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To ensure a sustainable natural resource management through strengthening
research and fulfill capacity building needs to stakeholders.



Participatory Rural Appraisal Report on

Community Forestry and the Potential Community Based Enterprise Development for Damrey Chak Thlork, Kampong Speu Province



Submitted by



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Table of Contents

Acknowledgements	2
Acronyms	4
Executive Summary.....	5
1. Introduction.....	8
2. Objectives of the PRA/Enterprise Assessment	8
3. Scope and Limitations.....	9
4. Methodologies and Tools for assessment.....	9
4.1. Literature review:	9
4.2. Sampling size selection and field observation:	10
4.3. Data entry and interpretation:	10
5. Key Findings	10
5.1. Socio-Economic and Livelihoods condition in Damrey Chak Thlork CF:.....	10
5.2. Access to productive agricultural land and assets:.....	11
5.3. Types of agricultural production and seasonal crop calendar in Damrey Chak Thlork CF:.....	12
5.4. Agricultural productions and incomes and food security in the CF target area:	13
5.5. Access to forest resources and NTFPs among the CF members:.....	14
5.6. Access to financial resources:	16
5.7. Access to marketplace, infrastructure and irrigation system.....	16
5.8. Labor forces/ skilled labor availability in the communities.....	16
5.9. Membership to existing groups, individual and group business preferences:.....	17
5.10. CF Committee and Capacity Gap: Leadership and Management issue:.....	18
5.11. Potential business operation/ enterprise development for Damrey Chak Thlork CF:	19
5.11.1. Business potential for other agro-industrial crops:.....	20
5.11.2. Business potential related to Non-Timber Forest Products processing:.....	21
5.12. Constraints and risks involved in business/ enterprise and with possible solutions:.....	21
6. Conclusion and Recommendations	22
7. Annexes.....	24
7.1. References.....	24
7.2. List of Key Informant and Participants attending in the study	25
7.3. Some important data related to Kraing Deivay commune and Damrey Chak Thlork CF	26
7.4. Questionnaires Developed for this study	30

Acronyms

AMK	Angkor Microfinance Kampuchea
APFNet	Asia-Pacific Network for Sustainable Forest Management and Rehabilitation
BP	Business Plan
CCs	Commune Councilors
CF	Community Forestry
CFMP	Community Forestry Management Plan
DACP	Department of Agricultural Cooperative Promotion
GEF	Global Environment Facility
EDI	Enterprise Development Institute
FA	Forest Administration
FiA	Fisheries Administration
FAC	Forest Administration Cantonment
FGDs	Focus Group Discussions
HHs	Households
ha or HA	Hectare
IRD	Institute of Forest and Wildlife Research and Development
ID Poor	Identification of Poor Household program
GERES	Group for the Environment, Renewable Energy and Solidarity
KHR	Khmer Riels
KIs	Key Informants
KYSD	Khmer Youth and Social Development
LWD	Life with Dignity
MFIs	Micro Finance Institutes
MAFF	Ministry of Agriculture, Forestry and Fisheries
NTFPs	Non-Timber Forest Products
NGOs	Non-Government Organizations
PRA	Participatory Rural Appraisal
RECOFTC	Regional Community Forestry Training Center for Asia and the Pacific
SFM	Sustainable Forest Management
TPC	Thaneakea Phum Cambodia

Executive Summary

This PRA/study was carried out by the Enterprise Development Institute (EDI) between late July to end August 2016. The specific objectives of the study is (1) to facilitate the identification of appropriate forest-based livelihoods in Damrey Chak Thlork CF, (2) to prepare methodologies for conducting community business assessment including identifying the community based enterprise development opportunity, and (3) to facilitate in the writing of a community enterprise plan for the implementation of the selected forest-based enterprises.

Key results from this study include several aspects related to the social-economic condition of the local communities, agricultural land ownership and assets, current livelihood sources, livelihoods calendar, incomes and food security issues, access to forest and NTFPs resources, access to financial resources, access to market places, infrastructure and irrigation systems, labor forces/skill labor availability, membership to existing group among CF members, the CF Committee and their capacity gaps, the potential business operation/enterprise development in the future, and the constraints/risks for some specific business with suggested solutions. The key results are:

- For social economic conditions it is noted that Kraing Deivay commune, where Damrey Chak Thlork CF is located, has a total of 1648 households, with a population of 7297 persons including 3757 females. 10% of them are living under ID Poor 1 and ID Poor2 and only 23% have access to a toilet (commune data, Jul 2016).
- Damrey Chak Thlork CF has 388 households¹ (with 1753 persons) and has been registered officially to take ownership of a community forestry area, equal to 1452 ha and was actively implementing numbers of initiatives in the past.
- For access to productive agricultural land and assets, it is revealed that local communities in Damrey Chak Thlork area have access to not only village land which averages 1.7 ha per household, but also rain-fed rice land of 1.37 ha, Chamkar rice land 1.73 ha and forest land 1.67 ha respectively. More importantly, it is also noted that people have limited access to electricity and other assets for their day-to-day lives. Local communities have access to only 4% electricity, to open wells 9%, to water pumps 5%, to ponds 27%, and access to toilet 39%, which is higher than other villages in the commune. In addition, local communities own batteries for lighting 93%, rice mills 13%, motorbikes 73%, two- wheels tractors 69%, plowing tools 69% and cars, 4%.
- For sources of livelihood, household's incomes and calendar, it is found that communities have many sources of income for each household and there are 20 sources of food and income including irrigated rice land, rainfed rice land, vegetable production, mango, jackfruits, banana, papaya, cassava, sugar palm and other NTFPs collection such as mushroom, bamboo and bamboo shoots, plus firewood for cooking. Their livelihood's calendar is almost all year round from January to December doing different kinds of agriculture activities.

¹ Data given by Commune Chief in July 2016

- For agricultural production, income and food security in Damrey Chak Thlork area, it is noted that local communities can get income especially from cattle, cassava and rice production. Being laborers, running small businesses, garment workers and government employees are also considered as the main income sources for day-to-day livelihoods in that CF area.
- For accessing to forest resources and NTFPs communities also reported that its members can access freely to collect different kinds of NTFPs such as wild honey, bamboos and bamboo shoots, rattan and vines, mushrooms, fuel woods, red ants and traditional medicines from the CF site. Some NTFPs are available seasonally and especially that majority of its CF members have access to grasslands for cattle feed all year round.
- For access to financial resources it is noted that several MFIs and Banks are actively operating in this community. Those financial institutions are included TPC, Prasac, AMK, Vision Fund and ACLEDA Bank. These MFIs can offer loans from a minimum of USD 500 up to the maximum of USD50,000 and have set a different interest rates based on the size of loan, type of businesses and length of repayment. However, the lowest interest rate is from 0.62% per month to 3% per month and they all require a collateral deposit land or equivalent assets. Despite loans being available for communities, there were not many people interested to take the loan due to the collateral requirement and non secure incomes from the agricultural sector. Local communities generally have no idea about running a business with those loans, except perhaps taking small loans for fertilizers, seeds and other supplies for agricultural work. Many loans were taken to buy 2-wheel tractors and motorbikes.
- Regarding labor force/ skilled labor availability in the communities, it was revealed that CF members/households had received numbers of training or capacity building from the previous projects or programs implemented by NGOs in that community in the past. However, they need those relevant training subjects again in the form of refreshment or new level courses. Surprisingly, the villages in Dak Por, Kraing Kor, Chey Meanlak, Pring and Kraing Ro Ngeang are really quiet because most of the laborers were going out to work for companies or going to collect timber from the clearance sites of the company.
- Community members have also affiliated to existing business groups such as the village bank, rice bank, savings group or self-help groups etc., that have been created by the previous projects or programs implemented by NGOs.
- For CF Committee and Capacity Gap, although CF Committees have gained experience from RECOFTC, GERES, Mlup Baitong and other NGOs project implementation in the past, they still lack confidence and have no trust in each other regarding leadership and management. It was suggested that new CF Committee be re-elected as soon as possible in order to implement new activities plan indicated in CFMP and for future community based enterprise project initiatives.
- Regarding potential agri-business or community base enterprise in Damrey Chak Thlork, it is found that raising cattle is a viable business and at the same time other options for agri-

businesses were also identified (as discussed in the Plan for Community Based Enterprise Development)².

