



# **Smallholder Tree Crop Revitalization Support Project**

# **BASELINE STUDY**

# **Draft Report**

November 2015



## **REPORT COVER**

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# **List of abbreviations**

ACC	Agricultural Coordination Committee
ARAP	Abbreviated Resettlement Action Plan
CAC	County Agricultural Coordinator
CAO	County Agricultural Office
CDA	Cooperative Development Agency
DAO	District Agricultural Office
EMP	Environmental Management Plan
EPA	Environmental Protection Agency
EPO	Equatorial Oil Palm
ESIA	Environmental and Social Impact Assessment
FO	Farmer Organization
GIS	Geographical Information System
GoL	Government of Liberia
НН	Household
LASIP	Liberia Agriculture Sector Rehabilitation Program
LC	Land Commission
MARCO	Morris American Rubber Company
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoGD	Ministry of Gender and Development
PCU	Project Coordination Unit
PDO	Project Development Objective
PIM	Project Implementation Manual
PMU	Program Management Unit
PSC	Project Steering Committee
SIA	Social Impact Assessment
STCRSP	Smallholder Tree Crop Revitalization Support Project

# **Forewords**

This report features the results of "Baseline and thematic Studies" for the Smallholder Tree Crop Revitalization Support Project (STCRSP).

The ToR foresee a baseline study conducted during Project's Year1 (PY1) and two further evaluation studies (Mid-term and final Impact Assessment) during PY3&4.

The first of these studies started on end of July 2014 but had to be suspended because of Ebola crisis in the Country; it has been reactivated on April 28th 2015 and has been carried out by an M&E expert, team leader, and a GIS expert.

This STCRSP's Baseline study has been conducted from April to November 2015 including:

Phase	From	То
1 – Inception Phase	28/04/2015	08/05/2015
2 – Baseline study preparation	08/05/2015	03/06/2015
3 – Baseline study implementation	08/06/2015	15/07/2015
4 – Data analysis	05/10/2015	17/10/2015
5 - Sharing of first results with STCRSP/PCU	19/10/2015	
5 – Additional data collection	19/10/2015	06/11/2015
6 - Sharing of main results with STCRSP/PCU and World Bank	13/11/2015	

# 1. Background

# 1.1. Institutional Context

Emerging from a 14 year war and with the support of the international community, Liberia, since 2003, has revived state administration, maintained peace and stability, improved governance, rebuilt some basic infrastructure and made progress on key human development indicators.

With a population of about 4.2 million, vast challenges remain going forward and Liberia ranks 175th out of 187 countries in the 2013 Human Development Index. Among other issues, child malnutrition and maternal mortality high rates, net school enrolment ranges, poor access to public electricity services and potable piped water, poor maintenance of primary, secondary and feeder roads are part of the challenge to be taken-up.

Agriculture has been the backbone of the economy throughout the conflict and the post-war period. This sector still accounts for the main part of the GDP (61% in 2008) and provides employment and/or income to about two thirds of the 4 million population.

The Ministry of Agriculture (MoA) is the central policy-making body of the GoL and is responsible for promoting agriculture development, regulating the sector and implementing food security policies and strategy.

Since 2008, the MoA has made strides to create County Agricultural Offices (CAOs) and to reorganize. It has established a Program Management Unit (PMU) in charge of the preparation and management of externally-funded programs such as the STCRS Project.

The STCRS project fits into the **Liberia Poverty Reduction Strategy** (PRS), particularly its second pillar "economic revitalization", based on the promotion of export oriented economic growth, through consolidating the role of the private sector, while also facilitating rural development, increasing rural incomes, and contributing to poverty reduction. The project is also fully aligned with the **2010-2020 Liberia Agriculture Sector Investment Program** (LASIP) as it contributes to three of the four programs of the LASIP and particularly to sub-programs 1.3 (Smallholder tree crop development), 2.1 (Rehabilitation and expansion of rural roads), 3.1 (Rebuilding the MoA and improved coordination & management), 3.4 (Capacity building of farm based organizations), and 3.5 (Revitalizing agriculture research).

# 1.2. The Project

#### 1.2.1. The STCRSP' development objective

The Smallholder Tree Crop Revitalization Support Project (STCRSP) is executed by the Government of Liberia through the Ministry of Agriculture (MoA), with funding from the International Development Association (IDA). The Project implementation's period was initially scheduled as starting on June 5<sup>th</sup> 2012 and ending on December 31<sup>th</sup> 2016.

The development objective of the project is:

"To increase access to finance, inputs, technologies and markets for smallholder tree crop farmers in Liberia, and prepare a long term development program for the tree crops sector".

As such, the STCRS Project is a pilot intervention aiming at (i) revitalizing the production and marketing of major tree crops (coffee, cocoa, rubber and oil palm), in targeted areas of the main tree crop producing counties, (ii) strengthening key public and private institutions associated with the sector. It will test different rehabilitation, replanting and new planting models and associated implementation and financing mechanisms for revitalizing the tree crop sector. These models will be implemented in partnerships with concessionaires/large firms, NGOs, Farmer Organizations (FOs) and financial institutions in six counties: Montserrado, Margibi, Grand Bassa, Bong, Nimba, and Grand Gedeh.

On the basis of this development issue and its monitoring and evaluation results, the STCRSP aims also at (iii) developing a longer term large scale smallholder tree crop development program.

Total project costs are estimated at around **US\$23.1 million** equivalent, which will be funded by an IDA credit of US\$15 million, Government of Liberia funding of about US\$1.1 million, financial institutions contribution of US\$0.8 million and beneficiaries in-kind inputs of around US\$ 6.2 million.

The project is structured around 3 components:

Component	Aims at	Budget (USD '000)					
	Revitalizing the production and	TC	IDA	GOL	PFIs	Total	
		CC	6,462	295	732	12,19	1
C1 – Smallholder Tree Crops revitalization	marketing of major tree crops (cocoa, coffee, oil palm and	OP	1,013	36	81	1,42	7
Tevitalization	rubber) in 6 selected counties	R	1,992	78	0	3,23	5
		Total	9,467	409	813	16,85	7
	<b>1.</b> Strengthening the main public and private institutions involved in	Т	С	IDA	GOL	PFIs	Total
C2 – Institutional building and	project (MoA, CDA, MoLME,LC, CARI)  2. Preparing a follow-up large scale	Inst	. CB	1,348	150	0	1,498
Preparation of future large scale		Prep.	of LSP	503	25	0	528
Tree Crop Development Program		P Pre	o. Fac.	1,225	0	0	1,225
	smallholder tree crop	То	tal	3,077	174	0	3,251
	development program						
			тс	IDA	GOL	PFIs	Total
_	Ensuring an effective	Impl.	Support	1,823	450	) (	2,273
C3 – Project coordination and	coordination, management and	N	1&E	633	44	1 (	678
management	M&E of the project	Total		2,456	495	5 (	2,951
						•	<u> </u>

The 3 STCRSP Components and budget

#### 1.2.2. Institutional arrangements

The **Ministry of Agriculture (MoA)** is the Implementing Agency of the Project, with project coordination and management to be anchored within the existing government structures, including planning and steering committees at national and district levels.

In order to enhance coordination with other donor-funded operations in the tree crop sector, main project results and implementation issues will be discussed at the regular monthly meetings of the MoA-led **Agricultural Coordination Committee (ACC)** which gathers the main donors and international NGOs involved in the development of the agriculture sector.

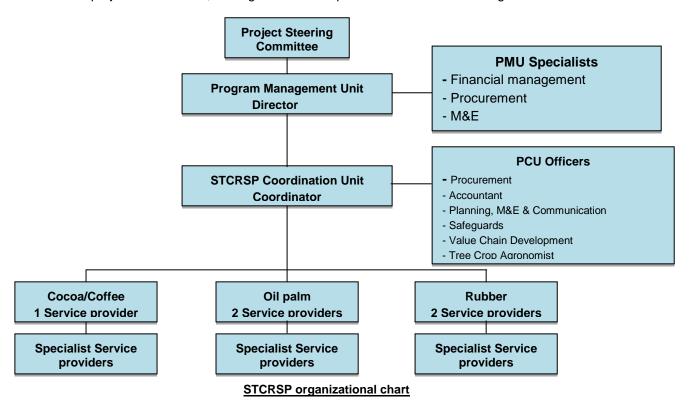
Chaired by the Minister of Agriculture, a **Project Steering Committee (PSC)** has been established to provide project oversight and guidance on key policy and implementation issues for the STCRSP. The PSC meets at least twice a year, in early June and early December.

Overall project coordination and implementation is undertaken through the MoA **Program Management Unit¹ (PMU)**, with a specific STCRSP **Project Coordination Unit (PCU)** established within the PMU. The PCU Project Coordinator reports directly to the PMU Director and has direct responsibility for managing all activities under Components 2 & 3, and for overseeing the effective implementation of Component 1.

<sup>&</sup>lt;sup>1</sup> The PMU has coordination responsibility for all donor funded projects implemented under MoA.

The sub-projects under the Component 1 are to be implemented by service providers ("Operators"). Also, some activities may be subcontracted to specialist service providers (such as for FO strengthening activities, landowner validation and surveys, road design, construction and supervision, etc.).

The project coordination, management and implementation structure is organized as follows:



## 1.2.3. Environmental and social safeguards management

The Project triggers some of the World Bank Safeguards Policies, mainly in relation to the activities scheduled through Component 1 (Cocoa/Coffee, Oil Palm, Rubber production and marketing revitalization): **Environmental Assessment** (OP 4.01), **Natural Habitats** (OP 4.04), **Pest Management** (OP4.09), **Forests** (OP4.36),**Physical and Cultural Resources** (OP4.11), **Involuntary Resettlement** (OP4.12).

The general framework for complying with these safeguard policies is provided by the Environmental and Social Management Framework (ESMF), the Resettlement Policy Framework (RPF), and the Social Assessment (SA) which are intended to be used as reference documents in the formulation, design, implementation and monitoring of the various physical sub-projects. These documents also provide guidance for the preparation of sub-project Environmental and Social Management Plans (ESMP), Environmental and Social Checklists, etc.

The Safeguards Officer is the point of contact for all issues related to environmental and social impact management of project initiatives and activities. He is responsible for liaising with the EPA and participating Line and other Agencies and is also responsible for organizing and assisting in training of personnel in all aspects of the ESMP. Considering that<sup>2</sup>:

- To join the project, the smallholder farmers were required to prove their land ownership with a tribal certificate or a formal legal deed,

-

<sup>&</sup>lt;sup>2</sup>Comments given by the Safeguards Officer

- Since the beginning of the project, no resettlement issue has been encountered requiring the development of either a RAP or ARAP,
- Similarly, the presence of squatters on the land of other smallholder farmers has not been experienced yet,
- The farmers were encouraged to select areas on their farms with very limited environmental challenges (many of them have vast areas of farm land, up to 450 acres in certain cases and selecting 5 acres of farm land with limited environmental challenges out of these vast areas under their ownership, was a fairly easy proposition for most of them),

The Project didn't develop any ESMP, or ARP, etc. But as more farmers will have to be selected in the following years, such tools may have to be set-up.

#### 1.3. STCRS Project's quantitative objectives

#### 1.3.1. **Component 1 quantitative objectives**

As mentioned above, this component is implemented by 5 operators.

According to the Project Appraisal Document and the Project Implementation Manual, the quantitative objectives of each sub-program are:

# COCOA/COFFEE - SOCODEVI (Bong, Nimba, Grand Gedeh)

Expected results	2015/2016	2016/2017	2017/2018	Total
1. Revitalization of cocoa/coffee F.				
- Cocoa Rehabilitation Medium Input	300 ha	700 ha	1,000 ha	2,000 ha
- Cocoa Rehabilitation High Input	500 ha	1,000 ha	1,500 ha	3,000 ha
- Cocoa New Planting		500 ha	500 ha	1,000 ha
Sub-total Cocoa	800 ha	2,200 ha	3,000 ha	6,000 ha
- Coffee Rehabilitation	300 ha	500 ha	700 ha	1,500 ha
Sub-total Coffee	300 ha	500 ha	700 ha	1,500 ha
TOTAL Cacao/Coffee	1,100 ha	2,700 ha	3,700 ha	7,500 ha
2. FO capacity building and st.				
- New FO supported (new/Y)	15	15	0	30
- Existing FO supported (new/Y)	10	0	0	10
- Existing Coop. Supported (new/Y)	3	0	0	3
3. Feeder roads rehabilitation				
- Feeder roads rehabilited	20 km	20 km	10 km	50 km
4. Access to financial services				
- Established rural microfinance inst.	2	2		6
- Upgraded banking windows	4	4		12

2013/2014: Project Lauching year & 2014/2015: Ebola crisis 2015/2016 and 2016/2017: report respectively the PY2 and PY3 objectives proposed by PIM

#### **Cocoa/Coffe Sub-Component objectives**

# OIL PALM - EPO (G. Bassa) & VOSIEDA (G. Gedeh)

Expected results	2015/2016	2016/2017	2017/2018	Total
1. Revitalization of oil palm Farms				
- EPO Rehabilitation	100 ha	100 ha	100 ha	300 ha
- EPO Replanting	100 ha	100 ha	100 ha	300 ha
Sub-total Operator 1	200 ha	200 ha	200 ha	600 ha
- V Rehabilitation	100 ha	100 ha	100 ha	300 ha
- V Replanting	100 ha	100 ha	100 ha	300 ha
Sub-total Operator 2	200 ha	200 ha	200 ha	600 ha
TOTAL Oil Palm	400 ha	400 ha	400 ha	1,200 ha
2. FO capacity building and st.				
- EPO Out growers FOs supported (new per year)	2	2	2	6
- V F.' run plantations Block FOs supported (new)	4	0	0	4
- V Farmers' run plantations - Cooperative (new)	1	0	0	1
3. Feeder roads rehabilitation				
- EPO Feeder roads rehabilited		10 km	10 km	20 km
4. Processing support				
- V Mini mills	2	2	0	4

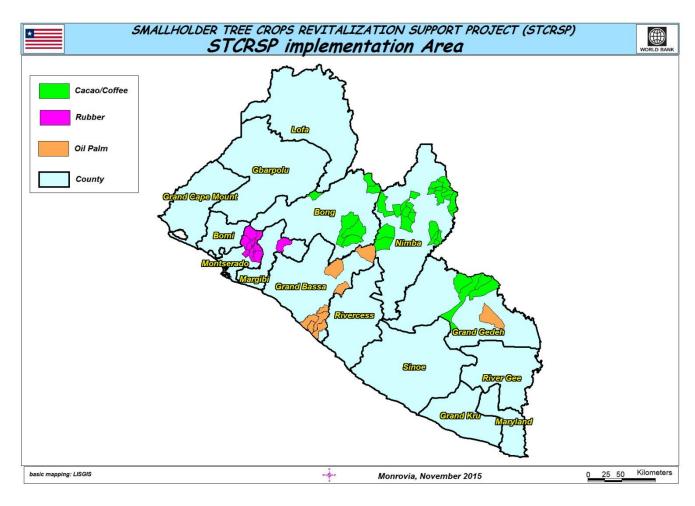
Oil palm Sub-Component objectives

RUBBER - MARCO (Montserrado) & Operator 2 to be contracted (Margibi)

Expected results	2015/2016	2016/2017	2017/2018	Total
1. Revitalization of rubber Farms				
- MARCO Replanting	100 ha	150 ha	250 ha	500 ha
- MARCO New Planting		100 ha	200 ha	300 ha
Sub-total MARCO	100 ha	250 ha	450 ha	800 ha
- Op2 Replanting	200 ha	400 ha	500 ha	1,100 ha
- Op2 New Planting		250 ha	450 ha	700 ha
Sub-total Operator 2	200 ha	650 ha	850 ha	1,800 ha
TOTAL Rubber	300 ha	900 ha	1,300 ha	2,600 ha
2. FO capacity building and st MARCO & Op2 New and existing FOs and Coop. supported				14
3. Feeder roads rehabilitation				
- MARCO Feeder roads rehabilited	5 km	5 km	10 km	10 km
- MARCO Feeder roads reopening	10 km	10 km		30 km
- MARCO Farm tracks	5 km	5 km	5 km	10 km
- Op2 Feeder roads rehabilited		5 km		10 km
- Op2 Feeder raods reopening		5 km		5 km
- Op2 Farm tracks		10 km		10 km

**Rubber Sub-Component objectives** 

The following map displays the targeted area for the 3 sub-sectors based on the available data.



