made is damaged during the wet season. At the time of the research visit it was dry season, yet no construction work was evident, nor had there been any work done in the previous months according to the CARE field staff. The completion of the road remains as a possibility, though there is widespread skepticism as to when it may actually eventuate. Improved road access will hopefully make connections between Dak Cheung and other parts of the country stronger, potentially enabling greater access to markets, health care facilities and educational opportunities for those living in the district. Due to difficulties in access to remote villages in Dak Cheung District, the research for this evaluation was conducted in the villages of Dak Dor (2), Dak Vor, Dak Vai and Dak Vang (see figure two). (Note that Typhoon Haiyen in the South China Sea influenced heavy rains in Dak Cheung at the start of the dry season which impacted considerably on road access just prior to the evaluation).

Figure Two: Dak Cheung District in relation to Sekong. (Source: CARE Sekong Office).



The remoteness of Dak Cheung District from essential services and markets, coupled with the demographic composition of the population (being primarily rural ethnic groups), means that life in Dak Cheung District is very difficult for those who live there. It is well documented that

geographic isolation and ethnic identity constitute the greatest risk factors for social and economic marginalization in Lao PDR (UNDP 2007). Among ethnic groups in Lao PDR, gender is a factor that compounds marginalization: within ethnic communities, women and girls are often more marginalized than men and boys when marginalization is measured against indicators such as level of education, access to labor market opportunities, health and nutrition and so on.

The Dak Cheung Food Security Project builds upon a longer-term engagement with livelihoods support by CARE in the province. CARE has been working in Dak Cheung District since 2007. Initial programming started with a 5-year Lao Australia NGO Cooperation Agreement (LANGOCA) project with the aim to link UXO (unexploded ordinance) clearance with livelihood development in rural areas. In September 2009 Typhoon Ketsana hit the province, resulting in extensive flooding and wide spread crop damage from the wind. CARE responded with emergency programming including food distributions, non-food items, WaSH (water, sanitation and hygiene), and livelihood support. Post-crisis projects included WaSH and disaster risk reduction. In 2010, in addition to on-going emergency response programming, CARE started four new projects. This included a CLTS<sup>11</sup> pilot project (CISS), and WaSH<sup>12</sup> recovery project (following on from the emergency WaSH activities), a DRR<sup>13</sup> project and also a 3.7 year livelihoods project – the Dak Cheung Food Security Project (DFSP), as part of the on-going development programming. In 2012 CARE further extended programming in Dak Cheung district to include two livelihood projects and a Disaster Risk Reduction (DRR) project. In 2013 CARE started the 4-year EU funded project: Partnerships for poverty reduction and women’s empowerment in Dak Cheung (PWED) Project.

The EU-funded Dak Cheung Food Security project has run for 45 Months (3.75 yrs). The donor agreement had a start date of April 2010 and the MoU (Memorandum of Understanding) with the Provincial Agriculture and Forestry Department and was signed in July 2010. The DFSP has two primary objectives: first, “to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR”; second, “to increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market-based shocks.” Meeting these objectives involves coordinating and implementing a range of activities across an area

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<sup>11</sup> Community-Led Total Sanitation

<sup>12</sup> Water Sanitation Hygiene

<sup>13</sup> Disaster Risk Reduction

characterised by geographic and ethnic diversity, lacking in road infrastructure and highly contaminated by UXO. It is a very challenging project to implement. There are 20 target villages in the project. Each village represents a unique environment in terms of the cross cutting factors of geography, ethnicity, road access and UXO contamination.

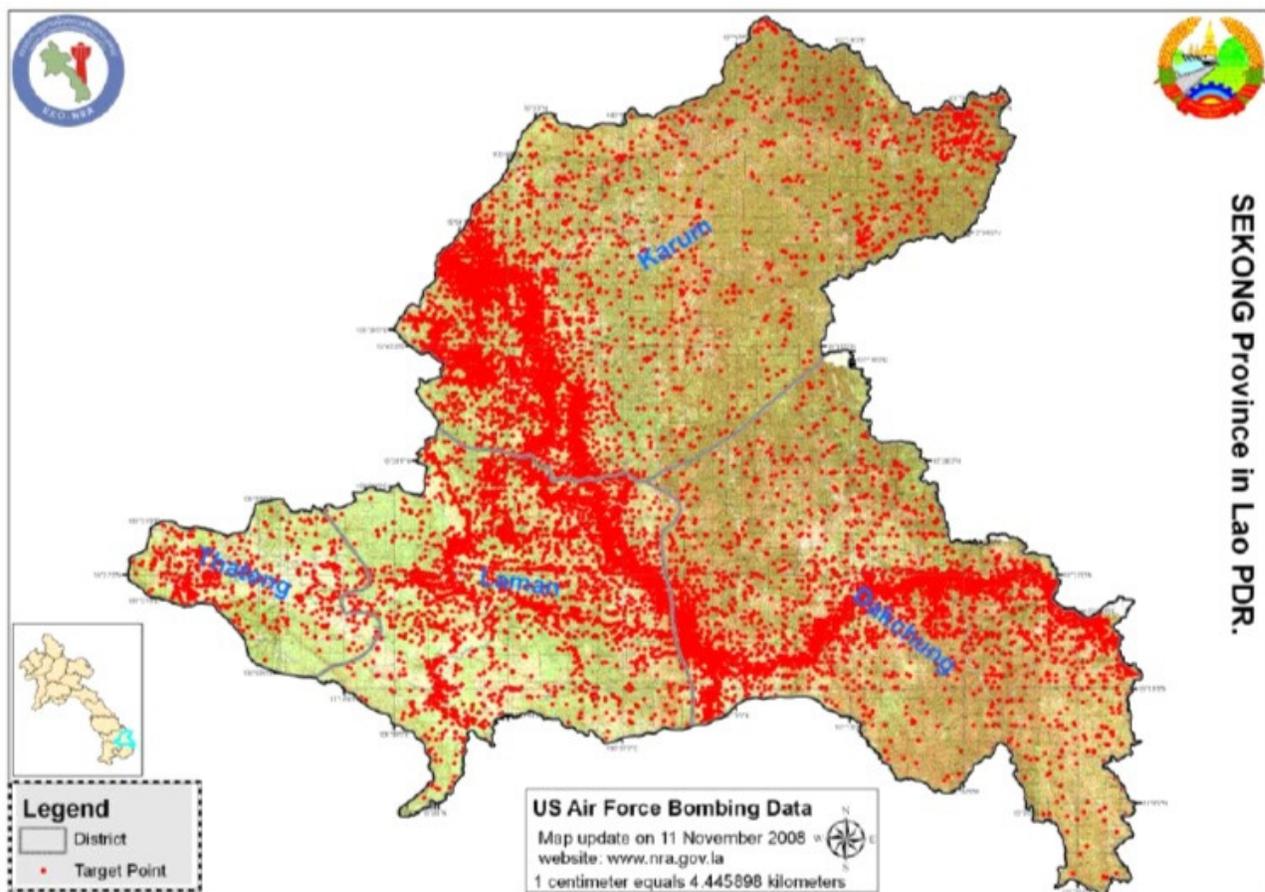
In terms of geography, each village has a unique combination of amount and variety of agricultural land (some primarily with steeply sloping agricultural land, some with more flat arable land), water access (either located beside a river or creek or some walking distance from the water source), and level of access to road infrastructure. Some target villages have a longer history of crop production (this is particularly important with regard to coffee production, with crops producing income only approximately 4 years after establishment), which greatly affects the level of income and therefore food security when compared to other, less established villages.

The project also operates in an ethnically diverse environment. Within the target villages there are four ethnicities reported: Taliang, Ye, Katu and Trieu. Of these, Katu and Trieu are assumed to be very culturally similar (the CARE Dak Cheung team believed the ethnic groups to be 'the same' for all intents and purposes). Katu villagers were reported by the CARE field team to be the most challenging to work with when implementing the project in terms of communication because their strong cultural practices can be very much at odds with accepted ways of doing things in wider Lao society. (It should be noted that CARE does not consider that Katu are any less motivated to participate in food security activities. CARE has succeeded in recruiting local ethnic staff, but these come from Talieng not Katu ethnicities). One example of challenging Katu culture that was given by the CARE field team is the practice of sending women to the forest alone to give birth. While this practice is not linked to food security, the ethnic difference and strong spiritual beliefs can hamper the implementation of project activities, even if the reason is simply that the CARE team feel a cultural difference and find it difficult to communicate across such cultural differences. Moreover, communication between the CARE field team and the Katu villagers is difficult because neither CARE staff nor the government partners have Katu language expertise. The village head can communicate in Lao and provides translation for CARE project activities, a situation that opens up the possibility of translation inconsistencies and perhaps inequitable distribution of project activities and support. CARE and the project partners have language expertise in Taliang language and report that both Taliang and Ye villages are easier to work with because the cultural differences and practices of these

ethnicities are compatible with project activities.

UXO contamination remains a challenge for the achievement of greater food security in Dak Cheung. UXO clearance has been slower than projected; therefore villager's access to safe agricultural land is currently limited to cleared land only. The slow clearance of UXO has affected the rate at which the project was able to establish coffee plantations, develop fishponds, construct irrigation schemes and expand rice fields. Coordination with UXO clearance teams is ongoing, but the progress of clearance is necessarily slow due to the challenges of access and inclement weather (see figure three, below).