- Each sub-sector of agri-businesses is always connected to some level of risks/constraints such as for cattle raising, pigs and chickens/ducks; risks are related to diseases and other climates hazard. Most of these risks are manageable or controllable and there are also some possible solutions to go about managing those risks.

The recommendations, however, is included but not limited to:

- 1) Considering development of a cattle raising business/ enterprise development by using an integrated approach, where Silvopasture business is viable and profitable for this CF area.
- 2) Consider creating “Supply Business and Service Business” approach, similar to other Agricultural Cooperative developments in Cambodia, where collective producer groups/ sub-sector business groups need to be identified and function under the new project implementation. The capacity and technical support should include business/ entrepreneurship training, practical business plan development for each sub-sector and adequate business coaching/mentoring when it is implemented.
- 3) Additional study is needed on the proposed CF site within the CF Block 1, Block 2 and Block 4 for the suitability of the location, soil conditions for cash crops, place to build cattle cow stables and houses, sites for other high value cash crops such as date palm, sweet bamboo, seedless lemons and lemon grass. The location should be close to water sources.
- 4) IRD/APFNet can be the next direct implementer by supporting Damrey Chak Thlork CF to implement community based enterprise projects and other conservation efforts.IRD/APFNet should address the key action points and resources requirement indicated in the 5 years budget plan on CFMP.

² This community enterprise development plan is part of this assignment in deliveries number 3 that will soon be submitted by EDI.

1. Introduction

Institute of Forest and Wildlife Research and Development (IRD) under the Forestry Administration has been implementing the project “Landscape Approach to Sustainable Management of Forests in PrekThnot Watersheds” for a period of 3 years, from 01st January 2015 to 30th December 2017, under financial support of APFNet. As part of the project’s outputs it is also intended to carry out forest based community enterprise assessment in order to develop viable community enterprises in the area. Damrey ChakThlork is an established Community Forestry (CF) located inside the watershed area of Prek Thnot and is targeted for further enterprise development while it can maintain forest ecosystems and sources of livelihoods of the local communities.

Damrey Chak Thlork CF is situated in Kraing Deivay Commune, Phnom Sruoch District, Kampong Speu Province. This CF has been officially registered and gained agreement with the Forest Administration Cantonment (FAC) in 23 June 2014 for a period of 15 years, from January 2016 to January 2030 with the possibility to extend for another 15 years.

Damrey Chak Thlork CF has 388 HHs covering two villages (Dak Por and Kraing Kor village) with a total area of 1452 ha of land. A Community Forestry Management Plan (CFMP) has been recently completed under the technical support of FA and RECOFTC in November 2015 for the first 15 years of this project. The CFMP has been divided into 5 areas: (1) Chamkar Thun 146 ha, (2) Damrey Chak Thlork 323 ha, (3) Trapaing Pring 528 ha, (4) Chrush Kes 409 ha and (5) Pech Sangva 46 ha.

There have been many actors involved in this CF development in the past who include GEF/SFM support project (implemented from 01 Mar 2011 to 29 Feb 2016) and other organizations involved in research and technical support activities such as GERES, RECOFTC and Mlup Baitong organization. IRD/APFNet has started to implement projects supporting Sustainable Management of Forests in Prek Thnot Watersheds in early 2015. These projects have also been contributing and supporting local communities in the watershed area to have gained an improved livelihoods condition through developing community-based enterprise (output 3.2 of the project document) and by using an integrated conservation and development approach. The general objectives of the project being carried out by IRD/APFNet are: (i) To build capacity and raise awareness on the concept of integrated watershed/landscape planning for central and local stakeholders through scientific assessments, analysis and participatory watershed/landscape planning processes, (ii) To improve the integrated management of Prek Thnot Watershed with participation of stake holders, and (iii) To share the experiences and lessons’ learned from the project to stakeholders.

In early July 2016, IRD contacted Enterprise Development Institute (EDI) for carrying out this study and development of the Community-Based Enterprises in Damrey Chak Thlork CF. This study commenced in late July to end August 2016.

2. Objectives of the PRA/Enterprise Assessment

Under this particular assessment task, EDI has been strictly following terms and conditions of the TORs. The specific objectives are:

- 1) To facilitate the identification of appropriate forest-based livelihoods in Damrey Chak Thlork CF. It is expected that EDI (as consultant) will use Participatory Rural Appraisal (PRA) in combination with enterprise assessment methodologies, to identify the potential forest-based livelihood.
- 2) To prepare methodologies to conduct community business assessment including identifying the community based enterprise development opportunity.
- 3) To facilitate in the writing of a community enterprise plan for the implementation of the selected forest-based enterprises.

3. Scope and Limitations

EDI use Participatory Rural Appraisal (PRA) technique for identifying the livelihoods calendar, village resources mapping and other existing livelihoods strategies. In addition, we scoped down to the specific agricultural/livelihoods activities such as rice or cash crop production, animal husbandry, vegetable growing and other NTFPs collection through scoring the highest potential for the future business/enterprise in the communities. Despite the fact that there were some projects which had been implemented in the past by GERES, RECOFTC and other NGOs, we also want to learn from past experiences what had worked well and what had not before we introduce something new to the communities. For example, why is the charcoal kiln and red ant business not working to date? Did communities take it as a lesson learned? What should be changed or modified for the next step? The EDI team prefers to discuss them all in detail before building or introducing new business/ enterprise approaches.

The timeframe during this assessment is short and in the rainy season many community members are not available and do not stay at home if we give them a short notice. Also, this assessment does not cover a wide range of market demands and supply capacity because they do not have any regular products tradable on a regular and timely basis. We can only assess the business/ enterprise potential in term of any sector or sub-sectors that could benefit to a numbers of employments, needs of skills/ technologies, products that are meeting unmet market demand and, especially wherever the availability of resources/ raw materials in the local area (sustainability of resources). We also try to seek understanding about the business mindset as an individual or collective commitment to run business/ enterprise in the near future.

4. Methodologies and Tools for assessment

4.1. Literature review:

Relevant secondary data had been collected and reviewed before the assessment trip was conducted. These documents included project documents that IRD submitted to donors, previous project reports implemented by other NGOs: RECOFTC, GERES, Mlup Baitong who received funding from GEF/SFM, research documents, community forestry business plan and other relevant reports related to communities' forestry in Cambodia. Based on these documents reviewed, some selected tools for research and questionnaires have been drafted and tested.