**Project targeted areas** 

# 1.3.2. Component 2 quantitative objectives

The activities of Component 2 are to be coordinated by the PCU which will contract qualified service providers to deliver the training programs. MoA and CDA, at headquarters and county levels, represent the main target of this support.

## **CAPACITY BUILDING and SUPPORT TO MoA, CDA& EPA**

Expected results	2014/2015	2015/2016	2016/2017	2017/2018	Total
1. MoA & CDA Trainings					
- MoA& CDA HQ staff trainings	5	3			8
- MoA & CDA county staff trainings	6	12			18
TOTAL MoA & CDA trainings	11	15			26
2. Support to MoA & CDA Offices					
- Support to MoA County Offices (equipments)					
- Contribution to MoA C. Offices operating costs					
- Field allowances for C. Offices Coordinators and Off.					
- Support to CDA (vehicles and equipments)					
- Assistance to CDA for development of Coop./FOs tools					
- Assistance to CDA for the development pf a National P&S					
- Field allowances for CDA HQ and field staff					
- Contribution to vehicle and office operating costs					
3. EPA Trainings					
- EPA HQ and field staff trainings					

# PREPARATION and VALIDATION of a LARGE SCALE TC DEVELOPENT PROGRAM

Expected results	2014/2015	2015/2016	2016/2017	2017/2018	Total
1. Elaboration of Master Plans and validation			3		
- Elaboration of LSTC Master Plans (including database and					
GIS)			3		
<ul> <li>Validation workshops and revision pf LSTC MP</li> </ul>			1		
- National conference					
2. Preparation of LSTCDP					
- Mid-term review of STCRSP			1		
- Final evaluation of STCRSP				1	
- Detailed feasibility studies					

#### **Component 2 objectives**

# 1.3.3. Component 3 quantitative objectives

This Component's objective is to ensure an effective coordination, management, monitoring and evaluation of the project. In this sense, no quantitative objective has been identified (nor included in the Results Framework).

# 2. Baseline study preparation

# 2.1. Households sample

## 2.1.1. Sizing of the sample

For STCRSP's Beneficiaries, the used sampling frame has consisted of the 7 beneficiaries lists established by the Project's partners:

County	Beneficiaries	Cocoa/Coffee	Coffee only	Oil palm	Rubber
Nimba	785	741	44		
Bong	167	167			
Grand Gedeh	161	161			
	152			152	
Grand Bassa	53			53	
Montserrado	158				158
Margibi	53				53
6	1 476				

## STCRSP's Beneficiaries available lists

Considering that on May 2015 (during the survey's preparation):

- Some of the partners were still working on the finalization of their farmers' lists,
- Some of the partners hadn't even formalized their partnership with the project,
- One of the partners had not been yet identified,

the Beneficiaries' lists used by the Consultancy were the available ones, at this period.

The sizing of the overall sample to be established has been done taking into account the available time and survey team for data collection; also, the sampling rate has been differentiated according to the number of county's beneficiaries, in order to allow conducting analyses with a sufficient number of farmers, in all counties.

In order to build a control group for later analyses, the sample has been doubled with the identification of Project's Non-beneficiaries farmers.

The sample has finally been designed as follows:

County	Beneficiaries	Ratio	Cacao/Coffee	Coffee only	Oil palm	Rubber	TOTAL BNF	NON-BNF
Nimba	785	9%	64	10			74	74
Bong	167	20%	33				33	33
Grand Gedeh	161	20%	32				32	32
	152	25%			38		38	38
Grand Bassa	53	35%			19		19	19
Montserrado	158	19%				30	30	30
Margibi	53	25%					30	30
6	1 476	15%	129	10	57	60	256	256
								TOTAL: 512

STCRSP's Baseline survey sample - Sizing

#### 2.1.2. Selection of clans and communities

The former proposed methodology was to choose, for each county, a representative number of Communities of which the geographical dispersion would be appropriate. This couldn't be done as the positioning of 50% of the communities is not possible (they are not found in LISGIS lists): the comparison of the targeted communities as listed by operators shows that half of these communities can't be found in LISGIS listings.

County/Operator	Listed communities	out of which communities included in LISGIS lists <sup>3</sup>				
Grand Gedeh / VOSIEDA	10	5	50%			
Grand Gedeh / SOCODEVI	23	10	43%			
Nimba / SOCODEVI	61	40	66%			
Bong / SOCODEVI	41	16	39%			
Montserrado / MARCO	50	29	58%			
Margibi	19	10	53%			
Grand Bassa / EPO	28	5	18%			
Total	232	115	50%			

Consistency of Project's lists with LISGIS

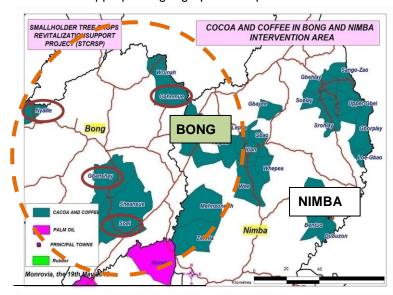
It has then been decided to first select some clans, focusing the sample on the ones that represent as much as possible beneficiaries and then checking if these clans provide also a good geographical representativeness. The following example (Bong county) illustrates this methodology.

1. The 167 beneficiary list involves 41 communities and 7 clans but 4 of these represent 92% of the total number of beneficiaries and have been selected:

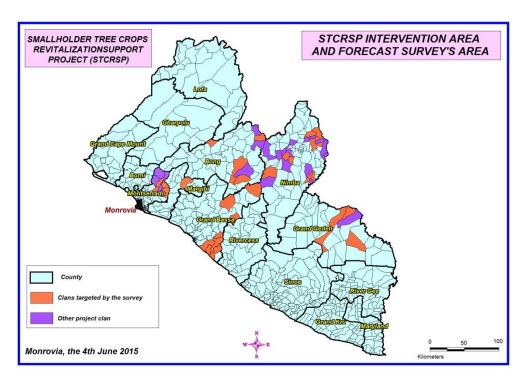
Clans	Nb of communities	Nb of BNF	%	Cumul
Soel	13	55	33%	33%
Gahnmue	6	48	29%	62%
Nyallie	15	30	18%	80%
Gbanshay	4	21	13%	92%
Sheansue	1	7	4%	96%
Wrunah	1	4	2%	98%
Panta	1	2	1%	99%
7	41	167	100%	100%

Selection of clans

2. The appropriate geographical dispersion of the 4 selected clans is controlled:



<sup>&</sup>lt;sup>3</sup> ...and as a consequence can (or not) be plotted on GIS maps



Checking of appropriate geographical dispersion

For each of the chosen clans, 2 communities are then selected. As many communities include very few beneficiaries (i.e. in Bong county, 71% of the communities include 3 or less beneficiaries and one third include only 1 beneficiary), it has been decided to focus the sampling on the ones which are as representative as possible (namely the ones which include the greatest numbers of beneficiaries)<sup>4</sup>. In this purpose, the communities of the clan have been sorted according to the number of beneficiaries they include and then the first and the third ones have been retrieved.

#### 2.1.3. Selection of farmers

Having established the list of communities to be targeted by the data collection, **the farmers to be interviewed have been randomly selected** according to the sample size decided above, for each county.

Finally, the sample has involved the following numbers of districts, clans, communities and farmers:

County		Districts	Clans	Communities	Farmers
Nimba	Cocoa/Coffee	6	10	14	74
Bong	Cocoa/Coffee	4	4	8	33
Grand Gedeh	Cocoa	1	2	4	32
	Oil Palm	1	1	4	38
Grand Bassa	Oil Palm	2	2 ( ?)	4	19
Montserrado	Rubber	1	4	8	30
Margibi	Rubber	1	1	5	30
TOTAL		16	24	47	256
		••		— `	

STCRSP's Baseline survey sample (BNF)

<sup>4</sup> This will also facilitate the management of the survey by avoiding the dispersion of data collection on too many sites

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A dedicated document has been produced which includes the complete set of Households' sample lists and complete beneficiaries lists. During the survey, in case of unavailability of a farmer listed in samples, he/she has been replaced by any available farmer listed in Project's targeted beneficiaries (in the same community, if possible).

For each Community to be part of the survey, a sample of Project's Non-beneficiaries (with the same number of households as for the Community's Project's beneficiaries sample) has been build, with collaboration of the community's authority, using the following criteria:

- Head of household involved in tree crop (cocoa or coffee, oil palm or rubber, according to the given area)
- Being willing to participate in the survey
- If possible, the Community's NON-BNF list should include 10 to 15% female heads of household.

## 2.2. Questionnaire

As specified by the Project Implementation Manual, the purpose of the Baseline study is to "provide insight of the current situation to be able to later monitor progress towards achievement of the project development objectives and of the main results indicator".

As such, the Baseline study Questionnaire that was prepared by the Consultancy aimed at enlightening the role of tree crops in farming systems, the investment (labour, land and capital) that smallholder farmers make on these productions, the sales' practices, the corresponding income, etc.

The questionnaire has also provided a broader information set, related to household's labour force, education level, housing and access to services, the cultivated food crops, the possible off-farm activities, etc.

The draft questionnaire has been submitted to the M&E Officer on May 19<sup>th</sup> 2015 and the final version (cf. Annex 6.2) has been presented during the debriefing meeting held on June 3<sup>rd</sup> 2015 with PCU.

The final questionnaire is structured as follows:

#### 0 - Identification of household

# SECTION 1 - DEMOGRAPHICS AND EDUCATION

1. List of household's members specifying: relationship to head of HH, highest school grade completed and schooling (for youths), literacy, participation to HH labour force

#### **SECTION 2 – HOUSING AND FACILITIES**

- 2. Housing: main material for walls, roofing, number of sleeping rooms
- 3. Facilities: main source of drinking water, toilet facility
- 4. Access: to nearest motorable road, to local market, to health center
- 5. Household assets
- 6. Agricultural assets

#### **SECTION 3 – AGRICULTURE ACTIVITIES**

- 7. Land tenure
- 8. 2014/2015 cultivated Food and cash crops
- 9. Land allocation for cropping in 2014/2015 season and use of labour & inputs
- 10. 2014/2015 Fallow and not exploited plots
- 11. Details on labour use
- 12. Livestock

# **SECTION 4 – FOCUS ON TREE CROPS**

#### 13. COCOA

- Total area (in production or not)
- 2014/2015 operations and labour costs, other costs (fertilizers, pesticides, etc.)
- Sales (where, buyer, frequency, quantities, prices)

## 14. COFFEE (idem)

- **15. OIL PALM** (idem + possible work of some HH's members on Company's plantation)
- 16. RUBBER (idem + possible work of some HH's members on Company's plantation)

#### SECTION 5 - INDIVIDUAL PLOTS or ANIMALS

17. Individual plots or breeding: type of production and use of income

#### **SECTION 6 – ACCESS TO SERVICES**

- 18. Access to fertilizers and pesticides
- 19. Access to credit
- 20. Access to extension services
- 21. FO's membership and services
- 22. Information on market prices
- 23. Services/installations invillage/town

#### **SECTION 7 – OFF-FARM WORK**

- 24. Details on possible work on Company's plantation
- 25. Other off-farm activities
- 26. Seasonal migration

#### **SECTION 9 - FOOD BALANCE**

- 27. Staple food
- 28. Food self-sufficiency

#### **SECTION 10 - SOURCE OF INCOME**

29. 2014/2015 main sources of cash money

## SECTION 11 - STRATEGY

- 30. Strategy
- 31. Success factors of agricultural activities
- 32. Blocking factors of HH development
- 33. Projects, wishes for family, agricultural activities, off-farm activities

The questionnaire template has been tested on field in Montserrado, Bong and Grand Bassa Counties (from May 29<sup>th</sup> to June 2<sup>nd</sup> 2015)

# 2.3. Survey implementation

Under supervision of a coordinator, the 7 member team of enumerators has implemented the data collection in communities, from 2015 June the  $8^{th}$  to July the  $2^{nd}$ . Data entry has been done by one of the enumerators and ended on late July.

Data analysis was then conducted on early October and main results have been shared with PCU on October the 19<sup>th</sup> and with key-persons on field (local authorities, operators, farmer focus groups) from 2015 October the 20<sup>th</sup> to November the 6<sup>th</sup>.

Collected comments and possible additional information have been taken in final analyses presented in this STCRSP Baseline survey report.

# 3. Characterization of STCRSP' Beneficiaries

# 3.1. Sample of analyze and validity of control group

Considering the unavoidable small adaptations to be done during data collection on field (farmers who couldn't be interviewed and to be replaced) and the very few questionnaires to be considered as obviously not reliable and then not taken into account for analyses), the final sample of study is as follows:

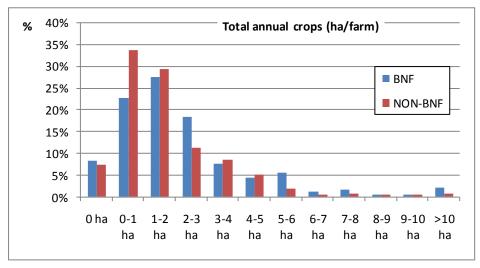
County	Beneficiaries	Ratio	Cacao/Coffee	Oil palm	Rubber	TOTAL BNF	NON-BNF
Nimba	785	9%	72			72	75
Bong	167	21%	35			35	35
Grand Gedeh	161	20%	32			32	32
	152	25%		38		38	38
Grand Bassa	53	32%		17		17	18
Montserrado	158	18%			28	28	30
Margibi	53	60%			32	32	30
6	1 476	17%	139	55	60	254	258

STCRSP's Baseline survey final sample

The comparison of the BNF sample with the NON-BNF group for key indicators confirms the validity of the latter.