Figure three: US air force bombing data map, (note that this does not indicate the level of current UXO clearance, only the historical level of UXO contamination).



### UXO Contamination in Sekong Province

Implementing the DSFP involves carrying out a series of analytical and practical processes in each village. The first involves consultation with each community regarding the kinds of food security and livelihood activities they would ideally like to have the project supply and implement. Second, the field team must conduct a sophisticated analysis of the combination of

geography, level of UXO contamination, social infrastructure and existing resources for each village. This step enables the team to assess the feasibility of community requests for project activities and to consult with government partners who provide some technical support for specific project activities. Project staff can then select a range of activities and support to match the needs of each village, taking into account the requests from village committees for particular activities and support. Following this, further community consultation is conducted to establish the relevant village committees required to manage each specific project support activity and to finalize agreement between CARE DFSP and the Village Committee responsible for the supported activity. For example, if a village is to receive from the project supply a petrol powered coffee mill, a committee must be set up within the village to manage the mill which involves collecting milling fees and arranging equipment repair when necessary (paid for from milling fees). Potential sustainability of every form of support is a key consideration when assessing community needs and project support.

Monitoring of the success of the support supplied is primarily done through two channels: first, through field site visits by CARE field staff and government partner technical support staff in the case of agricultural support for new production techniques or new agricultural initiatives, and second, through the focal point of the Women's Income and Nutrition Group (WINGs) set up in each village. WINGs groups have been established in each village to formalize women's involvement in the project and to facilitate women's networks of support at the village level. WINGs should meet at a minimum every two months to review the success of previous project support mechanisms such as workload reduction activities (supply of handcart building materials to reduce workload in carrying firewood and other heavy items, rice mills and so on) and to examine any new requests for workload reduction and income generation activities. The establishment of WING groups has been a key project activity enabling women to access civil society and supported their participation in decision making in the village, both at a household and community-wide level. The role of WINGs groups in empowering women will be discussed in greater detail in the results/discussion section of this report.

## **Research Methodology**

The primary aim of this evaluation was to review the gender related project components of the DFSP and to assess the success of the project against EU evaluation criteria and the project log-frame. The methodological approach adopted for this evaluation study encompassed a review of all relevant project documentation (see appendix A for a full list of project documents reviewed), as well as primary research conducted in Dak Cheung District. The research design sought to meet the requirement of providing a clear evaluation of the DSFP within the constraints of time and accessibility posed by the research site. In this section of the report, the discussion of the methodological approach for this evaluation will be presented in two parts. First, a detailed description of the research process itself will be presented. Second, the section will conclude with a discussion of the relative strengths and weaknesses of the research methodology.

The fieldwork was conducted over a period of four days from November 12, 2013 to November 15, 2013 inclusive. There were four villages assessed during this time, one each day. The

selection of possible villages for the assessment was, unfortunately, limited to those located nearby Dak Cheung District town because Typhoon Haiyan had affected the weather in the district causing enough rainfall to make many of the villages covered by the project inaccessible by car. Even small amounts of rainfall poses significant challenges in accessing all villages located to the north of Dak Cheung, so these were not part of the evaluation fieldwork.

The evaluation team consisted of two international consultants, one gender expert and one agricultural production expert. In addition there were a number of other team members, including staff from CARE as well as staff from the Lao Government staff from the national and district levels. CARE staff included the project manager, the senior gender manager, a Taliang/Lao translator, and a Lao/English translator. Lao Government staff included one district representative and one national level representative from the Ministry of Agriculture and Forestry (MAF) and a national level representative from the Ministry of Foreign Affairs (MoFA). The international consultants worked independent from each other while in each village and discussed findings at the end of each day, which proved to be a very productive way of working and sharing knowledge and ideas. The Lao government officials observed the research and made their own notes from the discussions they observed to use in compiling their internal reports.

The methodology for the gender component of the evaluation involved two basic activities while in each village: first, a meeting of all available village women to discuss changes in food availability, level of understanding and application of nutritional training delivered during the project, and changes in their level of income and their level of engagement with the WINGs groups. The second in-village activity involved in-depth interviews with four women in each village to explore the impact of the project on their food security and level of empowerment in terms of participation in decision making at the village level and agency at the household level in detail. Interviewees were selected on the basis of their level of income and status in the village, with at least 2 women in each village being from the poorest families, and 2 from those who are slightly better off (see appendix B for evaluation tools).

In addition to the in-village activities, in-depth interviews were conducted with two key project staff: the Project Manager and the Senior WINGs Coordinator. The aim of these interviews was to understand the ways in which the project is implemented, including an analysis of the logics used to decide how project activities and support are distributed at the household level in each village. Distribution of project activities within the village is a complicated process of balancing household need with available household resources (land, access to water sources, and labor) to find the best fit of support and activities for assisting each household. The effectiveness of partnerships between project staff and government were also discussed in the interviews with CARE project staff.

There were several potential limitations in the methodology utilized for this evaluation, including the short time frame for fieldwork, the composition of the research team, and issues around translation. Most of these limitations were unavoidable, and some could be compensated for by

triangulating data in other ways (for example, interviews with project staff). Each limitation is discussed below.

The fieldwork was originally designed to be of a longer duration than it was in practice, but there were several events that delayed the beginning of the field component of the evaluation. First, the agricultural consultant suffered an injury and had to delay the start of the fieldwork by one week. Second, Typhoon Haiyan was approaching the field site at the time the field team could have departed Vientiane, which caused further delays<sup>14</sup>. Longer time in the field would have allowed a greater number of villages to be included in the evaluation, and would have resulted in a more reliable dataset. However, since the project target villages are all unique, with different geographic, ethnic, access and UXO characteristics, it would be unlikely that any fieldwork evaluation could have captured all possible scenarios. The consultant is confident that by understanding the way in which the project has been implemented in the target villages it is possible to comment on the effectiveness of the project, and on the impact the project has had in terms of the broad objective to *improve* food security in the target villages, but it is not possible to comment confidently on the impact that the project has had in detail across all villages.

The second key limitation to the evaluation fieldwork is related to the composition of the research team. Ideally the research team would have been made up of only the relevant CARE staff, the consultants and the translators necessary for the research. The addition of Lao Government officials potentially affected the ability of the consultants to create rapport and trust with the research participants, simply because the staff mentioned were not a necessary part of the research team and were observing all research conversations. This is not a problem specific to Lao government staff, it is simply a problem of establishing rapport with research participants and this is best done with only those who are a necessary part of the research team. Arriving in each village with such a large group would likely have been somewhat daunting for villagers and the presence of Government staff from Vientiane could have limited the ability of villagers to communicate freely.

The third potential limitation involves issues in the translation process. All village-based interviews were conducted through a four-step translation process, from English to Lao, then Lao to Taliang and back again. While this may seem to be a source of error (as translation so often is), this limitation was addressed by the gender consultant holding long preparatory meetings with both translators where the interview schedules were reviewed and discussed in detail so that the spirit of the questions was well understood by both staff assisting with translation. Interview questions were translated from English to Lao and Lao to Taliang before fieldwork began, and the interview process of English-Lao-Taliang-Lao-English was much more efficient during the fieldwork because of the preparatory discussions which had occurred. Another positive aspect of the translation process is that the gender consultant has a good grasp of Lao language and was able to understand a significant amount of the Lao dialogue and

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<sup>14</sup> After Typhoon Haiyan crossed the Philippines it was predicted that the centre would actually cross Dak Cheung as a category 4 typhoon. CARE evacuated the Dak Cheung team to Sekong Town at this time. In fact 100km from the Vietnam coast the storm turned sharply northwards and so little wind was experienced in the district. However, the weather system did influence considerable rainfall at that time which impacted on village access.

therefore be sure that the translator was in fact translating word-for-word the responses of the research participants as the Taliang translator reported them.

## Results and Discussion

In this section of the report the results and discussion of the field research will be presented. The focus of this report is on only those actions and impacts with gender-related elements, as per the log frame provided with the ToR (see appendix C, which also lists the level of achievement of each activity). The EU evaluation criteria of Relevance, Effectiveness and Efficiency will provide the structure of the results and discussion section. The Impact, Sustainability, Methodology of Delivery and Partnership Approach of the project will be discussed in the section on Effectiveness, as this is where the relevant log frame objectives will be evaluated. The final section of the results and discussion will focus on the extent to which the project has contributed to women's empowerment.

### Relevance

This assessment of the relevance of the project has three components. The first component is an assessment of the relevance of the project in relation to National Government policy and priorities. The second component is an assessment of the relevance of the overall project objectives in terms of the priorities of the project target population. The final component is an assessment of the individual project activities with regard to the priorities of the project target population.

The DFSP is highly relevant in relation to Lao National Government policies and priorities. The overall objective of the program, "to support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR" is clearly aligned with government policy. The focus on women's participation and empowerment through the project design and implementation is also aligned with the Lao Government's commitment to MDG 3, (promotion of gender equity and women's empowerment). These wider international commitments have been enshrined in national level policies such as the National Growth and Poverty Eradication Strategy (NGPES) and the National Socio-Economic Development Plan NSEDP, where the DFSP focus on rural development and poverty alleviation clearly align with Lao government policies and plans.