4.2. Sampling size selection and field observation:

The sample size selection included households and key informants who know best about the CF area and those who's received benefits from community forestry site. The sample size has been calculated based on formula Yamane 1967³ in which we selected 75 household's respondents from Dak Por, Kraing Kor, Chey Meanlak, Pring and Kraing Ro Ngeang village for interview, especially those beneficiaries resided in Damrey Chak Thlork CF. Besides this, 2 Focus Group Discussions (FGDs) and 17 key informants (KIs) such as with CF Committee, Village Chiefs, Commune Chief/commune councilor members, IRD staff, and NGOs' staff were also contacted for interview separately. Farmer groups outside the Damrey Chak Thlork CF area were also contacted for interview to understand about other cash crop potential. Another CF in Taing Samroang commune was also contacted to interview in order to learn about best practice in CF management, cattle raising experiences and leadership issues (see list of key informant and FGD participants in annex 7.2).

The general data/information related to local population, household economic condition, physical infrastructure and socio-economic status can be collected from the commune database. But local community willingness and commitment to work with the future project would be the requisite for the success of future enterprise works. EDI team also observed ongoing livelihoods activities during this rainy season including rice planting, mushroom cultivation, labor, migration, transporting logs and other forms of livelihoods activities to be seen in the community and along the way.

4.3. Data entry and interpretation:

After all data/information was collected and collated, EDI's team members used the input as scientific data/ information reliable for interpretation that could help us to have an overall understanding of data quantitatively and qualitatively, especially from the HHs interview with verification of KIs and FGDs. All data readily for views are available in annex 7.3.

5. Key Findings

5.1. Socio-Economic and Livelihoods condition in Damrey Chak Thlork CF:

Damrey Chak Thlork CF is located inside the Kraing Deivay commune, Phnom Srouch district, Kampong Speu province. This CF consists of two main villages (Kraing Kor and Dak Por) out of 9 villages in the commune. Dak Por and Kraing Kor village has also expanded other sub-villages. Kraing Deivay commune has a total of 1648 households with a population of 7297 persons including 3757 females. Kraing Deivay commune is one of the poorest communes in Kg. Speu where 10% of the total families are under ID Poor1 and Poor2 (data of commune, Jul 2016). There is still limited access to toilet and electricity. Data given by the commune chief indicated that only 23% of the total families have access to toilet and other basic sanitation. It is also noted that this commune have a high numbers of migration (about 3% of the total family members) both internal and external migration for alternative employment. But the actual figures may be higher than that because if based on the selected sample site in Dak Por and Kraing Kor villages we can see that local communities do labor jobs about 20% totally. For instance, during this assessment, the EDI team reported that there were not so many people staying home available for interview because they had already gone to work with Grandis company, who operates 10,000 ha of teak's plantation in Phnom Srouch and Aural district.

³Yamane 1967 formulation that $n = \frac{N}{(1+Ne^2)}$ (n = total direct number of samples for interviews, N = total direct members of the community forestry, e = error precision level at $\pm 10\%$).

Damrey Chak Thlork CF has 388 households (with 1753 populations) who have registered officially to take ownership of community forestry area equal to 1452 ha and were actively implementing numbers of initiatives in the past. The recent assessment undertaken by EDI team has revealed some important findings about their livelihoods/ economic development aspects and the other business potential opportunities.



Household Interview in the village by EDI team



Observed rice planting activities this rainy season

5.2. Access to productive agricultural land and assets:

It is important to understand that communities' access to agricultural land is the most important source of livelihoods and economic development in the villages. In general, through household interviews, it was found that local communities in Damrey Chak Thlork area have access to village land which on average is 1.7 ha per household, rainfed rice land 1.37 ha, chamkar rice land 1.73 ha and forest land 1.67 ha respectively (see table 01 below). More importantly, it was also found that people have limited access to electricity and other assets for their day-to-day lives. Local communities have access to only electricity 4%, to open wells 9%, to water pumps 5%, to ponds 27%, and access to toilet 39%, which is higher than other villages in the commune. In addition, local communities own batteries for lighting 93%, rice mills 13%, motorbikes 73%, two- wheels tractors 69%, plowing tools 69% and cars, 4%.

Table 01: household land ownership

Household's Land Ownership	Average (ha)	Maximum (ha)	Minimum (ha)
Village land (N=75)	1.70	3	0.7
Rainfed rice land (N=74)	1.37	3	0.7
Chamkar land (N=15)	1.73	5	0.2
Forest land (N=13)	1.67	6	0.5

Table 02: household access and ownership to assets

No	Description	All Respondents	
		N	%
1	Access to electricity	3	4%
2	Access to open well	7	9%
3	Access to water pump	4	5%

4	Access to pond	20	27%
5	Access to toilet	29	39%
6	Owned battery	70	93%
7	Owned rice mill	10	13%
8	Owned motorbikes	55	73%
9	Owned 2-Wheels tractor	52	69%
10	Owned plowing tool	52	69%
11	Owned car	3	4%



Land assets and transportation ownership observed in Dak Por village

5.3. Types of agricultural production and seasonal crop calendar in Damrey Chak Thlork CF:

As part of livelihoods and food sources for the communities, it is found that there are many sources for sustaining day-to-day lives of the communities. They produced foods and other agricultural commodities in different seasons from their limited land size. From 75 households' interviewed, there are about 20 sources of foods and incomes including irrigated rice land, rainfed rice land, vegetable production, mangos, jackfruits, bananas, papayas, cassavas, sugar palms and other NTFPs collection such as mushrooms, bamboos and bamboo shoots, and firewood for cooking (see table 03 below).

Table 03: List of foods and income sources for local communities in Damrey Chak Thlork CF area

No	Source of Livelihood	All Respondents		Unit	Size	Seasonal Production
		Yes	No			
1	Irrigated rice land	62	13	a	102	Jun-Dec
2	Rainfed rice land	43	32	a	108	Jun-Dec
3	Vegetables land	31	44	m ²	100	Apr-Dec
4	Water melons land	4	73	m ²	194	May-Dec
5	Mango	47	28	tree	21	Jan-Dec
6	Papaya	19	56	tree	3	Jan-Dec

7	Jackfruit	19	56	tree	6	Jan-Dec
8	Banana	48	27	tiller	9	Jan-Dec
9	Cassava	5	70	a	52.3	May-Feb
10	Potato	1	74	a	0.5	Jan-Jun
11	Corn (fruit)	27	48	m ²	365	Apr-Dec
12	Cattle	59	16	head	4	Jan-Dec
13	Pig	37	38	head	3	Jan-Dec
14	Goose	2	73	head	3	Jan-Dec
15	Chickens	72	3	head	9	Jan-Dec
16	Ducks	17	58	head	9	Jan-Dec
17	Bam-boos/shoot	39	36	kg	7.75	Jan-Dec
18	Mushroom	50	25	kg	9	Jan-Dec
19	Sugar palm	3	0	tree	6	Jan-Jun
20	Firewood collection	43	32	cart	9.5	Jan-Dec

5.4. Agricultural productions and incomes and food security in the CF target area:

It is found that, from household interview, there are some specific agricultural commodity that local communities have produced for owned consumption (which is part of their family food security) and for sale. Rice and cassava production was the top commodity for selling while there are many livestock raised and sold annually (see table 04 below). There are significant incomes they have earned from cattle raising and cassavas growing and these become a promising economic opportunity for the communities in the area. However, some commodities items have proven a big loss compared to other incomes' sources; there were several reasons including some families have just started to plant and have not yet gained fruits or harvest during this study for crops such as corn and mango and some other items that were already planted a long time ago and give fruits every year such as coconut trees that people reports about income only and no more investment on planting and caring them (see table 05 below). From household interviews, it was found that local communities have also gained other income from off-farm jobs including being a laborer, small business operator, garment worker, government employee and groceries shops in the village (see table 06 for off-farm job).