Household members	BNF	NON-BNF
Total number of household members	6,8	6,0
Age of head of household	49	44
Literacy rate of heads of household	55%	50%

Annual crops	BNF	NON-BNF
Ratio of farms growing		
No annual crop	7%	7%
Rice	82%	81%
Cassava	59%	56%



Total annual crops (ha/farm - rice, cassava, vegetables, sweat potato, yam)

Excluding the tree crops targeted by STCRSP, the ratio of farmers growing other tree crops are similar from a sample to the other:

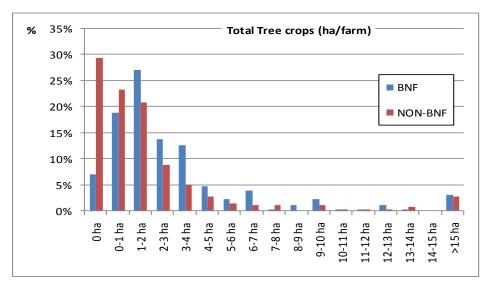
Other Tree crops	BNF	NON-BNF
Ratio of farms growing		
Mango	14%	11%
Pawpaw	17%	15%
Citrus	9%	10%
Coconut	16%	11%
Breadfruit	8%	6%
Pineapple	33%	31%
Butter pear	17%	13%
Kolanut	22%	18%
Sugar canne	14%	13%

Comparison of BNF and Non-BNF samples - "Fruit" crops

Considering cocoa/coffee, oil palm and rubber (targeted by STCRSP), it was expected that the rate of farmers producing the latter should be higher for BNF sample; however, when grown, the corresponding areas for farmers who are involved in cocoa/coffe, oil palm and rubber production are similar from a sample to the other:

STCRSP targeted Tree crops	BNF	NON-BNF
Ratio of farms growing		
Cocoa	59%	37%
Coffee	8%	5%
Oil Palm	20%	12%
Rubber	48%	37%

Comparison of BNF and Non-BNF samples – STCRSP tree crops



Total tree crops area (ha/farm - cocoa, coffee, oil palm, rubber)

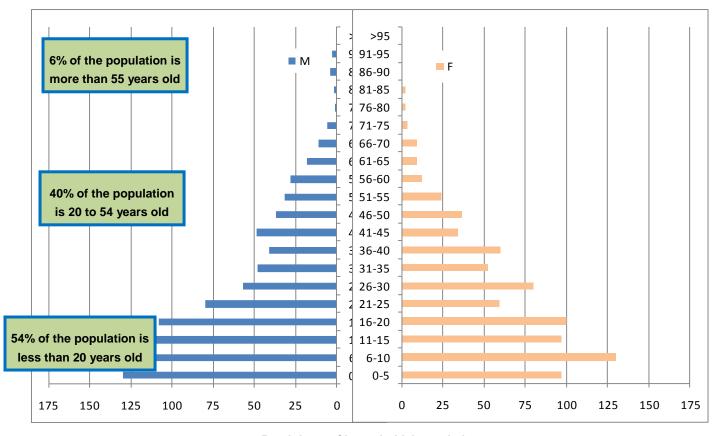
The data collection on field has followed the sampling requirements established during the preparation phase in terms of size and representativeness.

Considering the structure of households and farms, the control group can be considered as fully valid.

# 3.2. Demographics and education

## 3.2.1. Population breakdown

The breakdown of the total population of the interviewed households can be displayed as follows:



#### Breakdown of households' population

The farms population shows a high rate of young males and females (under 20 years of age). In addition, this census displays unbalanced rates of total number of males (54%) and females (46%). National data also give such a distortion for rural population (although less pronounced).

Average age of heads of households<sup>5</sup> is 49, with higher values for Bong (58 years old on average) and Grand Bassa (56):

Age of Head of Household	Average	Min	Max
STCRSP total area	49	19	95
Grand Gedeh – VOSIEDA	48	29	88
Grand Gedeh – SOCODEVI	43	24	65
Nimba	47	22	90
Bong	58	32	93
Montserrado	47	26	67
Margibi	47	19	73
Grand Bassa	56	40	95

Age of head of households

<sup>5</sup> Household (HH): a group of persons living together and eating from the same pot and responsible to the same head

Head of household: males or females heading households and expected to be responsible for providing the daily needs of their family

#### 3.2.2. Households members

Focusing on farmers households, with **6.8** members per households, this variable doesn't show critical differences from a county to the other:

Number of members in households	Average	Min	Max
STCRSP total area	6.8	1	15
Grand Gedeh – VOSIEDA	7.4	1	12
Grand Gedeh – SOCODEVI	6.5	4	14
Nimba	7.1	1	15
Bong	6.4	2	12
Montserrado	6.0	1	10
Margibi	7.2	1	13
Grand Bassa	6.5	1	10

Size of households

In addition, the demographics data have been analysed in order to determine the available family labour, for each farm, in Adult Equivalent (considering, for instance, that a boy of 13 years old or a family member of 60 years old may not provide the same labour force as an adult of 25 or 30 years old).

Also, considering his age, the needs of a household's member may differ (in terms of food, clothes, education, etc.)

For each member of an household (in case of work on farm, for labour force column), the following weighting coefficients have been used:

Labour force					
Age	М	F			
1-7	0	0			
8 – 14	0.5	0.5			
15 – 54	1	1			
55 – 64	0.8	0.5			
>= 65	0	0			

Needs				
Age	М	F		
1-7	0.5	0.5		
8 – 14	0.7	0.7		
15 – 54	1	1		
55 – 64	0.8	8.0		
>= 65	0.7	0.7		

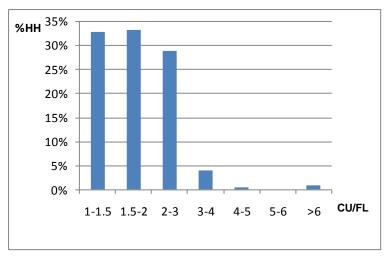
Correction coefficient applied to HH members

Additional correction coefficient (0.5) is applied to labour force in case of schooling, for children between 8 to 18 years old.

This analysis leads to the estimated total labour force (Adult Eq.) and to the estimated total number of "Consumption Units" (Adult Eq.) of a given household. The ratio Consumption unit / Labour force is then a good indicator of the balance of the household regarding available labour compared to needs. The higher this ratio is the more difficult it is for the head of household to comply with his family needs.

AVERAGE	Family Labour (Adult Eq.)	Consumption Units (Adult Eq.)	Ratio CU/FL
STCRSP	3.4	5.6	1.9
Grand Gedeh – VOSIEDA	3.5	6.0	2.0
Grand Gedeh – SOCODEVI	3.1	5.2	1.9
Nimba	3.6	5.8	1.8
Bong	3.5	5.5	1.7
Montserrado	3.2	5.1	1.7
Margibi	3.5	5.9	1.9
Grand Bassa	3.5	5.6	2.3

Size of households - Adult Equivalent



Households ratio "LF/CU"

With 6.8 households members on average and a family labour of 3.4 Adult Equivalent, the STCRSP's farms should deal with the project's requirement for tree crops. These data show little variations from a county to another.

The farms for which the household shows an unbalanced ratio "Consumption Unit / Family labour" are very few (CU/LF is over 3.0 for 5% of farms).

#### 3.2.3. Education

The analyses have been conducted on the one hand concerning the heads of households education level and on the other hand concerning the schooling rates for members of household who are 7-18 years old.

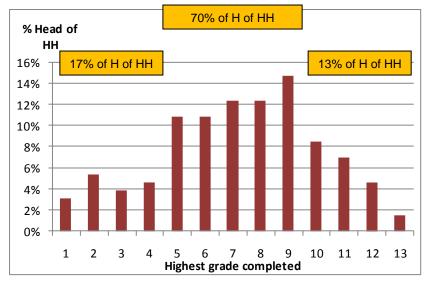
For the whole project's area:

- 38% of heads of households have never attended school
- 45% of heads of households can't read and write
- 1% of heads of households can read and write in Local Language
- 54% of heads of households can read and write in English with some substantial differences from a county to another:

	Head of HH literacy rate (English)
STCRSP total area	54%
Grand Gedeh – VOSIEDA	42%
Grand Gedeh – SOCODEVI	59%
Nimba	72%
Bong	37%
Montserrado	57%
Margibi	48%
Grand Bassa	29%

Literacy rate of heads of households

<u>For the ones who have attended school</u>, 70% have completed up to grade 5 to 9 but 17% have not gone higher than grade 4:



Breakdown of H of HH according to their highest completed school grade

For members of households between 7 to 18 years, the schooling ratio is good for boys and girls (it is higher for boys in Nimba and Bong, lower in Grand Gedeh, Montserrado and Margibi and similar for boys and girls in Grand Bassa).

Considering the whole sample of households, the schooling ratio is quite low for children from 7 to 10 years old, increases for 11-14 years old children and drop slightly for 15-18 years old members:

A = 0	STCRSP		
Age	M	F	
7-18	75%	70%	
7-10	57%	51%	
11-14	90%	81%	
15-18	84%	83%	

Average schooling ratio

# 3.3. Housing, facilities and assets

The great majority of farmers live in a mud blocks or dub constructed house (89%), roofed with zinc (82%). Improved toilet facilities are scarce as 50% have none but bush, 34% declare an open traditional pit latrine and 16% use improved latrine.

Housing assets are limited: some families own a bed frame (27% of households), most of them have a foam mattress (84%), mosquito net (86%), table and chairs (62%) and half own a radio (44%) and a cell phone (51%).

The source of drinking water is a hand pump for 76% of farmers, whereas 9% use a dug well (protected or not) and 9% use a pond, river or stream. Whatever it is, the source of drinking water is generally nearby the housing (distance walk is 5 mn on average).

**Note:** The high ratio of farmers using hand pump for drinking water seems overestimated as focus groups discussions organized with farmers underlined that some of them inoperative.

Regarding access (to nearest motorable road, to local market or nearest health facility), the general conclusion is that farmers have to deal with serious isolation situation:

Access to the community	STCRSP
No motorable road	1%
Only motorable road in dry season	44%
Motorable road throughout the year	55%

Time to the nearest local market	STCRSP
Average	01:57
< 15 mn	15%
15 to 30 mn	3%
30 mn to 1 hour	13%
1 to 2 hours	34%
2 to 3 hours	21%
> 3 hours	15%

Distance to the nearest health facility	STCRSP
Average	01:34
< 15 mn	10%
15 to 30 mn	8%
30 mn to 1 hour	24%
1 to 2 hours	34%
2 to 3 hours	19%
> 3 hours	6%

Mean(s) of transport to market	STCRSP
Only walk	17%
Walk or bicycle	4%
Access to motorcycle	38%
Access to vehicule	42%

Access to facilities

Only 42% of farmers have access to a taxi, pick-up or truck to reach the nearest local market (it doesn't mean that they own a vehicle<sup>6</sup>) and 17% have the only solution of walk.

**Note**: some farmers met during focus group discussions explained that they only walk to local market because of high prices asked by motorcyclists for transportation, in relation with the very bad "roads" they have to take.

Most of the STCRSP's farmers have to face serious isolation situation which may have direct consequences on their productive activities (limited access to inputs, expensive access to market, etc.) and on the farms' economic results.

## 3.4. Access to services

In connection with the isolation situation of smallholders, as displayed above, they have very little access to basic services which would lead to improved growing practises, higher production and income:

- > 86% of farmers don't know where they might purchase fertilizers or chemicals.
- > 57% don't have access to credit (except, for some of them with middlemen during food shortage periods, at very high interest rates) and 37% have the possibility to borrow small amounts from a susu club.
- > 78% have never been supported by extension services. In the event of extension services, they are provided mostly by NGOs or Projects (86% of cases) and the second most frequent source of advisory services are associations or cooperatives<sup>7</sup>.
  - Extension services (if any) are usually appreciated as 72% of concerned farmers think this support was "useful" or "very useful". In specific areas such as Margibi county, mixed feelings have been recorded as a result of "bad" experience with some projects in the past.
- ➤ Half of STCRSP beneficiaries are members of a FBO or a Cooperative but 7% of them declare they don't get any service from them. The most common services provided by

<sup>&</sup>lt;sup>6</sup> 12% of farmers own a motorbike and 2% have a car.

<sup>&</sup>lt;sup>7</sup> STCRSP' SIA report explains that MoA "operates an agricultural extension service comprising 15 County Agricultural Coordinators (CACs) as well as an average of five District Agricultural Officers (DAOs) per County (total of 90 AOs, out of which 7 females). The major task of the agricultural extension service is to encourage the formation of farmer groups [...]. However, their operations are seriously hampered by the restricted availability of operational vehicles, of fuel and sufficient daily subsistence allowances enabling extension staff to undertake field missions."

- FBOs/associations/cooperatives are advisory services, input supply and process services.
- In the communities, the recorded cases of available services are scarce and correspond to cereals storage warehouses and oil presses.
- > 88% of smallholders declare they have access to information on market prices but actually for most of them this information may be considered as unreliable as it is given by middlemen they are dealing with.

# 3.5. Agriculture activities

#### 3.5.1. Agriculture assets

Agriculture assets are limited to a few essential tools as cutlasses and hoes. Some farmers own an axe, a shovel or a pick; very few declare a wheel barrow or a manual sprayer. None of them possesses a tractor or a power tiller.

Agricultural assets	STCRSP
Cutlass(es)	92%
Hoe(s)	70%
Axe	44%
Shovel/Spade	34%
Pick	27%
Wheel barrow	7%
Knapsat manual sprayer	4%

**Agricultural assets of STCRSP farmers** 

The main capital of farmers consists in their **family labour force** and the **land** they can use to grow crops.

#### 3.5.2. Land

The main source of land is inheritance from ancestors for most of the farmers: the totality of land they use has been inherited for 72% of farmers but this ratio is higher in Grand Gedeh/SOCODEVI area (88%), in Nimba (88%) and Bong (80%); it is lower in Grand Gedeh/VOSIEDA area (57%), in Margibi (50%) and Grand Bassa (53%) where grant by local authorities and purchase are more often observed.

In any case, the land pressure is not a blocking factor for farming.

Regarding the possession of land titles, analyses also show some discrepancies from a county to another. The two extreme areas are:

- cocoa/coffee area in Nimba and Grand Gedeh where more than 85% of farmers have no Tribal certificate nor land deed, and on the opposite,
- rubber area in Montserrado and Margibi where 90% of farmers have a Tribal certificate or a land deed.

The Bong and Grand Bassa counties represent an intermediate situation, with roughly half of farmers possessing a land title.

Land title	STCRSP	G GEDEH V	G GEDEH S	NIMBA	BONG	G BASSA	MONTSERR.	MARGIBI
No land title	57%	53%	91%	86%	51%	59%	7%	13%
Tribal certificate	30%	39%	9%	11%	43%	35%	75%	34%
Land deed (1)	10%	8%	0%	1%	6%	6%	18%	53%

(1) At least on part of land

Possession of land titles

These findings confirm the initial SIA report's conclusions that "for smallholder cocoa and coffee farms, [...] tribal certificates or deed are rather the exception, while for rubber and oil palm plantations [...] the formalization of land rights has progressed relatively further."

**Note:** meetings with farmers in Grand Bassa county has underline that farmers without any land title for the land they use fear that EPO may take the opportunity of the project's implementation to steal their land.

Land tenure is an important issue whenever one deals with tree crops and STCRSP has targeted, as far as possible, farmers testifying land security. As scheduled in the Project's documents, supports to farmers on this issue are still needed.

