



Investing in rural people

Democratic Socialist Republic of Sri Lanka

Smallholder Tea and Rubber Revitalization (STARR) Project

Design completion report

Main report and appendices

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Programme Management Department

Democratic Socialist Republic of Sri Lanka
Smallholder Tea and Rubber Revitalization (STARR) Project
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Currency equivalents

Currency Unit	=	Rupee (LKR)
US\$1.0	=	LKR 130

Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

Abbreviations and acronyms

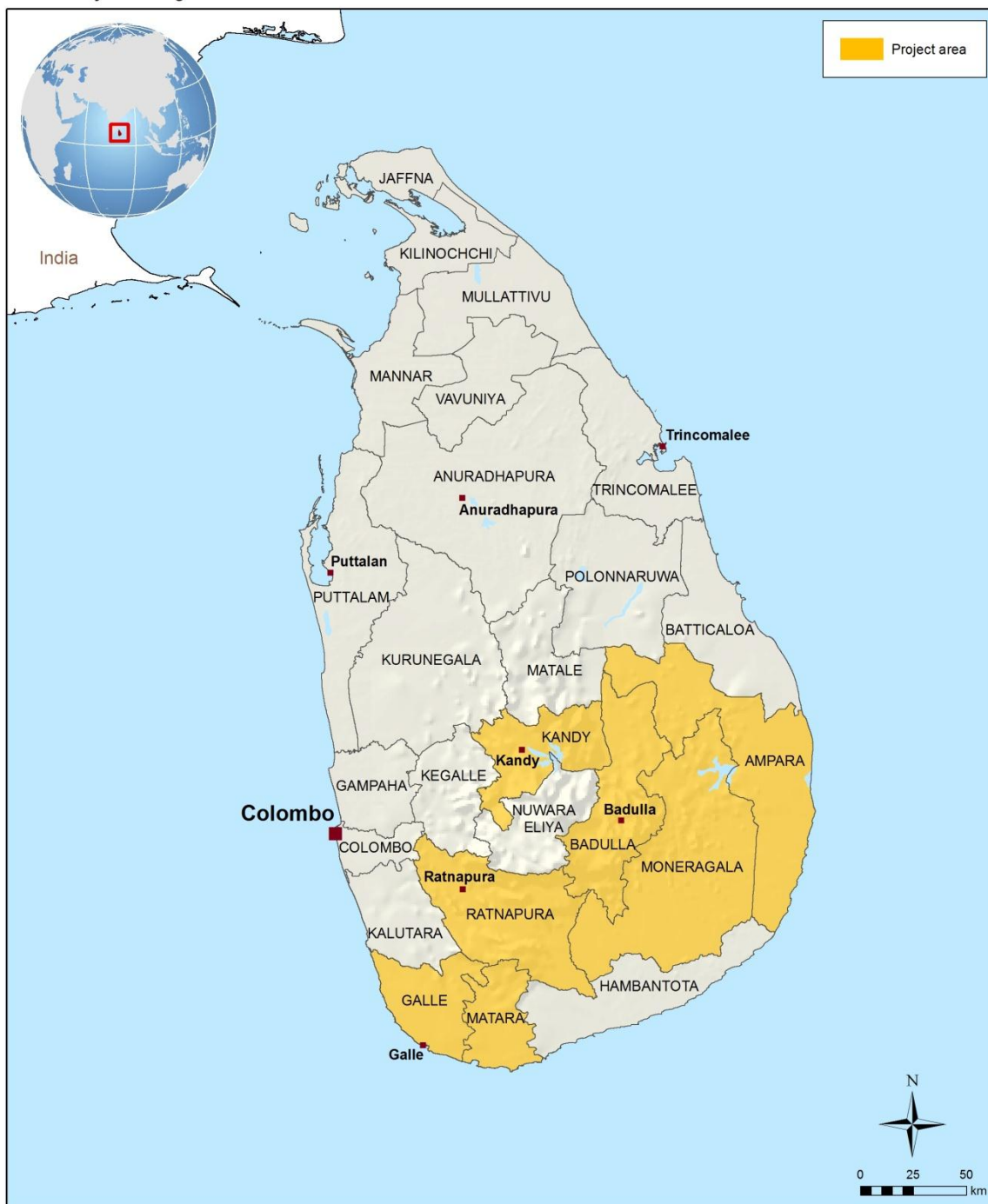
ADB	Asian Development Bank
CBSL	Central Bank of Sri Lanka
COSOP	Country Strategic Opportunity Paper
DEA	Department of Export Agriculture
DSD	Divisional Secretariats Division (Administrative Unit)
FD	Forest Department
GoSL	Government of Sri Lanka
IFAD	International Fund for Agricultural Development
LDO	Land Development Ordinance
LRC	Land Reform Commission
MASL	Mahaweli Authority of Sri Lanka
MPI	Ministry of Plantation Industries
MOU	Memorandum of Understanding
NGO	Non-Governmental Organisation
PBAS	Performance Based Allocation System
PFI	Participating Financial Institutions
PMU	Programme Management Unit
PSC	Project Steering Committee
RDD	Rural Development Department
RRI	Rubber Research Institute
SLTB	Sri Lanka Tea Board
SPENDP	Smallholder Plantations Entrepreneurship Development Programme
TRI	Tea Research Institute
TSHDA	Tea Smallholder Development Authority

Map of the project area

Sri Lanka

Smallholder Tea and Rubber Revitalization (STaRR) Project

Project design



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 13-03-2014

Executive Summary¹

- i. Smallholders dominate Sri Lanka's tea and rubber sectors, which have been making a notable contribution to the national economy for over a century. They account for a major share of the country's tea and rubber production. There are tremendous opportunities and challenges for the sustainable smallholder tea and rubber development, particularly in terms of productivity and market linkages, impacting directly on the smallholders' livelihood and poverty level.
- ii. Almost half of the tea lands in Sri Lanka are more than 20 years old and require replanting to enhance yields and productivity. Yet smallholders have little capacity to replant the tea on their own. While the Government has a subsidy scheme which finances about 40% of the total cultivation cost, the subsidy is only provided after the smallholder has made the initial expenditures for tea replanting. Both the timeliness and level of financial support have acted as disincentives for smallholders to initiate replanting. Without additional financing support to strengthen the replanting programmes, many of the poor smallholders will be pushed back well below the poverty line. As for rubber, in response to private sector demands, the newly-formulated National Rubber Master Plan calls for promoting rubber in non-traditional rubber cultivation areas as a source of livelihood to smallholders while meeting the growing local and international demand for latex. The Government has introduced proactive policy that supports the granting of land permits, land clearance and initial rubber cultivation. The proposed Project is designed to assist the targeted smallholders to improve their food security and increase their income through revitalizing tea and rubber development.
- iii. The Project area would be located in seven neighbouring districts in central and southern Sri Lanka, including Galle (tea), Matara (tea), Ratnapura (tea and rubber processing), Badulla (tea), Kandy (tea), Moneragala (rubber) and Ampara (rubber). These districts have been selected based on their poverty incidence, production of tea and potential for rubber. A total of 144,000 people, or 32,000 households, would benefit from the Project.
- iv. The **goal** of the Project would be to enable poor rural people to improve their food security, increase their incomes and strengthen their resilience. The **development objective** of the Project would be a more profitable, productive and resilient economic activities of tea and rubber smallholders in selected districts. The Project outcomes would include: (i) smallholders' economic activities in tea and rubber become more productive, profitable and resilient; (ii) better organized tea & rubber smallholders able to effectively and sustainably produce and market their products; and (iii) tea and rubber smallholders get increased access to credits. The Project would have **three main components**: (A) tea smallholders development; (B) rubber smallholders development; and (C) inclusive rural financing. The first two components would have three sub-components each, including (i) strengthening tea and rubber societies in production and marketing; (ii) market driven production support in tea and rubber; and (iii) income and market diversification for tea and rubber smallholders. The Project would adhere to the **principles** of demand driven and market based participatory development, in which the smallholders would be the key decision-makers regarding their participation in project activities.
- v. Private sector partnerships would be a **key pillar** of the Project. Private sector players, especially tea and rubber processors, have shown business interest and willingness in strengthening their relationship with small producers to secure quality and quantity of raw material that are needed either for processing or exporting. They can also provide a range of financial, social and welfare services to both tea and rubber smallholders. The Project would support business models to promote partnerships between the private sector and the smallholder for the mutual benefit to both parties. **Another key pillar** of the Project would be the initiative to facilitate smallholders' access to available financing in the banking system. Smallholders need a range of financial services including transfer

¹ Mission (06-22 July 2015) composition: Mr Ya Tian, IFAD Country Programme Manager (CPM) for Sri Lanka (09-22 July); Mr Anura Herath, IFAD Country Programme Officer (CPO) for Sri Lanka / mission leader / Economist; Mr Marco Camagni, IFAD Senior Technical Specialist on Rural Markets and Enterprises, Lead Adviser for this project; Mr Rauno Zander, consultant Rural Finance Specialist; Mr Canute de Silva, consultant Agronomist; Mr Bodhi Wanniarachchi, consultant Business Linkages & M&E Specialist; Mr Gamini Hitinayake, consultant Environmental Specialist; Mr Susantha Siriwardena, consultant Rubber Processing Specialist; and Mr Dayananda Ratnasekera, consultant Financial Management Specialist. Mr Brian Baldwin, the Senior Operation Advisor, IFAD, has joined the mission over 06-09 July and attended the briefing meeting with the Secretary and the Senior staff of the MPI, and the meeting with the Director Generals of External Resources and National Planning and the senior staff of the two institutions that represented the Ministry of Policy Planning and Economic Affairs. He also provided invaluable guidance and support to conclude the design process.

payments such as cultivation subsidies, savings, insurance and loan products; and the state banks have introduced several loan products specifically for tea and rubber. The Project would act as a platform to link the targeted smallholders with two state banks having specific financial products for tea and rubber and willing to expand their lending in collaboration with the Project.

vi. The Project would be implemented over a **six year period**. The Ministry of Plantation Industry (MPI) would be the lead project agency. The private sector would play an active role in the Project through business models to strengthen technical assistance and capacity building efforts that the public agencies are providing. The Bank of Ceylon and the People' Bank would also partner with the Project to provide smallholder access to their existing financial products for tea and rubber. While a project management unit would be established at MPI, the existing structures within the Tea Small Holding Authority (TSHDA) and the Rubber Development Department (RDD) would be used to implement the Project. Where required, the extension staff would be supported by use of technical assistance, implementation support and recruitment of Animators. Services of an experienced service provider would be competitively recruited to assist in mobilizing smallholders.

vii. The total project cost over six years is estimated at LKR 8,502 million (USD 65.4 million) including contingencies (USD 3.8 million). The Project costs are organized into: (i) tea smallholders development (69% of total base costs); (ii) rubber smallholders development (22%); (iii) inclusive rural financing (6%); and (iv) project management (4%).

viii. The Project's support for tea replanting and intercropping would lead to increased yields from tea as well as from appropriate inter-crops such as pepper. On average, a household's production benefits would increase from 3,000 kg/ha to over 14,000 kg/ha of fresh tea leaves in a year over a 20 year period at a minimum. Smallholders planting rubber would be able to benefit from a steady income from latex, the average production of which would be expected to be 2,160 kg per year for the next 30 years. About 10% of the rubber growers would intercrop rubber with maize, about 25% with banana, 5% pineapple, and about 10% with cocoa. Benefits would also be generated by about 3,320 business enterprises to be supported by the Project. The Project would contribute to institutional sustainability at the village level. The strengthening of tea and rubber societies would be expected to enable them to continue serving their members; and this dimension would be further reinforced by linking these societies with the banking and private sector partners of the Project.

ix. The Project is expected to have an Economic Internal Rate of Return (EIRR) of 26%, a benefit-cost ratio 1.64, and the Net Present Value (NPV) at a discount rate of 10.2% would be LKR 19,139 million (USD 147.2 million) for 20 years project period. Costs would have to increase by 64% or benefits would have to decrease by 40% for the NPV to be zero. As required by the PMD Operational Instruction on Logframes and Economic and Financial Analysis, the following tables are provided as part of the Executive Summary (see next page below): (i) incremental Income of Typical Farm and Business Models; (ii) component wise costs and total number of beneficiaries; (iii) main assumptions and shadow prices; (iv) number of beneficiaries and adoption rates; and (v) economic cash flows; (vi) results of the sensitivity analysis.

x. The Project would contribute to environmental and natural resource management sustainability in several ways. The planting of rubber trees in the buffer zones would help protect forests by creating a natural boundary between the forests and the cropped lands where smallholders were previously practising a system of shifting agriculture. The planting of rubber on land which has been formerly regularised by the Government would also provide smallholders a regular and more reliable source of income and reduce the temptation to encroach on forest lands. The tea smallholders would be provided technical training on good agriculture practices, improved soil fertility and soil health management, eco-restoration techniques, planning along contour lines to prevent erosion, principles of rainforest alliance, organic farming, etc. These measures would not only enable the smallholders to meet the growing demand for products sourced from sustainable and responsible farming, but also improve the yields and productivity on their lands.

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F I N A N C I A L	PRODUCTION										P-P BUSINESS MODELS		PROCESSING
	Farm models' net incremental benefits (in Rs '000/yr)										Business models' net incremental benefits (Rs '000)		Group Processing Business (Rs '000)
	Tea - mono crop	Tea + pepper	Rubber Mono	RB + Maize	RB + Banana	RB + Pine	RB+Cocoa	Passion fruit business	Orchid business	Rubber Processing			
	0.5 ha	0.5 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1000 Sq ft	250 kg/day			
PY1	-189	-189	-341	-216	-158	-249	-316	-30	-775	-2 789			
PY2	-241	-301	-108	17	375	66	-193	1 307	119	348			
PY3	-138	-153	-106	18	639	78	-107	1 007	1 013	348			
PY4	-132	-143	-104	20	337	23	-114	659	1 013	348			
PY5	267	392	-97	27	344	-72	99	171	1 013	348			
PY6	271	536	84	41	150	-59	162	41	1 013	348			
PY7	271	746	222	247	247	247	559	1 307	1 013	348			
PY8	237	852	322	347	347	347	659	1 007	1 013	348			
PY9	237	852	363	388	388	388	684	659	1 013	348			
PY10	237	852	398	423	423	423	719	171	1 013	348			
NPV (Rs 1000)	563	3 674	1 377	2 037	3 328	1 978	3 112	3 875	1 899	306			
NPV (USD 1000)	4.3	28.3	10.6	15.7	25.6	15.2	23.9	29.8	14.6	2.4			
FIRR (@10%)	18%	42%	22%	40%	269%	39%	33%	4348%	40%	12%			

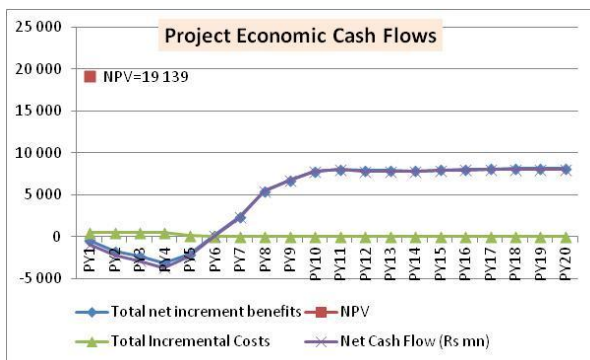
PROJECT COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROJECT COSTS (in million USD)		65.4	Base costs	61.6	PMU	2.40
Beneficiaries	144 000 people	32 000 Households	48 groups	3 320 enterprises		
Cost per beneficiary	454 USD x person	2 044 USD x HH	Adoption rates	86%		
Components and Cost (USD million)			Outcomes and Indicators			
Tea Smallholders' Development	42.446 M	Better organized Tea Smallholders able to more effectively and sustainably produce and market their products	Increased productivity by 466%			
Rubber Smallholders' Development	13.298 M	Better organized Rubber Smallholders able to effectively produce, process and market their products	New rubber yield will be RSS 2160 kg			
Inclusive Rural Financing	3.4 M	Tea & rubber smallholders get increased access to credits that is available in the market	Increasing agricultural finance access by 30%			

MAIN ASSUMPTIONS & SHADOW PRICES					
FINANCIAL	Output	Av. Incremental	Price (in Rs/kg)	Input prices	Price (Rs)
	Replanted Tea	466%	65	Fertilizer / kg	26
	Rubber (RSS 1)	New	275	Pest control / ha	2000
	Pepper	New	700	Plant material - tea/ha	187 500
	Maize	74%	900	Plant material - Rb/ha	42500
	Banana	67%	40	Plant material - PP/ha	22 500
	Pine apple	New	40	Plant material -Cocoa/ha	15000
	Cocoa	New	250	Rural wage	650
	BM - Passion	New	60	Sale value of RB latex	185
	BM - Orchid	New	25		
ECONOMIC	Official Exchange rate (OER)	130	Discount rate (opportunity cost of capital)	10%	
	Shadow Exchange rate (SER)	130	Social Discount rate	10.20%	
	Standard Conversion Factor	0.90	Output conversion factor:tea & Rb	1.1 & 1.3	
	Labour Conversion factor	0.95	Input Conversion factor	0.95	

BENEFICIARIES, ADOPTION RATES AND PHASING							Adoption rates	
	PY1	PY2	PY3	PY4	PY5	PY6	Total	86%
Tea mono crop	2 800	6 737	6 945	6 945	0	0	23 427	
Adjusted (adoption rate)	2 352	5 659	5 834	5 834	0	0	19 678	84%
Tea + Pepper	1 400	3 368	3 472	3 472	0	0	11 713	
Adjusted (adoption rate)	1 120	2 695	2 778	2 778	0	0	9 371	80%
Rubber mono crop	228	850	1 128	1 128	0	0	3 333	
Adjusted (adoption rate)	182	680	902	902	0	0	2 667	80%
Rubber & maize intercrop	23	85	113	113	0	0	333	
Adjusted (adoption rate)	18	68	90	90	0	0	267	80%
Rubber & banana intercrop	57	213	282	282	0	0	833	
Adjusted (adoption rate)	57	213	282	282	0	0	833	100%
Rubber & pineapple intercrop	11	43	56	56	0	0	167	
Adjusted (adoption rate)	11	43	56	56	0	0	167	100%
Rubber & cocoa intercrop	32	119	158	158	0	0	467	
Adjusted (adoption rate)	19	71	95	95	0	0	280	60%
Passion fruit business model	0	450	0	0	0	0	450	
Adjusted (adoption rate)	0	347	0	0	0	0	347	77%
Orchid business model	0	2 870	0	0	0	0	2 870	100%
Rubber Group Processing	80	80	400	680	680	0	1 920	100%
			8 473				32 000	