Table 04: Commodities of local communities for consumption and sale

No	Commodities items	Unit	For HH Consumption	For Sell
1	Irrigated rice	Kg	1,313	1,266
2	Rainfed rice	Kg	957	1,128
3	Vegetables	Kg	22	33
4	Cattle	Head	-	3
5	Pig	Head	-	3
6	Goose	Head	-	3
7	Chickens	Head	14	13
8	Ducks	Head	7	2
9	Water melons	Fruit	53	75
10	Mango	Kg	76	165
11	Papaya	Fruit	24	-
12	Jackfruit	Fruit	14	62

13	Banana	Set	35	88
14	Cassava	Kg	-	2,275
15	Potato	Kg	43	2
16	Corn	Kg	190	-
17	Bamboo/bamboo shoot	Kg	8	-
18	Mushroom	Kg	9	-
19	Firewood collection	Cart	10	-

Table 05: Incomes and Expenses from agricultural commodities in Damrey Chak Thlork CF area

No	Commodities Items	Incomes per year		Expenses	
		KHR	USD	KHR	USD
1	Cattle	6,333,400	1,583.35	200,000	50.00
2	Cassava	4,150,000	1,037.50	600,000	150.00
3	Rainfed rice	1,266,100	316.53	508,300	127.08
4	Irrigated rice	950,500	237.63	582,500	145.63
5	Jackfruit	400,000	100.00	50,000	12.50
6	Melons	312,500	78.13	73,400	18.35
7	Duck	265,000	66.25	28,300	7.08
8	Chicken	241,300	60.33	143,600	35.90
9	Mango	200,000	50.00	273,400	68.35
10	Banana	144,300	36.08	50,000	12.50
11	Pig	129,500	32.38	421,800	105.45
12	Corn	-	-	10,600	2.65
13	Coconut	61,200	15.30	-	-
14	Firewood Collection	-	-	22,100	5.53
15	Vegetables	20,000	5.00	5,700	1.4

Table 06: Other incomes sources from off-farm jobs in Damrey Chak Thlork CF area

No	Other income sources (Off-farm jobs)	All respondents	
		No	%
1	Laborer	15	20%
2	Small business	7	9%
3	Garment worker	5	7%
4	Government staff	4	5%
5	Groceries shop	4	5%
6	Firewood collection	3	4%
7	Chacoal making	2	3%

5.5. Access to forest resources and NTFPs among the CF members:

NTFPs collection was widely reported by the CF members through household interview and FGDs in Damrey Chak Thlork CF. Local community members can access freely to collect different kinds of

NTFPs such as wild honeys, bamboos and bamboo shoots, rattans and vines, different kinds of mushrooms, fuel woods, red ants and traditional medicines. These NTFPs are available seasonally (see table 07 below) and especially they have reported that the majority of its CF members have accessed to grasslands for their cattle feeds in all year round.

In the past years, GERES, RECOFTC, Mlup Baitong under financial supported from GEF/SFM has implemented capacity development project including introduction of charcoal production through Yushimura kiln technology and formed Red Ants collection group. Both charcoal production and Red Ants business is no longer functioning because of lack of raw materials for producing charcoal from the CF site / forest and lack of processing skills and packaging techniques for Red Ants collector group. Only cattle raising inside the CF area is sustainable and there are grasses for all year round available.



NTFPs collected and processed by local communities

Table 07: Livelihoods calendar

Livelihoods Activities	Harvesting Season
Bamboo shoot	June to December
Red ants	Year round
Grasses	Year round (from CF area)
Wild fruits	Seasonal, time to time
Wild animal	September
Wild mushroom (Ka Ngork)	Jun, Sep, Oct
Wild mushroom (Prich)	Oct, Nov, Dec
Wild mushroom (Ach Tonsay)	Apr, May, Jun
Wild mushroom (Popush Sek)	Jun, Sep, Oct
Traditional herbs/vines	Year round
Ple Pongro	Apr, May
Wild honey	Nov
Fuel wood	Year round

Source: FGDs with local communities in Damrey Chak Thlork CF area, Aug 2016

5.6. Access to financial resources:

Most of all respondents reported that there several MFIs and Banks are actively operated in their community. Those financial institutions included TPC, Prasac, AMK, Vision Fund and ACLEDA Bank. These MFIs can offer loans size from minimum of USD 500 up to the maximum of USD50,000 and have set at different interest rates based on the size of loan, types of businesses and length of repayment (see table 08 below). However, the lowest interest rate is from 0.62% per month to 3% per month and they all require collateral for personal loans. Despite loans being available for communities to get, there were not many people interested to take loans due to collateral deposit requirement and people have no idea about running a business with these loans, except for some of the individual families to take loans for agricultural purposes such as fertilizers, seeds and for transportation means such as 2-wheels tractors and motorbikes.

Table 08: MFIs and Bank presented in the community with the loan size and interest rates

Type and Name of MFIs/ Bank	Amount Min to Max (KHR or USD)	Interest rate
TPC (thaneakea phum) MFI	500-1500 \$	3% per month
ACLEDA	2500-75,000\$	0.62% to 1% per month
Prasac MFI	500-50,000 \$	1.3 to 2.3% per month
AMK MFI	2000- 20,000 \$	1.8 - 2.8% per month
Vision Fund	500-5,000 \$	2-3.5% per month

Source: FGDs with local communities in Damrey Chak Thlork CF area, Aug 2016

5.7. Access to marketplace, infrastructure and irrigation system

Market access is generally limited among local communities, especially for Damrey Chak Thlork CF. There are some people running small scale stores or shops in the village but trade activities is very small scale. Road connection to and from village between provincial market and Phnom Penh is generally good because the government has built gravel and tarmac road networks to the villages. Communities reported that there were many middlemen who came into the villages and bought agricultural commodities and other goods from the villagers with their own fixed prices. If this situation remains it is also a good opportunity that communities can form themselves and work alongside or in partnership with them to have fair business and share good profits in the form of business partnership and cooperation. . Changing mindset of communities in doing agriculture business is needed and perhaps become a viable community business/ enterprise in the future.

According to an interview with commune chief of Kraing Deivay commune, it was revealed that only certain numbers of villages have access to canal irrigation systems and the reservoirs of Tomnup Angkor Chey where farmers in those villages can access to water for rice and other cash crops cultivation. Those villages include Prey Ka Heach, Daung, and Banteay Roka village that is located near Tomnup Angkor Chey and Stung Peam Poul. For Damrey Chak Thlork CF, there is very limited water access during dry season, even for domestic use. However, in Dak Por/Kraing Ra Ngeang village, the commune has allocated some fund this year to construct a pond 50m x 50m x 3m from its commune investment fund. But this pond is only secure drinking water for villagers rather than for vegetable growing business.