The DSFP objectives are highly relevant to the target population. Dak Cheung District is ranked as the 13<sup>th</sup> poorest district in Lao PDR.<sup>15</sup> The research undertaken by CARE prior to commencing the DFSP found that the people in the 20 project villages had experienced chronic food insecurity, typically being without enough rice to eat for 6-9 months of each year. In lieu of adequate rice availability, their diet was supplemented with forest foraging and consumption of cassava and maize. In addition, their vulnerability to unexpected shocks to the rice production capacity such as climatic events, pest, disease and wild animals meant that food insecurity was a constant treat to their subsistence. Living with such chronic food insecurity meant that nutrition levels in the target villages were significantly below what would be considered sufficient to curb

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<sup>15</sup> National Growth and Poverty Eradication Strategy

the very high levels of stunting, wasting and malnutrition evidenced in rural areas in Laos.<sup>16</sup> For these reasons, the overall objective of the DFSP, to support food security in all its dimensions, is highly relevant to the target population.

The DFSP activities are a sophisticated suite of interventions aimed at reducing food insecurity, reducing women's workloads and empowering women through the creation of village based women's income and nutrition groups. The list of activities include:

- Construction of irrigation systems for paddy rice production
- Supply of livestock
- Supply of material inputs for agricultural production
- Promotion and development of upland crops
- Promotion and development of vegetable production (home gardens)
- Support to coffee production, processing and marketing
- Promotion and development of fish production
- Support to animal production through animal vaccination
- Construction and/or repair of infrastructures (water supply systems and road infrastructures)
- Activities related to women's workload reduction
- Training on nutrition
- Establishment of Women's Income and Nutrition Groups in each village
- Capacity building (of villagers and district staff)

Of the above activities, the only one that villagers have expressed doubt over in terms of relevance is the animal vaccination activity. The reason for this is that there were significant numbers of livestock death in 2012 after the animals had been vaccinated. The deaths were caused by a disease that the animals had not been vaccinated for, however, because of the villager's lack of understanding of the science of vaccination and disease outbreaks this event significantly reduced confidence in the ability of the vaccination program to protect animals from disease. Their confidence in the effectiveness of the vaccination scheme is important because unlike other aspects of the project activities, the villagers must pay for vaccinations<sup>17</sup> (the fees are low, between 300-1000 kip for a vaccination that lasts 6 months), therefore if confidence in the effectiveness of the activity is low they will be reluctant to implement the activity.

## **Effectiveness**

This section is structured around the log frame objectives and results and reports only on those components allocated to the gender consultant. The log frame is located in Appendix C.

Overall Objective G2: Minimum of 70% of women report increased household food availability and/or income.

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<sup>16</sup> MDG Progress Report of the Lao PDR 2013.

<sup>17</sup> In the latter stages of the project a reduced subsidy system has been introduced so that village vets gradually charge increasing amounts to farmer for vaccination so that eventually they are able to manage vaccination as a small income generating activity and motivation from both the vets and the farmers is sufficient to reduce the need to regular external interventions.

In each of the villages visited for the evaluation a group meeting of all village women was called. Table 1, below, shows the number of women attending each meeting and the percentage of women who reported that they had increased availability for food and income.

Table 1: Percentage of women reporting increases in food and income availability.

<i>Village</i>	<i>Number of women attending the meeting</i>	<i>% of women reporting increased availability</i>	<i>% of women reporting increased food</i>	<i>% of women reporting increased income</i>
Dak Dor	21	100		100
Dak Vay	11	100		100
Dak Vor	24	100		100
Dak Vang	32	100		100

The discussions held in the group meetings revealed that all women had benefited from the home vegetable garden seed supply and cultivation training implemented through the project. The home vegetable gardens had increased the variety and amount of vegetables that women had available for household consumption and the amount and variety of vegetables that they had available to sell as an income generating activity. In terms of household consumption, prior to the DSFP almost all women cultivated a very limited variety of vegetables, primarily cabbage and chili, in their home gardens for consumption and sale. The project introduced a variety of vegetables to the women for cultivation in their home gardens including pumpkin, cucumber and spring onions, spinach, long bean, green bean, coriander, lettuce and morning glory, all of which have been incorporated into their diets. This diversification of vegetable varieties in the household diet represents a significant improvement in household nutrition. In terms of income generation, many women commented that the training they had received from the project on the types of vegetables that are popular in the market had enabled them to focus on cultivating those vegetables and therefore increase their incomes. The sustainability of this activity is expected to be excellent because women were very supportive and enthusiastic about the activity, the activity had involved the supply of seeds and training women in cultivation and, importantly, seed saving processes so that they could ensure that they would have seeds to use in the following season.

Most women reported that prior to the project they made virtually no income from vegetable sales. At the time of the evaluation women in Dak Dor, Dak Vor and Dak Vang reported earning between 50,000 and 100,000 kip per month from vegetable sales. The situation in Dak Vay was less positive, with women reporting that they were not cultivating vegetables in their home gardens at the time of the evaluation because it was rice harvest time and vegetable cultivation was occurring in the upland rice fields. The overall level of food security in Dak Vay was not as positive as the other villages that were visited, though it had improved from the baseline situation at the beginning of the project. The key reason for this is that the village had relocated just 2 years prior to the evaluation and so building of houses has impacted on time available for agriculture. Coffee from the project was a new activity in this village, and therefore was in the

early stages of crop development and so had not yet reached a point where the coffee could be sold. In addition, being located away from the main road contributes to isolation, as does the ethnic diversity of the district, where villages located close to each other may still be isolated because they do not share a common language. With time it is likely that the food security situation in Dak Vay will improve to the levels seen in other more established villages.

When asked about their level of consumption of meat and fish, the women in Dak Dor, Dak Vor and Dak Vang all reported that they had good access to these protein sources. Those households with fishponds in particular had ready access to fish as the activity was going very well. In Dak Vay, there were 5 women who attended the meeting (out of a total of 11 women who attended) who reported not having eaten meat or fish at all over the past week. Clearly the food security situation in Dak Vay is still critical, though, as mentioned previously, it has improved from the baseline situation. In Dak Vay, (the village which had only been relocated 2 years previously), there had been a disease in the months prior to the evaluation visit which had resulted in almost all the poultry and many of the pigs in the village dying, which accounts for the low access of people in this village to protein at the time of the evaluation. Unfortunately, the disease was one which livestock had not been vaccinated for, and the mortality of the vaccinated livestock reduced confidence among the villagers in the vaccination program.

The key factor driving the difference in the level of wealth and food security between the three villages which were better off (Dak Dor, Dak Vor and Dak Vang) and Dak Vay, where poverty and food security are still critical, was the length of time that coffee plantations had been established. The three better-off villages had established coffee plantations prior to the beginning of the DFSP, so at the time when the DFSP was initiated they already had plantations that were yielding produce, even if yields were low and producers did not know how to process the coffee in order to increase their profits.

The DFSP was able to support those villagers with already established coffee plantations by training producers in more effective growing techniques and, importantly, in processing techniques that enabled producers to sell their coffee for a much higher price than if it was not processed after harvesting. The increases in incomes from coffee production have been significant (raising incomes from around 6 million kip per year to 30 million kip<sup>18</sup> per year in households with enough labor to cultivate more than 2Ha of coffee). Even in households with little access to labor (one woman interviewed was a widow with all her children in school, so the household had very little labor power), incomes can be as much as 10 million kip per year, which is a significant boost to the household economy above rice production only, and more than the household could make without the added value that has come from the training in production and processing that DFSP has provided. The fact that this woman had been able to keep all of her children in school (older girls were even in the district high school) is evidence that the family is no longer in the category of extreme poverty. In Dak Vay, coffee plantations are not yet mature, but it is hoped that in another 2 years time the people in Dak Vay will see similar improvements in their incomes and food security. Interest in and valuing of the results obtained from the improved coffee cultivation and processing mean that the sustainability of this

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<sup>18</sup> 30million kip is equivalent to 2,700Euros (11,000kip/Euro) or 3,700USD (8,000kip/US)

activity is likely to be very high as knowledge transfer about the improved techniques had been very effective with those having received training passing on their knowledge to others in the village.

Specific objective P1.3: Minimum of 75% of women producing new types of food learned through WINGs.

In all villages visited for the evaluation, 100% of women reported producing new types of food learned through WINGs, both in terms of food produced in the home vegetable gardens and in terms of cooking different varieties of food for household consumption. The supply of vegetable seeds and training in cultivation and seed saving has been enthusiastically welcomed by all women participating in the WINGs groups (which include all women in each village) and success in cultivating home vegetable gardens has been high (in Dak Vay, where the available labor pool is low, women have adopted a mixed cultivation strategy of planting the vegetables in the rice fields for the rice season, but will revert back to home vegetable cultivation once the harvest season is complete). The results of this evaluation in terms of the uptake of nutrition training by women in the discussion groups were interesting because they contradict results from previous evaluations (the mid-term review and the nutrition study). All women who had participated in nutrition training (10 women in each village) were able to recall the content of the nutrition training and recite the food groups as well as report on the types of food and cooking methods taught during the nutrition training. All women who had participated in training reported that they had passed their training and knowledge on to others in the village, that they and their friends and relatives has adopted the new cooking techniques and that they were very happy with the taste and improved nutrition for their families. According to the WINGs senior manager, this shift is due to the adoption of the recommendations of the earlier reports and changes in training techniques as a result of those recommendations.