E C O N O M I C	NET INCREMENTAL BENEFITS (Rs mn)						NET INCREMENTAL COSTS (Rs mn)					Net Cash Flow (Rs mn)
	Total Tea Cultivation	Total Rubber Cultivation	Passion fruit business model	Orchid business model	Rubber Processing centers	Total net incremental benefits	Economic Investment Costs	Economic recurrent Costs	Economic O&M Costs	Total Incremental Costs		
PY1	-351	-61			-5	-417	440	34	0	474	-891	
PY2	-1 316	-228	-2	-168	2	-1 713	413	62	0	475	-2 187	
PY3	-2 331	-295	291	49	-11	-2 299	473	69	0	543	-2 842	
PY4	-3 143	-266	224	49	5	-3 131	454	69	1	525	-3 656	
PY5	-2 392	42	147	86	64	-2 051	132	59	2	193	-2 244	
PY6	-190	44	39	86	168	147	1	36	3	40	107	
PY7	1 989	39	12	174	168	2 381	0	36	7	43	2 338	
PY8	4 499	348	291	174	168	5 479	0	36	17	53	5 426	
PY9	5 369	824	224	174	168	6 759	0	36	27	63	6 696	
PY10	5 922	1 404	147	174	168	7 824	0	36	37	73	7 751	
PY11	6 051	1 633	39	174	168	8 065	0	36	43	79	7 986	
PY12	5 925	1 764	39	168	7 896	0	36	43	79	7 817		
PY13	5 795	1 871	39	168	7 873	0	36	43	79	7 794		
PY14	5 666	1 979	39	168	7 852	0	36	43	79	7 773		
PY15	5 666	2 092	39	168	7 965	0	36	43	79	7 885		
PY16	5 666	2 210		168	8 043	0	36	43	79	7 964		
PY17	5 666	2 263		168	8 096	0	36	43	79	8 016		
PY18	5 666	2 294		168	8 127	0	36	43	79	8 048		
PY19	5 666	2 293		168	8 127	0	36	43	79	8 047		
PY20	5 666	2 291		168	8 124	0	36	43	79	8 045		
	NPV @ 10.2% (Rs mn)	19 139										
	NPV @ 10.2% (US \$ mn)	147.2										
	ERR	26%										

SENSITIVITY ANALYSIS (SA)				
F)	Δ%	Link with the risk matrix	IRR	NPV (USD M)
Base scenario			24%	99.9
Project benefits	-10%	Institutional; low quality planting material, weak technical and management capacities of district line agencies; Groups; Lack of financial capacity to invest in processing or other equipment	20%	66.0
Project benefits	-20%		16%	33.7
Project costs	10%	Increase cost of planting material and cost of group processing centers	20%	75.9
Project costs	20%		17%	53.4
1 year lag in ben.		Risks affecting adoption rates and low implementation capacity	17%	58.9
2 years lag in ben.			13%	23.0
Output prices	-10%	Low management & negotiating capacity of farmer groups; poor access, lack of transport and market information	21%	78.3
Output prices	-20%		19%	7.5
Input prices	10%	Market price fluctuations, remoteness & transport difficulties	21%	78.1
Input prices	20%		18%	7.4
Adoption rates	-10%	Extension service outreach is limited, low uptake of good practices, drought and plant growth is low	21%	75.7
Adoption rates	-20%		18%	52.3
Yields	-10%		21%	5.2



Logical Framework for the STARR Project

Results hierarchy	Indicators					Means of verification			Assumption
	Name	Baseline	YR1	Mid-term	End target	Source	Frequency	Responsibility	
Goal: Enable poor rural people to improve their food security, increase their incomes and strengthen their resilience.	1. Number of HH, benefiting from project services; 2. Improved HH assets. 3. Improved food security. 4. Reduction in prevalence of child malnutrition;			1. At least 7,300 households (HH), or 32,820 people, 30% women 2. The 7,300 HH with registered an average of 20% increase in HH asset;	1. At least 27,600 households (HH) , or 124,000 people, 30% women 2. The 27,600 HH registered an average of 40% increase in HH asset; 3. The 27,600 HH (10% women headed) will not experience hunger period of more than 1 month/yea 4. Prevalence of child malnutrition reduced by 20%;	RIMS impact surveys at baseline and completion. Special impact evaluation studies by external agencies	Year 1 At the end of fourth year of the project	M&E Specialist/Project Manager	Government will continue to have favorable policies towards tea and rubber sector; The economy of the country in general will have favorable growth and low cost escalations; Less or no natural calamities affecting tea and rubber community.
Development Objective: Smallholders' economic activities in tea and rubber become more productive, profitable and resilient.	5. Increased productivity				5. Average green tea leaf productivity increased from 3000 kg/ha to 14000 kg/ha; 6). Average dry rubber sheets productivity of Kg 2160 / ha is achieved.	Reports of M&E officer; Records of rubber societies; Reports of SP, BDOS, pvt sector linkage officer;	Monthly	M&E Specialist/Community Development Coordinator as the field-level M&E supported by Business Development Coordinators	Price recovery over next five-year economic/price cycle; and Lands be timely available for planting.
Outcomes/Components Better organized Tea & rubber SH able sustainably produce & market their products	7. Societies organised and selling members tea & rubber			7. At least 30 tea societies & 10 rubber societies	7. At least 50 tea societies and 20 rubber societies	Reports of M&E officer Records of tea & rubber societies.	Monthly	M&E Specialist to coordinate with originators of reports	No holdups the Project tea replanting incentive and the TSHDA subsidy paid to the beneficiaries;
Tea and rubber SH get increased access to credits	8. Number of tea and rubber growers got loans			8. The 1450 beneficiaries, 30% women, got loans	8. The 16,000 beneficiaries, 30% women, got loans	Partner bank monitoring reports;	Partner bank reports	Business Development Coordinators at	Commitment of banks in financing tea and rubber sectors;

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Results hierarchy	Indicators					Means of verification			Assumption
	Name	Baseline	YR1	Mid-term	End target	Source	Frequency	Responsibility	
						progress reports of facilitators	quarterly and others monthly	the field level and M&E Specialist at the PMU level	Political uncertainties and special initiatives related to agricultural finance do not affect credit culture;
Outputs Tea societies capacity built including gender Smallholder Tea replanted in 5 districts; Overhauling farm roads in tea areas.	9. number of tea societies diagnosed & capacity built 10. tea replanted extent 11. farm road length overhauled			9. 100 tea societies; 10. 2250 ha of tea 11. At least 50 km of designated road lengths	9. 150 or more tea societies; 10. 5500 tea replanted in 5 districts; 11. At least 80 km of designated road lengths	Reports of M&E officer Records of tea societies. Reports of SP, BDOS.	Monthly	M&E Specialist to coordinate with originators of reports	MPI use a scheme to pay the "target related incremental payment" to participating TSHDA staff; TSHDA will continue with the proposed modified infilling scheme; .
Rubber society capacity built including gender Smallholder rubber planted in 2 districts; Overhauling farm roads in rubber areas.	12. number of rubber societies diagnosed & capacity built 13. rubber planted extent 14. farm road length overhauled			12. 40 societies; 13. 900 ha rubber planted in 2 districts; 14. At least 50 km of designated road lengths overhauled	12. 60 or more tea societies; 13. 3000 ha rubber planted in 2 districts; 14. At least 70 km of designated road lengths	Reports of M&E officer Records of VRDC societies Reports of service providers, BDOS,	All monthly	M&E Specialist to coordinate with originators of reports	MPI resolves at earliest the scheme to pay the "target related incremental remuneration" to participating RDD staff;

I. Strategic context and rationale

A. Country and rural development context

1. Following the end of the 26-year civil war in May 2009, the Sri Lankan economy has grown at an impressive pace recording an annual average growth rate of about 7.4 per cent in 2014. However, real gross domestic product (GDP) growth slowed in 2013 to 7.2 per cent due to a severe drought and weak external demand. The gross national income per capita was USD 2,908 in 2012 and this has risen to USD 3,608 in 2014. The country is on track to meet most of the Millennium Development Goals (MDGs) and compares favourably with other countries in its income band in terms of gender equality. It also performs well on human development indicators, which was 0.75 (min 0 and max 1) in 2013 and ranks 97th out of 183 countries on the Human Development Index. The Government's development policy framework is articulated in the Public Investment Strategy 2014-2016, which sets the principle target as raising the per capita income to USD 4,000 in 2016 and elevating Sri Lanka to the status of a strong middle income country. The newly appointed government in January 2015 maintained the same targets.

2. Eighty per cent of the country's population resides in the rural areas. Despite a declining share in the GDP (10.1% in 2014), agriculture is the backbone of the economy and an important source for employment as almost one-third of the total labour force is engaged in agriculture, traditionally dominated by rice and plantation crop production. The agriculture sector predominates in the Uva province contributing 26% to its GDP in 2012, 15% in the Central province and 18% in the Sabaragamuwa province. The main agriculture crops are paddy, tea, coconut, rubber and a variety of horticulture and vegetable crops. The smallholder farmer has the major share of production and is a major contributor to food security in the country. The Government's strategic direction for agriculture is to achieve sustained improvement in production through increased productivity and market competitiveness. For the plantation sub-sector, including its smallholders, the direction is to transform it to an integrated value-added sub-sector by managing young plantations through continuous cultivation, increasing productivity, applying good agricultural practices and diversifying products and markets.

3. Rural poverty has declined considerably in Sri Lanka over the recent years, with an incidence of 6% in 2014. However rural areas still account for the majority of the poor. There are areas which are more prone to vulnerability and poverty, determined often by location-specific characteristics. Some districts have been traditionally and persistently poorer than others. The main causes of rural poverty include: (i) lack of or inadequate productive assets, (ii) engagement of a substantial portion of the labour force as unpaid family workers and/or poorly paid labour, (iii) low productivity and profitability in agriculture and limited alternative opportunities; (iv) women's relatively low engagement in the labour force and lack of remunerative or productive employment, (v) high rate of youth unemployment, (vi) malnutrition and disabilities, (vii) lack of access to markets; and (viii) prolonged drought and impact of climate change.

4. The main vulnerable and poverty groups include: (i) smallholders, in both crop and plantation production (tea, rubber, etc.); (ii) plantation workers in the estate areas; (iii) artisanal and small-scale fishers; (iv) women-headed households; and (v) unemployed and underemployed labour, particularly youth and women. The vulnerability of rural women in the labour market is greater due to their relatively low skills, engagement in seasonal work and the lack of arrangements to reduce the double burden of unpaid domestic work and farm work.

B. National rural poverty reduction strategy

5. The key policy document that outlines the national rural poverty reduction strategy was the 2015 Presidential Election Manifesto. The policies, programmes and long-term economic development plan is being formulated, the Vision of the Manifesto maintain the overall targets of achieving the MDGs ahead of the deadline, with the eradication of hunger and hard-core poverty in Sri Lanka by 2016. The overall government policy planning as per the news briefing of the Ministry of Policy Planning and Economic Development address (i) ensuring the betterment of villages to be emerged as "micro-centres of growth on modern lines and investment promotion zones"; (ii) focus on pro-regional development, to restore people's livelihoods, reactivate services and facilities, employment generation, rehabilitate infrastructure and develop human capabilities; and (iii) encourage enterprise development as well as the development of domestic agriculture as the means to promote

inclusive economic growth and better sharing of the development benefits. The key national poverty reduction and rural development programme is the “Samurdhi” programme which is implemented island wide.

C. Harmonization and alignment

6. IFAD coordinates its country programme work with the government agencies and the development donor community. The IFAD country programme is directly aligned with the Government’s development priorities as defined in the Public Investment Strategy 2014-2016 as well as the national planning process. The annual portfolio review has been jointly undertaken with the Ministry of Finance and Planning. IFAD’s support contributes to the objectives of the UN Development Assistance Framework (2013-2017), especially “equitable economic growth and sustainable livelihoods”. IFAD participates in the Development Partner Forum’s Private Sector Development Working Group, which is attended by all the multilateral and bilateral agencies. IFAD maintains close contacts and undertakes regular consultations with all relevant bilateral and multilateral donor agencies during project missions, aiming at learning, avoiding duplication of efforts and exploring partnership opportunities. IFAD has also started an active engagement with private sector players during project design and supervision to assess the potential for partnership for the benefit of smallholder farmers in the country. IFAD financed Smallholder Plantation Entrepreneurship Development Programme (SPEnDP) is one of the IFAD operations in the country which is in alignment with the equitable economic growth in the tea and the rubber smallholder sector. SPEnDP is in its 7th year of operation. It has provided a number of lessons in yield increase in both tea and rubber and more than 100% adoption rate, that supports the potential for up-scaling of its focus in developing tea and rubber smallholding sectors (see para 9 of Appendix 3 for lessons). STARR Project would vertically up-scale the tea and rubber production interventions that were adopted by SPEnDP into new districts. In addition STARR will have other interventions, particularly the ones that the private sector is effectively involved which were also supported by SPEnDP to a limited degree.

D. Rationale

7. The tea and rubber sectors have been making a notable contribution to the national economy. Tea smallholders who own less than 2.5 hectares contribute 70% of the country’s total tea production while smallholder rubber growers make up 62% of the land under smallholder cultivation. About 50% of the smallholder tea lands in the island are reported to be more than 20 years old with less than optimal production capacity. While Government has established an annual 2% replanting target, both large estates and smallholders have difficulty in accessing the right financial instruments and developing the financial capacity to replant the tea. As tea production levels fall, without the needed replanting, many of the smallholders are likely to be pushed below the poverty line. To assist replanting smallholder tea, GOSL has a subsidy scheme which finances about 40% of the total cultivation cost. However, the subsidy is only provided after smallholder bearing the initial expenditures for tea replanting has been made. Therefore, both the timeliness and level of financial support act as disincentives for smallholders to initiate replanting. As a result, the national replanting requirement is not met and declining incomes and poverty levels therefore remain among the smallholders. Thus the Government is in need of additional financing to strengthen the replanting programmes so that the smallholders will be attracted to replant. The proposed Project is designed to assist the Government in providing a grant to targeted smallholders at the commencement of tea replanting together with the government subsidy. To ensure both higher and sustainable incomes for smallholders, the Project would also support capacity development of tea societies, organic tea production and environmental compliant tea cultivation techniques working in partnership with other partners (e.g. Rainforest Alliance). SPEnDP experiences in the mid-country showed that the tea replanting at the smallholder level with government subsidy and IFAD additional financial assistance has attracted very small scale farmers to tea replanting and rehabilitation, and also helped increasing tea yield by about 418% after four years of replanting (Appendix 3 for details). SPEnDP’s actual achievement tea replanting was double the initial target of 100 ha or old tea indicating the adoption rate is 200%.

8. To meet the growing local and international demand for latex, as part of the National Rubber Master Plan, the Government has been promoting rubber in non-traditional rubber cultivation areas to provide a source of livelihood to smallholders. While crepe rubber is produced at estate level, sheet rubber (i.e. RSS 1) is produced by smallholders and Sri Lankan varieties ensure that local and international demand remains high. International prices are cyclical and the current downturn in world

prices is expected to pick up in 2018 opening opportunities for smallholders reaching full production or in the process of planting new cultivars. The Government's proactive policy therefore supports the granting of land permits and a subsidy for land clearance and initial rubber cultivation. In the initial years, intercropping under young rubber is encouraged to meet income needs during the non-productive period of rubber. The proposed Project will assist smallholders with rubber plantations on 2250 hectares in Ampara and 750 ha in Moneragala districts. The SPEnDP assisted rubber in Moneragala has produced 2150 kg/ha of dry rubber in its 8th year of planting indicating the production potential in the non-traditional areas. The target achievement in rubber was about 87 ha more than the initial target of 5000 ha, indicating 102% adoption rate in a non-traditional rubber growing area.

9. There is a critical constraint of good quality planting materials for both tea and rubber. The GOSL has tried to address this need through the establishment of mother bush nurseries for tea and bud-wood nurseries for rubber and undertaking on-going research for improved cultivars. However, there is slow dissemination of these results to the farmers. The Government has also encouraged the establishment of private sector nurseries at both the household and commercial level. It has a programme of supplying inputs to households for the production of high quality tea planting materials. While this experiment has generally worked well, there is insufficient capacity to produce the large volume of quality plants required. The Project would assist the Government to invest in the long-term capacity to produce nurseries for rubber which is a critical constraint in the production of high yielding rubber plants. The Project would also provide technical guidance and support for financing to private sector nurseries to expand the production of tea plants in areas where there is shortage of such materials. TRI and the Rubber Research Institute (RRI) have a good system for the registration, monitoring and inspection of private nurseries to ensure quality plants and would provide overall technical supervision and certification.

10. The Government provides extension services for the tea and rubber smallholders through the Tea Smallholding Development Authority (TSHDA) and the Rubber Development Department (RDD). However, the extension service is unable to provide coverage to the large number of smallholders in their circle due to limited staff and operational support. The extension staff also requires up-gradation of their skills, material and travel support, additional field staff and an incentive system which rewards good performance. The proposed Project would provide increased support to both the tea and rubber extension staff. The Project would also coordinate and support the provision of improved technical capacity for smallholder tea and rubber growers, registered tea and rubber societies, build the capacity of small private sector players along the tea and rubber value chains such as private nurseries and licensed tea collectors, etc. Rubber plantation in non-traditional areas would also entail skills for plant selection, tapping latex and processing ribbed sheets for better shelf life and bargaining capacity. The Project would provide these skills to the new and existing rubber growers.

11. There is a long gestation period between the plantation of tea (5 years) and rubber (6-7 years) and the first harvest. In the case of tea, the two and a half years required before the tea plant yields the first crop is further extended by the technical recommendations which require an initial period of land clearing, terracing and plantation of grasses for one and a half years to enhance the regenerative capacity of the soils. Most tea smallholders will replant their plots only gradually to enable them to earn some income from the existing lands. Smallholders diversify their income sources by inter cropping tea with pepper vines on the shade trees grown with the tea. Over 50% of the SPEnDP tea growers intercrop tea lands with pepper as an income diversification strategy. Other smallholders grow vegetables and horticulture crops around the home plots. Rubber farmers fare better as rubber can be intercropped with other crops. In SPEnDP farmers intercrop with maize, banana, pineapple, legumes, and cocoa. While some households own livestock, the holding capacity is limited due to limited landholdings, availability of fodder, labour and cultural reservations. Nevertheless, the provision of supplementary sources of income to the smallholders in the interim period is essential. There is need for provision of improved seed and seedlings for the ancillary crops as well as for training in improved intercropping practices. The availability of off-farm opportunities varies considerably from one area to the other. There are some areas where the smallholders work as wage labour or in nearby factories or in a range of vocations as carpenters, mechanics, masons, Government jobs, etc. The Project would facilitate alternate sources of income and employment where required by establishing linkages with Government vocational training institutes, access to small enterprise loans, providing matching grants, access to business development services and placement with the private sector.

12. To ensure both higher and sustainable incomes for both tea and rubber smallholders, and to ensure that public funding requirements are progressively reduced, it is necessary to facilitate

partnerships with the private sector tea and rubber processors in a manner which provides sustainable quality supply for which smallholders receive a premium price. Private sector players have a business interest in strengthening their relationship with small producers to secure quality and quantity of raw material they need either for processing or exporting. To this end private companies provide a range of financial, social and welfare services to both tea and rubber smallholders. Therefore, in order to make both sectors more competitive there is a need to facilitate partnerships with the private sector tea and rubber processors that will be mutually beneficial to all. The private sector is also looking for sourcing from smallholders other products: e.g. livestock, dairy, mushroom cultivation, high value horticulture and vegetable products. In the selection of these activities, the Project would follow an approach which works from the market backwards to ensure that there is a demand for these products and that market links are established with private firms prior to initiation of these activities to ensure adequate inputs are supplied and the produce is marketed. The additional services which some private sector companies offer include advances and loans, employment opportunities, collection services and various type of extension training services.