#### 3.5.3. Main crops

The overview of farmers' practices in STCRSP's implementation area can be summarized as follows:

- Rice (upland and/or low land rice) and cassava appear to be the very first annual crops grown by farmers: rice is produced by 82% of farms whereas cassava is grown by 59%.
- At a lower level, farmers also produce vegetables (28% of households), maize (26%), sweet potatoes (10%), yam (11%) and groundnuts (6%).
- The **use of inputs** (such as improved varieties, pesticides, fertilizers) is very unusual: the very few cases recorded concern improved varieties of rice (15% of rice farms), of cassava (10%) and vegetables (9%). Focus group discussions with farmers also underlined that fertilizers are sometimes applied on rice plots.
- Some of the farmers harvest **tree crops** such as mango, pawpaw, citrus, coconut, breadfruit, butter pear, kolanut and pineapple sugar cane.
- As expected, the great majority of farmers grow cocoa/coffee or rubber or palm according to the focused sub-projects areas.<sup>9</sup>

The county by county analysis shows that Grand Gedeh County is the area where the agriculture systems are the most diversified, with cassava and rice but also with substantial ratio of farmers producing other annual crops and "fruit" crops (mango, pawpaw, etc.).

Nimba, Bong and Montserrado are also "rice/cassava" counties but the farmers produce other annual crops and "fruit" crops with a lower frequency.

In Margibi, 22% of farmers don't grow annual crops; when they do, the production is focused on rice and cassava but rarely on other annual crops.

Grand Bassa county is a cassava production area (82% of households produce cassava as this ratio is only 29% for rice); "fruit" crops are scarce but 41% of farms grow sugar cane.

The followings tables and figures display the average allocation of land for annual crops. The survey didn't provide data concerning "fruit" crops as the farmers harvest some trees disseminated on their land and/or on the community area. Details for STCRSP's tree crops data are displayed in dedicated chapters.

Project. Final report. MoA/MoPW. January 2012. 117 pages and annexes

9 Cocoa (and coffee at a lower level) in Bong. Nimba and Grand Gedeh/SOCODEVI

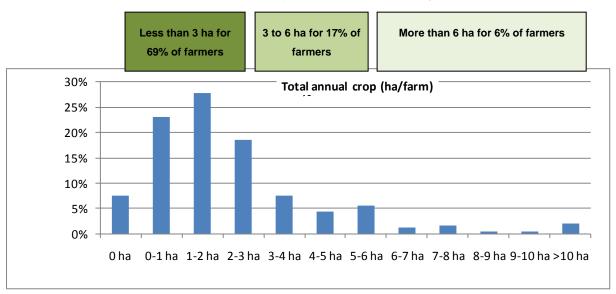
<sup>&</sup>lt;sup>8</sup> AGRER. Social impact assessment for the implementation of the Smallholder Tree Crops Revitalization Support Project. Final report. MoA/MoPW. January 2012. 117 pages and annexes

<sup>&</sup>lt;sup>9</sup> Cocoa (and coffee at a lower level) in Bong, Nimba and Grand Gedeh/SOCODEVI, Rubber in Montserrado and Margibi Counties, Palm in Grand Bassa County. As they mainly produce oil palm through Dube Cooperative (collective production), the ratio of farmers growing their own production is lower in Grand Gedeh VOSIEDA area.

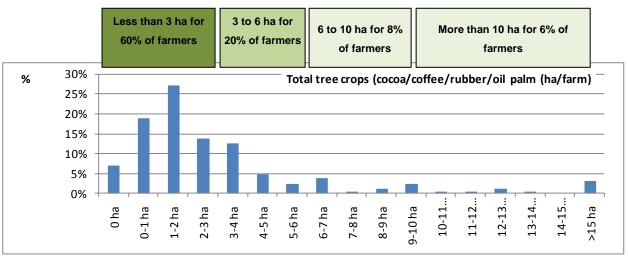
Annual crops	STCRSP's farmers	Average area (1)
No annual crop	7%	-
Total annual crop area		2,61 ha
Upland rice	74%	1,44 ha
Lowland rice	39%	0,88 ha
Cassava	59%	0,83 ha
Vegetables	28%	0,66 ha
Maize	26%	0,56 ha
Sweat potato	10%	0,44 ha
Yam	11%	0,31 ha
	_	
Rice and cassava	51%	1,87 ha

(1) For farmers growing...

## Frequency and annual crops average area



Breakdown of farms - Annual crops area



Breakdown of farms - Tree crops area

Rice and cassava average out to 84% of total annual crops of a farmer and these are actually the two staple food for all the households (and plantain is declared to be third staple food by 69% of farmers but this seems to occur only in case of food shortage and actually any available food crop can be used).

Only 9% of households are self-sufficient every year (the farm's production reaches the family needs) and 36% of them have to cope with food shortage every year (for a 2 to 4 month period – from July/August to September/October). In such a case, agriculture (such as tree crops) is the main source of revenue on which farmers can rely (59%). Only 5% of farmers facing food shortage declare that the purchase of food is then supported by credit (with relatives, middle-men, etc.).

- **Notes:** 1. Annual crops are considered as food crops; however rice and cassava are cropped for household's consumption but also for selling and they can represent a notable source of cash money. In this way, households facing food shortage may have produced sufficient quantities of paddy or cassava for reaching their needs but successive selling led to this shortage.
- 2. The low ratio of farmers resorting to credit seems under-estimated as focus groups discussions organized with farmers underlined that debt taken with middlemen (credit to be paid back to middlemen with part of harvest) is quite frequent.

Considering the whole project's area, 89% of the heads of household declare that their main income is provided by agriculture, either by annual crops (rice and cassava) either by tree crops (cocoa or rubber or oil palm according to the different areas).

#### 3.5.4. Breeding

Breeding is not a frequent activity within STCRSP's implementation areas: one third of households declare owning goats (with very few animals on average) and three quarters breed chicken but other types of breeding are not often; if not chicken, 52% of farmers don't own any kind of animal (cow, goat, sheep, duck).

Breeding	STCRSP's farmers	Average number of animals (1)
No breeding	18%	-
Chicken	74%	10
Goat	34%	3
Sheep	15%	3
Duck	15%	5
Cow	1%	2

<sup>(1)</sup> For farmers breeding...

For any kind, the purpose of breeding mixes household consumption, saving and selling.

#### 3.5.5. Individual cropping or breeding and off-farm work

For 9% of households one or two members have their own activity, beside their work on family farm. For the two thirds of them, this individual activity is growing of annual crops; it consists in tree crops for 24% of them and in breeding for 14%.

The use of corresponding income (in-kind or cash revenue) is totally individual in 50% of the recorded cases, totally dedicated to household needs for 14% and shared between their own expenditures and household's needs for 36%.

For 4% of farmers, a member of household works for a cocoa/coffee or rubber company, or for a private farm; in addition, for 22% of households one (mostly) or two members have an off-farm activity (small business, teaching, charcoal production, construction, etc.). In those cases, the corresponding revenue is mostly dedicated to household needs (90% of involved households).

Seasonal or long term migration (1 or 2 family members are leaving their community for individual work) is not often as it is recorded for only 5% of farms (out of which 40% of the migrants remain in the district, 27% in the county whereas 7% travel to another district and 27% to Monrovia).

# 3.6. Focus on female headed households

As displayed by table below:

- female and male headed households display comparable size;
- average age of female and male heads of household are similar;
- female heads of household who have attended school are few (only one quarter of them) and as a consequence their literacy ratio is very low (22%)

Household members	F Headed HH	M Headed HH
Total number of household members	6.6	6.9
Family labour (Adult Eq.)	3.5	3.4
Consumption units (Adult Eq.)	5.5	5.7
Age of head of household	49	49
Ratio of H of HH who have attended school	24%	73%
Literacy ratio of heads of household	22%	63%

Demographics and educational back ground - Comparison of F and M headed HH

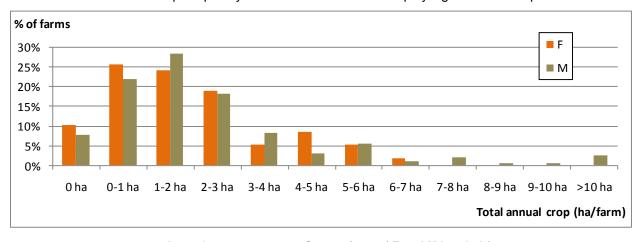
However, it is interesting to underline that female heads of household seem to feel more concerned with education issue than male heads of household, as the schooling ratios are quite higher in first case:

Schooling ratio for members of HH between 7 to 18 years old				
	FHo	F H of HH		of H
Age	M	F	М	F
7 - 10	73%	50%	56%	52%
11 - 14	89%	96%	90%	74%
15 - 18	88%	95%	83%	78%
All	85%	83%	73%	66%

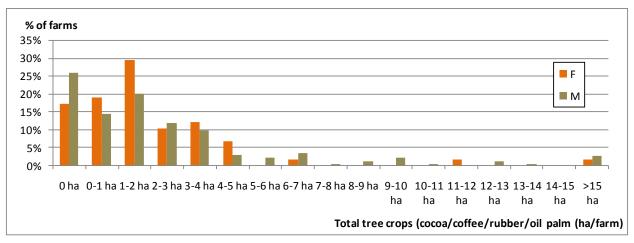
Schooling ratio of households members - Comparison of F and M headed HH

Considering the farming systems, the analyses don't display any significant discrepancy between the two sub-samples:

- Annual crops grown are similar with respect both to types of crops and to farms' sizes
- The size of tree crops plots grown by "F Farms" are smaller (2,96 ha/farm compared to 3,87 ha/farm one third more for "M Farms")
- Ownership frequency and livestock size don't display significant discrepancies.



Annual crops acreage - Comparison of F and M headed farms



Tree crops acreage - Comparison of F and M headed farms

# Farming systems are based on both:

- annual crops they grow (mainly rice and cassava but other productions may also provide notable support to household)
- tree crops (cocoa or rubber or oil palm, depending on the considered area)

Breeding takes a very limited place in farming systems.

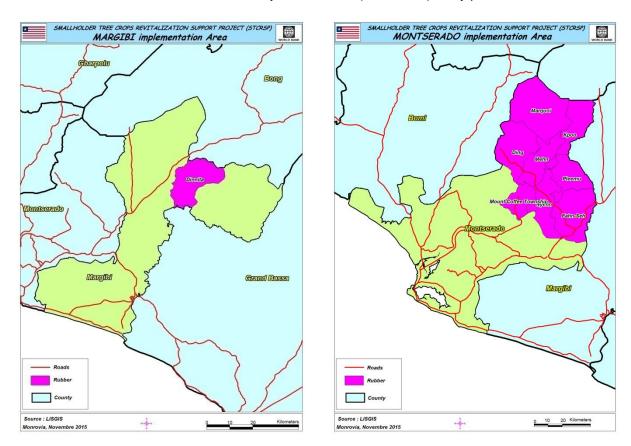
According to the characteristics of the project's beneficiaries as displayed in this analysis, it appears that the selection work conducted by PCU with STCRSP's partners has been done carefully and has led to the effective selection of the targeted population: very few beneficiaries may not be considered as smallholders involved in tree crops.

Using the reference given by STCRSP's SIA report, smallholders are "defined as farmers, both male and female, who mainly derive their food and cash income from farming (including from tree crops) and mostly using their own family labour. Effective cultivated acreage under tree crops and food crops vary between Counties, according to existing production systems".

# 4. Focus on STCRSP Tree crops

#### **4.1.1.** Rubber

If the whole sample of Project's beneficiaries is considered, a total of 122 (48%) heads of household declare a rubber farm but only 29% of them (35 farmers) really produce wet latex.



Rubber revitalization sub-project areas

Focusing Montserrado and Margibi counties (Rubber sub-project implementation area, through MARCO and Salala Rubber Corp.):

- 92% declare a rubber farm out of which approximately one third (31%) are productive and two thirds (67%) are young farms (trees are not productive yet); in addition, two farmers own old rubber farms (not harvested anymore).
- **Productive farms' size is 2.1 ha** on average (excluding the 3 largest ones 10 to 16 ha).
- Young farms' size is 3.3 ha on average (excluding the 2 largest ones 20 and 26 ha).
- Rubber farms are mainly planted with seedlings; some farms mix seedlings and budded stumps or are 100% planted with high potential clones.
- None of the farmers use fertilisers or pesticides.
- Farm works consist mainly in slashing (71% of farms), pruning (14% of farms), opening of trees and panelling (14%) and of course tapping and transport of cup-lump from farm to storage point.

• **Family labour** is involved in any required work and if necessary farmers use **hired labour**<sup>10</sup> (mainly for slashing and tapping, sometimes for pruning and weeding); in addition, kuu may be mobilized for slashing.

The following table displays the breakdown of total labour use, for **productive farms**. We may underline that these data represent an estimate as it is obvious that such a survey can't be as accurate as a periodic tracking and recording:

Work	Man.day/ha (average)
Slashing	15
Pruning	1
Weeding	0,5
Op. Trees/panelling	0,5
Tapping	147
Transport from farm	4
Total	169 md/ha
Including hired labour:	37 md/ha

Labour use - Rubber

Tapping season may start on February but the use of seedlings rather leads to the first tapping during the months of April or May, with little daily latex production. The quantities of cup-lump then increase from June to September. The real peak season lasts from October to January.

The tapping work is generally organised by dividing the rubber farm into several plots (number of plots depending on the number of tappers) each of them to be tapped every 2 days or more (depending on the trees' clone and resistance).

In case of use of hired labour for tapping, the payment is often done after selling, 40% of cup-lump (or coagulum) value (minus possible transport costs and taxes) being shared by tappers whereas the farmer keeps the 60%. Some other farmers pay their possible hired tappers at daily fees (3 US\$/tapper/day) while others set a fix amount per harvested ton (150 to 250 US\$/ton).

For STCRSP's beneficiaries in Margibi and Montserrado counties the estimated average yield represents 1 946 kg/ha. Additional data display similar production levels:

Source of information	Yield
STCRSP' Beneficiaries in other areas (12 bnf in Nimba county, 5 bnf in Bong county, 1 bnf in Grand Bassa county)	1 953 kg/ha
Non Beneficiaries (15 farmers in Margibi/Montserrado/Nimba/Bong/Grand Bassa counties)	2 187 kg/ha
Farmers focus group in Margibi county	2 162 kg/ha
Farmers focus group in Montserrado county (1)	2 773 kg/ha

<sup>(1)</sup> The discussion held with a farmers group in Montserrado leads to a higher average yield than other sources as this group included several cases of new rubber farms planted with high yield potential clones.

#### Yield estimates - Rubber

Wet latex is stored by farmers to be sold once or twice a month (depending on the daily level production). Until 2014, most of the rubber farmers used to sell cup-lump to middlemen (selling to be done in the village). In this case, the general opinion is that the farmer is cheated twice: first on the selling price and then on latex weight.

Since April 2014, Firestone which is the only final purchaser in Liberia, has required that only the producers may have the opportunity to sell (directly to Firestone). Any rubber farmer has to be registered and checked to be allowed to sell a specific amount of latex, once or twice a month. The purpose is to identify genuine farmers and eliminate theft.