Result 3.2: 70% of WINGs members in 15 villages have increased understanding of food and nutrition that include diverse, nutritious, locally-available food.

WINGs membership includes all adult women in each village. Nutrition training has been provided to 10 women in each village with the expectation that they will pass their knowledge on to other women in the kin and friendship networks. During the discussion groups (which were comprised of all adult women from the village who were available on the day of the evaluation), all women reported that they had adopted the new cooking techniques introduced through the nutrition training provided by the DFSP. More importantly, there was evidence of very good understanding of the nutritional needs of children and young people as the consultant asked questions about the distribution of food at the household level to see if women understood that children and young people have high nutritional needs because they are in a growth phase of physical and intellectual development. Overall the nutrition training has been largely successful.

Result 4.2: Minimum of 60% of HHs report applying learning's acquired from project supported trainings in food and income strategies.

All women involved in the evaluation research (the women in the discussion groups and those who participated in the in-depth interviews) reported applying the knowledge they had gained from the training they had participated in as part of the DFSP. As discussed above, the relevance of the activities was considered to be extremely high by the target population, and the results of applying the training in terms of increased food availability and increased income had been excellent, further reinforcing the relevance of the project activities. The excellent results of the project activities, particularly in villages where there were already coffee plantations established, has really consolidated the commitment of the target population to applying knowledge they have gained through training, and passing that knowledge on to others in the village. In villages where there has not yet been a lot of evidence of the usefulness of the project activities (where incomes are yet to increase because of immature coffee plantations, high livestock mortality and lack of labor to cultivate home vegetable gardens), the level of commitment to applying the knowledge gained through project activities may be less. For example, in Dak Vay, one woman reported that all of the fish fingerlings that had been provided by the project for her fishpond had died, and other fishponds in Dak Vay showed evidence of poor management (fish had not grown at the expected rate). This result indicates that close technical monitoring and assistance is needed in villages where food security and poverty are at a critical level is more important than it is in villages where project activities are readily adopted by the target population.

Activity 3.1: Women's Income Generation and Nutrition Groups (WINGs) established and operating in 15 villages.

WINGs groups have been established in 15 villages (as per the project design). The process of establishment involves the following steps:

1. Project staff call a meeting of all adult women to ask if they are interested in forming a WINGs group, and if the women are interested, (which in all cases they were), the project staff then guide the women to select group leaders based on the criteria that leaders must be able to read and write Lao language and be respected members of the community.

Project staff then a pocket chart with pictures of main different work types. Women use the chart to vote on the activities which are the greatest burden or workload. At the beginning of formation this was often rice milling. The project staff then discuss solutions to address this. This method was developed in addition to needs assessments as women often requested livestock as it was what the men wanted rather than discussing inputs that work directly benefit women. As the process of meetings and discussion continued and women saw that activities were implemented in response to their collective opinions, income generation activities suitable for the women were also identified.

Once activities have been selected, the project team examines the logistics of implementing the activity in the district office and involve project partners in the planning and logistical analysis of the viability of each particular activity that has been requested.

2. Once a plan for implementing the activity has been developed, the project team return to the village to discuss the management of the activity with the villagers, asking them to develop a plan for management and sustainability of the activity.
3. After agreement is reached, the villagers establish who within the WINGS groups will manage the activity with rules governing the activity.
4. The WINGS leaders are responsible for running the workload reduction activities implemented under the project and for coordinating with project staff in case of any technical problems with the activity.

Income generation activities are managed in a slightly different way because they are administered on a household-by-household basis. Requests for income generating support such as supply of livestock (pigs and ducks), fruit trees, vegetable seeds, banana plantations, and so on, are made during the WINGS meeting. Following the requests, the project technical staff examine the resources of each household to assess their capacity to implement the activity or support they have requested. If there is a good fit between the request and the capacity of the household to implement the activity the activity is supplied with training from technical staff on how to implement it successfully. If there is not a good fit between the request and the capacity of the household to implement the activity, project staff return to discuss alternative options with the household members, working collaboratively until an agreement is reached.

As a portal for the distribution and management of project support the WINGS groups have been functioning well in all sites (the success of the WINGS groups in terms of promoting women's engagement in community decision-making and supporting women's networking opportunities will be discussed in the section below, 'contribution to women's empowerment'). There are five villages where the 2 monthly meetings are not always attended by project staff because of access difficulties, but these sites are contacted by phone and the women there have been trained in how to hold meetings and given materials to support their meeting such as workload charts and pictures and so on. Accessibility is a key limitation to the project activities in Dak Cheung, but it is a limitation that is not readily solvable, nor one that is due to poor management by project staff in any regard. There are four villages (all located to the north of Dak Cheung) that are very difficult to access where poverty levels and food insecurity are still critical. The project staff report that these villages have experienced improvements in their food security, but that extreme difficulties in accessing the villages has impeded the level of support that project staff can offer outside of the main dry season, as well as limiting the access that those villagers have to markets to sell their produce.

Activity 3.2: Nutrition training models developed and undertaken through WINGS in 15 villages.

3.2.1: Assessment of child weaning and other key practices undertaken.

In mid 2011, a study was undertaken by an international consultant detailing current nutritional understandings and traditional practices associated with food, infant weaning and feeding and associated health issues in CARE targeted villages. The resulting report (published in August 2011) gives a comprehensive description of child weaning, nutritional intake for children, young

people, pregnant mothers and other adults and the level of understanding of adult women of nutrition and food preparation techniques.

3.2.2: Training designed and ToT undertaken with DFSP and LWU staff.

Nutritional training for DFSP is based on the LANN (Linking Agriculture, Natural Resource Management and Nutrition) model which is in use across Lao PDR and now also in Burma. Training was conducted in December 2011 on the revised kick off sessions, and in November 2012 for the new 'evening class' sessions that focus on specific food groups.

Below is an extract from the English Guidelines for LANN prepared for CARE in January 2012 (available from CARE Lao, Vientiane office, page 4):

- *LANN is a community-based training approach to family nutrition for remote areas with low access to public health services.*
- *The LANN training approach is suitable for those organizations and/or projects which aim to exploit actionable linkages between agriculture, natural resource management, income growth and nutrition.*
- *LANN is not a "classical" nutrition training and is not specifically focusing on mother and child care. There is a broad range of training approaches and IEC materials available from other organizations that could be used. The LANN training approach was developed in 2009, at a time when there was a yawning gap in appropriate training tools for "green nutrition" including concepts, curricula, training slides and field tools and so forth. "Green nutrition" is defined here as comprising food consumption and food acquisition through own production, wild collection or purchase.*
- *Initially, LANN was developed for 7 INGOs in Lao PDR in 2009, most of which are non-health focused and have their competitive edge in food security. Initial partners were AgriSued, CARE, CCL, CRWRC, Helvetas, WCS, and WHH. In 2010, FRC and VFI joined. LANN was also adopted and is still applied by WHH in Cambodia since 2010. WHH has secured funding to apply LANN in Sri Lanka and Burma in 2012, too.*

3.2.3: Round the cooking pot nutritional trainings undertaken every 2 months with each of the 15 WINGs.

LANN training involves a series of sessions, each of which deals with a different aspect of nutrition (sessions are divided into topics such as 'fats', 'proteins' and so on). The program begins with a 'start-up session', which aims to introduce the program and give an overview of the nutritional topics to be covered in the sessions that will follow. The start-up nutrition training and the first nutrition module has been delivered in 16 of the DSFP villages and was attended by both men and women. Following the initial two training sessions, participation was restricted to only 10 female participants per village. This step was not necessarily a positive management decision, as the program seeks to encourage gender equity and the diversification of male and female roles; moreover, including men in the nutrition training may facilitate cultural change in household food preparation practices more so than if the woman in the household was communicating the new knowledge to her husband without the reinforcement of the project staff. Implementing the nutritional training in all sites across the project area at the regularity originally

intended in the log frame has been hampered by the challenges of access to those villages north of Dak Cheung.

#### 3.2.4: Mother and child health trainings and Q&A sessions held.

Mother and child health trainings have been delivered as a component of the nutrition training.

Activity 4.2: Female and male farmers from 15 villages improve technical production and marketing skills through on-site placements.

Two on-site placements to coffee plantations in Paksong have occurred during the project cycle: a technical training placement focusing on coffee production (nursery establishment, plantation, fertilization, use of bio-insecticide, pruning) for 49 villagers (19 of whom were women), drawn from 10 of the project target villages and a training and study tour for 25 villagers (14 of whom were women) from the 5 villages which were not part of the first on-site placement on production techniques, pruning, roasting, coffee processing and marketing.

### **Efficiency**

The project management has been as efficient as possible given the difficult conditions faced implementing a development project in Dak Cheung District. The key challenges faced are difficult access due to lack of road infrastructure, attracting and keeping quality staff because the district is so isolated and has such inclement weather, the high level of UXO contamination in the district and the uncertainty of possible village relocation due to high levels of interest in the district from mining companies.

Road infrastructure development linking the district to other districts via the direct Dak Cheung/Sekong road and the Dak Cheung/Attapeu road has been discussed in a previous section of this report. During fieldwork for the evaluation, project staff did report that the German INGO, KfW (German Financial Cooperation), is planning to support road improvement, which will enable better access to those villages north of the district town, Dak Cheung. The poor road infrastructure has had a significant impact on the cost of maintaining and repairing project vehicles, with many more repairs being necessary than was allocated for in the initial budget.