13. The movement to adopting Good Agricultural Practices (GAP) adhering to Rain Forest Alliance Principles (RFA), UTZ standards, etc., is gaining ground in Sri Lanka with some companies declaring that they would source their produce in the future only from those adopting sustainable and responsible farming practices. The small producer needs to be made aware of these principles to better prepare them for the future market demand. The relationship with the private sector needs to be strengthened to provide sustainable natural resource management awareness and training to smallholders. Some private sector companies have received certification for organic production under the most stringent standards for export to Europe, Japan and the US. These companies are prepared to expand their base to include a growing number of smallholders and offer a good opportunity for collaboration. Some companies have adopted the principles of the Rainforest Alliance and adhere to sustainable natural resource management and fair trade practices. The smallholders would benefit substantially from awareness about these principles and links need to be made with private sector companies well versed in these principles and practices. The corporate level agreement between IFAD and Unilever would be capitalised upon to build on the partnership as well as arrangements with other leading companies such as Bio-foods, Finlay, etc. The officers of the TSHDA, RDD, Forest Department would also be introduced to some of these more sustainable practices.

14. Smallholders need a range of financial services which includes transfer payments such as cultivation subsidies, savings, insurance and loan products. The rate of financial inclusion in the country is 69% which is among the highest in Asia. The Government Banks have introduced several loan products for tea and rubber which requires facilitation to mobilise such products. Further, state and private Banks are also mandated by the Government to provide subsidised credit for a range of activities. There is estimated to be a large volume of funds which banks have for rural lending that are linked up with such products. The Project will attempt to address the credit reach issues and make them effectively available.

15. The SPEnDP demonstrated, as summarised above and detailed in Appendix 3, that the IFAD project approach has encouraged the poor to rehabilitate tea and cultivate rubber in non-traditional areas. The IFAD capital grant support in addition to the government subsidy that was given to tea and rubber attracted the IFAD target group in the mid-country to replant and rehabilitate tea, and to cultivate rubber in Moneragala. Higher yields of both crops have been realised in comparison to their non-project counterparts. The SPEnDP supported alternative income generating activities have bridged a part of the financing gaps that the farmers experienced during the gestation period of both crops. The rural societies namely Village Rubber Development Clusters for rubber and Entrepreneur Groups for tea supported the delivery of project inputs which enhanced the efficiency of the two government institutions, the Rubber Development Department and the Tea Smallholders Development Authority, in delivering their services. The table below shows the gradual process of tea replanting and rubber cultivation with the corresponding average yield collected from a sample of beneficiaries. Since the farmers replant sections of the tea holdings, the remaining extent produce green tea leaf and that is shows as the yield in the 2nd year. Almost the same approach will therefore be used in the STARR Project in replanting tea and new planting of rubber with vertical up-scaling to include five districts for tea and two districts for rubber. A major constraint that were observed in SPEnDP, namely lack of systematic involvement of the private sector with business models providing sustainable enterprises for the poor were addressed in STARR Project. A dedicated sub-component for both tea and rubber that finances business plans preparation and implementation was an improvement to the up-scaling process.

SPEndP performance	Pr Yr 1: 2007	Pr Yr 2	Pr Yr 3	Pr Yr 4	Pr Yr 5	Pr Yr 6	Pr Yr 7	Pr Yr 8	Total
Replanting of tea (Ha)	0	6	8	8.8	49.3	46.6	55.4	41.5	201.6
Replanted tea yield - Green tea leaf (kg/ha/yr)		4,446	5,928	10,375	14,100	15,556	18,667	18,667	
New rubber (Ha)	0	645	1034	1475	644	1027	262		5087
New Rubber yields (kg/ha/yr)								2150	

II. Project description

A. Project area and target group

16. **Project Area:** The Project would target 5500 hectares of old tea lands in smallholdings and 3000 hectares of new lands for rubber. In addition the Project would support 2000 matching grants to establish business enterprises (typical examples are passion fruits and flowers) and 48 rubber group processing centres. The targeted districts have been selected based on their replanting potential of tea, potential for expansion of rubber, addressing environmental concerns, and high poverty incidences. The targeted tea districts would be Galle and Matara districts (Southern Province), Ratnapura (Sabaragamuwa Province), Badulla (Uva Province) and Kandy (Central Province). The districts selected for new rubber include Moneragala (Uva Province) and Ampara (Eastern Province), and rubber processing in Moneragala, Ampara and Ratnapura. Within each tea district, the selection of Divisional Secretary Divisions for cultivation would be based on the need for replanting and higher poverty incidence. Individual poverty will be targeted by selecting smallholders with less than one hectare. In both cases the lands and people would be selected in close consultation with the staff of TSHDA and RDD. The project targets are summarised below.

Table 1: Potential Target Districts and Extent of Cultivation

District	Tea Smallholdings (<1ha)		Rubber Smallholdings (1 ha)		Rubber Processing Centers
	Extent (ha)	Holdings	Extent (ha)	Holdings	
Matara	1 500	5 357			
Galle	1 400	5 833			
Ratnapura	1 500	6 254			4
Badulla	600	2 857			
Kandy	500	3 125			
Moneragala			750	833	40
Ampara			2250	2 500	4
Total	5 500	23 427	3000	3 333	48

17. **Target group** of tea consists of existing tea growers representing the poor with having less than one hectare of unproductive tea lands in the five districts listed above. For rubber the beneficiaries would be selected with the guidance of the *Grama Niladhari* to ensure the eligibility criteria and the poverty levels and given one hectare of rubber. In both cases, the gender equality would be considered in selecting the beneficiaries by including 30% of women as tea and rubber growers. The **project period** is six (6) years.

18. The target for tea would be about 23,420 smallholder tea producers whose yields of tea are low mainly because of the age of the plants. As the target, rubber would be cultivated by about 3,330 smallholders² under the Project. It is expected that farmers would plant rubber on **one hectare**. The Project would also assist existing smallholder households in processing of rubber for those smallholders who have planted rubber earlier and whose rubber production would have begun by the time STARR starts. The Project would provide refresher training in rubber processing and processing facilities and establishing marketing links where required. In addition to tea and rubber, intercropping

² The reason for 3 330 beneficiaries to cultivate 3000 ha at the rate of one ha per beneficiary is that when forest land is given, the physical one ha will not be able to accommodate full plant density. This is because large forest trees will not be up-rooted and as such the spacing such trees will reduce the number rubber trees. This is adjusted by increasing the number of plots.

pepper in tea lands and several crops, namely maize, cocoa, passion fruits, banana, and pineapple in new rubber lands would be supported.

19. Under the producer-private sector promotion model, the Project would finance 400 business models involving about 3320 beneficiaries, 2870 among tea beneficiaries and 450 among rubber beneficiaries. About 1920 rubber producers, who are not the new cultivators, will benefit from 48 rubber group processing centres. Table 2 presents the number of beneficiaries of STARR. For each enterprise, the design assumes an average adoption rate of 86%. This means the Project will have to contact 14% more households to get the full physical target of tea and rubber extent achieved. The economic analysis however demonstrated that even at the 86% adoption rate, or less physical extent than targeted, the investment in the Project as a whole will be economically viable. However the project management will take all efforts to reach almost 100% physical targets of tea and rubber extents.

20. **Targeting strategy** adopted for both tea and rubber components were principally the same. Focusing on the poor people in the selected districts is the principle strategy. Targeting for tea and rubber would be performed in three steps: (i) First Level, District Targeting is to select the project implementation districts for tea and rubber; (ii) Second Level DSD³ Targeting is to select the Divisional Secretary (DS) divisions within the targeted districts. The 1st and the 2nd level is based on pre-determined criteria; and (iii) Third Level Beneficiary Targeting would be to select base level implementing areas and project partners in the targeted DS divisions, where the potential project beneficiaries would reside or potential developable land would exist. They would be identified as specific tea society areas in the tea component and as GN divisions in rubber component. The GN and the Samurdhi officers will assist the Project in the final selection.

21. **For tea**, on the basis of poverty information and extent of tea cultivations as Appendix 2 explains in details, the targeted five tea districts would be Ratnapura (Sabaragamuwa Province), Galle (Southern Province), Matara (Southern Province), Badulla (Uva Province), and Kandy (Central Province). The above district targeting is most appropriate as they have relative high poverty incidences, main smallholder tea growing areas, populace of tea extent and tea growing smallholders, covers five out of eight main smallholder districts, represents 85% of smallholder grower locations and represents 83% of smallholder tea land locations.

22. The next two levels of targeting, namely the DS divisions Targeting and Beneficiary Targeting would be undertaken by each Tea Regional Manager and staff of the targeted districts at a series of workshops proposed to hold as one of initial steps in project implementation (see Appendix 5: Project Implementation). The same set of criteria namely incidence of poverty in the DSDs, availability of smallholder tea lands in the DSDs, availability of smallholders in the DSDs would be prudently examined by them to target the project implementation DSDs and within such DSDs the implementing tea societies. Members of such tea societies would be the project beneficiaries. Additionally the district TSHDA staff would also assess whether the smallholders' tea lands could be improved by replanting (for example if the soil is highly unproductive such land will not be suitable). The tea inspectors of the targeted DSDs would select such beneficiaries after these considerations. The eligibility criteria for tea beneficiaries who reside in any selected DS division include (i) having no more than one hectare of low productive tea (about 3000 kg/ha/year of green tea leaf) with agronomic potential for productivity improvement and willing to replant tea; (ii) members of a tea society; and (iii) no other substantial income sources such as government or private sector jobs, business etc. Eligible women would represent about 30% of the beneficiaries. Only those beneficiaries who would take up tea replanting will be eligible for receiving other benefits of the Project, namely matching grants, training, and partnership with the private sector led business models.

23. **For rubber**, on the basis of the government policy on new rubber, presence of notable poverty incidences, and abundance of new land (Appendix 2 has details), the districts of Monaragala (Uva Province) and Ampara (Eastern Province) would be targeted for cultivation of rubber. In the Monaragala district, the eight DSDs – Monaragala, Buttalla, Madulla, Wellawaya, Bibila, Badalkumbura, Medagama, Siyambalanduwa – having the intermediate climate and in Ampara, the two intermediate climate DSDs – Padiaythalawa and Mahaoya – would be targeted.

24. The eligible beneficiaries would include (i) those households who have no land or have only illegally encroached patches of land or own very small extents, (ii) with little or no sizable sources of income other than from subsistence cultivation or as farm labourers, and (iii) have no access to

³ DSD=Divisional Secretary Divisions, sub administrative geographical areas in a the district

adequate financial assistance for tea land improvement. Grame Niladhari and the Samurdhi Officer will certify the eligibility criteria. Eligible women and women headed families would represent about 30% of the beneficiaries. The Rubber Development Officers of the RDD in the targeted DSDs with the help of the Grama Niladhari and Samurdhi Officers would select such beneficiaries. Only those beneficiaries who would take up rubber planting will be eligible for receiving other benefits of the Project, namely matching grants, training, and partnership with the private sector led business models. The members of the village rubber development clusters (VRDC) in Moneragala and Ampara and the members of the selected Thurusaviya Societies in Ratnapura will be eligible to use the group rubber processing facilities.

25. Targeting strategy for establishing **group processing centres** would involve three criteria namely: (i) presence of notable poverty incidences, (ii) abundance of rubber smallholders currently processing rubber in sub-standard levels (RSS 4 and 5), and (iii) viable rubber latex producing Thurusaviya societies or Village Rubber Development Clusters to administer sourcing-in, processing and marketing of rubber (Appendix 2 for details). Thus rubber processing centres would be established at Monaragala, Ampara and Rathnapura. Under IFAD funded Smallholder Plantation Entrepreneurship Development Programme has already established 40 GPCs in Monaragala. Harnessing its experience, 40 new GPCs would be established in Monaragala and 4 in Ampara after the completion of SPEnDP GPSs and assessing their viability.

Table 2: Potential Project Beneficiaries

	BENEFICIARIES, ADOPTION RATES AND PHASING							Adoption rates
	PY1	PY2	PY3	PY4	PY5	PY6	Total	86%
Tea mono crop	2 800	6 737	6 945	6 945	0	0	23 427	
<i>Adjusted (adoption rate)</i>	2 352	5 659	5 834	5 834	0	0	19 678	84%
Tea + Pepper	1 400	3 368	3 472	3 472	0	0	11 713	
<i>Adjusted (adoption rate)</i>	1 120	2 695	2 778	2 778	0	0	9 371	80%
Rubber mono crop	228	850	1 128	1 128	0	0	3 333	
<i>Adjusted (adoption rate)</i>	182	680	902	902	0	0	2 667	80%
Rubber & maize intercrop	23	85	113	113	0	0	333	
<i>Adjusted (adoption rate)</i>	18	68	90	90	0	0	267	80%
Rubber & banana intercrop	57	213	282	282	0	0	833	
<i>Adjusted (adoption rate)</i>	57	213	282	282	0	0	833	100%
Rubber & pineapple intercrop	11	43	56	56	0	0	167	
<i>Adjusted (adoption rate)</i>	11	43	56	56	0	0	167	100%
Rubber & cocoa intercrop	32	119	158	158	0	0	467	
<i>Adjusted (adoption rate)</i>	19	71	95	95	0	0	280	60%
Passion fruit business model	0	450	0	0	0	0	450	
<i>Adjusted (adoption rate)</i>	0	347	0	0	0	0	347	77%
Orchid business model	0	2 870	0	0	0	0	2 870	100%
Rubber Group Processing	80	80	400	680	680	0	1 920	100%
			8 473				32 000	

26. Women play an important role in the production of the tea and rubber crops. Women headed and other vulnerable households, in particular, have little capacity to replant tea on old lands, sustain themselves in the interim or invest in new rubber cultivation because of the initial cost of land clearing and preparation. A special strategy, including the involvement of tea societies and rubber societies in selection, would be applied with clear targets for their inclusion, granting them land permits on new lands and offering them supplementary support. Providing matching grants for additional income is one of such support. About 50% of the training, financial services and supplementary livelihood opportunities would be provided to women. Young men and women evinced considerable interest in the production of tea and rubber crops and would be especially targeted as a mechanism for productive youth employment in rural areas.

B. Development objective and impact indicators

27. The **goal** of the Project would be to enable poor rural people to improve their food security, increase their incomes and strengthen their resilience. The specific **development objective** of the Project would be a more profitable, productive and resilient economic activities of tea and rubber smallholders in selected districts.

28. The Project would assist 23,423 poor households in tea replanting and 3,333 poor households in rubber production and 1,920 rubber growers who are already tapping latex in processing. The impact indicators that would be used would be IFAD's two anchor indicators namely (i) improvement in the household asset index, and (ii) reduction in prevalence of child malnutrition. The project log-frame provides information regarding the outcome indicators including RIMS indicators relevant for each outcome and the specific outputs associated with each outcome.

C. Outcomes and Components

29. **Project outcomes:** The Project outcomes would include: (i) 200 revitalized Tea and 100 strengthened Rubber Societies providing a range of services to members including processing, enhanced marketing and effective linkages with financial services; (ii) high yielding tea crops replanted on 5500 hectares and rubber planted on 3000 hectares by smallholders to provide a sustainable source of income and diversified livelihoods; and (iii) strengthened smallholders undertaking sustainable commercial business with the private sector based on Business Plans prepared with the support of the Project.

30. **Project components:** There are three components: (A) Tea Smallholders' Development; (B) Rubber Smallholders' Development; and (C) Inclusive Rural Financing. The Project would also put in place project management arrangements to support the implementation of the first two components.

Component A: Tea smallholder development

31. The purpose of this component is better organized tea smallholders able to more effectively and sustainably produce and market their products. It has three sub-components: (i) Strengthening tea societies in production and marketing; (ii) Market driven production support in tea; and (iii) Income and market diversification for tea smallholders.

A1: Strengthening tea societies in production and marketing subcomponent has two main activities: (a) diagnostic analysis of the capacity of the tea societies; and (b) capacity building.

Tea smallholders are members of Tea Smallholder Development Societies (tea societies) established by TSHDA under Tea Smallholder Development Act No.35 of 1975. To receive any state assistance such as subsidies, advisory services, training, etc. it is required for tea smallholders to be members of tea societies. Tea societies are at various functional levels but mostly as mere mandatory societies. However the societies have the potential to offer a wide range of services to its members if properly mobilised and supported. Strengthening the societies would be essential for sustainability, equity and empowerment of its members. As such the Project offers the two activities for their strengthening.

(a) Diagnostic analysis of the capacity of the tea societies is the first step of the strengthening process. The Project will undertake a series of diagnostic analyses of the societies in the selected Divisional Secretary Divisions (DSD) of the targeted five districts. The Project recruited Community Development Officer, attached to each district office of TSHDA with the assistance of the Tea Inspectors in the district and the Project recruited Animators will select the societies for this purpose. The GN and the Samurdhi Officers of the concerned GND will assist the selection process (Appendix 4 for details). Since the members of these societies would be the potential beneficiaries, selection of the societies would receive due attention in terms of poverty level of its members and agronomic potential for tea replanting. Once selected, service providers or resource persons will visit each selected society and conduct the analysis using a set of strategic indicators (see Appendix 4 for the list of indicators). The target would be about 200 tea societies for the analysis.

(b) A customised capacity building process will commence after the diagnostic analyses on the basis of the status of different societies. The societies are expected to have the capacity in organising smallholders to receive project inputs, training, mobilise internal lending, initiate linkages with Banks for credit, and to initiate business activities including tea green leaf collection. Further the management and business development skills should be improved. The Project would finance the service providers / resource persons to develop training packages to facilitate training. Leadership

development training would be given to women and men with the potential for leadership. Gender sensitization would focus on the importance of empowering women and youth within the societies. Members would be educated on management principles including financial analysis and planning. At least 30% of the participants in capacity building would be women.

The Project would also provide equipment and tools to worthy societies to facilitate cultivation such as machine-driven pruner, plucking shear and marketing equipment such as leaf collecting trays and weighing machines. Most of the existing tea societies do not have a proper asset base as currently they cater only to the bare minimum activities of the members. As the societies are revitalized to make them key smallholder organizations, they would need few pieces of basic office equipment such as tables, plastic chairs for group meetings, cabinets and stationery. The Project would examine the needs of each society prior to providing such support.

A2: Market driven production support in tea subcomponent has three main activities: (a) replanting of low productive tea lands; (b) tea rehabilitation- infilling of replanted tea lands; and (c) nursery and training support.