5.8. Labor forces/ skilled labor availability in the communities:

From our analysis, it was revealed that CF members/households have received numbers of training or capacity building from the previous projects or programs implemented by NGOs in the community. All respondents reported that they had received training on agricultural technique for 11%, CF

management plan 8%, Health and nutrition 5%, Charcoal making 5%, Land law and human rights 3% and advocacy, savings group, reproductive health and traffic law 1% respectively. These kinds of training or sessions took place in the village and CF members were invited to join. However, some of them have never finished joint training completely and they swap between wife and husband to attend the training (see table 09 below)

Table 09: Training subjects received by CF household members in the past

No	Training or skill need	All Respondents	
		No	%
1	Agricultural techniques	8	11%
2	CF management plan	6	8%
3	Health and nutrition	4	5%
4	Charcoal making	4	5%
5	Land law	2	3%
6	Human rights	2	3%
7	Advocacy	1	1%
8	Savings group	1	1%
9	Reproductive health	1	1%
10	Traffic law	1	1%

5.9. Membership to existing groups, individual and group business preferences:

It is noted that all household respondents mentioned that they belong to existing business group such as village bank 20%, rice bank 8% and agricultural cooperative 3% (see table 10 below). This is because they have been involved with other NGOs projects in the past 20 years. There is pros and cons in terms of development affects from those NGOs that one hand communities have experiences and strong confidence in expression and can assert their rights for ownership and advocacy. But on the other hand , they rely too much on NGOs support which they get everything free from NGO intervention although they can contribute something through labor costs. Therefore, they have not much in business/ enterprise development venture where its required for their own investment. Only 8% from all respondents said that they can or are willing to invest by themselves for any business/ enterprise projects. Individual household investment is the most preference from all respondents. They have no trust to work in a group business. From past experience, LWD had implemented group business model for chicken raising, vegetable growing but all failed at the end of the project. Similarly, GEF/SFM supported projects for collective charcoal production in 4 provinces including Kg. Speu were also reportedly failed. Thereis only one individual charcoal business (using Yushimura kiln technology) in Battambang still running to date after project completion⁴.

Table 10: Membership to existing business groups

Member to existing business group	All Respondents	
	No.	Percent
Village Bank (N=75)	15	20%
Rice bank (N=75)	6	8%
Agricultural Cooperative (N=75)	2	3%

⁴ Based on KI interview with RECOFTC staff



Community Forestry members in attended in meeting

5.10. CF Committee and Capacity Gap: Leadership and Management issue:

It is very important to understand about current capacity, leadership and management of CF Committee members of Damrey Chak Thlork. From the evaluation report by RECOFTC in November 2015, it was illustrated clearly that there were many positive impacts from the conservation and project intervention efforts in the past; this included the improved condition of resources, communities have gained experience and technical know-how, have improved production and have greater access to resources⁵, gained new technology such as Yushimura charcoal kiln and other initiatives. In addition, the CFMP has already completed and put it in place for implementation from 2016 to 2030.

EDI team had also conducted a meeting with CF Committee members to verify some expectations, commitments and other plan for resource mobilization etc. as indicated in the plan. We have also reviewed an existing potential for business development of CF such as Red Ants collection and charcoal business, these two business clearly failed due to poor quality of firewood available from the CF site / forest to produce good quality charcoal that no buyers wanted, and Red Ants collector group has lack of processing and packaging skills. On the other hand, leadership and management expectations is also important if the Committee member is to work together and if they have any new plan to re-elect the committee members because currently there are only 4-5 members who are active and participated regularly to CF related to works. CF Committee mandate is in need of re-election and they stressed that all types of business, enterprise and other development projects need the legality of committee and the healthy internal functions. CF committee admitted that they did not held regular meeting as planned and it is important to keep all members informed and practice transparency in the use of resources, especially in financial resources management. RECOFTC informed us that the GEF/SFM project had a support grant of USD20,000 before the project ended to make sure that CF can keep ongoing process of their CFMP implementation. However, it is clear that money has been used for forest re-plantation (Acacia and Eucalyptus) in the degraded area where it used to be in conflict with private company. This reforestation has cost more than USD11,000 on 15 ha of land and the rest of money was paid out to the lost Charcoal and Red Ants businesses.

⁵ CF Business Plan Impact Assessment report by RECOFTC, Nov 2015

The committee agreed that there was some mistrust among themselves and they will need to have a re-election of a CF Committee and this will also be related to the next step of Business/Enterprise project where it will also be required to create sub-committees or working groups on each business sector in the next step of activities if the project gets approval. It is noted that leadership & management of the CF Committee has been elected since 2012 by RECOFTC's facilitation in cooperation with FA staff. So far, the committee has come to an end of its 5-year term and CF Committee is in need of more women representatives to stand for and work with the new business/ enterprise project. It will also encourage young people (youth) in the village to be involved especially those who can use computers and have knowledge on basic excel or accounting skill to support running community business/ enterprise project.

In relation to Capacity Development, it is noted that CF Committee does not function well and distrust each other due to not having regular meetings. Meetings can be organized only when donors or NGOs visit and their general capacity is needed to address on minute writing, book keeping/financial management, project implementation and monitoring of the project implementation. Technical support such as new technology of fruits and cash crops plantation, grasses growing, seedless lemons or date palm plantation and cattle raising businesses need to be hands-on and coaching while implementing the project.

From FGD with CF committee and household members it was also noted that there have been many NGOs and actors working in the CF area. Those including LWD, Srer Khmer, Mlup Baitong, GERES, KYSD and RECOFTC and they gained some specific training from those NGO services (see table 11 below).

Table 11: Training subjects provided in the past and the gap for future action

Training received in the past (1-2 years)	Institution/ NGOs, Service Provider	What is needed/gaps for the future action?
Agriculture skill (basic), Land Law, Human rights Gender	LWD	Not everyone had attended and therefore stressed to need more of these kinds of training and deliver free seeds and techniques.
Agriculture skill	Srer Khmer	Not everyone had attended and therefore stressed to need more of these kinds of training and deliver free seeds and techniques.
Community Forestry establishment	MlupBaitong	This organization had also provided training on other conservation and livelihoods development including water sanitation.
Charcoal production	GERES	With only CF committee members and was funded by GEF/UNDP small grant
Youth Development, Youth engagement in development	KYSD	With youth group only. This organization was also promoted democratic space for youth and other governance issue.
CFMP, CF management and CF business	RECOFTC	As part of GEF/UNDP small grant and was finished in late 2015.

5.11. Potential community business/ enterprise development for Damrey Chak Thlork CF:

Based on current practices and skills available in the communities, it is revealed that cattle raising and other livestock (pigs, chickens and ducks) and vegetable growing are the proven successes and it is

still a traditional practices of the communities. During this study, EDI team suggested discussion on the criteria for scoring including (1) if the business brings about profit, (2) if the business required skill, (3) if the business is a labor intensive, (4) if the business can meet high market demands. Cattle, rice, pig and vegetable production is the top scorer (see table 12 below). However, there are numbers of new cash crops with high values in the markets that communities are interested on for their individual or collective investment such as date palms, seedless lemons, sweet bamboo and sesame (see table 13).

Some of the agri-products are also in high demand from the market and farmers can do this through contracted farming business models or they can form themselves to be specific producer groups or agricultural cooperatives. The agricultural business model that is being practiced in Cambodia in the form of “Supply Business” or “Service Business” is also part of the RGC’s policy and commitments especially through the new created Department of Agricultural Cooperative Promotion (DACP) within MAFF. Details of this potential business/ enterprise will be discussed in the Part 2 of this assignment (regarding Community Based Enterprise for Damrey Chak Thlork CF). Provincial FA and FiA will also be integrated into Provincial Department of Agriculture that this government restructured will help facilitate and support to CF in the province much better than before.