CARE was aware of the challenges associated with human resources management in Dak Cheung, and have allocated good salaries to field staff in order to encourage staff retention. This is an efficient use of funds as staff turnover negatively impacts the progress of project activities to a significant degree.

The high level of UXO contamination has hampered the ability of project staff to implement some activities, namely result 1.2 (50 non-targeted HHs increase production of fish/forage/vegetable through adopting improved integrated production model without pond construction subsidy). Implementation of other activities such as the expansion of coffee

plantations and rice paddy/upland rice areas has also been hampered by slower than expected clearance of UXO.

Uncertainty around relocation of target villages has affected only one village, Dakxieng. (Noting that both Tahgbrong and Dak vay undertook selfdetermined relocation during the project period). With such a high level of interest in Dak Cheung district by mining companies and with the future improved road infrastructure, village relocation may pose a threat to the food security of sites that have been part of the project. Currently, it is anticipated that Dak Ran village will be relocated in response to bauxite mining. Other villages may also be impacted.

Overall, the DFSP has been efficiently managed given the challenging context of the district.

### **Contribution to women's empowerment**

Women's empowerment is an intrinsic part of CARE's approach to poverty reduction and development. Like many development organizations, CARE understands that investing in women's empowerment and development is a powerful way to bring about positive change in communities. Reflection on CARE's program implementation and outputs across a range of contexts has shown that increasing women's access to livelihood strategies, markets and support networks has direct and positive impacts on community health and wellbeing, children's access to education and healthcare and food security<sup>19</sup>. The DFSP has been designed to be very inclusive of women in terms of ensuring a 50/50 gender balance in all technical trainings, the project's focus on reducing women's workloads and in terms of the establishment of WINGS groups in 15villages as a conduit for specific project activities.

The technical training enables women to gain new and highly relevant knowledge, knowledge that is very much valued by the men in the village because it brings significant increases in the household income. Women interviewed for this evaluation reported that their husbands greatly respected the knowledge that they bought back from the trainings they have attended, and that they had passed the knowledge on to their husbands. By positioning these women in the role of educator and source of valuable knowledge, the project has enabled them to renegotiate gendered roles within the household to achieve greater agency and equality in decision-making processes. As one women commented "in the past men thought women had no good ideas, nothing new to offer, now, they see we are just as clever as them, even more so in some things". The repositioning of women as "clever" is an important and significant step toward empowerment of women's voices, plans and ideas. When these clever ideas has seen to lead to significant increases in the standard of living for the household, the new, more equal gender relationship becomes well established, and women are able to voice their ideas and opinions in decision making processes and have their ideas valued and respected.

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<sup>19</sup> Investing directly in livelihood strategies where the resources are controlled by men has not demonstrated the same widespread benefits due to normative models of masculinity which encourage men to spend additional income on merit making and building relationships with other men in the community rather than on food, children's health or education.

The reduction of women's workloads has been a key project focus for the DFSP. Project staff have consulted with the WINGs groups to ask women what their most burdensome activities are and sought solutions to reduce their workloads, thereby freeing up time for other activities. The workload analysis that the women themselves have conducted resulted in several labor-saving initiatives, namely, the introduction of rice milling (either mechanized or water powered depending on the suitability of the site), and the supply of materials to construct handcarts. Prior to the DFSP support on rice milling, women would typically spend several hours each day hand milling rice. The women who participated in this evaluation (88 in total) reported that the introduction on the rice mills had enabled them to get an extra hour's sleep because they do not have to wake so early to mill the rice. Given the amount of hard work that women do, that extra one hour sleep could have significant positive impacts on their health and wellbeing. Another unexpected positive impact of the workload reduction support provided by the DFSP is that after the introduction of handcarts (initially conceived to reduce women's workload in carrying firewood which was collected by women and children—not men—and carried in a basket on the woman's back) men have now shifted from their belief that collecting wood is "woman's work" and men and women collect firewood together. Perhaps it is the fun of pushing the cart, or that carts are seen as mechanical and therefore the proper domain of men that has attracted men to assist with firewood collection. Whatever the reason, the women welcomed the help and were happy to be doing the previously arduous task of firewood collection with their husbands and with the handcart. Handcarts are very widely utilized for carrying heavy loads—from water to agricultural produce—the handcarts have therefore not only reduced the workloads of women but also of children, who are often responsible for carrying the water for the household. Training those who receive handcarts in repair and maintenance ensures the sustainability of the activity in the post project period.

The WINGs groups play a key role in the delivery of project support, with some of the key project activities being allocated at the request of WINGs members, all of whom are women. WINGs groups play a central role in negotiating with the DFSP staff on the types and amount of project support that each village and household will receive. The project actively promoted women (who will also be in WINGs) to become members of the management committees established to run activities not directly implemented via WINGs (e.g. coffee cooperatives). Coupled with the new knowledge women gain from technical training, these two factors (of being the ones to request project support/activities and being on project activity management committees) position women in a powerful role at the center of community life, and significantly elevate their position with regard to the pre-existing gendered political structures within the village. All the women who participated in this evaluation responded that they would continue the WINGs groups even without any project support from CARE, stating that they wanted to preserve the knowledge that had learned from the project and that the meetings were highly valued by all women in the village as a place to exchange ideas, provide support to each other and feel a strong sense of solidarity.

Another key impact of the project design on women's empowerment is that the establishment of the WINGs groups and the women-led committees that have resulted from the delivery of project activities through the WINGs groups has enabled a space for women to form and

consolidate their relationships of mutual support. Prior to the DFSP activities, women rarely had time or occasion to meet with their friends and relatives to talk and discuss issues that affect their lives. The establishment of the WINGs groups as a women-only space to examine key problems and issues that they face has enabled a strong sense of solidarity to develop. This was particularly evident in the villages where the food and income activities had enabled significant development of food security and increases in household income. It seemed that there was a threshold of food security that once reached, enabled the development of WINGs much more as a civil society organization. Before that threshold is reached, however, the many positive benefits of WINGs as a source of solidarity and a potential platform for establishing new, village-led initiatives remain as a potential only.

### **Key Lessons Learned and recommendations**

The DFSP has put gender and women's empowerment at the centre of project design and implementation. As the discussion above highlights, this strategy has significantly contributed to the repositioning of women from a subordinated position both at the household and village levels to a more empowered position where they are able to move towards more equal partnerships in decision making process at the household level and to participate in village governance in the form of management committees for project activities. This is a very positive outcome and one that should inform future programming, not only within CARE but also in other organizations. It is recommended that the key lessons learned are documented and circulated among country directors of other key INGOs operating in Laos. One of the unexpected outcomes of increased women's empowerment is that many children (both girls and boys) are able to stay in school and complete secondary school as well as high school. The increased access to income has contributed to this outcome, as has the support for women's voices in household decision making processes as it is the women who were strongly determined that their children's lives would be better than their own.

The discussion above also noted that there was a threshold of food security and income level that enabled the flourishing of the women's groups as a platform for women's empowerment. There are several DFSP target villages where this threshold has yet to be reached (Dak Vay for example). It is recommended that in villages where food security has remained at a critical level project activities and monitoring be more intense and concentrated than in sites where project activities are progressing well. Close monitoring of sites where progress is slow, analysis of the causes for slow progress and remedial action from project staff may assist those sites in reaching a level at which the many positive effects of women's empowerment can be manifested.

It was clear that the participation of women in training has been a key factor in their increasing confidence levels and ability to exercise agency in their relationships within the household and the village. Continued development of project staff skills in facilitating training with an emphasis on both building the confidence of marginalized participants and educating participants in the chosen topic of training will further consolidate the benefits of training as a means of supporting women's empowerment as well as knowledge transfer. As noted above in the section on

effectiveness (point 3.2.3), the inclusion of men as well as women in the nutrition training will model greater gender equity in the household by challenging traditional male and female gender roles and may make the new knowledge more likely to be implemented because men are more likely to believe external 'experts' rather than their wives when it comes to changing traditional culinary practices.

## **Conclusion**

The DFSP has largely met all of its aims and objectives. Some sites have reached a significantly higher level of food security and income generation than others, but all sites have benefited from increased food security and income levels from the baseline situation. The DFSP has made a significant positive impact on the lives of villagers in the Dak Cheung District. The practical outcomes of greater food security and improved nutrition across the District are highly positive. Labor-saving technologies such as the rice mills and irrigation are greatly appreciated by project participants. The greatest improvements in wellbeing are seen among families where women's empowerment has been achieved to some extent because these families distribute their labor power more equitably and efficiently to achieve greater outcomes for the household.

By integrating women's empowerment into the project design and implementation, the DFSP has enabled significant shifts in gendered relationships both at the level of the household and the village. The empowerment of women to have a voice in decision-making processes at these two levels has enabled positive outcomes for children and well as adults in the target villages and significantly contributed to the overall success of the project in reaching its aims and objectives.