(a) Replanting of low productive tea lands is one of the major activities to increase land labour productivity of tea. The Project would support replanting 5500 ha of low productive tea lands in the five selected districts. In general, vegetative propagated (VP) tea which is over 20 years old or has not been managed properly gives poor yields. Seedling old tea also yields poorly. Though tea growers obtain some income from such lands, the productivity and incomes continue to decline and is a disincentive for further investment. TSHDA envisages replanting at least 2% of smallholder tea annually, but achieves less than half of its target due to inability of smallholders to pre- invest in the programme while losing income from uprooted tea.

In the identified five districts (Galle, Matara, Ratnapura, Badulla and Kandy) 5500 ha of old tea will be replanted over a period of six (6) years. The replanting target in the 1st project year (PY) would be 675 ha, followed by 1575 ha in 2nd PY and 1625 ha each in 3rd and 4th PY. Due to soil renovation gestation period prior to planting, any lands under grass in the 4th year would be replanted in the 6th project year.

Government assistance for replanting tea is the TSHDA tea replanting programme; a 5-step subsidy of Rs. 500,000 per hectare spread over 3-4 years, which meets depending on the field situation around 25% of the total cost of replanting. The subsidy is paid after undertaking the replanting activities. Smallholders are expected to finance the cost of replanting upfront, and strictly follow the technical parameters recommended by TSHDA in order to qualify for this partial support. This is a financial strain which is unaffordable for most smallholders. The post-paid subsidy is also considerably delayed in many instances due to late field inspections, processing procedures and lack of timely payment by the Government which considerably discourages poor growers from joining the scheme.

The project replanted tea would be eligible for all the existing and future production support of the Government notwithstanding any complementary support given by the Project. Thus inter-alia, they would be entitled to the replanting / planting subsidy which is given for land preparation, soil rehabilitation, planting and crop maintenance), the extension interventions; group extension programmes and land visits, the extension support services; quality planting material and soil testing etc. The Project would ensure that training activities will adequately focus on quality that is demanded by the market.

The Project would additionally provide up-front partial funding for old tea uprooting and land preparation as a Capital Grant amounting to Rs 175,000 per ha to encourage replanting. Rs 25,000 / ha of this would be given just before planting to support purchasing planting material (Appendix 4 for details). The full grant would be proportionately paid based on actual area replanted with the recommendation of tea societies and administered by TSHDA. Additionally, quality planting material, training and advice, and supply of small equipment previously mentioned (A1) will be supported. The Project will facilitate some studies to be carried out to assess the contribution of the IFAD up-front capital grant in encouraging tea smallholders to participate at the government tea replanting subsidy scheme. The results of such studies, if appropriate, would be used to initiate a policy dialogue on reviewing and possibly revising the government subsidy scheme to be more acceptable to the tea smallholders.

(b) Rehabilitation-infilling of replanted tea is necessary for maintaining optimum plant density for both ecological and economic gains. The recommended optimum number of tea bushes per hectare

depending on elevation is 12,500–13,500 for VP tea fields. Smallholders experience high plant mortality due to drought, pest infestation or other plant diseases leading to low productivity from less than optimum plant stand. Thus the Project will support infilling replanted tea to minimise vacancies.

With the experience of the IFAD funded SPEnD programme in the mid country where even one year old replanted fields were supported with infilling, the Project will assist with Rs 300,000 per ha to infill from the first year of replanting if more than 15 percent vacancies were observable. A total of effective 800 ha of any tea land replanted with the Project will be supported from second project year onwards (see Appendix 4 for details). Experience from SPEnDP as well as from the TSHDA supported lands indicates that the average extent of lands with vacancies of any tea land is about 15% of total cultivated lands. The infilling is supported for the whole 5,550 ha of project supported tea lands. At the rate of 15% infilling of 5500 ha, the project needs to infill a total of 800 ha (15% of 5500 ha) which is spread over an extent of 5500 ha.

(c) Support for nurseries and training will facilitate quality replanting. Commercial nurseries for project purpose would be those with the objective of producing plants exclusively for sale. They would have an annual operational capacity of 50,000 to 200,000 plants. The Project would finance training for about 30 such nursery men in five districts to facilitate producing quality planting material. The self-nurseries would be small volume tea nurseries mainly to cater to own plantation needs for replanting or infilling, usually undertaken as a home garden venture but with TSHDA supervision. The Project will also encourage self-nurseries and support training of self-nurserymen. Women and youth would be encouraged to participate in the private commercial and input nursery training programme. In addition the Project will make linkages between the nursery men and the two state banks (Bank of Ceylon and the People's Bank) to get available loan facilities with existing products.

The Project would provide **technical support** to tea smallholders since they often have limited or varying access to specialised knowledge about modern crop management and plantation techniques. Knowledge on shade management, soil conservation, soil acidity levels, soil organic matter and carbon content, micro nutrients, pruning and plucking need to be upgraded. It would facilitate developing of training modules with TRI and assist TSHDA to conduct specialised trainings. The Project would arrange exposure visits such as to TRI and the tea auction in Colombo and visits to plantations practicing eco-restoration and high density plantation techniques, etc. Since women play an important role in the production, care and upkeep of the tea gardens, at least 50% of the trainees of such trainings would be women and youth. The Tea Commissioner's Department will also be involved in providing training particularly in upgrading quality of green tea leaf.

In **upgrading extension service**, the Project would support training the TSHDA staff to enhance their level of technical knowledge, communication, gender sensitization and familiarise them with new cultivation techniques such as eco-restoration, high density plantation, soil fertility and health, the principles of sustainable management such as of Rainforest Alliance and UTZ standards. The Project would also provide extension officers with opportunities for exposure visits. Additionally TSHDA would get special training assistance from collaborating institutions: TRI on in-service knowledge upgrading, Department of Agriculture, Department of Export Agriculture etc. on intercropping. The Business Linkage Coordinator at PMU in MPI and Business Development Officer at tea regional offices would arrange specialized training on need basis. These will be supported through a well-developed business plan with identified markets (see sub-component 3).

A3: Income and market diversification for tea smallholders subcomponent has two objectives: (i) to help tea smallholders diversify their income sources through profitable farming (including intercropping) and non-farming activities responding to market opportunities; and (ii) to strengthen the existing or introducing new marketing channels for green tea leaf marketing through the facilitation of mutually beneficial (win-win) business relationships between tea smallholders and the private sector (i.e. leaf collecting societies, green leaf collectors, tea factories, plantation companies etc). These are achieved through three activities: (a) smallholders' income diversification; (b) market linkages and product diversification; and (c) supporting marketing infrastructure.

(a) Smallholders' income diversification will use extensive experience of SPEnDP and the STARR Project will operate a *Matching Grant Facility* which will provide start-up matching grants as a seed capital to individual tea smallholders willing to start a new income generating activity either in farming (e.g. intercropping tea with pepper or the same tea smallholders establishing cut flowers or orchid houses etc) or in non-farming activities (e.g. concrete pieces for housing, clothing, footwear, backyard poultry, milk etc) always in response to a clear market opportunity identified with the support of project Business Development Officer and the field animators.

Matching grants will be provided on individual basis and just one time during project life span (no repeated grants will be allowed). The grants will be disbursed accordingly on a 70:30 ratio basis, i.e. 70% from project and 30% from the grant beneficiary. The 30% share can be either in cash or in kind. Total grant amount from project will not exceed LKR 70,000 per beneficiary. Following the experience of SPEnDP it is expected that a significant number of start-up grant beneficiaries will subsequently graduate as clients of the financial sector. The Project will help those facilitating linkages with financial institutions and supporting the preparation of required documentation. The Animators with the support of the tea societies will identify the beneficiaries for matching grants. The beneficiaries will be limited to those who are in the project target group that is, those who would undertake tea replanting and members of the tea society that is targeted by the Project. However those members of the targeted tea societies who are reluctant to replant tea but yet wish to access project benefits will be supported by one of the following three ways or a combination of those: (i) capacity building, skill development and training to undertake enterprises; (ii) accessibility to all extension and knowledge transfer processes that would be supported by the Project; and (iii) facilitate establishing linkages with financial institutions that are dealing with the Project in providing financial services for investing in project approved income generating activities. The field animators would introduce such beneficiaries who meet the project eligibility criteria. At least 30% of such beneficiaries should be women.

The amount of the grant will be calculated on the basis of a simple financial analysis of the proposed economic activity carried out by the animator together with the potential beneficiary. The analysis will also check the potential market for the proposed product or service making sure that there is a reasonable expectation about the actual final demand. This is a key lesson learnt from the SPEnDP project where failures to develop solid market linkages have affected the profitability and sustainability of some of the activities supported by matching grants. Whenever possible and viable, collective marketing of those crops will be promoted in order to achieve economies of scale and reach markets beyond the closest village. A Business Plan will be prepared with the support of a service provider to explore opportunities for bulking production in an unique collection point for subsequent transportation and marketing by a private sector buyer. A possible model is the one successfully developed with Cargill for fruits and vegetables in the SPEnDP.

Matching grants proposal will be approved by the project Business Development Officer in the district after a verification of its financial and technical viability. The promotion of collective marketing in selected IGAs will be facilitated by the Animators in consultation with Colombo-based Public Private Partnership Linkages Coordinator. It is expected that about 2,870 viable income generating activities and 10 collective marketing initiatives would be supported with matching grants.

(b) Market linkages and product diversification activity of STARR will also actively help selected Tea Societies, i.e. those with greater level of organization and capacity based on the initial diagnostic and subsequent capacity building, explore opportunities for market diversification and for more formal linkages with the private sector in the tea value chain. Project staff in Colombo and in the field will act as facilitators looking for mutually beneficial (win-win) opportunities between smallholders and tea factories.

During the design mission at least two potential areas of win-win collaboration between tea societies and tea processors have been pre-identified. The **first** stems from improving and maintaining the quality of tea leaves in order to fetch premium price in the market as well as obtaining Government incentive (B60)⁴. This strategy seems potentially promising in a district such as Ratnapura where, in a highly competitive environment (120 tea factories, 280 tea societies), certain tea factories (e.g. New Vithanakande, KDU Group, Cicilian) depend largely on smallholders for raw material (around 80% of leaves processed) and have a long-term reputation for the quality of their tea leaves which they are willing to maintain⁵. This linkage will be further strengthen by training workers of selected tea factories to improve the quality of black tea production. The Tea Commissioner's Department will undertake this training under the coordination of the PMU in the MPI.

The **second** is related to developing new products for market diversification (i.e. tea eco-restoration, tea organic production and more sustainable and resilient tea production) with those private companies (e.g. Bio-Foods) that have already gained a solid position as exporter of these niche products to certain markets (mostly in Europe and North America). From preliminary discussion it is,

⁴ This is the additional money GOSL will pay to kg of green tea when the quality is good. It is Rs 20/kg. Some factories pay this once they get it. Factories have to qualify for this by producing quality black tea.

⁵ The Tea Factory spends approximately LKR 12 million/year to pay a team of extension officers that provides technical advice, on-site inspection to small holders suppliers of the factory.

however, important to acknowledge that it does not potentially seem a mass strategy for Sri Lanka smallholders tea development partly due to the high level of investments and income foregone (due to transition from conventional to organic cultivation) required initially as well and the limited number of private operators linked to equally small size of the end market. Nevertheless the Project has financing to explore the possibility of identifying smallholders with willingness to participate with such private sector and venture into market demanded production such as organic or bio-tea. The business development officer with the guidance of the private sector linkage facilitator will explore such possibilities.

These win-win deals will be formalised in a joint Business Plan and related contract between smallholders and the business partner which will be prepared with the support of a specialised service provider. Whenever possible a cluster approach of tea societies will be promoted in order to achieve economies of scale and minimum volumes required by the private companies. About 40 such Business Plans will be developed. About 25 private sector large scale tea nurseries will also be supported using a business model with high level of profitability and quality planting material. The planting material will be supplied to the project supported tea planting.

The Project contribution to this type of Business Plan will be twofold: (i) a lump-sum allocation to the tea societies to cover the cost of business development advisory services as well as selected market intelligence and marketing activity (e.g. price information systems, participation in fairs, business to business trips) prioritised in the Business Plan; and (ii) extension support to smallholders through the TSHDA district staff. Private companies will also be expected to invest in the Business Plan (e.g. providing specialised extension and advisory services and other welfare support to smallholders, and pre-financing input such as fertiliser) in order to consolidate and ensure the loyalty of their supply chain.

Joint Business Plans and related contracts between tea societies and tea factories will be reviewed by a Technical Review Committee composed of a local Tea Board representative, the project Business Development Officer and the Regional Director of TSHDA in consultation with Colombo-based private sector linkage facilitator. The review of the Business Plans will be based on three major aspects: (i) the track record and commitment (including expected contribution) of the private sector company (tea factory); (ii) the viability of the business proposal; and (iii) the governance and accountability mechanisms established between smallholders and tea factory to make it a truly win-win deal⁶. If a Business Plan is assessed satisfactorily against the three criteria it will be approved. Otherwise it will be sent back for revision to the tea society and the service provider who had worked on it.

In addition, the Project would finance two business plans through service providers to facilitate the two Tea Shakthi factories at Passara and Keppetipola to obtain bank loans to modernise the factories.

(C) Marketing infrastructure will be supported to enhance the business activities of the beneficiaries. The smallholder tea lands are often deep inside village in difficult terrain, affecting the mobility of smallholders in their routine farming activities, such as transport of inputs like fertiliser, infilling plants, and harvested green leaves to a collection centre etc. With a view to facilitating mobility of both inputs and products the Project will finance overhauling strategic section of farm roads. Underdeveloped roads structure will affect the price structure that has been assumed in the design. A total of about US \$ four million would be allocated to improve a total of about 90 km in all five districts under tea. The selection of roads and difficult stretches for improvements will be carefully selected with full participation of the project assisted tea growers or societies using PRA tools. On average one km of road developed should cover at least 30 ha of tea lands that are replanted with STARR. The three-step selection process outline below will ensure transparency and also the expenditure would be audited at each point (see Appendix 4 # 34 for details): The PRA tools will be applied by the district project staff with the full participation of the community through the tea societies. On average one km of road developed should cover at least 30 ha of tea lands that are replanted with STARR. This eligibility criterion will be used and the community would ensure that this coverage will be the outcome

⁶ The review of the BPs would be based on the following criteria: (i) formal buy-in and commitment of the parties involved in the BP evidenced by a formal agreement (e.g. Contract Agreement); (ii) financial viability and sustainability of the proposed business; (iii) number of small producers reached and included in the BP including women and youth; (iv) the estimated increase in volume of produce sold by small producers; (v) win-win features of the proposed business model (i.e. duration, existence of a transparent price setting mechanism, suitable payment terms, risk mitigation measures); (vi) grievance mechanism foreseen to settle disputes among parties; (vii) no transfer of land rights from the farmers to the private company envisaged in the BP; (viii) contribution from the company with its own funds; (ix) evidence of a complementary loan from a financial institution for working capital and/or investment purposes (if needed).

of roads. In addition the roads also will support other social activities such as connecting schools, medical dispensaries etc. The approval process will be one with two steps - the annual plan of road development will receive district level approval by the district coordinating committee, chaired by the Divisional Secretary (Appendix 5 #7) with the eligibility information, and with that approval the Project Steering Committee, Chaired by the Secretary, MPI will finally approve. With the community getting involved at the very early stage of selection, the whole process will have three levels of transparency - community, district and national, thereby minimising the possibility for funds being allocated injudiciously. Using the project monitoring data the expenditure that would be incurred in roads would be audited at the district and national level. In addition to the roads, few strategically selected green tea leaf collection points will also be supported with the same budget of US \$ 4 million. These would be on a pilot basis to test whether the improved collection points will also contribute to increasing prices of green tea leaf. Together with structural improvements of such collection points, the Project will initiate and support the Tea Societies to have a dialogue with the tea factories that are connected with such collection points to develop institutional arrangements to take advantage of the collection points as well as the road structures. The project monitoring system will record the progress of this process as well as the changes in the green tea leaf pricing to assess the benefit of this arrangement. Both expenditure allocation in roads and price improvement due to the collection points will be assessed regularly by the IFAD project supervision missions.

The Project would provide necessary **support to TSHDA regional offices** in each of the five districts to manage the project interventions. These include additional staff, office equipment, mobility, incremental cost of travelling, and DSA for existing and newly recruited staff at the district level. The administrative and financial management arrangements are common to all districts and detailed in Appendix 5 and summarised in Section III below.

32. **Component B: Rubber Smallholders' Development**

The purpose of the component is to enhance rubber production and processing of quality rubber products with advantaged market linkages. This component has three sub-components: (i) Strengthening rubber societies including processing and market sensitivity; (ii) Market driven rubber production support; and (iii) Income and markets diversification for Rubber smallholders.

B 1: Strengthening rubber societies including processing and market sensitivity has two main activities: (a) diagnostic analysis of the capacity of the Thurusaviya societies in Ratnapura and Village Rubber Development Clusters (VRDC) in Moneragala and Ampara; (b) capacity building of the societies.

Unlike with TSHDA where all smallholders are members of tea societies, it is not mandatory for RDD to organize rubber societies or rubber growers to join any society. The experience of SPEnDP in Monaragala is very positive on workability of VRDCs in carrying out Project activities. The effectiveness was mutual; for the Project staff to implement project activities; for grouped farmers to voice their needs, plan cultivation activities and subsequently marketing activities. Thus the STARR Project efforts would aim at: formation and strengthening of new rubber societies as VRDCs in the project implementation divisions of Monaragala and Ampare. All rubber growers under the Project would be mandated to be members of VRDCs. Women would be encouraged to actively take part in society activities and 40% of executive committee would be women. Rubber development programme in Monaragala and Ampara will be administered through newly formed VRDCs.

(a) A diagnostic analysis, as in the case of tea, is the first step of the rubber society strengthening process. Among three districts that have project support for rubber, only Ratnapura has about 100 societies. Many of these societies need strong capacity building interventions. The Project will undertake a series of diagnostic analyses of Thurusaviya societies in Ratnapura district. Since there is no project recruited staff in Ratnapura, Thurusaviya staff will select the societies which are worthwhile having the diagnostic analysis. Once selected, service providers or resource persons who are undertaking the same exercise for tea societies will visit each selected Thurusaviya society and conduct the analysis using a set of strategic indicators. The target would be about 100 societies which are active to some extent for the analysis. In Moneragala, VRDC will also be included in this analysis.

(b) The capacity building process will be customised according to the capacity of the societies. The societies are expected to have the capacity in organising rubber smallholder processors to receive project inputs, training, initiate linkages with Banks for credit, organise rubber processing in group processing centres and to initiate business activities including production and marketing of rubber sheets. Further the management and business development skills should be improved. Responding to the existing level of capacity, training and skill development in these areas would be the focus of the

capacity building process. The same service providers / resources persons in the tea sector would be used to develop the training packages to facilitate training. About 30% of the participants provided with capacity building training would be women. The Rubber Development Officers (RDOs) of RDD and Grama Niladaris (GN) have a broad familiarity of rural farmers who would be the potential rubber growers in new lands of Monaragala and Ampara. They if necessary with the help of Samurdhi Niladaris, would conduct a diagnostic analysis of the identified new rubber growers and grouped them into VRDCs, on line with SPEnDP. Though ideally formation of VRDCs should precede rubber cultivation, considering the short Project period and need to plant rubber on the very first available rainy season, priority would be for earliest establishment of the rubber plantation. VRDCs would be developed simultaneously.