Table 12: the top scorers of the agricultural commodity available from communities

Future business/ enterprise development	Profitable	Skill available	Labor intensity	Market demands	Total scores
Cattle (cows) raising	10	5	5	10	30
Rice growing	3	5	10	10	28
Pigs raising	5	5	8	7	25
Vegetable growing	3	1	8	10	22
Chicken raising	6	5	1	8	20

5.11.1. Business potential for other agro-industrial crops:

In fact, there are several private companies operating their agri-businesses in Phnom Srouch and Aural district of Kg. Speu. The significant companies that are closely linked and affected to this community forestry development are:

- **Grandis** is a timber limited company operated in Phnom Srouch and Aural district area that are promoting high value timber plantation such as teak trees; this company is open to accept laborers from Damrey Chak Thlork CF area. They provide free transportation back and forth every day for villagers employed by this company. This company owns 10,000 ha of total economic concession land.
- **Phnom Penh Sugar Company** is owned and operated by a local business Ly Yong Phat tycoon (LYP Group Co Ltd) that is promoting sugar cane plantation in Aural district. This company owns about 10,000 ha and has already developed processing plants and infrastructure ready to support agri-industrial development in the area; it has employed hundreds of local laborers to work in the plantation.
- **Other private companies** who own smaller plots of land in Phnom Srouch, Kg. Speu has also needed of laborers and some of them are also seeking to do contracted farming with local communities who want to plant specific commodity to supply them regularly and with quality.

- The EDI team has also carried out thorough studies based on secondary and primary data available on agri-product items that are adaptable to Cambodia soil conditions and revealed other agri-business opportunity for local communities wherever they can access to water resources and technologies (see table 13 below). Currently, companies in that area have also allowed communities to harvest grasses for cattle feed with permission. Grasses from those areas are transported and sold to the other places in Kg. Speu and to some extend to Takeo provinces, Kandal and Kg. Chhnang province where farmers need grasses for cattle and buffalo feeds.

Table 13: Business potential for other agro-industrial crops in this area

Cash crops	Profitability (L-M-H)	Condition
1. Date palm	High	Need water and this crops can be adopted to the CF soil condition
2. Seedless Lemons	Medium to High	Need water and is adaptable to climate in this CF area
3. Sweet Bamboos	Medium to High	Need less water and is adaptable to climate and type of soil in this CF area
4. King Grasses/ Elephant grasses	High	Need less water and is adaptable to climate and type of soil in this CF area
5. Sesame	Medium to High	Need less water and is adaptable to climate and type of soil in this CF area
6. Mango	Medium to High	Need less water and is adaptable to climate and type of soil in this CF area

5.11.2. Business potential related to Non-Timber Forest Products processing:

As mentioned in livelihoods' source earlier in this report, local communities have identified numbers of NTFPs items that have sustained their livelihoods day-to-day. Those NTFPs can actually be processed and developed into handicraft productions such as bamboo and rattan handicrafts and other traditional medicines. The available products are from Phnom Srouch, Aural Mountain and from Cardamom Mountain. Wild mushrooms and other wild fruits were reportedly in high volumes during its harvest season but there is no processing/ handicraft production skill available in the Damrey Chak Thlork area. In the future, rattan and bamboo handicraft production can be introduced into this CF area where the producer group/ handicraft group can be trained and produced different furniture to link with Rattan Association of Cambodia.

5.12. Constraints and risks involved in business/ enterprise and with possible solutions:

We have identified some constraints/risks involved in agri-businesses for community in Damrey Chak Thlork as well as the rest of Kraing Deivay commune. Each sub-sector of agri-businesses is always connected to some level of risks/constraints such as for cattle raising, pigs and chickens/ ducks; risks are related to diseases and other hazard climates. Most of these risks are manageable or controllable. Based on discussions, there are also some possible solutions to go about managing risks as indicated in the table 14 below.

Table 14: Businesses, risks and possible solutions for Damrey Chak Thlork CF area

Future business/ enterprise development	Risks/ Constraints (L- M -H)⁶	Possible Solutions (suggested how to manage risks)
Cattle (cows) raising	Some cattle disease that is uncontrollable by village veterinary (M)	Working with Vet. Association in the commune and keep network and communication with Livestock Department regularly, especially if there was something unusual.
Chicken raising	Past experience of bird flu disease break out (H)	Working with Vet. Association in the commune and keep network and communication with Livestock Department regularly, especially if there was something unusual. CP company in Kg. Speu has number of high quality vet/expert to advice on this matter also.
Pigs raising	Disease uncontrollable for pigs and market price fluctuated (H)	Working with Vet. Association similar approach with cattle and chicken. For market price fluctuation, the project should established business group who in charge of marketing sector and have wider network outside the community.
Rice growing	Disaster from flood and drought, and Pests (M)	Working with Agronomist/ experts in pest control. Flood and drought is need wider intervention from local, district and provincial authorities. Promote infrastructure development focusing on irrigation system for supporting this solution.
Vegetable growing	Lack of water during dry season (H)	Working with Agronomist and similar to rice sector.
Human Resources	Lack of laborers (due to the fact that they are outmigration)	Providing competitive salary/ benefits for working in the community. Other incentive such as vocational skills, technologies and adequate support from NGOs or development partners.

6. Conclusion and Recommendations

This study concludes that Damrey Chak Thlork CF is the only one active community forestry site in KraingDeivay commune. Covering 1452 ha of land, Damrey Chak Thlork CF has already developed CFMP and business plans for Red Ants and Charcoal production is in place. Local communities at household level however still have limited access to water resources, market places and other assets such as toilets and electricity. Local CF members acknowledged the importance of having access to community forestry sites where they can collect NTFPs, firewood and grasses for animal feeds. The greatest incomes are coming from cattle raising, cassava plantation and rainfed rice and that existing livelihood domain is also become the biggest potential for future business as well.

The study also identified some concerns over leadership and management issues within CF Committee that require immediate action to hold re-election of committee members and steering the new CFMP implementation for this year. The general capacity of CF Committee is also limited. At the household level, CF members require additional training and skills on agriculture techniques and other agri-business related to make sure that they can be profitable and successful in the future.

⁶ L= Low, M= Medium, H= High)

Damrey Chak Thlork CF has a number of business/ enterprise potential including cattle raising and other high value cash crop (agri-businesses). The recommendations are, however, included but not limited to:

1. Considering development of cattle raising business/ enterprise development by using an integrated approach, where Silvopasture business is viable for this CF area.
2. Consider creating “Supply Business and Service Business” similar approach to other Agricultural Cooperatives in Cambodia where collective producer groups/ sub-sector business groups need to be identified and function under the new project implementation. The capacity and technical support should include business/ entrepreneurship training, practical business plan development for each sub-sector and adequate business coaching/mentoring.
3. Additional detail study on the selection site within the CF Block 1, Block 2 and 4 for the suitability to build cattle cow house and other high value cash crop such as date palm, sweet bamboo, seedless lemons and lemon grasses.
4. IRD/APFNet can be the next direct implementer by supporting Damrey Chak Thlork CF to implement community based enterprise project and other conservation efforts.

7. Annexes

7.1. References

GEF, UNDP and FA. (Feb 2016). *Final Project Report on Strengthening Sustainable Forest Management and Bio-Energy Markets to Promote Environmental Sustainability and to Reduce Greenhouse Gas Emissions in Cambodia*. Phnom Penh: UNDP.

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Maningo, E. V. (Nov 2015). *CF Business Plan Impact Assessment*. Phnom Penh: RECOFTC and FA.

RECOFTC and FA. *Business Plan for Red Ants*. Phnom Penh: RECOFTC and FA.