## Appendixes

Appendix A: Full list of documents consulted for the evaluation

*Strong Women, Strong Communities: CARE's holistic approach to empowering women and girls in the fight against poverty.*

*CARE international in Lao PDR Gender Strategy 2011-2015,*

*CARE international gender policy February 2009.*

*2009 Food Security Program for Lao PDR European Commission Grant Application for Dak Cheung Food Security Project.*

*DFSP Baseline study January 2011.*

*DFSP Mid-term review report, November 2012.*

*CARE Australia policy on evaluation of projects and programs.*

*DFSP ROM evaluation report, May 2012.*

*Moloney, J. 2011, Participatory diagnostic on current nutritional understandings and traditional practices associated with food, infant weaning and feeding and associated health issues.*

*EU project monitoring reports from 2010 and 2012*

## Appendix B: Evaluation tools

1. Interview schedule for WINGs senior manager
2. Women's discussion group questions
3. Women's in-depth interview questions

### ***WINGs senior manager interview schedule***

Could you tell me a bit about the process of establishing a WINGs group?

Who participates in WINGs? How are members identified?

Who does not participate? Why?

Where do the WINGs groups meet?

When do the WINGs groups meet?

What happens in the meetings? What role do the project staff play? (facilitators?)

How long do the meetings take and what time of day do they happen?

Is the process of every bi-monthly meeting the same?

Do all women speak out during the meetings? How do the project staff manage participation?

Is there a process of consultation whereby the WINGs members bring concerns from non-WINGs members to the project team?

Which villages have functioning (regularly meeting) WINGs groups?

How often has the nutritional training occurred?

Who does the training and can you tell me about how the training is done?

Is the roll-out of nutrition training even across all 15 villages?

Has there been any testing of the nutrition training effectiveness? (test forms/questions to check participant understanding and effectiveness of training module design and delivery)

How do you think that women can pass their knowledge on to others given that we know women do not have many opportunities to interact in the village?

Have there been any mother and child trainings/Q and A sessions? If so, where have these occurred?

Are there differences in the level of activity or success of the different WINGs groups in different villages?

What do you think are the reasons for the differences in success and activity?

Ethnicity and related cultural beliefs?

Individual's motivation levels?

More or less support for WINGs activities from men in the village?

Differential workloads of women and therefore more or less time available for activities?

(Please feel free to provide different reasons here and discuss your ideas at length. I just list these few as a starting point for discussion)

I noticed that in the Mid Term review the consultant made some recommendations to modify the design of nutrition training materials and the delivery of the training. Did this happen? What changes were made and were they effective?

***Women's group discussion: all women who have participated in project activities (WINGs, training, etc)***

Introduction: I stress that I am here to listen to and learn from the women's experiences. The donors have sent me to ask how they are going because the donors care about them and want to help them. They should feel free to tell me how the experience of the project has been and suggest any improvements because I can tell the donors and help to do project activities better in the future. I also want to know what aspects of the project they have found the best so the project can do more of that in the future. The important message to give in the introduction is that I want to hear the women's ideas and suggestions!

1. After CARE came to work with you on food security, do you have more food and income than before?
2. What exactly? (fish, vegetables, rice?)
3. Please raise your hand if you have a fishpond
4. Is it difficult to look after the fishpond?
5. How many times a week do you eat fish?
6. Why not more than that?
7. The other days of the week do you eat meat?
8. Is there anyone here who does not eat either meat or fish every day of the week?
9. Who has a home garden to grow vegetables?
10. Before the project did you have a home garden?
11. Do you grow enough vegetables in your garden to eat every day?
12. Raise your hand if you have enough vegetables to sell as well as eat.
13. Did you sell vegetables before the project?
14. How has your income from vegetables sales changed since the project started?
15. Who makes more than 100000 kip/month from veg sales?
16. Who makes more than 50000 kip/month from veg sales?
17. Who makes less than 50000 kip/month from veg sales?
18. Have you been successful at saving seeds?
19. Before the project did you know how to save seeds?

20. Who has been to nutrition training?
21. What did they cook there?
22. What did you learn about nutrition?
23. Have you passed on your knowledge from the training to others?
24. Do you now cook differently than you did before the training?
25. Does your family all eat together at the same time?
26. Do children eat the same amount and variety and adults?
27. Do children have the same nutritional needs as adults? If its different, how is it different?
28. Did you know about nutrition before the project?
29. Then ask a selection of women what they had for breakfast and lunch to test if they really are applying the nutrition training to food selection and preparation.
30. Do you have enough food now or are you still short of food at some times of the year?
31. If you have a problem with vegetables production who do you ask for help?
32. What project activities do you like the most? Why?
33. Before the project was there enough rice to eat?
34. How many of you are members of WINGs?
35. What do you like about WINGs?
36. What would you change about WINGs?
37. Will you continue to meet in the WINGs groups after the project is over? Why?
38. Before the project did you have the ability to take an equal role in household decision-making?

***Interview schedule for selected female beneficiaries of DFSP***

Section one: Daily life and workloads

1. How many people live in your household? Who are they?
2. Could you tell me about your day? What time do you wake up? What do you do first? And then what...and then what...etc. (Ask also how long each activity takes)
3. Who washes the clothes for the household?
4. Who prepares the food?
5. Who gathers firewood for cooking?
6. Can you tell me what your husband does in a typical day? (wake up what time, then what, then what, then what...)

Section two (a): Women's relationships in the village

1. Do you get much opportunity to talk with other women in the village?

2. Do you ever meet with other women to do activities like washing clothes, planting vegetables in your home garden etc?
3. Do men in the village meet to talk with their friends and relatives sometimes?
4. What are the most difficult things in your life now?
5. If you have a problem, who will you ask for help?

Section two (b): Women's relationships in the household

6. In your household, how do you decide how the money from the rice harvest will be spent? Do you talk about it together or do the men decide?
7. Who keeps the money in your household?
8. If you want to buy something, do you ask your husband first or just take the money?
9. If your husband wants to buy something, does he ask you first?
10. Do you make a budget for the year with school fees, money for food purchase, medical expenses and so on? How do you plan your spending? Is this a process that is done as a family? Who participates and how?
11. Does your husband drink alcohol? How often and how much?
12. Does your husband ever hit you or the children?
13. If yes, how often does this happen?
14. If yes, what do you do when that happens? Run to ask for help, stay quiet?

Section three: aspirations for children

1. Do your children attend school?
2. Do you plan for them to stay in school and finish primary?
3. Do you plan for them to finish high school?
4. Will your sons and daughters stay in school?
5. What would you hope your children will do when they grow up?
6. What age do girls marry in your village?

Section four (a): participation in CARE programs

1. Have you participated in any CARE training?
2. Which trainings have you attended?
3. What did you learn there? (detail each different training)
4. How have you applied the things you learned?
5. Do you feel that you can grow more food after the training?
6. Do you feel that you earn more income after the training?
7. Do you feel that you have more say in the household now that you are stronger on your skills to produce food and income?

8. Did your husband support you to go to the training or did he try to stop you from participating?

Section four (b): WING participation

9. Are you a member of the WING group?
10. If no, why don't you participate in WING group?
11. If yes, what do you like about the WING group?
12. If yes, What do you not like about the group?
13. Does everyone talk at the WING meeting or only some people?
14. Do you feel confident to talk?
15. What things do you talk about at the WING group?
16. Since being part of the group do you spend more time with other women out side of the group?
17. Do you ask other women for help when you need it since being in the group or is it the same as before where women do not really talk much in the village?

Section four (c): WINGS and nutrition

18. Have you been to any of the nutrition trainings?
19. Do you remember what they cooked at the training session?
20. Can you tell me what your family eat for breakfast?
21. What do they eat for lunch? Dinner?
22. Has your choice of food changed since participating in the nutrition trainings? How?
23. How is the food for babies and children different from the food adults eat?
24. Do you buy food from the district or only cook what you grow?

Section five: Thinking about the future

How has your life changed since participating in the CARE program these past 3 years?

What would you say is the biggest problem you face now?

What would you like to change to make your life easier?

Appendix C: Log frame showing the sections for which the gender consultant is responsible

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS	CONSULT
<p><b>Overall Objective:</b> To support food security in all its dimensions preventing crises and contributing to achieving the Millennium Development Goal 1 (MDG-1) in Lao PDR.</p>	<p><b>G1:</b> Productive asset ownership of 70% of poor households within project core villages is increased by a minimum average of 30% over baseline through a) reduced livestock mortality, b) paddy and fishpond creation and c) coffee garden establishment.</p> <p><b>G2:</b> Minimum of 70% of women report increased household food availability and/or income</p>	<p>Baseline Mid-Term Review. EoP Evaluation.</p> <p><b>G2:</b> Quantitative survey of female program participants in 4 villages</p>	<p>Household sourced wild proteins do not decline faster than able to be replaced through new and improved production systems.</p> <p>Resettlement of target villages does not occur.</p>	<p><b>G1:</b> FS</p> <p><b>G2:</b> This objective has been achieved</p>
<p><b>Specific Objective:</b> To Increase food security particularly of the poorest, through expanding and diversifying income and food sources reducing vulnerability to natural and market based shocks.</p>	<p><b>P1.1</b> Adopting Households report increased food production of at least 20% for project supported food production activities supported through R1.1, R1.2 &amp; R1.3.</p> <p><b>P1.2</b> Minimum of 50% increase over baseline in annual income of 70% of households classified as poor</p>	<p>Baseline Mid-Term Review. EoP Evaluation.</p> <p><b>P.1.1:</b> verification from program reports on food production</p> <p><b>P.1.3:</b> Quantitative survey of female</p>	<p>Climatic events do not generate higher than 'normal' upland crop damage.</p> <p>Improvements in transport access results in increased trader activity.</p> <p>Resettlement of target villages does not occur.</p>	<p><b>P.1.1</b> This objective has been achieved</p> <p><b>P1.2</b> FS</p> <p><b>P1.3</b> This objective has been achieved</p>