<sup>10</sup> Average cost is 4 US\$/person/day

As a consequence: on the one hand, rubber farmers have the opportunity to get final Firestone price and presumably fair weighing; on the other hand, they have to organise and support transport to Firestone plant (individually or with other farmers of the community) and this can be expensive: 50 to 100 US\$/Ton from production areas in Margibi and Montserrado counties (unit cost depending on the distance and on the tonnage to be delivered). They also have to pay a 4% government tax and a 2 US\$/Ton fee to Rubber Planters Association of Liberia (RPAL).

For year 2014, rubber farmers could sell at 601 US\$/Ton on average but international market has since drastically dropped and 2015 Firestone prices have fluctuated between 550 and 575 US\$/Ton.

According to those data and considering the current system (direct selling to Firestone), average yearly net cash flow is estimated as follows (a distinction is made between cases of farms using family labour and those hiring tappers):

RUBBER - Yearly net cash flow – Family tappers	
Wet latex production	1 946 kg/ha
Firestone buying price	601 US\$/Ton
Gross proceeds	1 170 US\$/ha
Direct costs	249 US\$/ha
Hired labour for slashing, etc. (16 md)	64,0 US\$/ha
Hired labour for tapping	-
Transportation to Firestone plant (69 US\$/Ton)	134,3 US\$/ha
4% Tax (24 US\$/Ton)	46,8 US\$/ha
RPAL Fee (2 US\$/ton)	3,9 US\$/ha
Financial costs	-
Gross margin	921 US\$/ha
Depreciation costs	-
Yearly net cash flow	921 US\$/ha

RUBBER – Yearly net cash flow – Hired tappers	
Wet latex production	1 946 kg/ha
Firestone buying price	601 US\$/Ton
Gross proceeds	1 170 US\$/ha
Direct costs	643 US\$/ha
Hired labour for slashing, etc. (16 md)	64,0 US\$/ha
Hired labour for tapping	394,1 US\$/ha
Transportation to Firestone plant (69 US\$/Ton)	134,3 US\$/ha
4% Tax (24 US\$/Ton)	46,8 US\$/ha
RPAL Fee (2 US\$/ton)	3,9 US\$/ha
Financial costs	-
Gross margin	527 US\$/ha
Depreciation costs	-
Yearly net cash flow	527 US\$/ha

Yearly net cash flow estimates - Rubber

These data underline the very important weight of the cost of possible hired labour in the final result of a rubber farmer. In 2011, STCRSP's SIA mentioned: "Major constraints mentioned by farmers included cost of hiring external labour, transport, lack of improved seeds and insecticides and theft. Hired labor was given by over 52% as prime source of labor, followed by own family labor with 48%."

Let us note that since 2011, the unit price of hired labour has risen by a third (3 US\$/md to 4 US\$/md) whereas wet latex selling price has dropped by two-thirds (2,000 US\$/T to 600 US\$/T).

The Rubber sub-sector seems to be relatively dynamic in recent past as evidenced by the importance of new planted areas recorded in the last few years<sup>11</sup>.

However, this situation may be called into question by current monopsony situation (Firestone is virtually the sole wet latex buyer) and by the recent drop in price on the international market.

The yearly net cash flow of rubber farmers may be affected by any other price drop. The rubber depends also on the availability of family labour (tapping is labour consuming and hiring of tappers leads to substantial loss in the rubber farm's economic result.

However, it should be kept in mind that this data only reflects an economic result established at a given point in time which is not reflective of the long term potential.

<sup>11</sup> In that these data contradict STCRSP's Social Assessment report which was asserting that "There have been no significant replanting activities for the last twenty-five years due to the war, and a large proportion of the country's rubber and oil palm plantations are now at the end of their productive life, necessitating replanting". But it may be underlined that the same report mentions that 69% of rubber farms are below 10 years old.

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#### 4.1.2. Cocoa/Coffee

The Cocoa/Coffee sub-project covers Cavala district in Grand Gedeh county, Nimba and Bong counties. In this area, 100% of sampled beneficiaries have either a cocoa farm either either a coffee farm:

Cocoa/Coffe SP Area	
Farmers declaring Cocoa farm	89%
Farmers declaring Coffee farm	1%
Farmers declaring Cocoa and Coffee farms	10%

Occurence of cocoa/coffee farming

#### Regarding Cocoa farmers:

- Two-thirds of the farmers really harvest whereas one third own recently planted farms (29%) or too old farms to be exploited anymore (4%).
- Productive farms' size is 1.6 ha on average (excluding the 2 largest ones 10 and 16 ha).
- Young farms' size is 1.1 ha on average (excluding the 16 ha largest one) and the few old cocoa farms size 0,96 ha on average. As reported by one of the very few available cocoa sector's analyze<sup>12</sup>, many farmers in cocoa production area are planting new cocoa trees, either to replace aging trees or to expand the farm. The same source of information also underlines that "when planting new cocoa trees, most farmers [...] use seeds and/or seedlings from (their) old trees, whereas about one third use higher-yielding/improved varieties (or supposedly so), which are in short supply [...]. Some farmers use a combination of both, while others express a wish to access improved and more high-yielding varieties".
- The cocoa farmers don't use fertilizers or pesticides (only one registered case of fertilizers' use). The same source<sup>8</sup> reports the use of such input is slowly increasing with the recent development of the new large companies aiming at adopting "a longer-term perspective, by investing in the development of lasting relationships with farmers, either directly or through farmers' organisations such as cooperatives, [through the providing of] different kinds of services and inputs to cocoa farmers".
- The main part of farm works is dedicated to harvest and post harvest process (breaking of cocoa pods, transport to household, fermentation and drying) which represents 53% of labour use. Three quarters of the farmers mobilize labour for slashing/brushing and these operations represent 33% of total work. With lower frequency (25 to 35% of farms), some cocoa producers do some shade control, pruning and weeding which represent 13% of labour use, on average.
- Family labour is involved in any required work and if necessary farmers use hired labour<sup>13</sup> (mainly for slashing/brushing and harvesting); in addition, kuu may be mobilized for slashing/brushing.

The breakdown of labour use, for productive cocoa farms is estimated as displayed by the following table:

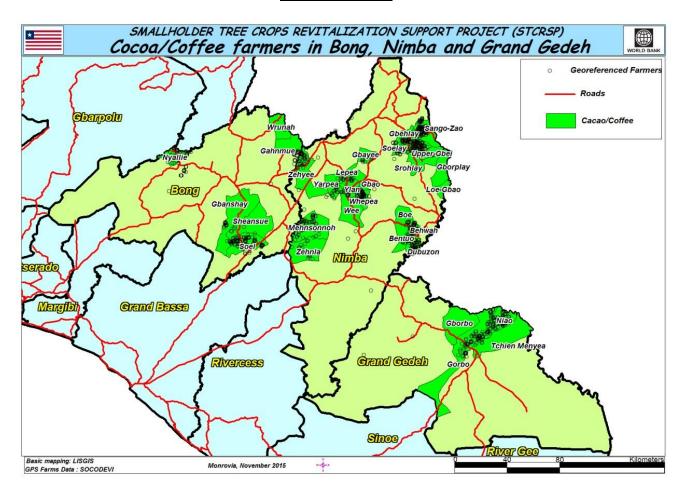
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<sup>&</sup>lt;sup>12</sup> Gun Eriksson Skoog. The Role of Institutions for Inclusive Development of Agricultural Markets: The Case of Cocoa in Post-Conflict Liberia. Draft. 125 pages and annexes.

<sup>&</sup>lt;sup>13</sup> Average cost is 4 US\$/person/day

Work	Man.day/ha (average)
Slashing/brushing	25
Shade control	2
Pruning	3
Weeding	5
Harvesting	18
Transport from farm	7
Fermentation/drying	14
Total	74 md/ha
Including hired labour:	41 md/ha

Labour use - Cocoa



Cocoa/Coffee revitalization sub-project area

Cocoa harvests start on July, with first a small cropping season (3 months) and then a major cropping season, from October to January. Harvesting is generally done once a month during small season and twice a month during major season, with monthly selling in both cases.

Average yield as estimated through this survey leads to production levels much higher than expected (compared for example with data collected during farmers selection work). It seems that the cocoa farmers' population should be divided into two main sub-groups with:

- a first group growing quite old farms with yields ranging from 150 to 400/600 kg/ha
- a second group growing more recently planted cocoa farms on good agricultural soils with yields ranging from 600 to 1200/1400 kg/ha.

Considering the whole sample, the estimated average yield is 960 kg/ha.

Note: farms size as recorded from heads of households' declarations seem to be very inaccurate and this leads to great margin of error for estimated yields. In order to mitigate this, farms size as geo-referenced by the sub-project partner has been used but we may underline that these data represent for each project's beneficiary the whole cocoa farm (mixing young not harvested plots, productive plots and old not harvested plots). They also mix cocoa and coffee plots.

In most cases farmers sell cocoa dry beans to middlemen (by 50 or 100 kg bags). Some of them (11%) also sell to a cooperative or association.

According to the above mentioned study<sup>8</sup>, it was agreed that after last war, middle buyers "used to have local monopsony - sole buying power - at farm-gate level or in district towns". However this monopsony is now largely broken and since 4 or 5 years, 'mid-level buyers face competition' in several counties".

The common practise of buying agents/middle buyers "appears to be to shop around for cocoa in the villages, buy the cocoa from farmers at the farm gate, often in rather small volumes, and pay cash on the spot".

Middle men are reported "not to care about the quality and thus quality grading of cocoa, but are known to mix different qualities of cocoa, and hence to pay farmers a low price for it".

The analyses of selling prices by farmers display important significant discrepancies from a county to another, with higher prices registered in Nimba County (1,59 US\$/kg on average) and lowest in Bong county (0,95 US\$/kg). According to this, a cocoa farmer would get in Bong county around 70% of the price bargained by cocoa farmers in Nimba county. This would be the consequence of less competition between buyers in Bong than in Nimba. Data collected during farmers focus groups meetings confirm this conclusion, with similar ranges of prices (farm gate prices in Bong county are 30-35% less than prices in Nimba county and 10-20% less than in Grand Gedeh county).

Considering the whole sample, the average selling price was 1,46 US\$/kg.

According to these data and considering the current main system (selling to middlemen), average yearly net cash flow is estimated as follows:

COCOA - Yearly net cash flow				
Dry beans production	960 kg/ha			
Average selling price	1 460 US\$/Ton			
Gross proceeds	1 402 US\$/ha			
Direct costs	164 US\$/ha			
Hired labour for slashing, etc. (41 md)	164 US\$/ha			
Financial costs	-			
Gross margin	1 238 US\$/ha			
Depreciation costs	-			
Yearly net cash flow	1 238 US\$/ha			
Yearly net cash flow estimate - Cocoa				

Yearly net cash flow estimate - Cocoa

Although affected by la qualité moyenne de sa production the The Cocoa sub-sector in Liberia has benefited of buoyant international market and recording of recently new planting attests to farmers' will to invest in cocoa cropping.

The estimated cocoa yields have been cross-checked during meetings with farmers groups in Nimba, Bong and Grand Gedeh and in both cases (either during the quantitative survey either during focus group meetings) it appears that some farmers may have quite good yields, contradicting general opinion 14. This issue will need further analysis, first using the on-going

<sup>14</sup> STCRSP's SIA report relates that ACDI/VOCA's LIFE project has involved 5,000 smallholders for replanting or new planting (improved hybrids) with yield of around 2,000 kg/ha. According to the same source, 25% of cocoa farmers has rehabilitated their farm (estimate made in 2011).

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production tracking by SOCODEVI and then using additional data to be collected by mid-term survey.

As it comes to coffee sub-sector, the main conclusion is that the interest of smallholder farmers noticed for rubber and cocoa (replanting and planting recorded during last years) can't be extended to. Only 11% of farms (16) own coffee plots but few really produce:

- 8 heads of household declare a coffee production
- 6 heads of household have recently planted coffee plots (not in production yet)
- 3 heads of household own old coffee farms (not harvested anymore).

Regarding the very limited number of coffee farms, it should be considered that the following data may not accurately represent the actual situation.

- Coffee farms' size (harvested plots) is 1,6 ha on average whereas young plots and old plots both size 0,8 ha.
- The coffee farmers don't use fertiliser or pesticides;
- The main part of farm works is dedicated to harvest and post harvest process (transport from farm and drying) which represents 69% of labour use. Most of the farmers (85%) mobilize labour for slashing/brushing and these operations represent 25% of total work. With lower frequency (35% of farms), some coffee producers do some shade control, pruning and weeding which represent 6% of labour use, on average.
- Family labour is involved in any required work and if necessary farmers use hired labour (mainly for slashing); in addition, kuu may be mobilized for brushing.

The breakdown of labour use, for productive coffee farms is estimated as displayed by the following table:

Work	Man.day/ha (average)
Slashing/brushing	16
Shade control	0.3
Pruning	1
Weeding	3
Harvesting	19
Transport from farm	11
Drying	16
Total	66 md/ha
Including hired labour:	13 md/ha

Labour use - Coffee

Average yield is estimated as 340 kg/ha (7 farmers' yields ranking from 50 to 600 kg/ha) and average selling price is 0.96 US\$/kg.

COFFEE - Yearly net cash flow				
Dry coffee production	340 kg/ha			
Average selling price	958 US\$/Ton			
Gross proceeds	326 US\$/ha			
Direct costs	52 US\$/ha			
Hired labour for slashing, etc. (13 md)	52 US\$/ha			
Financial costs	-			
Gross margin	274 US\$/ha			
Depreciation costs	-			
Yearly net cash flow	274 US\$/ha			
Voarly not each flow actimate - Coffee				

Yearly net cash flow estimate - Coffee

Since last war, many coffee farms have been abandoned or replaced by other tree crops. The recovering of this sub-sector seems still uncertain.

Few STCRSP farmers have made the choice of investing in coffee farms. As a result, the above analysis is supported by a very limited number of cases and should be cross-checked by additional data (collected during mid-term survey – the sampling may be slightly adapted in the purpose of having a significant number of coffee farmers).

#### 4.1.3. Oil palm

The Oil Palm sub-project of STCRSP is structured with on the one hand the revitalization of a farmers' run plantation in Grand Gedeh county (Dube Cooperative) and one the other hand an out grower scheme sub-project managed by EPO in Grand Bassa county.

The members of Dube Cooperative are not individual farmers but rather shareholders of the DUBE Corporation who live in town around the plantation which covered 10,000 acres of land (of this total, 2.500 acres were given to Dube corporative by MOA).

According to the management of Dube Coop., prior the signing of contract with MOA, members of the corporative (and some outsider living in towns around the plantation) used to harvest at randomly from the farm for their own use. In such case, it is not possible to develop any technical or economic analysis (the harvested area by each member can't be known).

However, some Dube Coop. Members declare having their own oil palm plot (either producing or not).

The following data correspond to information collected from Grand Bassa and Grand Gedeh county's farmers.