RECOFTC and FA. *Community Forestry Management Plan for Damrey Chak Thlork*. Phnom Penh: RECOFTC and FA.

7.2. List of Key Informant and Participants attending in the study

No	Name	Position & Organization
1	Ma Vuthy	Deputy Chief of Forest Resources Assessment and Social Economic and Environment Impact Center, IRD/ Forestry Administration.
2	Chhneang Kirivuth	Community Forestry Partnership Coordinator, RECOFTC
3	Marn Maen	Commune Chief of Kraing Deivay commune
4	Ouk Khnim	Chief of Leap Kuy Community Forestry, Taing Samroang commune
5	Keo Sophal	Committee member of Damrey Chak Thlork
6	Hours Nging	Member of CF in Damrey Chak Thlork
7	Chhun Leang	Member of CF in Damrey Chak Thlork
8	Neang Nem	Member of CF in Damrey Chak Thlork
9	Chuop Thy	Member of CF in Damrey Chak Thlork
10	Sat Sorn	Member of CF in Damrey Chak Thlork
11	RosRy	Deputy Chief of Village
12	Soung Varn	Chief of CF Committee
13	Im Sim	Member of CF in Damrey Chak Thlork
14	Siv Lim	Member of CF in Damrey Chak Thlork
15	Chhim Ny	Farmer/member in Banteay Roka village
16	Ros Noeun	Farmer/member in Banteay Roka village
17	Nhem Phoeun	Farmer/member in Banteay Roka village
18	Chhoun Soeun	Farmer/member in Banteay Roka village
19	Hin Sak	Farmer/member in Banteay Roka village
20	Pho Phe	First Deputy of commune of KraingDeivay commune
21	Yim Yet	Village Chief of Banteay Roka
22	Choup Chey	Farmer/member in Banteay Roka village
23	Yet Rorn	Farmer/member in Banteay Roka village
24	Suon Siv	Farmer/member in Banteay Roka village
25	Seng Soklai	Farmer/member in Banteay Roka village
26	Yem Phorn	Farmer/member in Banteay Roka village
27	Chuop Chhim	Farmer/member in Banteay Roka village
28	Sok Lang	Farmer/member in Banteay Roka village
29	Hel Hul	Farmer/member in Banteay Roka village
30	Sot Chhunly	Farmer/member in Banteay Roka village

- People participated in FGD: 30 persons including 19 women
- Household interview selection: 75 families

7.3. Some important data related to Kraing Deivay commune and Damrey Chak Thlork CF

a) Data on poverty (ID Poor 1 and Poor2)

No	Name of Village	Total HHs	ID Poor 1		ID Poor2		Total Poor1+2	
			HH	%	HH	%	HH	%
1	Banteay Roka	217	7	3%	15	7%	22	10%
2	Krasaing Khpos	122	7	6%	11	9%	18	15%
3	Trapaing Prei	196	8	4%	25	13%	33	17%
4	Kraing Kroch	104	2	2%	8	8%	10	10%
5	Prey Ka Heach	163	3	2%	7	4%	10	6%
6	Prey Toteung	255	12	5%	19	7%	31	12%
7	Kraing Kor	146	1	1%	9	6%	10	7%
8	DakPor	242	5	2%	9	4%	14	6%
9	Daung	203	4	2%	12	6%	16	8%
	Total	1648	49	3%	115	7%	164	10%

Data source: Commune data in July 2016

b) Data on access to Toilet by all families in Kraing Deivay commune

No	Name of Village	HHs	HHs Access to Toilet			
			Water	Dry	Total	%
1	Banteay Roka	217	61	0	61	28%
2	Krasaing Khpos	122	40	0	40	33%
3	Trapaing Prei	196	23	0	23	12%
4	Kraing Kroch	104	36	0	36	35%
5	Prey Ka Heach	163	52	0	52	32%
6	Prey Toteung	255	26	0	26	10%
7	Kraing Kor	146	65	0	65	45%
8	Dak Por	242	60	0	60	25%
9	Daung	203	11	0	11	5%
	Total	1648	374	0	374	23%

Data source: Commune data in July 2016

c) Data on land ownership and access to asset in Damrey Chak Thlork

Household's Land Ownership	Average (ha)	Maximum (ha)	Minimum (ha)
Village land (N=75)	1.70	3	0.7
Rainfed rice land (N=74)	1.37	3	0.7
Chamkar land (N=15)	1.73	5	0.2
Forest land (N=13)	1.67	6	0.5

No	Description	All Respondents	
		N	%
1	Access to electricity	3	4%
2	Access to open well	7	9%
3	Access to water pump	4	5%
4	Access to pond	20	27%
5	Access to toilet	29	39%
6	Owned battery	70	93%
7	Owned rice mill	10	13%
8	Owned motorbikes	55	73%
9	Owned 2-Wheels tractor	52	69%
10	Owned plowing tool	52	69%
11	Owned car	3	4%

d) Data on sources of livelihoods of households in Damrey Chak Thlork

No	Source of Livelihood	All Respondents		Unit	Size	Seasonal Production
		Yes	No			
1	Irrigated rice land	62	13	a	102	Jun-Dec
2	Rainfed rice land	43	32	a	108	Jun-Dec
3	Vegetables land	31	44	m ²	100	Apr-Dec
4	Water melons land	4	73	m ²	194	May-Dec
5	Mango	47	28	tree	21	Jan-Dec
6	Papaya	19	56	tree	3	Jan-Dec
7	Jackfruit	19	56	tree	6	Jan-Dec
8	Banana	48	27	tiller	9	Jan-Dec
9	Cassava	5	70	a	52.3	May-Feb
10	Potato	1	74	a	0.5	Jan-Jun
11	Corn (fruit)	27	48	m ²	365	Apr-Dec
12	Cattle	59	16	head	4	Jan-Dec
13	Pig	37	38	head	3	Jan-Dec
14	Goose	2	73	head	3	Jan-Dec
15	Chickens	72	3	head	9	Jan-Dec
16	Ducks	17	58	head	9	Jan-Dec
17	Bam-boos/shoot	39	36	kg	7.75	Jan-Dec
18	Mushroom	50	25	kg	9	Jan-Dec
19	Sugar palm	3		stem	6	Jan-Jun
20	Firewood collection	43	32	cart	9.5	Jan-Dec

e) Data on food consumption and commodity sold to market in Damrey Chak Thlork

No	Source of Livelihood	Unit	For HH Consumption	For Sell
1	Irrigated rice	Kg	1,313	1,266
2	Rainfed rice	Kg	957	1,128

3	Vegetables	Kg	22	33
4	Cattle	Head	-	3
5	Pig	Head	-	3
6	Goose	Head	-	3
7	Chickens	Head	14	13
8	Ducks	Head	7	2
9	Water melons	Fruit	53	75
10	Mango	Kg	76	165
11	Papaya	Fruit	24	-
12	Jackfruit	Fruit	14	62
13	Banana	Set	35	88
14	Cassava	Kg	-	2,275
15	Potato	Kg	43	2
16	Corn	Kg	190	-
17	Bamboo/bamboo shoot	Kg	8	-
18	Mushroom	Kg	9	-
19	Firewood collection	Cart	10	-

f) Data on income and expense from agriculture commodity

No	Commodities Items	Incomes		Expenses	
		KHR	USD	KHR	USD
1	Cattle	6,333,400	1,583.35	200,000	50.00
2	Cassava	4,150,000	1,037.50	600,000	150.00
3	Rainfed rice	1,266,100	316.53	508,300	127.08
4	Irrigated rice	950,500	237.63	582,500	145.63
5	Jackfruit	400,000	100.00	50,000	12.50
6	Melons	312,500	78.13	73,400	18.35
7	Duck	265,000	66.25	28,300	7.08
8	Chicken	241,300	60.33	143,600	35.90
9	Mango	200,000	50.00	273,400	68.35
10	Banana	144,300	36.08	50,000	12.50
11	Pig	129,500	32.38	421,800	105.45
12	Corn	-	-	0,600	2.65
13	Coconut	61,200	15.30	-	-
14	Firewood Collection	-	-	22,100	5.53
15	Vegetables	20,000	5.00	5,700	1.4