	<p>is projected within 2 years by the EoP Evaluation.</p> <p>P1.3 Minimum of 75% of women producing new types of food learned through WINGs.</p>	<p>program participants in 4 villages</p>		
<p>Result 1: Increased productivity of household staple foods, fats and protein production systems.</p>	<p>R1.1 Increase paddy rice production in target villages by 75% over baseline</p> <p>R1.2. 50 non-targeted households increase production of fish/forage /vegetable through adopting improved integrated production model without pond construction subsidy</p> <p>R1.3 90% of farmers adopting project promoted high yielding varieties of upland crops demonstrate increased production of these crops</p>	<p>Baseline survey.</p> <p>Annual Participatory Review.</p> <p>Mid-Term Review.</p> <p>EoP Evaluation.</p>	<p>UXO Lao able to provide adequate clearance resources, At least 50% of land identified to date as suitable for paddy has good enough soil quality to justify development, Staple crop varieties proven in the north demonstrate similar results in the south, Fish produced are consumed as well as sold,</p>	<p>R1.1 FS</p> <p>R1.2 FS</p> <p>R1.3 FS</p>
<p>Result 2: Expanded income generating assets (livestock, coffee) of the poor, generating significant additional incomes.</p>	<p>R2.1 Minimum of 350 HHs have successfully established at least 0.25 Ha each of close cropped</p>	<p>EoP Evaluation</p> <p>Annual Participatory Review.</p> <p>EoP Evaluation</p>	<p>Coffee prices remain sufficient to motivate farmers, not declining below 2002 levels, Mains electricity arrives in Dakcheung</p>	<p>R 2.1 FS</p> <p>R 2.2 FS</p> <p>R 2.3 FS</p>

	<p>Catimor coffee gardens.</p> <p>R2.2 Minimum of 150 HHs are paying full amounts for pig vaccination services by EoP.</p> <p>R2.3 85% of households in communities with improved road access utilize road to access markets</p>	<p>Construction reports, EOP Evaluation.</p>	<p>prior to project start.</p> <p>Nutritionally informed decision making over food purchases.</p> <p>Households utilise additional income to purchase food of high nutritional value</p>	
<p>Result 3: Improved women's food utilization skills and reduced women's labor burden.</p>	<p>R3.1 Minimum of 100 households have access to in-village clean water by EoP, reducing women's workloads.</p> <p>R3.2 70% of WINGs members In 15 villages have increased understanding of food and nutrition that include diverse, nutritious, locally-available food</p>	<p><b>R3.1: Verification with program manager as to the installation of in-village clean water access</b></p> <p><b>R3.2: Survey form to be administered in 4 sample villages by program staff during the field evaluation</b></p>	<p>Women of Influence able to be identified and interested to lead WINGs,</p> <p>, Recipes that are appropriate, nutritional and found palatable are able to be developed for adults and infants during weaning</p> <p>Recipes able to developed based on available foods in different seasons.</p>	<p>R 3.1 This objective has been achieved</p> <p>R 3.2 This objective has been achieved</p>
<p>Result 4: Strengthened village and District technical skills and capacities associated with project promoted food and income production systems.</p>	<p>R4.1 Minimum of 85% of trainees attending practical training in coffee production, picking, processing and sale from Boloven Coffee Producer Associations report applying one or more learnings.</p> <p>R4.2 Minimum of</p>	<p>Baseline survey.</p> <p>Annual Participatory Review.</p> <p>Mid-Term Review.</p> <p>EoP Evaluation</p> <p><b>R4.2: Quantitative survey of</b></p>	<p>National technical experts identified in timely manner,</p> <p>CPAs' stated willingness to provide training venue and internships eventuates,</p> <p>Farmer trainers able to be identified in timely manner.</p> <p>District staff assigned</p>	<p>R 4.1 FS</p> <p>R4.2 This objective has been achieved</p> <p>R 4.3 FS</p> <p>R 4.4 This objective has been</p>

	<p>60% of HHs report applying learning's acquired from project supported trainings in food and income strategies.</p> <p>R4.3 District staff 'training cards' show at least 65% satisfaction with on-the-job training received from technical experts.</p> <p>R4.4 Minimum of 5 publications, jointly authored with District staff, are produced.</p>	<p><b>female program participants in 4 villages</b></p> <p><b>R4.4: Verification with Program manager that publications have been produced</b></p>	<p>to project retained and do not transfer to other activities.</p>	<p>achieved</p>
<p><b>Result 1: Increased productivity of household staple foods, fats and proteins production.</b></p>				
<p><b>Activity 1.1: Construct/repair SSI systems able to irrigate a total of at least 30 Ha benefiting a minimum of 80 HHs.</b></p> <p>1.1.1 Technical survey of SSI, land size and quality, ownership and wealth status.</p> <p>1.1.2 Site prioritization using simple CBA methods.</p> <p>1.1.3 Beneficiary contracts signed outlining roles and responsibilities of project and beneficiaries.</p> <p>1.1.4 UXO assessment and, if required, clearance.</p> <p>1.1.5 Farmer paddy trainers identified and contracted.</p> <p>1.1.6 SSI construction and paddy construction.</p> <p>1.1.7 Farmer trainers provide full season, on-the-job training, project provides required additional inputs.</p>	<p><b>Means:</b></p> <p>1.1 Project irrigation engineer.</p> <p>1.2 CBA tool.</p> <p>1.3 Contracts, staff time.</p> <p>1.4 UXO assessment and clearance services.</p> <p>1.5 SSI construction materials, tools and other inputs.</p> <p>1.6 Farmer-trainers</p>	<p><b>MOV</b></p> <p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p>	<p>Sufficient UXO services provided in timely manner.</p> <p>Adequate land areas of sufficient soil quality with water resources for SSI able to be identified.</p>	<p>FS</p>
<p><b>Activity 1.2: Integrated fish/forage/vegetable pond</b></p>	<p><b>Means:</b></p> <p>1.1 National</p>	<p><b>MOV</b></p> <p>Monthly</p>	<p>Short-term TA of adequate quality</p>	<p>FS</p>

<p>systems established and successfully operating with a minimum of 100 poor households.</p> <p>1.2.1 Fisheries specialist input incl. cross-visits.</p> <p>1.2.2 Household selection (poorest) and contract signing.</p> <p>1.2.3 Pond/Garden Site identification (max. 0.25 Ha/site).</p> <p>1.2.4 UXO assessment and clearance.</p> <p>1.2.5 Pond construction, fencing and fish forage planting.</p> <p>1.2.6 Facilitate DK grass carp fingerling purchase in Vietnam and distribution to target households.</p> <p>1.2.7 Follow-up and support progressive pond site intensification (e.g. ducks, veggies etc) as warranted by farmer interest.</p>	<p>consultant services.</p> <p>1.2 Travel costs</p> <p>1.3 UXO services</p> <p>1.4 Fencing materials, forage seeds, vegetable seeds, minor equipment, watering cans etc.</p> <p>1.5 Labor construction subsidy</p> <p>1.6 Fish fingerlings</p>	<p>Expenditure Reports</p> <p>Monthly Project Reports</p>	<p>able to be identified.</p> <p>Sufficient UXO services provided in timely manner.</p>	
<p><b>Activity 1.3: Minimum of 150 farmers adopt one or more improved varieties of key upland crops (rice, cassava and maize).</b></p> <p>1.3.1 NAFRI cassava/maize/upland rice specialist input including on-farm demonstration design.</p> <p>1.3.2 Trial varieties and season one participating farmers (32) selected and contracts signed.</p> <p>1.3.3 Planting materials procured and distributed to participating farmers.</p> <p>1.3.4 Farmer field visits undertaken during growing season.</p> <p>1.3.5 Post-harvest participatory farmer assessment of varieties undertaken.</p> <p>1.3.6 Planting material of successful varieties purchased and distributed to season two farmers (10/village x 16).</p>	<p>Means:</p> <p>1.1 National consultant services.</p> <p>1.2 Travel costs.</p> <p>1.3 Planting materials.</p>	<p>MOV</p> <p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p>	<p>Higher yielding varieties proven in Northern Laos show same results and farmer acceptability in Sekong.</p> <p>Short-term TA of adequate quality able to be identified.</p>	<p>FS</p>