All women headed rubber growing households would be encouraged to become members of these societies and 40% of executive committee would be women. Once sufficiently developed, these societies would provide the forum for engaging with the smallholders, identifying beneficiaries, organizing capacity building support and to provide services which can assist the smallholder in rubber plantation, intercropping and eventually rubber processing and marketing.

B2: Market driven rubber production support has two activities (a) assisting smallholders to plant a total of 3000 ha of rubber in new land in Monaragala and Ampara districts; and (b) extension support and assistance to develop the rubber nursery.

(a) Planting rubber in new land will increase the availability of rubber for processing. The Project would undertake planting of 750 ha of rubber in eight DS Divisions in Monaragala; 150 ha in 1st PY and 200 ha each in 2nd to 4th PYs. Based on considerable experience from SPEnD, 5th and 6th PY are for much needed rehabilitation of the established plantations prior to project termination. New planting extent in Ampara would be 2,250 ha in 5 DS Divisions; 250 ha in 1st PY, 500 ha in 2nd PY and balance in 3rd and 4th PYs. The Project will support by way of land surveying to secure user rights to smallholders for the new lands sourced-in from state departments, production support for the new plantations including government assistance and project assistance and technical support for the rubber growers and extension staff. The RDD, Moneragala has identified land areas to be provided to the beneficiaries under different agencies (see Appendix 4 for details). The MPI and all other stakeholders concerning land releasing issues meet regularly at a steering committee since mid-2015 to review the progress of land releasing process thereby speeding-up land distribution. The Project would finance the process after project start-up and also the land surveying cost. The existing policy and the procedure of releasing lands to land users with 99 years lease and user rights would be used for the Project beneficiaries. Women headed households would be given priority in the selection of households for new rubber plantations. There is no legal barrier in providing ownership rights of these lands to women and therefore 30% of land plots should be given to women or joint ownership.

Government assistance for rubber cultivation is the RDD subsidy assistance of Rs. 150,000/ha to new rubber growers whose plantations comply with RDD standards with respect to plant density, plantation health, and growth achievement etc., staggered over a period of 8 years at predetermined stages of the plantation. The administration of the programme involves several field visits by RDOs to check conformity of the plantation. Subsidy payments are paid several months later after the farmers have undertaken the tasks using their own capital and also it covers only a part of the cost of cultivation of rubber (see Appendix 4 for details). Thus the Project will fund land readiness activities amounting to Rs. 30000/ha, with an up-front capital grant with the help of the rubber societies (VRDCs to be used appropriate). The full value of nursery plants amounting to Rs. 34000/ha and fertilizer requirement for the first year amounting to Rs. 5000/ha and second year amounting to Rs. 7000/ha would be granted totalling the assistance to Rs 76,000 per ha. These supports will be channelled through the participating rubber societies as capital grants (see Appendix 4 for details). The Project also provides about US \$ 500,000 for surveying the land, both farmers' plots and contiguous areas released by the Forest Department to facilitate land allocation with firm ownership to the farmers.

(b) Extension support and assistance to develop the rubber nursery will ensure productivity of rubber. The Project would support an effective and upgraded extension service and an extensive training programme for smallholders and officers. All training and technical advice will be undertaken by the RDD and RRISL, inclusive of rubber cultivation, latex collection and processing as detailed in a subsection below. In addition to RRI staff involvement in training, all animators would also be trained on raw rubber processing to advice to group processing centres when required. The business linkage coordinator at PMU and Business Development Officer at RDA office would arrange specialized training on need arising basis.

Advisory support to rubber smallholders and upgrading of extension service: Timely extension advisory service is essential for rubber smallholders as for most of them rubber cultivation and associated management issues are unfamiliar. Both RDD and RRSL would undertake an effective extension service targeted at critical stages of the crop, intensively in the first 2-3 years; the need of which was seriously experienced by the SPEnDP. The field level animators in collaboration with M&E coordinator would develop a workable arrangement for rubber smallholders to voice their advisory grievances to RDD or to RRISL, and the relevant agencies would respond swiftly. The operational specifics of the extension service including the advisory focus at any given time and method of approach would be monitored by the M&E coordinator of the PMU; Project Director at PMU would dialogue the observations with RDD and RRISL and if necessitates at the steering committee meetings. Additionally and if appropriate, RRISL would decide to undertake the group advisory approach, termed *Vihidum Sathkara (VS - disperse service)* that was introduced to few VRDCs of SPEnDP, or any other suitable form of advisory service. The Project would also upgrade the knowledge base and skill capacity of extension officers of RDD by supporting their professional exposure and training on modern rubber cultivation practices and inter-cropping techniques, eco-restoration, and principles of sustainable management such as those promoted by the Rainforest Alliance and UTZ standards. The PMU in consultation with RDD would organise such professional trainings with other relevant institutions; RRISL, DOA, DEA, DAPH, private sector companies and plantations. During PY1, the PMU would draw up a RDD staff knowledge enhancement plan with confirmed training schedules for PY2 and PY3 and would continue the process till end of Project (see Appendix 4 for details).

Training support would be provided for rubber smallholders, rubber processors and nursery growers organised through RDD and RRISL. The training module and course preparation would be done by RRISL and would include training on land preparation, soil conservation, fertilizer application, planting techniques, latex tapping, and latex processing. These will be included into the capacity building process of societies which will be undertaken as one of the initial stages so that farmer-to-farmer learning would be initiated and supported. The Project would organize exposure visits for smallholder rubber growers to well-developed rubber plantations, RRI and rubber processing facilities during the second year of planting. Up to 50% of women would participate in the training programme. In addition to RRISL staff involvement in training, all animators would be also trained during the 1st year on some critical activities of rubber production such as fertiliser application, pest and disease identification, raw rubber processing to advice to group processing centres when required. The incremental cost of the RRISL will be paid by the Project. The business linkage coordinator at PMU and Business Development Officer at RDA office would arrange specialized training on need arising basis. Further, under the Rubber Master Plan of Sri Lanka there is an attempt to establish a **Rubber Industry Technology Consortium (RITC)**. The objective of RITC is to promote innovations through enhancing technological capabilities at industry level by sharing available resources among the public and private sectors. According to the Master Plan this would start its initial implementation in the 1st quarter of 2016. The project beneficiaries through the societies could be linked up with some of the activities that RITC will initiate to improve the processing technologies and quality.

Support for a **rubber nursery** is a dearth need to have rubber nursery plants in sufficient quantity and on time (see Appendix 4 for details). Thus the Project would provide partial assistance to upgrade and manage the rubber nursery of RDD at Padiyathalawa in Ampara which is currently in operation. This nursery would provide plants for rubber cultivation in Moneragala and Ampara districts. Nursery operation and plant quality maintenance is under strict supervision of RRISL.

B 3: Income and markets diversification for rubber smallholders subcomponent has two objectives: (i) to help rubber smallholders diversify their income sources through profitable farming (including intercropping) and non-farming activities responding to market opportunities; and (ii) to strengthen the existing or introducing new marketing channels for either latex (if competitive) or processed sheet rubber through the facilitation of mutually beneficial business relationships between rubber smallholders and the private sector (i.e. and rubber collectors and traders or rubber processing and/or manufacturing companies). These are achieved through three main activities (a) smallholder income diversification; (b) market linkages and product diversification; and (c) marketing infrastructure.

(a) Smallholders income diversification will be based on SPEnDP experience. The STARR Project will operate a *Matching Grant Facility* which will provide start-up matching grants as a seed capital to individual rubber smallholders in the project target group who are willing to start a new income generating activity either in farming (e.g. intercropping rubber with maize, cocoa, banana and

pineapple) or in non-farming activities (e.g. concrete pieces for housing, clothing, footwear, backyard poultry, milk) always in response to a clear market opportunity identified with the support of project Business Development Officer and the field animators.

Matching grants will be provided on individual basis and just one time during project life span (no repeated grants will be allowed). The grants will be disbursed according to a 70:30 basis: 70% from Project and 30% from the grant beneficiary. Total grant amount from Project will not exceed LKR 70,000 per beneficiary. Following the experience of SPEnDP it is expected that a significant number of start-up grant beneficiaries will subsequently graduate as clients of the financial sector. Project will help them facilitating linkages with financial institutions and supporting the preparation of required documentation. The Animators with the support of the Rubber Societies will identify the beneficiaries for matching grants. The beneficiaries will be limited to those who are in the project target group.

The amount of the grant will be calculated on the basis of a simple financial analysis of the proposed economic activity carried out by the animator together with the potential beneficiary. The analysis will also check the potential market for the proposed product or service making sure that there is a reasonable expectation about the actual final demand. This is a key lesson learnt from the SPEnDP project where failures to develop solid market linkages have affected the profitability and sustainability of some of the activities supported by matching grants.

Whenever possible and viable collective marketing of those crops will be promoted in order to achieve economies of scale and reach markets beyond the closest village. A Business Plan will be prepared with the support of a service provider to explore opportunities for bulking production in an unique collection point for subsequent transportation and marketing by a private sector buyer. A possible model is the one successfully developed with Cargill for fruits and vegetables in the SPEnDP project.

Matching grants proposal will be approved by the project Business Development Officer in the district in consultation with Colombo-based private sector linkage facilitator. It is expected that about 450 viable income generating activities and 10 collective marketing initiatives would be supported with matching grants.

(b) Market linkages and product diversification. STARR through animators will also actively help selected Rubber Societies, i.e. those with greater level of organization and capacity based on the initial diagnostic and subsequent capacity building as well as the appropriate legal status, explore opportunities for product and market diversification and for more formal linkages with the private sector in the rubber value chain. Project staff in Colombo and in the field will act as facilitators looking for mutually beneficial (win-win) opportunities between smallholders and private rubber processing and manufacturing companies (e.g. CEAT, Lord Star, Elastomeric) as well as rubber traders, brokers and exporters.

During the design mission at least three business development strategies for Rubber Societies have been pre-identified. They are as follows: (i) improving locally-produced rubber in order to allow smallholders to retain a larger share of margins by producing better quality rubber sheets (RSS 1,2) that fetch a significant premium price in the market; (ii) expanding volumes of rubber produced by smallholders hence enhancing their bargaining power in the negotiation with the buyers; and (iii) diversifying on non-traditional types of rubber products to explore new marketing channels. The Project would encourage and provide the financial assistance to acquire technical know-how and required resources to diversify production to non-conventional types of sheet rubber such as air Dried Sheet rubber (ADS) and Easy Process Rubber (EPR) sheet after a careful assessment by the project Business Development Officer together with technical experts.

About 25 such Business Plans will be developed involving approximately 60 Rubber Societies (48 of which with a rubber group processing centres (RPC)). Business Plans and related contracts between Rubber Societies and the private sector will be reviewed by a Technical Review Committee composed of the project Business Development Officer, the local representative of the Rubber Societies and the Regional Director of RDD in consultation with Colombo-based private sector linkage facilitator. The review of the Business Plans will be based on three major aspects: (i) the track record and commitment (including expected contribution) of the private sector company; (ii) the viability of the business proposal, and (iii) the governance and accountability mechanisms established between smallholders and the company to make it a truly win-win deal⁷. If a Business Plans is assessed

⁷The review of the BPs would be based on the following criteria: (i) formal buy-in and commitment of the parties involved in the BP evidenced by a formal agreement (e.g. Contract Agreement); (ii) financial viability and sustainability of the proposed business; (iii) number of small producers reached and included in the BP including women and youth; (iv) the estimated

satisfactorily against the three criteria it will be approved. Otherwise it will be sent back for revision to the Rubber Society and the service provider who had worked on it.

In addition to co-financing the construction of the RPC, the Project will provide a lump-sum allocation to the Rubber Society involved in that RPC to cover the cost of business development advisory services as well as selected market intelligence and marketing activity (e.g. price information systems, participation in fairs, business to business trips) prioritised in the Business Plan. Depending on the nature of the business relationship, rubber purchasing private companies will also be expected to invest (e.g. providing specialised extension and advisory services and other welfare support to smallholders) in order to consolidate and ensure the loyalty of their supply chain.

As a business activity, STARR will support **rubber group processing centres**. STARR will build on the SPEnDP experience in supporting the construction of village-based group Rubber Processing Centers (RPCs). The Project will wait for a comprehensive analysis of the results and lessons learnt of SPEnDP-supported RPCs in the first two years before starting the construction of new RPCs. The Project will also finance a demand feasibility study of latex production and RSS sheet marketing before establishing rubber processing centres (see Appendix 4 for details).

The Project is expected to establish 48 RPCs (40 in Moneragala, 4 in Ratnapura and 4 more in Ampara) with daily processing capacity of 250 kg each at a cost of LKR 3 million on 80:20 cost sharing basis from the Project and rubber societies (see Appendix 4 for details in selection). Eight RPCs will be designed with product diversifying facilities to manufacture non-traditional type of sheet rubber such as Air dried sheet on demand. RRISL will provide all technical details and also the private sector would be invited to demonstrate quality requirement to which RRISL can appropriately respond.

(C) Marketing infrastructure will be supported to enhance the business activities of the beneficiaries. The new rubber lands are inside villages and about 2000 ha are in forest areas in difficult terrain, affecting the mobility of smallholders for transporting inputs like fertiliser, rubber plants, and harvested latex to processing centres etc. With a view to facilitating mobility of both inputs and products the Project will finance overhauling strategic section of farm roads. A total of about US \$ two million would be allocated to improve a total of about 80 km in Ampara mainly and also in Moneragala. The selection of roads and difficult stretches for improvements will be carefully selected with full participation of the project assisted rubber growers or societies using PRA tools. On average one km of road developed should cover at least 40 ha of new rubber lands that are planted with STARR. The same governance structure that was proposed for tea will be applied for the selection of roads in rubber areas too.

The Project will provide necessary **support to Rubber District offices** in Moneragala and Ampara districts to manage the project interventions. These include additional staff, office equipment, mobility, incremental cost of travelling, and DSA for existing and newly recruited staff at the district level. The Project also will contribute 50% of the rent of the Ampara Project office that will be established to manage project activities. The administrative and financial management arrangements are common to all districts and detailed in Appendix 5 and summarised in Section III below.

33. **Component C: Inclusive Rural Finance**

The purpose of the component is to facilitate access of targeted smallholders to available financing for production, harvesting and marketing of green tea leaf and to a lesser extent also for rubber products. The component has two sub-components: (i) facilitating access to financial services; and (ii) supporting implementation arrangements.

C1: Facilitating access to loan financing from the banking system. The two partner financial institutions (PFIs), the Bank of Ceylon (BoC) and the People's Bank (PB) were selected in view of their dense branch presence in rural areas and their interest and availability of specific loan types that are accessible in principle to tea and rubber smallholders, but with no adequate lending performance in place at present to service the requirements of this sector. STARR will take advantage of already existing facilities for tea (BoC and PB) and rubber processing (BoC) that are offered by the banks, but

increase in volume of produce sold by small producers; (iv) win-win features of the proposed business model (i.e. duration, existence of a transparent price setting mechanism, suitable payment terms, risk mitigation measures; (v) grievance mechanism foreseen to settle disputes among parties; (vi) no transfer of land rights from the farmers to the private company envisaged in the BP; (vii) contribution from the company with its own funds; (viii) evidence of a complementary loan from a financial institution for working capital and/or investment purposes (if needed).

with scope for wider on-lending reach and more disbursement using the benefits of a project context and staff, and promotional facilities offered at the divisional secretariat level.

The main reasons cited by both bank branch level staff for low performance include (i) not adequately promoted and few potential clients are aware of them; (ii) special schemes are not provided with lending targets at branch and district level, bank branch performance assessments are not affected by low disbursements and recoveries; (iii) offered at promotional and low rates of interest attracting special parties and there is apprehension that these schemes will result in problems for the banking sector; (iv) provided in isolation and without a supervisory or project context, and; (v) Branch level staff do not have the prerequisite lending and client handling skills.

With a view to improve the performance the Project would (i) offer information and promotional activities through specific credit linkage activities; (ii) operate with a target driven approach to lending operations, with precise district and divisions wise lending targets. These will guide the work of the branches and will be reviewed regularly; (iii) apply interest rate levels as currently applied by the two commercial banks as a result of their own interest rate setting for their loan types financed out of their own financial resources; (iv) embed the bank loan financing in a project context with supporting linkages, awareness and production level activities. This project umbrella itself has shown to work effectively as a risk reducing measure in smallholder financing.

As for credit provisions from the Banks' own resources, tea smallholder' credit requirements would comprise replanting, infilling and intercropping on existing plots of up to 1 ha. Projections are based on a maximum loan amount of Rs. 150,000 and an average transaction size of Rs 100,000. The loans for rubber would finance new plantings of small rubber plots. In the case of one district, rubber cultivation would be introduced new in the district, in other districts, the focus would be on financing new plantings of existing smallholders. The client wise loan requirements are calculated as an average of expected highly fluctuating borrowing requirements. The projections were made on the assumption of an average loan size of Rs 100,000 as well. Projected lending requirements to society-owned rubber processing units were calculated with a total investment volume of Rs 3,000,000 and an additional initial working capital provision of Rs 300,000. The project will provide 75% of the initial costs of this as seed capital, so the bank loan finances only the balance 25 per cent of the total Rs 3.3 million investment. For the 48 units to be envisaged for financing in three different districts, the loan is assumed to have tenors between two and six years. Calculations were based on an average recovery period of 4 years (net of grace periods if any). In the case of the Ampara district as a non-conventional location for rubber planting, the processing units would become operational only at the tail end of the Project when a sufficient quantity of latex supply can be ensured to run these units cost covering from the beginning.

Lending terms and conditions for tea and rubber smallholders. The People's Bank offers two lending facilities of interest to the STARR Project. Both are financed out of the bank's own resources. First, the People Fast is a flexible small loan type that is used a lot in branches for flexible small lending requirements. This loan type is offered with 10.5 per cent interest rate, a minimum loan size of Rs 50,000 and usually runs for 3 to 5 years. No prior account business is required making this suited for new and walk-in clients. The bank uses this loan type as an entry level loan to win new client segments in the small and retail scale of the market. Second, the Loan for Small Tea Factories is geared towards financing investment requirements of small private and publicly owned tea factories.

The Bank of Ceylon offers a special loan scheme to tea smallholders organized in these government supported societies. The scheme operates with initial lending amounts starting from LKRS 50,000 and runs already since September 2014. The scheme operates with monthly repayments of individual borrowers, the interest rate as of end June 2015 stood at 8 per cent, down from an initial 16 per cent at the launch of this product (see Appendix 4 for details). A scheme for tea smallholders works with similar terms and conditions and in cooperation with the Tea Smallholder Development Authority. Tea smallholder loans of BoC are not provided through societies but are transacted directly with individuals. Tea societies are not involved. District level tea inspectors propose loan applicants to the banks and are available for technical review and back up of the bank. This scheme in particular would benefit greatly from the STARR project collaboration since implementation is currently lacking, given adequate incentive structures for BoC staff and many other responsibilities of tea inspectors. The BoC is also about to launch another scheme that would be well suited to finance the society owned rubber processing units under STARR: the Perennial Crop Development Scheme. Loans up to Rs 25 mn for investments into processing facilities and factory rehabilitation for tea and rubber can be financed through this product. The interest rate is set by the bank at 8 per cent. The loan tenor (including grace

periods of up to 5 years) can extend up to 10 years for larger scale investments in processing factories.