- In Grand Bassa county, 82% of the farmers declare an oil palm farm but around one half (47%) really produce. In addition 18% own recently planted farms and also 18% have old plots.
- In Grand Gedeh county, 16% of the farmers own an individual oil palm farm and two-thirds of them produce oil palm (on third own recently planted plots).
- Considering both counties, productive farms' size is 2.4 ha on average and Young farms' size is 1.7 ha on average whereas the registered old farms size 0,4 ha on average (excluding the 12 ha largest one).
- The oil palm farmers don't use fertilizers or pesticides.
- The main part of **farm works** is dedicated to the keeping of farm (slashing/brushing, pruning, weeding) which represents 63% of labour use. Harvesting and post harvest process represent 37% of total work.
- Family labour is involved in any required work and if necessary farmers use hired labour<sup>15</sup> and kuu both mainly for slashing but also for harvesting and post harvest process.

The breakdown of labour use, for productive oil palm farms is estimated as displayed by the following table:

Work	Man.day/ha (average)
Slashing/brushing	48
Pruning	10
Weeding	1
Harvesting	19
Transport from farm	9
Processing	7
Total	94 md/ha

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<sup>&</sup>lt;sup>15</sup> Average cost is 3.60 US\$/person/day

Including hired labour: 47 md/ha

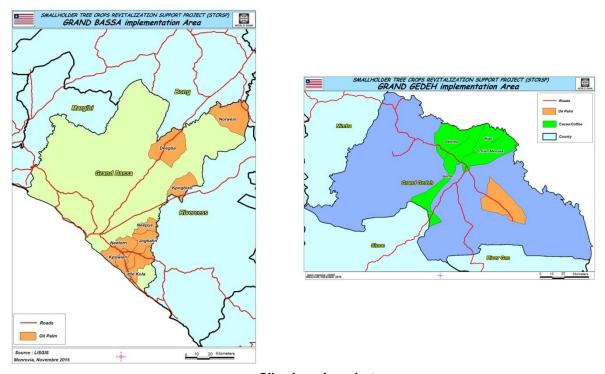
Labour use - Oil palm

The average production is 1 155 L/ha (corresponding to 5/5.5 FFB Tons/ha) and selling prices was 0.69 US\$/L during dry season (main production season); It increases slightly to 0.76 US\$/L during rainy season (when production is lower). Considering the whole year, average selling price was 0.70 US\$/L.

OIL PALM - Yearly net cash flow				
Oil Palm production	1 155 kg/ha			
Selling price	703 US\$/Ton			
Gross proceeds	812 US\$/ha			
Direct costs	169 US\$/ha			
Hired labour for slashing, etc. (47 md)	169 US\$/ha			
Financial costs	-			
Gross margin	643 US\$/ha			
Depreciation costs	-			
Yearly net cash flow	643 US\$/ha			

Yearly net cash flow estimate - Rubber

For the reasons described above, annual production for Dube Cooperative can't be estimated.



Oil palm sub-project areas

Regarding oil palm farming, analyses have been conducted on a limited number of households (few households grow productive oil palm farms in Grand Gedeh county – Konobo district, as well as in Grand Bassa county).

As no intervention will be done in 2015 (some clarifications are requested regarding the project implementation in Dube Cooperative – Grand Gedeh County- and the operator is not really active yet in Grand Bassa), additional data may be collected on a "fortified" sample.

# 5. STCRSP's relevancy and implementation

### 5.1.1. Farmers' point of view

Two-thirds of STCRSP farmers declare that their agriculture activities are insufficient for the household's needs.

When asked about the important factors that hinder the development of their farming activities, heads of households quote (3 factors were asked to be mentioned and rank):

- 1. Lack of tools and inputs
- 2. Lack of skills and training
- 3. Lack of credit / Lack of FOs

Opinion of farmers on blocking factors of agricultural activities				
	Rank 1	Rank 2	Rank 3	
Lack of labour	17%	5%	5%	
Lack of land	0%	0%	0%	
Lack of tools and inputs	62%	10%	8%	
Lack of information	1%	2%	0%	
Lack of skills and training	9%	21%	12%	
Problems of access to market	1%	3%	7%	
Lack of transportation means	1%	3%	3%	
Lack of access to credit	2%	1%	24%	
Lack of FOs	0%	1%	25%	
Soil fertility, climate,	5%	3%	15%	

**Constraints for farming development** 

This analysis and the expected supports to smallholders from STCRSP fully merge thereby demonstrating a good relevancy of the project. This conclusion confirms the results given by STCRSP's SIA report.

Regarding project implementation (this issue was not a real purpose, at this stage of the Impact assessment studies but as been partly discussed with farmers focus groups), we'll only mention that expectations are now high, almost two years and half after the project's start up.

However, it is fully understood by all stakeholders that Ebola disease made it very challenging for PMU/PCU and project's partners, from April 2014 to February 2015 (which represents 40% of STCRSP cycle since start up).

### 5.1.2. General guidelines for 2016 Assessment Study

Given the above comment and considering that most of the analyses (demographics and education, access to services, farming systems, etc.) carried out by the Baseline study don't need to be duplicated the next stage of the Impact assessment studies will focus on:

✓ Tree crops (cocoa/coffee in Bong, Nimba and Grand Gedeh counties, Rubber in Montserrado and Margibi counties, Oil Palm in Grand Bassa and Grand Gedeh- Konobo District)

**Note**: the initial sample could be extended in some areas in order to include an adequate number of households (i.e. for coffee and oil palm farms).

✓ Project's implementation: supports provided to beneficiaries for each sub-project (quantitative and qualitative analyses), internal and external influencing factors,

The surveys will also be extended to further discussions with Farmers Organisations/Cooperatives, with middlemen and input suppliers.

## 6. Annexes

## 6.1. Survey tools produced

The following tools have been provided to the Project Coordination Unit, to the Operators and to the Survey Team:

Tool		User
Sample lists	•	Operators (targeted farmers information and non-bnf selection) Survey team
Survey timetable	•	Operators, survey team and PCU
Note 1	•	Operators (criteria to be used for non-bnf selection)
Note 2	•	Survey team (general consideration on survey and processing implementation)
Note 3	•	Coordinator (guidelines for qualitative data collection)
Questionnaire	•	Enumerators
Data entry template	•	Enumerators
Survey monitoring table	•	Coordinator (monitoring of daily surveys implementation)
Cocoa additional Questionnaire	•	Enumerators

## 6.2. Questionnaire

STCRSP BENEFICIARY: NO=0 YES=1 (⊙ circle)

CODE:

### Republic of LIBERIA - MINISTRY of AGRICULTURE - Program Management Unit

#### SMALLHOLDER TREE CROP REVITALIZATION SUPPORT PROJECT - Baseline and Thematic Studies

Interviewer name:	Date:	Starting time:

"My name is..... We are here to collect information about the tree crop production and other issues in the County, on behalf of Smallholder Tree Crop Revitalization Support Project. Your household was selected to be part of this survey. I would like to speak to you (and your spouse/partner). The researchers will keep your responses confidential. Your full name will not be written down anywhere in the analyses and survey report to ensure confidentiality. We hope that the research will benefit Liberia by assisting us to understand better the needs of the people to improve the situation in the future. You will not receive any direct benefit if you join this study, your participation is voluntary. Do you have any questions for me? You may ask questions about this study at any time."

A - COUNTY:	B - DISTRICT:	C - CLAN:	<b>D</b> - VILLAGE:		
E - Name of respondant:			Mobile:		
F - Relationship to household head (Head=1 / Wife/Husband=2 / Son or Daughter=3 / Other Relative=4) :					

#### SECTION 1 – DEMOGRAPHICS AND EDUCATION

- **1. List** below by first name <u>starting with the head of the HH</u> and complete the below table for each member A household is defined as a group of people working on the Head of HH farm, under his authority or dependant on him.
- R to H = Relationship to household head (Head=1/Wife or husband=2/Child or Adopted child=3/Grandchild=4/Niece or nephew=5/Father or mother=6/Sister or brother=7/Grandfather-mother=8/Other relative=9/Not relative=10)
- What is the Highest grade completed: Not Applicable.=NA / Pre-primary=0/Grade 1=1/Grade 2=2/Grade 3=3/Grade 4=4/Grade 5=5/.../Grade 11=11/Grade 12=12/Post high school=13/Doesn't go to school=DGS
- Grade or level currently attended: use the same codes as for Highest grade completed
- Can read and write in Local Language or in English, for members age > 12: No=0/Yes in Local Language=1/Yes in English=2
- Can work (not too old, not too young, not disabled): No=0/Yes=1
- Work on farm: No=0/Yes=1

Mb	First name	R to H	M=1 F=0	Age	Has ever attended school? (No=0/Yes=1)	What is the highest grade completed?	What grade or level is currently attending (2014/15)?	Can read and write in Local Language or in English?	Can work? (No=0/Yes=1)	Work on farm? (No=0/Yes=1)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13						_				
14										
15										

If the number of HH members is more than 15, please use complementary table (page 10)

#### SECTION 2 – HOUSING AND FACILITIES

Please check "Do you have any other people you are 100% supporting, outside of the village?

2. Housing (O: Circle one answer)

Main material used for wa	lls of household <b>⊙</b> ?	Main material used for the	e <b>roofing</b> of household <b>⊙</b> ?	What is the <b>number of sleeping rooms</b> in the household?
Concrete block=1	Zinc= <b>5</b>	Zinc/Aluminum= <b>1</b>	Grass/Thatch= <b>4</b>	
Fried brick=2	Stick= <b>6</b> Bamboo= <b>7</b>	Tiles= <b>2</b> Palm fronds= <b>3</b>	Tarp= <b>5</b> Other:= <b>6</b>	
Mud block or Dubb.=3	Other:=8			
Wood planks=4				

### 3. Facilities (O: Circle one answer)

Main source of drinking water for members of your household <b>⊙</b> ?	How far away is this water source from your household?	Kind of <b>toilet facility</b> used <b>⊚</b> ?
Hand pump=1	Record time in hours and minutes to access source	Bush/field= <b>1</b>
Protected dug well=2		Open or traditional pit latrine=2
Protected spring=3 Unprotected dug well=4	close to the compound)	Improved pit latrine=3
Unprotected dug Weil=4 Unprotected spring=5	.Hmn	Flush latrine= <b>4</b>
Pond, river, or stream=6		Other:= <b>5</b>
Other:=7		

### 4. Access (⊙: Circle one answer)

Is there a <b>motorable road</b> to this community <b>⊙</b> ?	If you are to walk, how far away is the nearest motorable road from your household <b>⊙</b> ?
No motorable road= <b>0</b>	Less than 30 minutes' walk=1
Only motorable during dry season=1	30 to 60 minutes' walk 3= <b>2</b>
Motorable throughout the year=2	1 to 2 hours' walk=3
	2 to 5 hours' walk= <b>4</b>
	More than 5 hours' walk= <b>5</b>

market ⊚? SEVERAL possib	al How do you <b>get to</b> the local market ( <b>⊙ one or SEVERAL possible answers</b> )?		tance to the nearest n facility <b>©</b> ?
Walking=1  Kilometer=1  Mile=2  Hour and mn=3  DISTANCE  Walking=1  Bicycle=2  Motorcycle=3  Bus=4	Taxi= <b>5</b> Pickup= <b>6</b> Truck= <b>7</b> Other:= <b>8</b>	UNIT Kilometer=1 Mile=2 Hour and mn=3	DISTANCE

### 5. Household assets

Does your household <b>own</b> any of the following assets (No= <b>0</b> / Yes= <b>1</b> )?						
Bed frame: Television: Car, taxi: Fishing tools:						
Foam mattress:	Radio:	Sewing machine:				
Table/Chairs:	Cell phone:	Power saw:				
Cupboard/dresser:	Cupboard/dresser: Cooler/ice box: Generator: Mosquito net:					
Code a: Code b: Code c: Code d:						

### 6. Agricultural assets

Does your household <b>own</b> any of the following assets (No=0 / Yes=1)?						
Cutlass(es):		Wheel barrow: Tractor: Other:				
Hoe(s):		Knapsack manual sprayer:		Motor pump set :		Other:
Shovel/Spade:		Axe:		Power tiller: Other:		
Pick:		Rainboots:		Other:		
Code e:		Code f:		Code g: Code h:		Code h:

### SECTION 3 – AGRICULTURE ACTIVITIES

In this section, we'll describe the agricultural COLLECTIVE activities of the household.

### 7. Land tenure

### (several answers may be possible)

How did you get the farm land (No=0 / Yes=1)?				
Granted by local authorities:				
Inherited:				
Purchase:				
Rent:				
Code i:				

Do you have land title ( <b>⊙</b> )?					
No= <b>0</b>					
Tribal certificate=1					
Land deed= <b>2</b>					
Code j:					

### 8. Food and cash crops

Which <b>food crops</b> did y	Wich <b>cash or tree crop parcels</b> did you have on 2014/2015 - <b>exploited or not exploited</b> parcels (No= <b>0</b> / Yes= <b>1</b> ) ?			
Upland rice:	Sweat potatoes:	Groundnuts:	Breadfruit:	Sugarcane:
Lowland rice:	Yam:	Mango:	Pineapple:	Cocoa:
Cassava:	Other:	Pawpaw:	Butter pear:	Coffee:
Vegetables:	Other:	Citrus:	Kolanuts:	Oil palm:
Maize:	Other:			Rubber:
Code k:	Code I:	Code m: Code o: Code o:		Code o:

### 9. Land allocation for croping in 2014/2015 season (only cultivated parcels) and use of labour & inputs

Unit: Acre=A / Hectare=HA

Improved Veg. Material: i.e seeds, seedlings, cutlings

Chimical fertilizer: i.e. NPK, urea, etc. Pesticide: i.e. Herbicide, Fongicide, Insecticide

Machinery: i.e. tractor, power tiller, power saw

	TOTAL area		
Annual Crops grown	Unit	Size	
Upland rice:			
Lowland rice:			
Cassava:			
Vegetables:			
Maize:			
Sweat potatoes:			
Yam:			
Groundnuts:	Groundnuts:		
Other annual crops:			

	Labour (1)		Improved	Application (1)			Machinary
Family	Hired	kuu	Veg. Material (1)	Chim. Fert.	Org. Fert.	Pest.	Machinery (1)

	TOTAL Area		
Tree crops	Unit	Size	
Cocoa:			
Coffee:			
Oil palm:			
Rubber:			
Other tree crops:			

	Labour (1)		Improved	Application (1)			Machinem
Family	Hired	kuu	Veg. Material (1)	Ch. Fert.	Org. Fert.	Pest.	Machinery (1)

### 10. Fallow and not exploited plots:

Area of 2014/2015 non cultivates plots (1)	UNIT ( <b>A / HA</b> ) :	Area :
Lenght of fallow (year)		

(1) With real ownership of property

### 11. Details on labour use

Please indicate (No=0 / Yes=1) for each category of family members, hired labour and kuu, the main tasks they are dedicated to:

Task	Fa	amily labou	Hired					
Task	M Adult	F Adult	Children	labour	Kuu			
Brushing						] [		$\neg$
Burning							This table has	s
Tilling						<b>+</b>	to be	9
Sowing/Planting							completed for	r
Weeding							all farmers	
Harvesting								
Transport to HH								

### 12. Livestock

### SECTION 4 – FOCUS ON TREE CROPS

13. COCOA

Fox 200201	Total area planted but not yet in production		Nb or Area:	
For season <u>2014/2015</u>	Total area planted and in production	Unit (TREE/A / HA):	Nb or Area:	
	Total area planted but not harvested (too old, etc.)		Nb or Area:	