No	Other income sources	All respondents	
		No	%
1	Laborer	15	20%
2	Small business	7	9%
3	Garment worker	5	7%

4	Government staff	4	5%
5	Groceries shop	4	5%
6	Firewood collection	3	4%
7	Chacoal making	2	3%

g) Data on training received from NGO project in the past

No	Training subjects	All Respondents	
		No	Percentage
1	Agricultural techniques	8	11%
2	CF management plan	6	8%
3	Health and nutrition	4	5%
4	Charcoal making	4	5%
5	Land law	2	3%
6	Human rights	2	3%
7	Advocacy	1	1%
8	Savings group	1	1%
9	Reproductive health	1	1%
10	Traffic law	1	1%

Member to existing business group	All Respondents	
	No.	Percent
Village Bank (N=75)	15	20%
Rice bank (N=75)	6	8%
Agricultural Cooperative (N=75)	2	3%

7.4. Questionnaires Developed for this study

FGDs' Questionnaire for Forest-Based Community Enterprise Development

Name of Community:.....

Location: Village.....Commune:.....District:.....Province:....

How far from provincial town:.....

Total member of the community:.....male:.....Female:.....

1. What is your general status in the community forestry?

- Community forestry, in what step:.....
- Community fisheries, in what step:.....
- Registered community ecotourism, when:.....
- Community enterprise, when:.....
- Other:.....

1. What are your overall resources mapping in your village/community?

- a) Doing participatory exercise for resources mapping (sketch map)
- b) Do analysis of asset/property of the communities inside the map.

2. What are the potential resources do you have for sustaining livelihoods in the community? and in what season do they collect or process those resources (list down all they have) e.g.

- a) Sugar Palm
- b) NTFPs (wild honey, bamboos and rattan)
- c) Ecotourism
- d) Wildlife Farming (wild pig or other bush meats)
- e) Fruit Orchard (Mango; Papaya; Jackfruit, Durians, Banana)
- f) Rubber
- g) Industrial Crops (Sugar Cane; Cassava and Potato, Corn, Black Pepper)
- h) Fast Growing Timber Species: Eucalyptus; Mangium (Acacia Mangium); Acacia
- i) Rice Production: (1) Irrigated Rice; (2) Upland Rice [Ordinary]; (3) Upland Rice [Organic]
- j) Vegetables and Melons

Name of Livelihoods Activities	What season (day or month) or year round?	How far from village? (km, hour)

3. If we prepare for Silvopasture (raising cattle in the area) is it profitable? Are grassland available? What would be affected?

4. What is the most priority (3-5 tops) for your future business or enterprise development?

Future business/enterprise development	Profitable	Skill available	Labor intensity	Sustainable of resource/raw material	Market demands	Require technology (for processing/collecting)	Total scores

NB: suggested scores from 1= Least to 10= Most

5. What are the risks/ constraints could be involved in each of the indicated business sector/ livelihoods sources above?

Future business/ enterprise development	Risks/ Constraints (L- M -H) ⁷	Possible Solutions (suggested how to manage risks)

6. Can you access to financial capital in this village? with whom?

Type and Name of MFIs/ Bank	Amount Min to Max (KHR or USD)	Interest rate they charge per month/or year?

7. Did you receive any vocational/ skilled⁸ training before in relation to these indicated businesses? With whom (institution/ NGO)?

Training subjects received in the past (1-2 years)	Institution/ NGOs, Service Provider (who provided?)	What is needed/gaps for the future action?

8. If IRD will come to assist you for business/ enterprise development, what areas of support do you need most?

Areas of support needed	Group/ Individual	When is the most suitable time/season to do? Training/ Hardware	What will be your financial contribution?

9. Which one is the most top 3-5 priority for IRD to help you in this community/village?

.....
.....

10. What are overall suggestions/ recommendations would you like to provide to IRD?

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⁷ L= Low, M= Medium, H= High)

⁸ Vocational or Skilled training in term of agriculture, food processing, NTFPs processing etc., should be more focused in this assessment

Key Questions for Local Authority and Government

Name of Interviewer

Name of Interviewee, sex and position

Date of Interview

Place of interview

Tel number (in case)

General Info on:

- Village's population (male and female):
- Total of ID Poor 1
- Total of ID Poor 2
- General land tenure/ownership per ha in average

1. How many Community Forestry Members is in this village?
2. What are the roles of commune or village chief in supporting this CF/Village development?
3. How many NGOs support the CFs in your target areas, and what sector of support are their working on?
4. From your perception what are training subjects/ training needs should we prepare for capacity development for committee members?
5. From your perception what are training subjects/ training needs should we prepare for capacity development for village members/ entrepreneur group?
6. Do you see any of project activities by other NGOs overlapping with/duplicating with IRD/APFNet?
7. What should be good/ or best business model applicable for Damrey Chak Thlork CF area?
8. If we develop following business/ enterprise, do you think it will be working or not? why?

Type of Business/Enterprise	What work, what not work, why?
Charcoal production	
Cattle-based silvopasture	
Rattan and bamboo handicraft	
Wild honey production	
Agro-industrial crops: what crop?	
Rice production?	
Medicinal herb production?	
Other that best fit (specify)	

9. What are the challenges or constraints faced the CF you work in? and How to solve those constraints/problems?
10. What kind of livelihoods/ enterprise initiative that work and doesn't work? Why?
11. What are the challenges or constraints being faced by CF/Entrepreneur group (This can be blocks/enabling environment for CF)? what can be a solution? to those constraints/ challenges ?
12. What are the recommendations would you like to suggest to APFNet/IRD to be considered for the next community based enterprise project?

Key Questions for NGOs and other experts

Name of Interviewer

Name of Interviewee, sex and position

Date of Interview

Place

Tel number (in case)

1. How long has your organization been working in this Damrey Chak Thlork CF, Kg. Speu?
2. What are your main sectors and program activities in this CF development? Are you working on livelihoods development or economic empowerment? What did you observe over the current livelihoods or business development in Damrey Chak Thlork CF?
3. How many NGOs or organization (including UN agencies) working in that area?
4. Do you see any of your activities overlapping with/duplicating with IRD/APFNet?
5. What should be good/ or best business model applicable for Damrey Chak Thlork CF area?
6. If we develop following business/ enterprise, do you think it will be working or not? why?

Type of Business/Enterprise	What work, what not work, why?
Charcoal production	
Cattle-based silvopasture	
Rattan and bamboo handicraft	
Wild honey production	
Agro-industrial crops: what crop?	
Rice production?	
Medicinal herb production?	
Other that best fit (specify)	

7. What are the challenges or constraints faced the CF you work in? and How to solve those constraints/problems?
8. What kind of livelihoods/ enterprise initiative that work and doesn't work? Why?
9. What are the recommendations you would suggest for future enterprise development?