C 2: Supporting implementation arrangements will provide IFAD loan resources to (a) facilitate credit linkages and (b) conduct district credit committees.

In **facilitating credit linkage** there would be two areas of acceleration. First, the activities of the STARR facilitators in the districts would comprise sensitization of borrowers. Their close coordination with the two concerned line agencies will ensure that the role in particular of the TSHDA and its inspectors in borrower identification and technical back up of loan requests will be properly carried out. There will also be a separate pool of credit linkage and community mobilization specialists that would be recruited locally. These service providers would organize information meetings for potential loan applicants and ensure that productive and sensitization activities of the Project are complemented with the adequate information on existing facilities that the two state banks offer to provide financial support to the STARR smallholders. This would focus on different credit facilities currently available from BoC and PB, but would not restrict to this. Information on savings and current account facilities and on services for money transfer and remittance services could also be provided through this information and sensitization channel.

In **conducting district credit committees** an integral element of the component activities are the constitution and active conduct of meetings of all concerned stakeholders of component activities. This will ensure that the target driven approach of the Project to lending of tea and rubber facilities of smallholders will be put in practice and continue to be pursued by concerned branch and line agency staff, given the wide range of other activities they are engaged in. The committee would be headed by the district level MPI representative, and consist of branch level staff of the two partner banks, the two line agencies for tea and rubber development and STARR district level project staff to coordinate these meetings. STARR facilitators and the service providers to carry out credit linkage activities should receive copies of the minutes and signed minutes of these meetings. These minutes should consist of a section on issues and constraints and jointly agreed follow up action (with deadlines for action). The subsequent meeting should then assess progress and maintain a close focus on the lending targets agreed under STARR.

D. Lessons learned and adherence to IFAD policies

34. IFAD has financed a total of 16 projects in Sri Lanka since 1978, with loan commitments of USD 238.90 million and a total value of about USD 400 million. Currently, 3 projects are on-going. IFAD's project approaches have evolved over time: those in the 1980s followed mainly the integrated rural development project approach; the projects in the 1990s gradually adopted a "collaborative" approach involving NGOs, community organizations and the private sector in project planning and implementation; and lately since early-2000s with the emerging commercialization of agriculture, project designs have adopted increasingly the value chain approach. Three geographic zones have been the focus of IFAD project support – the dry zone, smallholder plantation areas, and the coastal districts affected by the 2004 tsunami. The most recent project is located in the Northern Province, contributing directly to post-conflict reconstruction efforts. Altogether, IFAD-financed projects in Sri Lanka have benefitted over 2.2 million poor people.

35. Improved food security has been reported by all the completed projects. In the dry zone, crop productivity was improved due to changed practices introduced through IFAD project interventions. The yield increase of seed potato averaged 30%. Project-supported small scale irrigation schemes improved water availability for paddy production, leading to a 50% increase in the cropping intensity in the Maha season of 2010-2011 and 410 per cent in the Yala season of 2011. About 20% of the project-supported coastal households reported an improvement in food security, as compared to 13% of the non-beneficiary households. Some of them were linked up with private sector for marketing their products (coir products, processed fish etc). The SPEnDP, would complete in 2017, reports that more than 9,000 households had been assisted in planting rubber on 5,000 hectares of land and would provide a reliable and sustainable source of monthly income for smallholders. Some of the latex from this rubber are processed in group processing centers funded by SPEnDP and managed by the Village Rubber Development Clusters (VRDC). Pending the production of the newly planted tea and rubber plantations, 20% of the project beneficiaries had undertaken other farming and livestock rearing activities such as mushroom cultivation, intercropping rubber with other crops and dairy farming. This had led to increase of incomes from 20% to 50%. The tea replanting in the mid-country under SPEnDP has superseded the target and replanted about 200 ha of

unproductive tea. The M&E system of SPEnDP which has a field data collection system using field animators with standard formats, a data base managed at the sub-programme office, and a reporting system. The system while still evolving regularly captures outcome information including both tea and rubber yields of its beneficiaries⁸. The yield increase of these in the 1st two years of yield cycle is about three times of the yield prior to replanting. About 20% of the lands have pepper as an intercrop, establish with SPEnDP assistance. An impact assessment study of SPEnDP tea and rubber growers indicated the following results (Appendix 3 for details): (i) the green tea leaf yield of the SPEnD farmers varied from 4,446 (3rd year after replanting) to 18,667 kg/ha/year (6th year after replanting), and the economic analysis of SATRR Project used a 90% of this yield; (ii) average dry rubber yield of tapping rubber extents of SPEnDP varied from 2150 with a variation from 1980 to 2250 kg/ha/year in the 8th year of rubber.

36. An assessment of the impact of IFAD projects reveals that these projects have contributed to increasing the incomes of beneficiary households. In the dry zone, the support by IFAD for seed production led to increased farmer income by more than two-fold. The income of women participants in the loan scheme increased by 32% for agro-based enterprises and 47% for trading. In smallholder plantation areas, the use of water storage tanks and protective nettings improved vegetable productivity, resulting in an estimated 40% increase in beneficiaries' gross income. The monthly mean household income of the coastal project beneficiary households averaged 15% higher than that of the non-beneficiary households

37. The private sector linkages were observed in recent IFAD projects. Matale REAP project had initiated few such linkages for seen onion production and sale, seed paddy production, clay and confectionary production at cottage level and sale, and shoe making. These enterprises are still operational but with varying degree of private sector participation. The contribution of the private sector for the investment had been negligible. The SPEnDP progressed further in creating private sector linkages with forward sale agreement for maize with Prima Company and passion fruit with Cargills. Side selling of both products affected the continuity of the partnership. Supply of vegetable by the Moneragala farmers to a collecting centre established by IFAD Dry Zone project and managed by Cargills is an example for a continuous business linkage that is in operation. National Agribusiness Development Programme (NADeP), would complete in 2016, has advanced design to initiate supply chain business models with the participation between the IFAD target group of farmers and the agribusiness companies or community based organizations which are willing to invest in commercial agriculture. About six such business models have already been in operation with NADeP funds being provided as farmers' equity capital to establish and operate such business. There are legal agreements between the producers and the agribusiness companies which stipulate the details about the business plans and the revenue sharing mechanisms etc. The legal provisions and fund management arrangements of NADeP indicate that they need high capacity of management which in certain cases beyond the reach of IFAD target group of producers. The most recent experience of private sector linkages emanates from Iranamadu Irrigation Development Project (IIDP) in Kilinochchi, Northern Province, would complete in 2017. Prima, Hayleys and Cargills have indicated their strong willingness to create supply chain linkages with the IIDP farmers to source in maize, gurkin, and passion fruit and daily milk. The weakness observed in the private sector involvement in IFAD projects are (i) side selling; (ii) irregular supply; (iii) poor and inconsistent quality; (iv) unwillingness of the private sector to contribute to farm investment and also absorb the risk of crop losses etc.

38. Rural empowerment represents an important impact of IFAD project interventions in Sri Lanka. Women's involvement in project activities has been in the range of 40% to 60%. However, it is not always highlighted in the monitoring and evaluation reports. Women are strongly represented in leadership roles in crop societies – 43% of presidents, 64% of secretaries and 54% of treasurers were women. The majority of loan beneficiaries of IFAD financed projects are also women (60-100%). The women groups in the coastal project districts have proved to be instrumental in further improving the social position of women. The rural empowerment process through IFAD projects has been well demonstrated through the roles and responsibilities that were delivered by the VRDCs in Moneragala and EGs in the mid country project areas of SPEnDP. These rural institutions have helped SPEnDP to deliver inputs during the initial years and later on are functioning as micro-financiers using their saved funds. Both activities have contributed to enhance the performance SPEnDP.

⁸ The IFAD Supervision and implementation support mission of May 2015 reported about the SPEnDP M&E system and the outcome assessment of tea and rubber production. The yield data presented in this report came from the outcome assessment of SPEnDP which has used a sample of about 2% of the beneficiaries of tea and rubber. It was however noted that no statistical verification of means were done and thus the mission has recommended to do so with a representative sample.

Based on IFAD's operational experience in Sri Lanka so far, a number of key lessons can be drawn: (i) application of participatory approaches in design and implementation is essential for empowerment and poverty reduction; (ii) proper identification of the target areas during design is key to ensuring poverty targeting, (iii) gender targeting requires the establishment of disaggregated gender targets and ensuring gender mainstreaming in all project components; (iv) rural grassroots institutions are often strong in common property development and management, supporting effective input delivery, but are weak in market-based commercial enterprises; (v) market based and value chain interventions are heavily dependent on the participation of individuals with entrepreneurial ability and with the capital to invest in small enterprises; (vi) project management, monitoring and evaluation, and financial management have been common and recurrent issues, and should be a key aspect of attention during design and implementation.

39. The proposed Project would also build on some of the key lessons learnt from SPEnDP which include the following; (i) importance of the role of the tea and rubber societies and the need to strengthen them for organizing smallholders, achieving economies of scale, enhancing bargaining power; and the input delivery of SATRR; (ii) the need to identify specific targets for women and poor households to highlight their inclusion; (iii) the smallholders cannot access the large volume of loan products available with banks because of collateral and surety requirements; (iv) term structures for loans should be lengthened in order to facilitate the financing of re-planting and related activities with a gestation period that exceeds short term lending; (v) the state-owned banks do not necessarily need a line of credit for providing financial services to smallholders but a mechanism which can reduce their risk of lending; (vi) for enhanced sustainability the partnership with the private sector should build on serving the mutual interests of smallholders and businesses; (vii) attracting the private sector requires the production of a minimum volume of produce with required quality; (viii) for enhanced sustainability the partnership with the private sector should build on serving the mutual interests of smallholders and businesses; (ix) working back from the market helps to understand market requirements and build buy-back and contract farming arrangements especially for products with a niche market; (x) using separate project management structure and modality creates friction with line agency staff, and does not lend itself to internalizing the lessons learnt during implementation; (xi) using Government line agencies builds much more ownership and sustainability for project activities and enhances Government capacity; and (xii) there is strong willingness of the private sector to create partnerships with small producers if there is sustainable supply of products with required quality.

III. Project implementation

A. Approach

40. The Project would be implemented over a six year period. It would adhere to the principles of demand driven participatory development in which the smallholders would be the key decision-makers regarding their participation in project activities. Given that the Project is focused on the tea and rubber sectors, it would adopt a value chain approach in identifying the relevant activities from production to processing and marketing. In the selection of sub-components and the activities, the design takes cognisance of some critical constraints along the value chain and the key stakeholders involved in the process. This involves the participation of a range of private sector players who would be involved in the Project.

41. The overall implementation approach of the Project would be based on several factors which takes into account (i) the fact that a large number of smallholders are the predominant producers of tea and rubber; (ii) the private sector is keen to enhance the production in the tea and rubber sector to meet the growing demand as well as adhere to the principles of sustainable and responsible farming; (iii) the inability of the formal banking sector to effectively disburse the range of savings and loan products due to their loan processing procedures and risk aversion to rural lending; (iv) the need to strengthen the capacity of existing Government extension staff; (v) the need for putting in place an implementation strategy which is sustainable and does not lead to friction with existing line agency staff; and (vi) the presence of a cadre of staff at the village level whose capacity is underutilised and can be effectively used to implement project activities.

42. The key principles adopted in designing the overall approach of the Project have been reiterated below:

- (a) *Strengthening the mechanisms for participation of smallholders*: The smallholder tea and rubber producers face several constraints in accessing technical, financial and marketing

services due to the fragmented and dispersed nature of production by a large number of smallholders. To address this constraint the Project would begin by strengthening and organizing Tea and Rubber societies through the 1st sub-component. The strengthening of the institutions of the smallholders namely the Tea and Rubber Societies would provide them a platform for participation and form a fundamental lynch pin to launch many of the project activities in partnership with other players. This mechanism would assist in reducing the transaction cost for linking the smallholders with the private and the public sectors for input supply, extension services and collective processing and marketing. This mechanism would also be used to strengthen the capacity of smallholder institutions to serve as a surety for its members to assess upfront capital support from the public sector, business linkages with the private sector and loans from the formal financial institutions.

- (b) *Building on institutional strengths of participating partners:* The Project would adopt an approach in implementation which would ensure that all participating organizations undertake tasks which are within their core area of competence. The overall project responsibility would be with TSHDA and RDD, the two main implementing organizations for tea and rubber smallholders. A specialised service provider or resource persons would organize and strengthen the Tea and Rubber Societies with close participation of the smallholders. Community Development Officer attached to each district will coordinate and lead these activities. TRI and RRI would provide the technical expertise required for the production of tea and rubber. The private sector would be the primary agency responsible for supplying plant materials, fertiliser, business development, marketing and processing of the tea and rubber. The private sector involvement is encouraged to give guidance for the production of quality produce and the requirements for production for niche markets.
- (c) The Project would adopt a very proactive approach for *public-private partnership* building through the third sub-component of both components. The project strategy would be premised on the following principles; (i) the private sector has a business interest in participating with smallholders, as there were few such cases in the tea sector, and mutually beneficial business opportunities would be capitalised upon; (ii) the private sector can be an important partner in helping smallholders diversify their produce and reduce their risks by offering contract farming and buy-back arrangements; and (iii) the private sector and the smallholder have a long-term interest in the sustainable development of natural resources and environmentally sensitive agriculture. The Project would capitalise upon these mutual interests by actively engaging with the private sector in all these aspects. The societies would also be offered an opportunity to learn about sustainable resource management practices through greater awareness of organic production, Rainforest Alliance principles, eco-restoration and alternate methods of enhancing yields. The private sector would arrange these training opportunities.
- (d) The Project would adopt an *innovative and sustainable approach in the provision of financial services* by partnering with two state-owned banks - BOC and the people's Bank. The Project would not provide a line of credit but would unlock the available range of loan products that are available with the state-owned banks through: (i) making smallholders aware of these products; (ii) organize smallholders into groups to avail of the several group loan products available; and (iii) conduct workshops and district monitoring meeting to establish credit linkages between tea and rubber growers, and banks. About 50% of the loans would be given to women.
- (e) The Project would recognise the *technical overlap and up-scaling* that it has with the SPEnDP in the rubber development in the Moneragala district, which is considered as complementary for the beneficiaries of SPEnDP. The technical overlap is the following: about 1200 ha of the SPEnDP supported rubber is coming to latex production in 2015-2016 onwards and this extent will be double by about 2018-2019. Since Moneragala is a non-traditional rubber growing area, there is a dearth of technically sound processing

facilities of rubber sheets. The current processing practice of many of the existing rubber smallholdings is home-based smoking after milling of coagulated latex with a milling machine owned by some growers. Coagulation, milling and smoking practices are sub-standard, resulted in producing 90% or in some cases 100% RSS 4 or 5 quality rubber, which fetches about Rs. 200 - 220 / kg of dry rubber. The GPC that are supported by STARR, 40 in numbers in Moneragala will help processing of some of the "SPEnDP rubber" latex with a quality of at least 80% RSS1 with marketing linkages. The group processing centres would be managed by the Village Rubber Development Clusters. As such this would have a demonstrating effort for those who are producing sub-standard dry rubber to take effort to improve quality.

B. Organizational framework

43. **Project management model** is based on (i) utilising the considerable public sector workforce and extension staff that exists at the district and DSD level, (ii) the need for long-term sustainability of the proposed arrangements, (iii) strengthening the capacity of community institutions and ensuring that the activities undertaken as part of the Project build Government capacity, and (iv) knowledge management and influence the manner in which Government organizes its interaction with smallholders in the tea and rubber sectors. The model also intends to take the advantage of the existing financial institutions and the private sector. A Project Management Unit (PMU) would be established at MPI.

44. The **Lead Project agency**: The overall lead agency for the Project would be the Ministry of Plantation Industry (MPI). The MPI would have in Colombo (i) Additional Secretary (Development), assigned among other duties, to supervise the overall implementation of the Project, who would liaise with the PMU on implementation matters and with NPD, ERD and IFAD on policy matters; (ii) a national steering committee under Secretary MPI and represented by all stakeholder institutions to meet periodically to guide the implementation and steer the Project. Specifically, the role of the NSC would be to provide overall policy guidance and clearing implementation obstacles, approve the annual work plans and budgets and ensure that Project performance is within the legal and technical framework agreed between the Government and IFAD. Initially, and as long as it is necessary, the NSC would meet monthly to launch and steer the Project in its critical early phase, and at least once in three months subsequently. The heads of the following institutions among others nominated by the Secretary, would be members of the NSC; TSHDA, RDD, TRI, RRI, Department of Land Commissioner, and Department of Forestry. The participating banks, agencies involved with intercropping and micro enterprises such as the DEA, DOA, DAPH, would be invited to attend the meeting as and when required. The Project Manager of PMU would act as the Secretary of NSC; responsible for dissemination of decisions and follow-up action.

45. **Project Implementers**: MPI's main constituents, the TSHDA and the RDD would be the project implementers. The Project management mechanism will extensively utilize existing public sector administrative and extension staff as well as the hierarchy within TSHDA and RDD for field level implementation. For specialised support, coordinators and service providers will be competitively recruited from outside (detailed below). The TRI and RRISL would play a major role on regulatory, technical advice and training; collaborating agencies such as DOA, DEA on supplementary programmes such as intercropping; Banks on credit support. Private sector is expected to link on advisory and marketing aspects. The Forest Department, Mahaweli Authority and Divisional Secretariat would provide land permits for the rubber producers.

46. **Project Management Unit**: A PMU would be constituted at MPI as an apex body in overall project management having a dedicated staff, headed by a Project Manager. The Project Manager would be a well experienced senior officer released from state service on available options for such releases, assisted by a government accountant, procurement coordinator initially for 3 years and office support staff recruited likewise from state service.

47. The PMU would also competitively engage a few professionals for specialised subjects such as; an M&E coordinator for developing and executing a monitoring and evaluation system; a training coordinator to liaise with all relevant technical institutions in modelling needed trainings and executing them in the field and; a Public Private Partnership Linkages Coordinator initially on a 3-year contract for developing and executing business models with the private sector and financial institutions.

48. The composition of PMU would be as follows: Project Manager, Training Coordinator, Accountant, Procurement Coordinator (for 3 years), Financial Assistant, Clerical Assistants (2-3), who would be released from the state service. Further the PMU will be staffed with Monitoring & Evaluation Coordinator, Public Private Partnership Linkages Coordinator (initially for 3 years), Office Assistant, and Drivers, who will be competitively recruited from the open market.