**Type**: Male Adult=1 / Femal Adult=2 / Children=3 / Mixed=4 **Nb**: average number of family members involved in the operation

Days: estimated total number of days for the operation

**Hired labour or kuu cost**: in case of <u>in-kind payment, include the corresponding monetary cost</u>

	r kaa cost. III case of <u>III kille</u>	Family labour			Hired labour cost				Kuu total cost	
	Operations 2014/2015 (No=0 / Yes=1)	Туре	Nb	Nb of days	Nb of pers.	Nb of days	Unit (LD or USD)	Cost/pers/day	Unit (LD or USD)	Total cost
	Slashing:									
	Brushing:									
	Shade control:									
	Pruning:									
OPERATIONS	Weeding:									
AND LABOUR	Fertilizers application:									
	Pesticides application:									
	Harvesting:									
	Transport from farm:									
	Fermentation:									
	Drying:								•	
	Packaging:								•	
	Transport:									

	Туре	Quantity		Unit cost		Application area	
OTHER COSTS	(No= <b>0</b> / Yes= <b>1</b> )	Unit	Quantity	Unit (LD/USD)	Price	Unit	Area
	Fertilizer:						
	Pesticides:						
	Vehicule:						
	Other:						

	Where did you sell (No=0 / Yes=1)?	To whom (No=0 / Yes=1) ?	
CALEC	On farm:	Trader:	
SALES	Home:	Relative or neighbour:	
	Local market:	FO or Cooperative:	
	Other:	Other:	
	Code p:	Code q:	

Starting (1): Ending:				
times per (2)				
tillies per (2)				
Unit:				
Max: 100				
Unit <b>(3)</b> :				
Max:				

(1) Month number (1 to 12) (2) Day or Week or Month (3) LD or USD

· · · / · / · / · · ·				
Major crop	Starting (1): Ending:			
Periodicity of sales	times per (2)			
DRY BEANS	times per (2)			
Quantity / sale	Unit:			
Min:	Max:			
Unit Price	Unit <b>(3)</b> :			
Min:	Max:			

14. COFFEE			
For sooson	Total area planted but not yet in production		Nb or Area:
For season	Total area planted and in production	Unit (TREE/A / HA):	Nb or Area:
<u>2014/2015</u>	Total area planted but not harvested (too old, etc.)		Nb or Area:

**Type**: Male Adult=1 / Femal Adult=2 / Children=3 / Mixed=4 **Nb**: average number of family members involved in the operation

Days: estimated total number of days for the operation

Hired labour or kuu cost: in case of in-kind payment, estimate the corrsponding monetary cost

		Fa	mily lab	our		Hired labour cost			Hired labour cost Kuu t		Kuu tot	al cost
	Operations 2014/2015 (No=0 / Yes=1)	Туре	Nb	Nb of days	Nb of pers.	Nb of days	Unit (LD or USD)	Cost/pers/day	Unit (LD or USD)	Total cost		
	Slashing:											
	Brushing:											
	Shade control:											
OPERATIONS	Pruning:											
AND LABOUR	Weeding:											
	Fertilizers application:											
	Pesticides application:											
	Harvesting:											
	Transport from farm:											
	Drying:											
	Packaging:											
	Transport:											

	Туре	Quan	tity	Unit cost		Application area	
OTHER COSTS	(No= <b>0</b> / Yes= <b>1</b> )	Unit	Quantity	Unit (LD/USD)	Price	Unit	Area
	Fertilizer:						
	Insecticide:						
	Vehicule:						
	Other:						

	Where did you sell (No=0 / Yes=1)?	To whom (No=0 / Yes=1) ?		
SALES	On farm:	Trader:		
SALES	Home:	Relative or neighbour:		
	Local market:	FO or Cooperative:		
	Other:	Other:		
	Code r:	Code s:		

STARTING CROP (1)	Starting (1): Ending:
Periodicity of sales	times per <b>(2)</b>
DRY CHERRIES	times per (2)
Quantity / sale	Unit:
Min:	Max:
Unit Price	Unit <b>(3)</b> :
Min:	Max:

(1) Month number (1 to 12) (2) Day or Week or Month (3) LD or USD

PEAK SEASON (1)	Starting (1): Ending:				
Frequency of sales	times per (2)				
DRY CHERRIES	1 17				
Quantity / sale	Unit:				
Min:	Max:				
Unit Price	Unit <b>(3)</b> :				
Min:	Max:				

END OF SEASON (1)	Starting (1): Ending:					
Frequency of sales	times per (2)					
DRY CHERRIES	times per (2)					
Quantity / sale	Unit:					
Min:	Max:					
Unit Price	Unit <b>(3)</b> :					
Min:	Max:					

15. OIL PALM	:			
Do you and/or so	me of the household members work on a Company or	Coop. Plantatio	n or mill/press	(No= <b>0</b> / Yes= <b>1</b> )
If Yes, don't forgo	et to fill-in Question 24. If Yes, please fill-in the followin	ng table:		
	How do you	pay ?: Not concer	ned= <b>0</b> / Deduct	ed from sales=1 / Cash=2
	What kind of inputs do you get from the Comp./Coop. (N	No= <b>0</b> / Yes <b>=1)</b> ?	How do you p	pay?
	Vegetal material (seeds, seedlings	s, stumps):		
		Fertilizers:		
	1	Pesticides:		
		Tools:		
	Services	:		
	Other			
		Code t:	Code u:	
If Yes, How many	days per week do you dedicate to work on the Comp	any Plantation	and on yo	u own farm
Do you have oil p	alm trees on your own farm (No=0 / Yes=1)?	L		
If the farmer has	oil palm trees on his own farm, please fill-in the follow	ing tables:		
Fax 22222	Total area planted but not yet in production			Nb or Area:
For season	Total area planted and in production	Unit (TREE/A/I	HA):	Nb or Area:
2014/2015	Total area planted but not harvested (too old, etc.)			Nb or Area:
		.1	· ·	

Type: Male Adult=1 / Femal Adult=2 / Children=3 / Mixed=4

**Nb**: average number of family members involved in the operation

**Days**: estimated total number of days for the operation

Hired labour or kuu cost: in case of in-kind payment, estimate the corresponding monetary cost

		Fai	mily lab	oour		Hire	ed labour co	st	Kuu tot	al cost
	Operations 2014/2015 (No=0 / Yes=1)	Туре	Nb	Nb of days	Nb of pers.	Nb of days	<b>Unit</b> (LD or USD)	Cost/pers/d ay	Unit (LD or USD)	Total cost
	Slashing:									
	Brushing:									
OPERATIO	Pruning:									
NS AND	Weeding:									
LABOUR	Fertilizers application:									
	Pesticides application:									
	Harvesting:									
	Transport from farm:									
	Processing:									
	Packaging:									
	Transport:									

	Туре	Qua	ntity	Unit co	st	Application area		
OTHER COSTS	(No= <b>0</b> / Yes= <b>1</b> )	Unit	Quantity	Unit (LD/USD)	Price	Unit	Area	
	Fertilizer:							
	Insecticide:							
	Vehicule:							
	Other:							
	Where did you sell (No=0 /	_	whom / Yes=1) ?	What d	lo you sell			

	where did you sell (No=0 / Yes=1) ?	To whom (No=0 / Yes=1) ?	What do you sell (⊙ circle one answer) ?
SALES	On farm:	Trader:	Fresh fruit bunches: 1
SALES	Home:	Relative or neighbour:	Oil palm: 2
	Local market:	FO or Cooperative:	FFB and Oil palm: 3
	Other:	Other:	
	Code v:	Code w:	

(1) Month number (1 to 12) (2) Day or Week or Month (3) LD or USD

DRY SEASON	Starting (1): Ending:
Frequency of sales	times per (2)
Quantity / sale OIL	Unit: LITER (L)
<u>PALM</u>	
Min:	Max:
Unit Price OIL PALM	Unit <b>(3)</b> :
Min:	Max:
Quantity / sale FFB	Unit:
Min:	Max:
Unit Price FFB	Unit <b>(3)</b> :
Min:	Max:

RAINING SEASON	Starting (1): Ending:					
Frequency of sales:	times per (2)					
Quantity / sale <u>OIL</u> <u>PALM</u>	Unit: LITER (L)					
Min:	Max:					
Unit Price OIL PALM	Unit <b>(3)</b> :					
Min:	Max:					
Quantity / sale FFB	Unit:					
Min:	Max:					
Unit Price FFB	Unit <b>(3)</b> :					
Min:	Max:					

16. RUBBER	:										
Do you and,	or s	ome of the household mem	bers <b>w</b>	ork on	a Compan	y Plantat	ion or p	lant (No=0 /	Yes= <b>1</b> ) :		
If Yes, don't	forg	et to fill-in Question <b>24<u>.</u> If Y</b>	' <b>es</b> , plea	se fill-i	n the follo	wing tab	le:				
					How do	you pay ?:	Not con	cerned= <b>0</b> / De	ducted from sales	s= <b>1</b> / Cash	=2
		What kinf of inputs do y				•		How do you	pay?		
		Vegeta	ıl materi	al (seed	s, seedlings	s, stumps):					
						Fertilizers:					
					1	Pesticides:					
						Tools:					
					•••••						
		Other						Code v:			
							oue x.	code y.			
If Yes, How	man	y <b>days per week</b> do you de	dicate t	o work	on the Co	mpany Pl	antation	and o	n you own farm		
Do you have	rub	ber trees on your <b>own farn</b>	n (No= <b>0</b>	/ Yes=	1)?						
		rubber trees on his own fa				owing tab	les:				
		Total area planted but not ye							Nb or Area:		
For season		Total area planted and in pro	duction			Unit (TRI	EE/A / HA	<b>\)</b> :	Nb or Area:		
2014/2015		Total area planted but not ha	rvested	(too old	d, etc.)				Nb or Area:		
Type: Male	Adul	t= <b>1</b> / Femal Adult= <b>2</b> / Child	ren= <b>3</b> /	Mixed	= <b>4 Nb</b> : av	erage nb	of famil	/ members ir	nvolved in the o	peration	_
		total number of days for th	-					,			
-		uu cost: in case of in-kind p	•		ate the co	rrespond	ing mon	etary cost			
		<u></u>	_	amily la				red labour cos	st	Kuu to	tal cost
	Op	erations 2014/2015 (No=0 /			Nb of	Nb of	Nb of	I I mile		Unit	Total
		Yes= <b>1</b> )	Туре	Nb	days	pers.	days	Unit (LD or USD)	Cost/pers/day	(LD or	cost
					uays	pers.	uays	(20 01 030)		USD)	COST
		Slashing:									
		Pruning:									
		Weeding:									

		163-1/	Туре	IND	days	pers.	days	(LD or USD)	Cost/pers/day	USD)	cost
		Slashing:									
		Pruning:									
		Weeding:									
		Fertilizers application:									
OPERATIONS		Pesticides application:									
AND LABOUF	Op.	of trees and panneling:									
		Plant protection:									
		Stimulation:									
		Tapping:									
		Transport from farm:									
		Processing:									
		Packaging:									
		Transport:									
		Туре		Qua	ntity		Unit c	ost	Application	area	
		(5) 6 (5) 4)					/· - /· · · · ·				

	(NO= <b>U</b> / Yes= <b>1</b> )	Unit	Quantity	Unit	(LD/USD)	Price	Unit	Ar
OTHER COSTS	Fertilizer:							
OTHER COSTS	Insecticide:							
	Vehicule:							
	Other:							
	Where did you sell			What do you sell (⊙ circle one		circle one		
	(No=0 / Yes=1) ?	To whom ?						
	On farm:	Trader:				Cup-	·lump (CL): 1	
SALES	Home:	Relative or neighbour:			Coagulum (CG) : 2			
	Local market:		FO or Cooper	rative	Cup-lur	mp and coa	gulum: <b>3</b>	
	Other:	0	ther	:				
	Code z:	Code aa:						

Ending: LOW SEASON (1) Starting: Frequency of sales: ..... times per (2)...... Quantity / sale CL Unit: Min: Max: Unit Price CL Unit (3): Min: Max: Quantity / sale CG Unit: Min: Max: Unit Price CG Unit (3): Min: Max:

(+)	violitii liullibei (1 to 12
MID SEASON (1)	Starting: Ending:
Frequency of sales:	times per (2)
Quantity / sale CL	Unit:
Min:	Max:
Unit Price CL	Unit <b>(3)</b> :
Min:	Max:
Quantity / sale CG	Unit:
Min:	Max:
Unit Price CG	Unit <b>(3)</b> :
Min:	Max:

(1)	Month number (1 to 12)	(2) Day or Week or M	onth (3) LD or USD
	Starting: Ending:	PEAK SEASON (1)	Starting: Ending:
es:	times per (2)	Frequency of sales:	times per (2)
L	Unit:	Quantity / sale CL	Unit :
	Max:	Min:	Max:
	Unit <b>(3)</b> :	Unit Price CL	Unit <b>(3)</b> :
	Max:	Min:	Max:
G	Unit:	Quantity / sale CG	Unit :
	Max:	Min:	Max:
	Unit <b>(3)</b> :	Unit Price CG	Unit <b>(3)</b> :
	Max:	Min:	Max:

i	SECTION 5 – INDIVIDUAL PLOTS or ANIMALS  17. Do some members of the household farm/breed for themselves (individual plots/animals for which they control the labour and the use of production) (No=0 / Yes=1): If the answer is Yes, please fill-in the following table:  Mb: use the number of Section 1 – 1																						
•	Type of activity: Annual food or cash crop crop=1 / Tree crop=2 / Breeding=3(if several activities, report the main one)  Use of production: 100% individual=1 / Mostly individual=2 / Balanced=3 / Mostly for household=4 / 100% for household=5  Code ab = Type of activity + Use of production = 2 characters																						
mem liste	ed		Mb	Туре	e of activity	Use of production	Codes ab			Type of activity		e of uction	Code ab										
1	uld be t of e 1	•																					
	SECTION 6 – ACCESS TO SERVICES																						
	18. Where can you buy fertilizers or pesticides (I don't know=0 / Relative-neighbour=1 / Cooperative-FO=2																						
,	/ Local market=3 / Specialized Company=4 / Other=5)																						
	<b>19.</b> If n	eed	led, wl	here can	you get a credi	t for business	or farming	(Nov	vhere= <b>0</b> /	Relative=1/L	ocal seller=2	2 [											
9	Susu cl	ub=	<b>3</b> / Ba	nk= <b>4)</b>								Į											
	<b>20.</b> Did	l yo	u recei	ive any a	dvice or trainin	g from Extens	ion Service	s in 2	.014/15, e	xcluding STCR	SP (No= <b>0</b> / Y	es= <b>1</b> )											
I	If Yes,	wha	it was	the sour	ce of extension	services (Gov	ernment= <b>1</b>	/ NG	60= <b>2</b> / Far	mer Association	on=3 / Othe	r= <b>4</b> )											
		-	-		hat was the qua	lity of the ad	vice (Useles	s= <b>0</b> /	Not very	useful= <b>1</b> / Ave	erage= <b>2</b>	l											
!	Useful=	=3 /	Very ι	useful= <b>4</b> )	)							L T											
	<b>21.</b> Are	yo	u curre	ently a m	nember of any f	armers' grou	or local as	socia	tion in thi	s village (No= <b>(</b>	/ Yes= <b>1</b> )												
	-				of group or asso																		
I	If Yes, v	wha	ıt servi	ices do y	ou get from the	group (No se	ervice= <b>0</b> / In	puts	= <b>1</b> / Sell p	roduce= <b>2 /</b> Ac	visory servi	ces= <b>3</b> /											
1	Proces	s se	rvices=	= <b>4</b> / Othe	er= <b>5</b> )																		
				-		-	· ·	-			-	-											
							? (District	Exter	nsion Ager	nt= <b>1</b> / Radio= <b>2</b>	/ Cell phon	e= <b>3</b>	22. Do you have any information on market prices - for the products you sell – rice, tree crops (No=0 / Yes=1)  If Yes, whom did you get the market information from ? (District Extension Agent=1 / Radio=2 / Cell phone=3										
						-		Friends=4 / Brokers=5 / From market=6 / Other=7)															
	<b>23.</b> Do	es t	23. Does this service/installation exist in your village/town and did you use it over the last 12 months (No=0 / Yes=1)?																				
	Service/installation Exists in your village?				, .		d you	u use it ov			_	-											
				on		Did you us		-	vice/install	ation Exis	months (No ts in your illage?	_	1) ? u use it?										
_			ower t	iller	Exists in your			-	<b>vice/install</b> Ri	ation Exis	ts in your	_											
-		P	ower t	iller ctor	Exists in your			-	vice/installa Rio Cassava g	e mill rinder	ts in your	_	-										
	Store (	P	ower t	iller ctor ins)	Exists in your			-	vice/installa Rio Cassava g Oil	exis vote mill rinder press	ts in your	_	-										
		P	ower ti Trac als/gra	iller ctor ins)	Exists in your			-	vice/installa Rio Cassava g Oil	e mill rinder	ts in your illage?	_	u use it?										
	SECTIO 24. Do If the a Mb: us	ON 7 son	Power ti Trac Pals/gra Thres 7 – OFF The meine meine num	iller ctor ins) sher Co  F-FARM Nambers of Yes, plea	Exists in your village?  de ac:  WORK  the household se fill-in the follection 1 – 1	Did you us  Code ad:  work for a colowing table:	e it?	Serv	rice/installa Ric Cassava g Oil Drying	etion Exis	ts in your illage? c:	Did yo	u use it?										
	SECTIO 24. Do If the a Mb: us Period	PP cere on 7 son answ se th	Power ti Tracials/gra Thres 7 – OFF ne men wer is None num y: Day=	iller ctor ins) cher Co  F-FARM Ves, plea hber of S  =1 / Wee	de ac:  WORK f the household se fill-in the foll ection 1 - 1 k=2 / Month=3	Code ad:  work for a colowing table:	e it?	Serv	Rice/installa Ric Cassava g Oil Drying	etion vote mill rinder press g floor Code a	ts in your illage?	Code ad	u use it? :										
	SECTIO 24. Do If the a Mb: us Period	PP cere on 7 son answ se th	Power ti Tracials/gra Thres 7 – OFF ne men wer is None num y: Day=	iller ctor ins) cher Co  F-FARM Ves, plea hber of S  =1 / Wee	Exists in your village?  de ac:  WORK  the household se fill-in the follection 1 – 1	Did you us  Code ad:  work for a colowing table:	pcoa, oil pal	Serv	Rice/installa Ric Cassava g Oil Drying ubber or	etion vote mill rinder press g floor Code a	ts in your illage?	Code ad	u use it? :										
mem	SECTIO 24. Do If the a Mb: us Period Use of	PP cere on 7 son answ se th	Power ti Traceals/gra Threse 7 – OFF me men wer is vine num y: Day=	iller ctor ins) cher Co  F-FARM Ves, plea hber of S = 1 / Wee 100% ind	de ac:  WORK  The household se fill-in the follection 1 – 1  ek=2 / Month=3 ividual=1 / Mos	Code ad:  work for a colowing table:  stly individual	e it?	Serv	Rice/installa Rice/cassava g Oil Drying ubber or	te mill rinder press g floor Code a	ts in your illage?	Code ad	u use it? :										
	SECTIO 24. Do If the a Mb: us Period Use of	PP cere on 7 son answ se th	Power ti Tracials/gra Thres 7 – OFF ne men wer is None num y: Day=	iller ctor ins) cher Co  F-FARM Ves, plea hber of S = 1 / Wee 100% ind	de ac:  WORK f the household se fill-in the foll ection 1 - 1 k=2 / Month=3	Code ad:  work for a colowing table:  stly individual	pcoa, oil pal	Serv	Rice/installa Ric Cassava g Oil Drying ubber or	rinder press g floor  Code a  company or o  household=4	ts in your illage?  c: c: dooperative / 100% for h	Code ad	u use it?										
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	l bus	iness, s	shop, n	nilli	ng, crop	s trade	, tro	ansport, s	sewin	g,	etc.	– <u>Thi</u>	nold have <b>off-fa</b> s may include ving table:				
Mb: use the nu					ostly ind	ividual	/ Bal	lanced= <b>3</b>	/ Mos	stly	for h	ousel	nold= <b>4</b> / 100% f	or hou	sehold= <b>5</b>		
	$\neg$	Mb			e of activi			Jse of inco			Mb		Type of activity		Use of inc	ome	
members listed																	7
here should be	▶																7
part of Page 1																	-
List																	-
26 During the	nast 1	L I2 mont	hs has	an	v membe	er of vo	ur in	nmediate	famil	l v h	een v	vorkir	ng or looking for	work			_
outside the cor	-				-	-				-		VOLKII	is or looking for	WOIK			
outside the cor		, (							_			Coun	ty= <b>3</b> / Monrovi	a= <b>4</b> / (	LLLI Other Count	rv=5	;
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						Mb	V	Where ?			th)	5.0	_	/ Yes= <b>1</b>		٠.۵	
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		embers															
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	Pai	t of Pa	ige i														
SECTION 9 – FO	OOD E	BALANC	E														
				old	l's staple	food (s	ever	al answei	rs mav	v b	e pos	sible.	first list 1 to 3 d	rops a	nd then rai	nk) ?	
		•			-	le food		List (✓		_	Rank			•		,	
					Rice				,								
					Cassava												
					Plantain												
					Yam												
					Sweat p	otatoe											
					Other:												
28. Considering	the t	food cro	ps pro	duc	tion of th	ne hous	seho	ld over th	e past	t 5	years	, wou	ıld you say				
that you are se	lfsuff	icient (N	Never=	)/9	Some yea	rs= <b>1</b> / l	Ever	y year= <b>2</b> )									
If <b>0</b> or <b>1</b> , when	a foo	d short	age las	t oc	cured, w	hen di	d it s	start (n° n	nonth	)	;	and e	nd and h	ow did	l you mana	ge to	)
buy food (Agri	. Acti	ivity ind	come=1	. /	Non agri	c. activ	∕ity i	income= <b>2</b>	: / De	bt	with	relat	ive/neighbour=	<b>3</b> / In-	-kind credit	=4 /	/
Other= <b>5</b> )																	
SECTION 10 – S	_ COLID	CE OE II	NCOME														
<b>29.</b> Which were																	
Which crop: Ri	ce= <b>1</b> ,	/ Cassav	/a= <b>2</b> / (	Oth	er food c	rop= <b>3</b> /	Coc	:oa= <b>4</b> / Co	offe= <b>5</b>	/(	Oil pa	lm= <b>6</b>	/ Rubber= <b>7</b> / Ot	her tr	ee crop= <b>8</b>		
Activity (circ	le on	e answ	er ①)	1		Whic	h tvp	e of crop (	(⊙)?				Which crop (co	de)?	If 3 or 8, sp	ecify	,
ricerricy (em		Agricult		If	1 🗪	"Food			, , -	l II	f <b>1</b> —	<b>→</b>		/ -	/ - [	•	_
			arm : 2	''	_	Tree		•		4	- f 2 —	<b>→</b>					$\neg$
SECTION 11 -	STRA			1			•			4							
															/N 0 / N	٩١	
<b>30.</b> Do the agri	cultur	al activ	ities re	ach	the hous	sehold	need	ls – food/	incom	ne '	tor clo	otnes,	education,heal	th,ect.	(No= <b>0</b> / Ye	s= <b>1</b> )	
If No, did you c	r will	you try	to dev	elo	pp other	activiti	es (N	lo= <b>0</b> / Yes	s= <b>1</b> ) [		]						
If Yes, what kin	d of a	ctivity						_	L		J						
_																	
<b>31.</b> In your opi rank)?	nion,	what a	re the	suc	cess facto	ors of a	ıgricı	ultural ac	tivitie	s (	check	<u>with</u>	letter code 1 t	o 3 an	iswers and	then	1
Luck A				$\neg$	Toch	nical sk	ille <b>F</b>	<u> </u>		ı			Access to cro	dit C			$\neg$
Luck A	urccc	(1) D	+	$\dashv$	-					+	-		Access to cre			$\vdash$	$\dashv$
Productive reso	urces	(T) R	+	$\dashv$	-			others E		+	-		NGO, project	оп		$\vdash$	$\dashv$
Experience C					G000	d mana	gem	ent <b>F</b>					Other:		ı		
(1) Capital, land	ı, equ	ııpment	, iabou	r													

**32.** In your opinion, what are the blocking factors of your development (check with letter code 1 to 3 answers and then rank)?

Bad luck <b>A</b>	Lack of information <b>E</b>	Lack of access to credit I	
Lack of labour <b>B</b>	Lack of training <b>F</b>	Lack of Farmer Organizations J	
Lack of land <b>C</b>	Problems of access to market <b>G</b>	Soil fertility, climate, pest, K	
Lack of aguinment D	Lack of transportation moans H	-	

33. What are your projects, wishes for...

1. Your family?	2. Agricultural activities?
-	-
-	-
-	-
3. Breeding activities (if any)?	4. Off-farm activities (if any) ?
-	-
- -	- -

**Possible Interviewer's comments:** 

### **Ending time:**

#### SECTION 1 – DEMOGRAPHICS AND EDUCATION

34. List of Household members - ADDITIONAL TABLE

- R to H = Relationship to household head (Head=1/Wife or husband=2/Child or Adopted child=3/Grandchild=4/Niece or nephew=5/Father or mother=6/Sister or brother=7/Grandfather-mother=8/Other relative=9/Not relative=10)
- Highest grade completed: Pre-primary=0/Grade 1=1/Grade 2=2/.../Grade 11=11/Grade 12=12/Post high school=13
- Grade or level currently attended: use the same codes as for Highest grade completed
- Can read and write in Local Language or in English, for members age > 12: No=0/Yes in Local Language=1/Yes in English=2
- FLC = Farming labour contribution: No=0/Part time=1/Full time=2

Mb	First name	R to H	M=1 F=0	Age	Has ever attended school? (No=0/Yes=1)	What is the highest grade completed?	What grade or level is currently attending (2014/15)?	Can read and write in Local Language or in English?	Can work? (No=0/Yes=1)	Work on farm?
16										
17										
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30										

### 6.3. Documentation Used

The following documents have been used during the STCRSP Baseline study preparation and implementation:

- STCRS Project's reference documents
  - IDA. Liberia Smallholder Tree Crop Revitalization Support Project. Project Appraisal Document. 15/05/2012. 15 pages and annexes
  - MoA. STCRSP Project Implementation Manual. Section 1. 20/04/2013. 48 pages and annexes
  - 3. MoA. STCRSP Project Implementation Manual. Section 2: Cocoa/Coffee Revitalization. 20/04/2013. 47 pages and annexes
  - 4. MoA. STCRSP Project Implementation Manual. Section 3: Oil Palm Revitalization. 20/04/2013. 32 pages and annexes
  - 5. MoA. STCRSP Project Implementation Manual. Section 4: Rubber Revitalization. 20/04/2013. 29 pages and annexes
  - 6. MoA. STCRSP Project Implementation Manual. Section 5: Financial Management Manual. 20/04/2013. 56 pages and annexes
  - 7. MoA. STCRSP Project Implementation Manual. Section 6: Monitoring and evaluation Manual. 20/04/2013. 19 pages and annexes
  - 8. Agrer. Environmental & Social Management framework for the implementation of STCRS Project. MoA. January 2012. 64 pages and annexes
  - 9. Agrer. Social Impact Assessment for the implementation of STCRS Project. MoA. January 2012. 117 pages and annexes

#### • Other documents

- 1. Land Commission. Land Rights Policy. 21/05/2013. 26 pages
- 2. Ministry of Gender and Development. Liberia National Gender Policy. 2009. 66 pages
- 3. MoA/WB. Liberia Gender-Aware Programs and Women's Roles in Agriculture Value Chains A Policy Memorandum. May 2010. 35 pages
- 4. Gun Eriksson Skoog. The Role of Institutions for Inclusive Development of Agricultural Markets: The Case of Cocoa in Post-Conflict Liberia. Draft. 125 pages and annexes.

# 6.4. Meetings

List of meetings organized during this phase:

Subject	
29/04/2015	Kick off meeting with Project Coordination Unit
30/04/2015	Surveys possible arrangements – key persons
04/05/2015	LISGIS – Available statistical data and maps
	Ministry of Gender – National Gender Policy
	Environmental Protection Agency – National Environmental Policy
05/05/2015	Surveys possible arrangements – NGO
06/05/2015	Land Commission – Support to project and Land Rights Policy
	Cooperatives Development Agency – Support to project and available data
07/05/2015	Surveys possible arrangements – Key person
08/05/2015	Introduction discussion – SOCODEVI
13/05/2015	Presentation of inception report to PCUm
15/05/2015	Meeting with SOCODEVI's Coordinator
15/05/2015	Meeting with VOSIEDA's Representatives
18/05/2015	Meeting with MARCO's sub-project Coordinator
26/05/2015	Meeting with EPO's sub-project Coordinator
27/05/2015	Training of the survey's coordinator and enumerators
29/05/2015	Testing of questionnaire in Fahn Community
19/10/2015	Presentation of first results to PCU
20/10/2015	Meeting with Salala Rubber Corp. Representative
	Meeting with Margibi county's local authorities (EPA, MIA, MDA, DAO, Kakata city corporation)
21/10/2015	Meeting with farmers group in Margibi county
22/10/2015	Meeting EPO Representatives in Grand Bassa county
23/10/2015	Meeting with farmers in Grand Bassa county
24/10/2015	Meeting with Todee Cooperative Representatives
25/10/2015	Meeting with farmers group in Montserrado county
26/10/2015	Meeting with Local authorities in Bong county
27/10/2015	Meeting with farmers group in Bong county
28/10/2015	Meeting with farmers group in Nimba county
30/10/2015	Meeting with VOSIEDA Representatives in Konobo District
31/10/2015	Meeting with KDFMCS Representatives in Grand Gedeh county
01/11/2015	Meeting with SOCODEVI Representatives in Grand Gedeh county
03/11/2015	Meeting with SOCODEVI Representatives in Nimba county
04/11/2015	Presentation of methodology and main results to WB M&E Specialist
06/11/2015	Meeting with MARCO Representatives in Morovia
12/11/2015	Presentation of main results to PCU and World Bank Experts

## 6.5. Contact List

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