<b>Result 2: Expanded income generating assets (livestock, coffee) of the poor, generating significant additional incomes.</b>				
<p><b>Activity 2.1: Minimum of 400 poor households have each established min. of 0.25 Ha of close planted Arabica (Catimor) coffee gardens.</b></p> <p><b>2.1.1 Establish village or household level nurseries able to supply all HHs with at least 1000 Arabica (Catimor) seedlings.</b></p> <p><b>2.1.2 Minimum of 400 poor households each receive subsidy to cover labor costs associated with 0.25 Ha coffee garden establishment.</b></p> <p><b>2.1.3 UXO assessment and clearance undertaken as required on poor HH coffee plantation areas.</b></p> <p><b>2.1.4 Coffee gardens established.</b></p>	<p><b>Means:</b></p> <p><b>1.1 National consultant services.</b></p> <p><b>1.2 Village contract.</b></p> <p><b>1.3 Nursery supplies, poly-bags, shade cloth, seed, watering equipment.</b></p> <p><b>1.4 Subsidy for nursery staff.</b></p> <p><b>1.5 UXO clearance services.</b></p> <p><b>1.6 Poor HH subsidy.</b></p>	<p><b>MOV</b></p> <p><b>Monthly Expenditure Reports</b></p> <p><b>Monthly Project Reports</b></p>	<p><b>Farmers accept 0.25 Ha limit. Sufficient UXO services provided in timely manner.</b></p>	<b>FS</b>
<p><b>Activity 2.2: Minimum of 100 households have increased cash returns on labor from coffee production through adoption of wash processing methods.</b></p> <p><b>2.2.1 Well processed samples of Arabica from target villages collected and sent for quality assessment (cupping) and value adding strategy developed based on such.</b></p> <p><b>2.2.2 Participatory market assessment and analysis of farm gate prices for washed verses dried undertaken with minimum of 10 farmers.</b></p> <p><b>2.2.3 Linkages established with coffee producer associations on the Boloven.</b></p> <p><b>2.2.4 Coffee Processing Investment Fund (CPIF) established.</b></p> <p><b>2.2.5 CPIF used to co-finance household or village level processing equipment and</b></p>	<p><b>Means:</b></p> <p><b>1.1 National consultant services.</b></p> <p><b>1.2 One pulper and wash set for sample collection and processing.</b></p> <p><b>1.3 Cupping services (free).</b></p> <p><b>1.4 Travel costs.</b></p> <p><b>1.5 Funds for CPIF (US\$ )</b></p> <p><b>1.6 CPIF Regulations and eligibility criteria.</b></p>	<p><b>MOV</b></p> <p><b>Monthly Expenditure Reports</b></p> <p><b>Monthly Project Reports</b></p>	<p><b>Global coffee prices for other Mild Arabicas do not fall below \$0.60/Lb (lowest global price during 2002 coffee crisis.)</b></p> <p><b>Short-term TA of adequate quality able to be identified.</b></p>	<b>FS</b>

materials (pulpers, tanks, drying racks) in villages with a minimum of 10 Ha of Arabica < 3 yrs age.				
<p><b>Activity 2.3: Generate farmer demand and willingness to pay for livestock vaccination services through efficacy demonstration.</b></p> <p><b>2.3.1 Livestock technical specialist input, rearing practices diagnostic, opportunity analysis and detailed activity design.</b></p> <p><b>2.3.2 Livestock vaccine cold chain reviewed and re-enforced as required.</b></p> <p><b>2.3.3 VVV trained and equipped with vaccination fee rates established.</b></p> <p><b>2.3.4 Vaccination campaigns held 2 x per annum, with initial focus on pigs.</b></p> <p><b>2.3.5 Cultivation of pig feed supplements (stylo etc) promoted through VVWs.</b></p> <p><b>2.3.6 VVV monitoring and twice annual refresher training.</b></p>	<p><b>Means:</b></p> <p><b>1.1 National consultant services.</b></p> <p><b>1.2 Equipment for cold chain.</b></p> <p><b>1.3 VVV ToR and project contracts (including fee rate).</b></p> <p><b>1.4 VVV kits.</b></p> <p><b>1.5 Vaccination purchase.</b></p> <p><b>1.6 Forage Seeds.</b></p> <p><b>1.7 Travel costs</b></p>	<p><b>MOV</b></p> <p><b>Monthly Expenditure Reports</b></p> <p><b>Monthly Project Reports</b></p>	<p><b>Short-term TA of adequate quality able to be identified.</b></p> <p><b>Vaccines procured of good quality and in timely manner.</b></p> <p><b>CSF / parasite infections are major cause of high pig mortality rates.</b></p>	FS
<p><b>Activity 2.4: Improve physical market access through construction/improvement of approximately 6 km of track and bridge construction and repair.</b></p> <p><b>2.4.1 Survey and costing of potential high priority new access tracks, improvements and bridge construction.</b></p> <p><b>2.4.2 Prioritization of infrastructure to be built with DIMC.</b></p> <p><b>2.4.3 Detailed technical design.</b></p> <p><b>2.4.4 UXO assessment and clearance as required.</b></p> <p><b>2.4.5 Formation of labor teams with associated training and procurement of required tools and materials.</b></p> <p><b>2.4.6 Construction of access tracks</b></p>	<p><b>Means</b></p> <p><b>1.1 Project irrigation engineer.</b></p> <p><b>1.2 CBA tool/DIMC.</b></p> <p><b>1.3 UXO assessment and clearance services.</b></p> <p><b>1.4 Subcontracted machine hire and services.</b></p> <p><b>1.5 Cash-for-work services.</b></p> <p><b>1.6 Tools and construction materials (cement, etc).</b></p>	<p><b>MOV</b></p> <p><b>Monthly Expenditure Reports</b></p> <p><b>Monthly Project Reports</b></p>	<p><b>Sufficient UXO services provided in timely manner.</b></p> <p><b>Post-Wet season repair costs do not exceed 20% of construction cost.</b></p> <p><b>Water supply systems do not require more than 30 % of the Infrastructure Investment Fund.</b></p>	FS

and bridges as required. 2.4.7 Access track repaired / consolidated following wet season.				
<b>Result 3: Improved women's food utilization skills and reduced women's labor burden.</b>				
<p><b>Activity 3.1 Women's Income Generation and Nutrition Groups (WINGS) established and operating in 15 villages.</b></p> <p>3.1.1 Women of Influence identified and WINGS detailed design undertaken.</p> <p>3.1.2 WINGS membership identified and group established</p> <p>3.1.3 Two-monthly WINGS days held with key topics / activities based on member wishes.</p>	<p><b>Means:</b></p> <p>1.1 Staff costs</p> <p>1.2 Travel costs</p> <p>1.3 DAFO per diems / training costs</p>	<p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p> <p><b>3.1: In depth interview with WINGS senior manager and verification from program reports</b></p>	<p>Women of Influence support WINGS concept.</p> <p>Men in village accept WINGS approach and do not block participation.</p>	<p>This objective has been achieved</p>
<p><b>Activity 3.2 Nutrition training models developed and undertaken through WINGS in 15 villages.</b></p> <p>3.2.1 Assessment of child weaning and other key practices undertaken.</p> <p>3.2.1 Training designed and ToT undertaken with DSFP and LWU staff.</p> <p>3.2.3 Round the cooking pot nutritional training undertaken every 2 months with each of 15 WINGS</p> <p>3.2.4 Mother and child health trainings and Q&amp;A sessions held.</p>	<p><b>Means</b></p> <p>1.4 National consultant services.</p> <p>1.5 Training funds</p> <p>1.6 Funds for 'round-the-pot' demonstrations.</p> <p>1.7 DHO staff inputs</p>	<p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p> <p><b>3.2: In depth interview with WINGS senior manager and verification from program reports</b></p>	<p>Short-term TA of adequate quality able to be identified.</p>	<p>This objective has been achieved</p>
<p><b>Activity 3.3 Village water supply systems constructed in minimum of three core villages.</b></p> <p>3.3.1 Needs assessment undertaken</p> <p>3.3.2 Contracts signing with communities including sustainability mechanisms.</p> <p>3.3.3 Technical assessment and designs, costings undertaken</p> <p>3.3.4 Construction undertaken and handover.</p>	<p><b>Means:</b></p> <p>1.1 Project engineer.</p> <p>1.2 Design costs</p> <p>1.3 Construction materials</p> <p>1.4 Contract with community</p>	<p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p> <p><b>3.3: verification with program manager that water supply systems complete</b></p>	<p>Communities seriously engage within sustainability issues.</p>	<p>This objective has been achieved</p>

Result 4: Strengthened village and district technical skills and capacities associated with project promoted food and income production systems.				
<p><b>Activity 4.1: Skills in participatory research, problem analysis and intervention design and implementation of approximately 20 DAFO and LWU staff strengthened</b></p> <p>4.1.1. DAFO and LWU staff work alongside short term technical experts in support of project interventions.</p> <p>4.1.2 District staff training fund utilized to finance staff specific training activities.</p> <p>4.1.3 District staff collaborate with short term TA in production of publications.</p>	<p><b>Means:</b></p> <p>1.8 National consultant services.</p> <p>1.9 Training funds</p> <p>1.10 Publication costs</p>	<p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p>	<p>Short-term TA of adequate quality able to be identified.</p>	<p>FS</p>
<p><b>Activity 4.2: Fe/male farmer from 15 villages improve technical production and marketing skills through on site placements</b></p> <p>4.2.1 Model coffee cultivators (5) identified in a minimum of 15 villages.</p> <p>4.2.2 Model cultivators undertake 3-6 week on-site placement with Coffee Producer Associations on the Boloven during coffee nursery establishment and management, harvest and processing and other key periods.</p> <p>4.2.3 Model cultivators play key role in activities 2.1 and 2.2.</p> <p>4.2.4 Linkages with key buyers developed.</p>	<p><b>Means:</b></p> <p>1.5 National consultant services.</p> <p>1.6 Trainee living allowances and training fee.</p> <p>1.7 Travel costs.</p>	<p>Monthly Expenditure Reports</p> <p>Monthly Project Reports</p> <p><b>4.2: Verification with project manager and monthly reports</b></p>		<p>This objective has been achieved</p>