49. **District level project management** will be managed by TSHDA and RDD. The district management setup at a TSHDA or RDD office would be called "district project management cell (DPMC)". In order to get the district government administration involved in this Project, the Secretary, MPI would officially inform the District Secretary of each project district at the onset of the Project. The district project management cell would represent the Project at the District Coordinating Committee and include the project activities in the committee agenda.

50. **Supplementary remuneration to staff of DPMC:** All state officers in TSHDA and RDD or other collaborating institutions directly and significantly involved in regional /district level implementation of the Project would be remunerated with a "Performance Related Incremental Remuneration" paid by IFAD loan resources, over and above their state salary (see Appendix 5 # 5 for details). The performance being the number of tea and rubber lands serviced by the field staff attached to RDD and TSHDA. The field staff of RDD (except the district assistant director) and the TSHDA (except the regional director) will be paid the increment based on the performance. The senior staff of the MPI and the district level heads of RDD and TSHDA will receive a government approved fixed rate for covering the duties of STARR Project. This principle of payment, which was applied in SPEnDP, has been accepted by MOF and the MPI as the lead agency.

51. **Implementation of Component A - tea smallholders development** would be by the Regional Managers of targeted districts under the overall responsibility of the General Manager TSHDA as coordinated by PMU at MPI. The Regional Manager (RM) of selected tea district will be overall in-charge of the district tea component. Depending on the DSDs and tea societies targeted for given Project years, the relevant zone Officer-In-Charge and Tea Inspectors (TI) would implement the Project at the ground level. As supporting staff, a Business Development Officer (BDO) and a Community Development Officer (CDO) (SPEnDP model experience) will be recruited by PMU and positioned with RM for capacity building of societies and development and execution of business models. Likewise field animators (FA), as one FA to serve two TIs ranges would be recruited by PMU and posted at preferred TI offices to assess field needs, assist field programmes and generate information for M&E. In addition one office animator similarly recruited would be assigned to RM primarily to assist him in compiling M&E information coming from field animators and all office work related to the Project which could be assigned to an animator. The PMU will initiate the involvement of the private sector factories to develop joint business proposals for tea smallholders / societies. Once the PMU select willing private tea factories with the involvement of the Tea Commissioner's Department, the BPs will be prepared by the Business Development Officer attached to the district(s) concerned. The Project will provide funds to implement the BP. The BP ensures that there is investment either way of technical assistance or funds, to implement the BPs. Appendix 5 provides the details of the staff composition at the district level.

52. The RM office would handle all the financial matters related to the Project. Thus government accountant at RM office would be encumbered with additional fiduciary matters, including the need to maintain separate project records from TSHDA records, receiving and paying of cash, preparation of balance sheets for the PMU etc. The MPI would intervene and transfer to RM office a suitable financial (clerical) assistant from the government combined services, as they are more experienced in government accounting and responsibilities than an outside temporary recruit.

53. **Implementation of Component B - Rubber Smallholders' Development** would be under the overall responsibility of the Director General, RDD by the Assistant Director of RDD Monaragalla for the targeted districts of Monaragala and Ampara. The staff relevant for the targeted implementation areas would implement the Project with additional recruitments detailed below. The Assistant Director (AD) of RDD office Monaragala will be overall in-charge of the rubber component supported by RDOs of the two districts. The Project management office for both Monaragala and Ampara would be AD's Office of RDD at Monaragala. The proposed management system is broadly similar to tea component. The key additional staff who would implement the rubber component includes a Business Development Officer (BDO) and a Community Development Officer (CDO) (SPEnDP model experience) and 12 animators (see Appendix 5 for details) who would be recruited at the district level.

54. The AD office would handle all the financial matters related to the Project. Thus government accountant at AD office would be encumbered with additional fiduciary matters, including the need to maintain separate project records from RDD records, receiving and paying of cash, preparation of balance sheets for the PMU etc. The MPI would intervene and transfer to AD office a suitable financial (clerical) assistant from the government combined services, as they are more experienced in government accounting and responsibilities than an outside temporary recruit.

55. Selection of the societies for **Rubber Group Processing Centres** will be carried out by a committee appointed by the NSC. GPCs will be designed by RRI and construction work will be undertaken / contracted out by the societies, Thurusaviya or VRDCs as appropriate, and monitored and supervised by RRI. The GPC societies would be formed under the Thurusaviya Fund where appropriate or the VRDC in Moneragala in particular (see Appendix 4 and 5 for details).

56. **Implementation of Component C - Inclusive Rural Financing** would be through the Bank of Ceylon and the People's Bank. They would sign operational MoUs with the MPI to specify roles and responsibilities of the project and the two partner banks (see Appendix 5 for details and MOU contents). Different schemes of the two partner banks already contain systems and procedures which are acceptable to TSHDA and RDD. These procedures are fine-tuned as these schemes are under implementation. Under STARR, the line agencies would be required to provide the requisite staff and technical back up at borrower and district level to facilitate the technical appraisal of loan requests. Facilitators and staff of the STARR PMU need to monitor in particular, to what extent the tea inspectors and the district staff of the RDD will remain involved, and whether there will be capacity limits to be addressed in project implementation.

57. There will be regular meetings between the bankers, the PMU and concerned line agencies on implementation challenges and emerging areas of action and follow up. Banks will report to the PMU separately on the STARR loan portfolio with M&E data including borrower location, loan purpose, status of loans and overdues (if any), listed separately for each borrower.

58. There are few **other key institutions** that will support project implementation. The Tea Research Institute and the Rubber Research Institute would provide technical backstopping to the Project for certification of plant material, development of training modules and testing and approving any new technologies for tea and rubber cultivation. In addition, key Government line agencies such as the Department of Agriculture, Department of Livestock, Department of Export Agriculture, etc would introduce and provide technical backstopping of intercroppings and livestock development activities. The Tea Board and the Tea Commissioner's Department will also be a partner in undertaking tea marketing related activities. The Tea Commissioner's department will coordinate the training of factory staff on high quality black tea production.

59. Government departments would be informed prior to project implementation about their specific roles and the mechanisms for coordination. Private sector is expected to play a key role in engaging in contractual relationships with smallholders to implement business models that will be developed. These key players would be invited at the project start-up and intermittently thereafter to facilitate implementation. If required MOUs or business development plans would be agreed between the project and these implementing agencies. Appendix 5 provides details on the staff, their terms of references, composition of the NSC, and organ gram of the project management structure.

60. In order to create awareness about STARR and more importantly about the implementation arrangements, the MPI together with PMU, TSHDA and RDD will conduct **awareness creation workshops** (separately for tea and rubber) prior to any activities in the field. These workshops are crucial and essential. The primary purpose would be to understand the Project in detail and each partner's responsibilities, target achievements, line of communications, troubleshooting methods, advance actions or reservations (example; planting material) to avoid delays, administrative matters involving MPI and IFAD, etc (see Appendix 5 for details on the structure of the workshops).

61. **Gender strategy in STARR** focus on fostering of a woman's sense of self-worth, her decision-making power, her access to opportunities and resources, her power and control over her own life inside and outside the home, and her ability to affect change. IFAD's Household Methodologies (HHM) would appear to be highly relevant in the tea and rubber smallholder context in the STARR project. The Project has been designed keeping in mind the important role women play in the agricultural sector especially in tea and rubber sectors and in recognising their contribution and acknowledging their roles. Specific targets under each component have been identified for women. Project's inclusive rural financing component increasingly targets women (particularly for non-farming IGAs) because of their historically-proved higher repayment records compared to men, and potential

contributions of female-targeted micro-finance to poverty reduction and women's empowerment. This is a learning experience from SPEnDP and IFAD-funded other projects in the country. Project focuses locating its rural financing programme within the wider development agenda – for example linkages with value chain operators. In all these attempts gender issues and specifically women's empowerment, continue to be regarded. The entry point would be the group sensitization where strong gender-sensitive elements need to be incorporated to training to transform the community towards acceptance of gender equality. The most important and deciding factor of this whole process is, however, the responsiveness for gender equality of project implementing partners, RDD and TSHDA, and other stakeholders in the value chains of rubber, tea and intercropping.

62. The Gender Mainstreaming Strategy would be based on the following principles; (i) **Develop gender responsive guidelines** for the implementation of the project reflecting the targets to be achieved in the project design; (ii) **Target interventions** to ensure the participation of women in planning and implementation processes and promote equal access to resources and benefit and (iii) **Monitor and evaluate** interventions to ensure that gender issues are well addressed. Annex I of Appendix 4 provides a comprehensive and detailed gender mainstreamed project description including a framework for a gender log.

63. The overall responsibility for the successful **implementation of the Gender Mainstreaming Strategy** would rest with the Project Manager, who would be assisted by all project-recruited PMU and district staff members. The M&E Coordinator in PMU will be the focal point for gender at PMU level who will integrate gender into the M&E system. CDO at the district cell is the focal point for gender at district level while RDD and TSHDA officers involved in project activities will also be given gender orientation at the outset. The Project Manager would be ultimately responsible for Gender mainstreaming in the project while all other staff including the field and professional staff would be responsible for ensuring that the gender targets are met. Project Manager will critically review the project design to see how it addresses gender issues, especially in relation to targeting and how project implementation approaches are aligned with the gender mainstreaming strategy and establishing a system for speedy feedback of results. The field staff (with CDOs' leadership BDOs and animators) are the pillars to implement the gender strategy. PMU staff will integrate gender concerns by supporting AWPB, project M&E system, project progress reports and human resource management of the project staff.

64. The Project Manager would prepare the Gender Strategy and action plan of the project as part of the initial work to guide planning, implementation, monitoring and evaluation of all the components of the programme. An annual Gender Scorecard would be developed to keep track of how well the project has been progressing on gender and inclusion. The strategy would include a simple action plan to help in monitoring gender and inclusion in the project. The main guiding principles laid out in this report would facilitate the development of this strategy. SIS missions carry gender performance reviews every year and make recommendations for further improvements.

65. IFAD would ensure that a specialist skilled in reviewing gender and poverty targeting issues is included in all SIS missions. The expert would assess the progress and performance of the project with reference to gender and poverty targeting, compare qualitative and quantitative achievements, highlight key issues, achievements and constraints. The specialist would review the level of the partner institutions' role for gender mainstreaming, assess the performance of the service providers and other stakeholders in the civil society, and identify areas for further improvement.

C. Planning, M&E, learning and knowledge management

66. **Log-frame and Annual Work Plan and Budgets (AWPB).** The project log-frame would show the main activities for the life of the Project and would be the basis with expansion for the AWPB. The Project log-frame will be refined periodically to reflect changes and modifications that may be necessary during the project life. The AWPB would represent the key planning document of STARR. The overall responsibility for the preparation of the AWPB would be assumed by the Project Manager supported by Regional Managers of the TSHDA for tea and the Deputy Directors of RDD for rubber at the district level. The Project Manager of the PMU will consolidate the district AWPBs for necessary approvals. The AWPBs would be prepared in close coordination with the Tea Inspectors and the Rubber Development Officers at the district level. The NSC approved AWPB should be submitted to IFAD three months before the following year for necessary non-objections from IFAD (see Appendix 6 for details).

67. **Monitoring & Evaluation.** The main purpose of an M&E system is to provide comprehensive, frequent and reliable data and information for sound result-based management and decision-making. It would be designed to inform project management of whether implementation is on track as planned or corrective action is needed. M&E system would capture the relevant knowledge and disseminate lessons learned in a targeted and strategic manner to facilitate the achievement of the project objectives. The M&E tasks are not the sole responsibility of M&E staff along, but a collective effort of both PMU technical staff and the district staff. The project M&E system would consist of four interlinked parts: (i) setting up of the system; (ii) implementing the system; (iii) verify and critically analyse the information; and (iv) communication of the M&E information to all stakeholders including the beneficiaries (see Appendix 6 for details).

68. The overall responsibility for the project M&E activities would lie with the PMU and its M&E Coordinator. The Project would be given specialist expertise for M&E at the PMU and District level for the purpose. The M&E Coordinator at the PMU would be responsible for ensuring consistency, accuracy and timeliness of all reporting undertaken under the Project. All M&E activities would be based on the IFAD Guidelines for project M&E and IFAD RIMS first and second level Indicators Handbook. IFAD would provide M&E and RIMS training to CDOs, BDOs, animators as well as TIs/RDOs. All indicators would be disaggregated according to gender and socio-economic status so as to enable a proper assessment as to whether the Project is reaching its intended target beneficiaries, poor households, women and vulnerable households.

69. The project M&E system would include both progress monitoring, and impact monitoring and evaluation. Performance indicators identified in the project log-frame would be further refined as required during implementation. Progress Monitoring would focus on the financial and physical performance of the Project. Each district cell would provide regular reports on the progress which would be coordinated by each CDO and BDO and consolidated at the PMU. The service provider/s recruited to mobilize and strengthen the tea and rubber societies would be required to provide regular reports on membership data, training provided, achievement of societies such as formation of small groups, creation of savings and credit funds, formal registration, IGAs commenced etc. CDO in each cell is responsible for the data relevant to rural credit component such as numbers of credit financing in each society/district with standard data and loan performance. M&E Coordinator with the assistance of two partnering banks will prepare a data templates. Annual and quarterly reports would be produced which would contain data relevant to project inputs, outputs and emerging impact (see Appendix 6 for M&E indicators as guidance). The PMU will prepare the M&E Matrix with implementation support from IFAD in the 1st quarter of the first project year. This will be an essential part of the Project Implementation Manual.

70. **Sex disaggregated** formats would be used for all monitoring protocol. Progress reporting and evaluation formats would be designed to capture sex-disaggregated data at all levels and to record progress against the baseline data. Project staff responsible for data collection and monitoring would be trained in understanding and applying gender analysis. A key role of the PMU's M&E Coordinator would be to effectively integrate the gender outcome indicators within the project's performance measurement framework and to ensure all personnel with M&E responsibilities at the field level have the awareness and skills to measure against the gender-specific indicators.

71. **The studies.** The baseline study, including Results and Impact Management System (RIMS) baseline, will be undertaken during the 1st semester of the first project year. This will be outsourced and the result will be used to update the project log frame. The appropriate RIMS indicators will be included into the AWPB for ensuring the achievement of the result hierarchy of the project. Impact monitoring studies will also be taken at the mid-term and just before project completion. A Mid-term review would be conducted at the end of project year three, to assess the progress, achievements, constraints and emerging impact, likely sustainability of project activities, and make recommendation and necessary adjustments for the remaining project period. The MTR would be carried out jointly by the MPI and IFAD. At the end of the project, a Project Completion Review (PCR) would be conducted by the PMU through a formal survey preferably undertaken by an agency with no previous involvement in project implementation. IFAD itself may also undertake a formal PCR using the results of the government PCR (see Appendix 6 for details).

72. **Participatory Community Based Monitoring.** An annual workshop would be organized by the PMU in which the participating smallholder farmers, women, progressive farmers, representatives from the Tea and Rubber Societies, private sector representatives from tea processing factories, rubber processors, technical partners such as the TRI, RRI, partner banks, etc.,

would be given the opportunity for sharing their views about the project and identify mechanisms for improvement.

73. **Learning and knowledge management** would be a key underlining theme of the Project. The main purpose of KM processes within STARR would be to ensure that knowledge generated is systematically identified, analyzed, documented, used to improve project performance and shared with key stakeholders. The Project would provide opportunities for considerable learning at the policy, operational and technical level given that it would be including certain novel features to make the existing Government strategy for replanting of tea and rubber more effective; restructuring the manner in which the group rubber processing centres are financed and operated as business enterprises; restructuring the manner in which extension services are delivered and research and extension are coordinated; demonstrating the use of eco-restoration to enhance tea yields; Partnership with the private sector to engage smallholders in sustainable farming; and the use of banks' existing loan products to finance tea/rubber-related and other IGAs. Success with any of these elements would have a significant impact on the strategies currently used in the plantation and rural finance sector. It would be important to document the experience and disseminate the results for wider policy impact. The Project would provide the opportunity to compile and disseminate and share the lessons in a systematic manner. Provision would be made in the budget for preparation of case studies of successes and failures and for technical and learning notes on key aspects of the project.

D. Financial management, procurement and governance

74. **Financial Management:** With a view to ensure that the proposed arrangements are appropriate and adequate in terms of capacity and resources for efficient and effective implementation of the project and meet with the IFAD's standards, an assessment was undertaken using "Financial Management Questionnaire (FMAQ) at Design and Risk Analysis" and the "Guidelines for Financial Management at Design" at the Ministry of Plantation Industries, Lead Project Agency. The assessment identified that fiduciary risk (Control risk) and inherent risk of the project at design would be medium level. Accordingly, appropriate mitigation measures are proposed under section 27 and "Summary of Project Fiduciary Risk Assessment at Design" in Annex 3 of Appendix 7.

75. The Ministry of Plantation Industries (MPI) as the Lead Project Agency (LPA) would be responsible for overall financial management of the project. Project specific financial management procedures and loan disbursements requirements would be outlined in the Letter to Borrower (LTB) agreed between the Ministry of Finance and Planning (MoF&P) on behalf of the Government of Sri Lanka (GOSL) and IFAD. The LTB would also contain, thresholds relating to procurements and withdrawal applications, maximum authorized allocation to the Designated Account, requirement of opening of Designated Account at Central Bank in US dollars, maintaining separate bank accounts for IFAD funds and Counterpart funds, and arrangements relating to financial reporting and auditing.

76. **Organisation and staffing:** The Project Management Unit (PMU) established under the MPI would implement all operational level fiduciary functions with the assistance of District Project Management Cells (DPMCs) that are set-up at District level in TSHDA and RDD Offices. Accounts section of the PMU would consist of an Accountant who is released on full-time basis from government service assisted by two Accounts Assistants. In addition, a Procurement coordinator with adequate experience in National Procurement Procedure would be recruited and assigned to the PMU. The project envisages utilizing current administrative structure at the district level of TSHDA and RDD. Accordingly, one Management Assistant (if feasible Economic Development officer) with accounting experience / qualification would be attached to each DPMC to assist the Accountant at the district level.

77. **Fiduciary functions:** The fiduciary functions that would be performed by the PMU would include preparation of the Annual Work Plan and Budget (AWPB), submission of applications to withdraw advances from the Designated Account to meet project expenditure based on available budgetary provision and projected expenditure of the period, release of adequate funds to the DPMCs for project activities, preparation of withdrawal applications (WA) based on actual expenditure statements that would be received from the DPMCs to get the Designated Account (DA) replenished by IFAD, preparation and updating the annual procurement plan, maintaining Fixed Asset Register (FAR) of the project, providing necessary guidance to DPMCs with regard to procurements, preparation of consolidated financial statements biannually and annually, maintaining the Audit Log and respond the Auditor General on issues raised and action taken to resolve them with copy to IFAD within one month from the receipt of Management Letter / Detailed audit Report. The Financial

Management (FM) arrangements will, to the extent feasible, be mainstreamed into Government systems. The operational day-to-day fiduciary functions will be the responsibility of the PMU, embedded within MPI, in liaison with the District Project Management Cells (DPMCs) attached to District level TSHDA and RDD offices.

78. The PMU's FM role will include consolidation of the AWPB, managing funds flow, maintaining project bank accounts, disbursement requests to IFAD, consolidating interim financial reports and preparing annual financial statements for audit. The PMU will put in place an imprest mechanism for the release of adequate funds to DPMCs. The PMU will prepare and update the annual procurement plan, deal with major procurements, maintain the project's Contract Register and Fixed Asset Register, support the Auditor General in coordinating the annual audit and maintain a log of audit observations. The PMU will also be responsible for ensuring that district level finance staff have sufficient capacity, are provided with appropriate training and guidance with regard to reporting expenditure and procurement, and that DPMCs comply with laid down procedures for the project.

79. DPMC finance staff will be responsible for (i) preparing district-level annual budgets, (ii) maintaining accounting records of project expenditure, separate from district accounts, (iii) managing and reconciling the district-level bank account for the project, (iv) and preparing financial reports and documentation to support imprest replenishment requests and (vi) facilitating internal and external audit processes.

80. The FM risk for the project is rated 'medium'. Measures to be put in place to mitigate these risks include qualified and experienced financial staff, a detailed financial and accounting manual, automated accounting processes (accounting software), quarterly financial reporting, internal and external audit. The FM assessment, along with details concerning arrangements for staffing, budgeting, accounting, funds flows, disbursement, financial reporting, internal control and audit are presented in Appendix 7.

81. **Budgeting and Funds flow:** The MPI would be responsible for managing the funds flow from the loan proceeds and CF, opening and maintaining the Designated Account in US Dollars at the Central Bank of Sri Lanka (CBSL) to receive initial deposit and replenishments, obtaining agreed amount of counterpart funds from the General Treasury, forwarding imprest applications prepared by the PMU to obtain advances from the DA to meet project requirements, scrutinizing and forwarding WAs to IFAD for replenishment of the DA, etc. Accordingly, the MPI would make adequate annual budgetary provisions for IFAD funds and Counterpart funds in the National Budget, based on the AWPB of the Project. IFAD funds would be channelled through the Designated Account maintained at the CBSL under imprest method. An initial deposit would be released by IFAD to the credit of this account, out of which, funds would be released in instalments to the PMU on request. PMU in turn, would release sub imprest for each DPMC as a renewable advance to meet projected expenditure. Replenishments of the DA would be effected through submission of Withdrawal Applications (WAs) to IFAD. The General Treasury releases monthly renewable imprest for counterpart funds to the PMU and in turn, the PMU would distribute counterpart funds among DPMCs on the same basis (Statement of Funds Flow is at Annex 1 of Appendix 7).

82. **Designated and Project Account:** The Designated Account (DA) would be managed under the imprest account method. An initial deposit, approximately equal to projected eligible expenditure over the first six months of implantation, would be deposited in to the DA once the loan become effective on submission of a WA by the PMU through MPI. Replenishment of the DA would be effected through submission of WAs and accompanying Statements of Expenditures (SOEs), in accordance with IFAD procedure as set out in the Financing Agreement (FA), Letter to the Borrower (LTB) and Loan Disbursement Hand Book (LDH). Detailed procedure is included in Appendix 7.

83. **Withdrawal of Funds:** All withdrawals would be in line with projected expenditures as detailed in the approved AWPBs. It is the responsibility of the PMU to submit WAs to replenish the DA from time to time, based on eligible expenditures. A WA requesting a replenishment of the DA should cover approximately thirty per cent (30%) of the Authorised Allocation (Initial deposit) or 90 days of eligible expenditure incurred from the said account, whichever occurs first. In the case of expenditure below the specified threshold indicated in the LTB, Withdrawal Applications would be supported by certified Statement of Expenditure (SOEs) and all other expenditure would be supported by relevant evidence to prove that the expenditure has been actually incurred for the intended purposes of the project. All supporting documents relating to SOEs would be kept at the PMU and made available for auditing and review by supervision missions. Detailed procedure is available in the LDH.

84. **Prerequisites for release of first installment of initial advance by IFAD:** In order to qualify for receiving initial advance from IFAD, following requirements would be fulfilled. (i) Opening of a DA to receive funds, in advance, in USD for exclusive use of the project at the CBSL, (ii) Opening Project Accounts at PMU in a Commercial Bank acceptable to IFAD and GoSL; (iii) Appointment of key project staff including Accountant on fulltime basis; (iv) Submission of a letter designating the names of the officials authorized to sign WAs, which include their authenticated specimen signatures to IFAD by the Secretary of the MoF&P, (v) IFAD's No objection for AWPB and Procurement Plan for the first project year. Second installment of the initial advance would be issued after installation of a suitable accounting software package for project accounting.

85. **Financial reporting and accounting:** Financial reporting and accounting system would be organized in a manner that enable monitoring progress of implementation, identifying the works, goods and services financed by IFAD funds and other sources separately and disclosing their uses in the project. Although the government system of accounting is on cash basis and manually operated, the PMU would install a suitable accounting software to maintain project accounts under double entry accounting system on accrual basis. For this purpose and other preliminary expenses that would be incurred prior to the loan effectiveness, a provision of USD 50,000 is recommended under retroactive financing in the FA. In addition to the quarterly progress report on financial and physical performance of the project, the MPI would submit annual Project Financial Statement (PFS) to IFAD within four months after the end of the relevant fiscal year and the audit report within six months after the end of the fiscal year. In addition, PMU is expected to prepare bi-annual accounts for monitoring purposes. Financial management procedure applicable to the proposed project is described in Appendix 7. A comprehensive set of guidelines relating to project financial management would be incorporated in to the Project Implementation Manual (PIM).

86. **Systems, controls and procedures:** It is assessed that overall control measures and systems and procedures that are in place are adequate to address needs of the proposed project. The Internal Auditor of the MPI who is supported by a team dedicated staff would conduct internal audit of the Project. In addition, regular internal audit conducted by the Internal Audit units of the RDD and TSHDA would supplement the auditing work of the Ministry Internal Audit. The MPI would issue necessary instructions to formalise this arrangement and to include auditing of STaRR Project in their annual audit programme. As part of internal control, PMU would give effect to a formal delegation of authority and clear segregation of duties among the project staff. In addition Project's financial performance would be periodically reviewed by the Steering Committee set up at the Ministry.

87. **External Audit:** The Auditor General (AG) who is constitutionally mandated to audit all government accounts and report to Parliament annually, would perform external audit of the project. At the meeting, the mission had with the AG, a request was made to submit a copy of the Financing Agreement (FA) and other relevant information of the Project in advance, enabling AG to issue necessary instructions and guidance to the staff and ensure timely submission of audit report and management letters. Accordingly, the MPI would communicate with the AG regarding specific auditing requirements of IFAD and provide a copy of the FA along with other relevant information immediately after signing of the FA. The AG would submit audited financial statement and a detailed audit report along with a Management Letter not later than six months after the end of the financial year.

88. **Procurement:** The STaRR Project would adopt National Procurement Guidelines that were drafted in association with major funding agencies such as the World Bank, the ADB and the JICA and largely consistent with IFAD guidelines. However, in case of any inconsistency, IFAD Guidelines would supersede the National Procurement Guidelines. All procurements under the Project would be in line with the procurement plan approved by IFAD. In order to provide a legal basis for the National Procurement Guidelines and take appropriate measures to enhance transparency of the procurement process National Procurement Commission would be setup by the GoSL under the provision of 19th Amendment to the Constitution of Sri Lanka that was recently enacted. The commission has powers to investigate complaints against public procurements and file legal action against persons responsible for any fraud or malpractices.

89. **Governance:** The project's inherent risk at design is at medium level. Transparency International (TI) index for Sri Lanka is 3.8 and RSP for the region is 3.6. In comparison to the previous year there is an improvement in TI index by 0.1. It is pertinent to mention at this point that the GoSL has enacted new Anticorruption provisions under 19th Amendment to the Constitution widening the scope of the "the Commission to Investigate Allegations of Bribery or Corruption" and also made provision in the amendment for implementation of the UN Convention against corruption and any other international conventions relating to the prevention of corruption to which Sri Lanka is a party.

Since the Corruption Perception Index published by Transparency International (TI) for Sri Lanka is not below the IFAD's threshold 3, no specific Governance and Anticorruption (GAC) strategy would be included in the design of this project

E. Supervision

90. The Project would be directly supervised by IFAD. The approach to supervision would be one of implementation support and assistance rather than that of policing. A supervision mission would be fielded after every six months in the initial two years and thereafter every year. The Government would provide logistical support for the mission and staff from TSHDA and RDD would participate in the mission. The supervision mission would comprise technical specialists, specialists on gender and poverty targeting, private sector business specialist, financial management specialist, and M&E specialist. Other experts would be included as and when required.

F. Risk identification and mitigation

91. The project faces several risks. **First** is the lack of capital with the smallholder to invest in the replanting of old tea crops and new rubber lands and also in processing equipment. This could reduce the beneficiaries' adoption rate as depicted in the economic analysis. The lack of capital is further aggravated because the government grants cover only a fraction of the total cost, and it has long delay in providing payments due to the manner in which the instalments are structured and Government cash flow is organized. These risks are being addressed through providing capital support to supplement Government financing as well as changing the manner in which the supplementary funds would be structured. Intercropping arrangements are proposed to assist smallholders earn supplementary incomes during the time that the tea and rubber plantations reach maturity. The risk of lack of availability of government counterpart funds for the timely payment of the Government share of the subsidy to the smallholders would be mitigated to a large extent by ensuring the inclusion of the required funds in the annual Government budgets and timely release of funds to TSHDA and RDD.

92. The **second**, an institutional risk, is the availability of plant materials which would be addressed by supporting private nurseries for tea and large RDD nursery in Ampara district for rubber to provide the required plant materials. The timely unavailability would also have the risk of increasing prices. The **third** risk is the timely regularization of land for the new rubber plantations which will delay in realising benefits. MPI has made a time table to ensure the availability of these lands from the Forest Department and the Mahaweli Authority and both have agreed to make these lands available and initiate the process immediately. There are also some tea smallholders who do not have land titles and are encroaching on the lands which they are farming, which also contribute to the same risk. However, most of these holders are eligible to get certificates from the local authorities to confirm their user rights and the Project would facilitate this process where required. The risk of the friction between a separate project entity and high staff turn-over generally witnessed in some of the on-going donor funded projects would be mitigated by the proposed project management arrangements which are embedded in the existing institutional arrangements of the Government. Nevertheless the institutional capacity to implement the project, particularly the business model approach would be the **fourth** risk. This will delay getting the project benefits. Appropriate capacity building activities will mitigate this risk. **Fifth** is low management and negotiating capacity of farmer groups, poor access roads, lack of transport and market information which will overall negatively affect the output prices. Appropriate capacity building of societies after a diagnostic analysis and supporting farm-road (last kilometre) would minimise this risk. The rehabilitated road structure will also reduce the input prices. **Sixth** is associated with institutional factors such as limited extension service outreach, low uptake of good agricultural practices. These would reduce the number beneficiaries taking the project activities (reduced adoption rate). Logistic support, capacity building and extension support for the farmers would mitigate this risk. The **seventh** is the climatic factors such as drought which will affect plant growth with lower yield. Good agriculture practices including soil renovation and soil moisture management, which the project is supporting, will control this risk. The sensitivity analyses for all these risk factors show that the project is reasonably robust for many of the risks (see the economic analysis).

IV. Project costs, financing, benefits and sustainability

A. Project costs

93. The total project cost is estimated at LKR 8,502 million (USD 65.4 million) including contingencies (USD 3.8 million) over a six year period. Project costs are organized into: (i) tea smallholders development (69% of total base costs); (ii) rubber smallholders development (22% of total baseline costs); (iii) inclusive rural financing (6% of the base cost); and (iv) project management (4% of total baseline costs). The component wise costs are summarized in Table 3 below.

B. Project financing

94. IFAD would provide a loan of USD 25.764 million on bled terms. The IFAD financing represents the full country allocation for Sri Lanka for the 2013-2015 allocation cycle. The Government would provide USD 32.76 million including the value of the cost of their staff, operating costs, duties and taxes, and annual budget allocation for tea and rubber cultivation subsidy. Participating banks are expected to provide USD 3.25 million as a line of credit from their own funds. Beneficiaries are making a substantial contribution of USD 3.6 million in terms of their own labour and capital for replanting of tea, cultivation of rubber, inter-crops as well as their contribution to the private nurseries, access roads and rubber processing units provided under the project. Project costs by financiers and components are summarised in Table 4 in both LKR and US \$.

Table 3: Estimated Total Project Cost by Component

	<u>(LKR '000)</u>	<u>(US\$ '000)</u>
	<u>Total</u>	<u>Total</u>
	<u>Amount</u>	<u>Amount</u>
A. Tea Smallholders' Development		
Strengthening Tea Societies in Production & Marketing	118 742	913
Market Driven Production Support for Tea	3 971 852	30 553
Income and markets diversification for Tea smallholders	1 006 643	7 743
TSHDA Districts units	680 214	5 232
Subtotal	5 777 451	44 442
B. Rubber Smallholders' Development		
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	56 037	431
Market Driven Production & Processing Support for Rubber	954 101	7 339
Income and markets diversification for Rubber smallholders	713 022	5 485
RDD Districts units	198 672	1 528
Subtotal	1 921 832	14 783
C. Inclusive Rural Financing		
Financing Tea Smallholders	260 000	2 000
Financing Rubber Smallholders	130 000	1 000
Awareness Creation and Credit Linkages	65 239	502
Subtotal	455 239	3 502
D. Project Management		
Project Management Unit	347 562	2 674
	8 502 084	65 401

Table 4: Project Cost by Financiers (Rs 1000)

	The Government		IFAD		Banks		Private sector		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Tea Smallholders' Development															
Strengthening Tea Societies in Production & Marketing	7 402	6.2	100 011	84.2	-	-	-	-	11 329	9.5	118 742	1.4	-	111 378	7 364
Market Driven Production Support for Tea	2 931 935	73.8	1 039 917	26.2	-	-	-	-	-	-	3 971 852	46.7	-	3 969 917	1 935
Income and markets diversification for Tea smallholders	63 077	6.3	700 684	69.6	-	-	-	-	242 882	24.1	1 006 643	11.8	-	943 566	63 077
TSHDA Districts units	391 455	57.5	288 759	42.5	-	-	-	-	-	-	680 214	8.0	22 382	554 068	103 764
Subtotal	3 393 870	58.7	2 129 370	36.9	-	-	-	-	254 211	4.4	5 777 451	68.0	22 382	5 578 929	176 140
B. Rubber Smallholders' Development															
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	5 143	9.2	46 987	83.9	-	-	-	-	3 906	7.0	56 037	0.7	-	51 089	4 948
Market Driven Production & Processing Support for Rubber	516 577	54.1	394 993	41.4	-	-	-	-	42 531	4.5	954 101	11.2	-	922 706	31 395
Income and markets diversification for Rubber smallholders	74 942	10.5	467 561	65.6	-	-	1 893	0.3	168 626	23.6	713 022	8.4	-	639 342	73 680
RDD Districts units	115 704	58.2	82 967	41.8	-	-	-	-	-	-	198 672	2.3	7 629	159 095	31 948
Subtotal	712 367	37.1	992 509	51.6	-	-	1 893	0.1	215 063	11.2	1 921 832	22.6	7 629	1 772 231	141 972
C. Inclusive Rural Financing															
Financing Tea Smallholders	-	-	-	-	260 000	100.0	-	-	-	-	260 000	3.1	-	260 000	-
Financing Rubber Smallholders	-	-	-	-	130 000	100.0	-	-	-	-	130 000	1.5	-	130 000	-
Awareness Creation and Credit Linkages	26 095	40.0	6 524	10.0	32 619	50.0	-	-	-	-	65 239	0.8	-	58 715	6 524
Subtotal	26 095	5.7	6 524	1.4	422 619	92.8	-	-	-	-	455 239	5.4	-	448 715	6 524
D. Project Management															
Project Management Unit	126 681	36.4	220 881	63.6	-	-	-	-	-	-	347 562	4.1	-	325 702	21 860
Total PROJECT COSTS	4 259 014	50.1	3 349 284	39.4	422 619	5.0	1 893	-	469 274	5.5	8 502 084	100.0	30 011	8 125 577	346 496

Project Cost by Financiers (US\$ 1000)

	The Govern ment		IFAD		Banks		Private sector		Beneficiaries		Total		For. Exch.	(Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Tea Smallholders' Development															
Strengthening Tea Societies in Production & Marketing	57	6.2	769	84.2	-	-	-	-	87	9.5	913	1.4	-	857	57
Market Driven Production Support for Tea	22 553	73.8	7 999	26.2	-	-	-	-	-	-	30 553	46.7	-	30 538	15
Income and markets diversification for Tea smallholders	485	6.3	5 390	69.6	-	-	-	-	1 868	24.1	7 743	11.8	-	7 258	485
TSHDA Districts units	3 011	57.5	2 221	42.5	-	-	-	-	-	-	5 232	8.0	172	4 262	798
Subtotal	26 107	58.7	16 380	36.9	-	-	-	-	1 955	4.4	44 442	68.0	172	42 915	1 355
B. Rubber Smallholders' Development															
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	40	9.2	361	83.9	-	-	-	-	30	7.0	431	0.7	-	393	38
Market Driven Production & Processing Support for Rubber	3 974	54.1	3 038	41.4	-	-	-	-	327	4.5	7 339	11.2	-	7 098	241
Income and markets diversification for Rubber smallholders	576	10.5	3 597	65.6	-	-	15	0.3	1 297	23.6	5 485	8.4	-	4 918	567
RDD Districts units	890	58.2	638	41.8	-	-	-	-	-	-	1 528	2.3	59	1 224	246
Subtotal	5 480	37.1	7 635	51.6	-	-	15	0.1	1 654	11.2	14 783	22.6	59	13 633	1 092
C. Inclusive Rural Financing															
Financing Tea Smallholders	-	-	-	-	2 000	100.0	-	-	-	-	2 000	3.1	-	2 000	-
Financing Rubber Smallholders	-	-	-	-	1 000	100.0	-	-	-	-	1 000	1.5	-	1 000	-
Awareness Creation and Credit Linkages	201	40.0	50	10.0	251	50.0	-	-	-	-	502	0.8	-	452	50
Subtotal	201	5.7	50	1.4	3 251	92.8	-	-	-	-	3 502	5.4	-	3 452	50
D. Project Management															
Project Management Unit	974	36.4	1 699	63.6	-	-	-	-	-	-	2 674	4.1	-	2 505	168
Total PROJECT COSTS	32 762	50.1	25 764	39.4	3 251	5.0	15	-	3 610	5.5	65 401	100.0	231	62 504	2 665

95. IFAD would provide a loan on blend terms, with interest on the principal amount outstanding at a fixed rate of 1.25% per annum, plus a service charge of 0.75% per annum. The loan would have a maturity period of 25 years, including a grace period of five years starting from the date of approval by the Executive Board of IFAD.

96. The GOSL contribution would be from the annual budget of MPI allocated to develop tea and rubber through the government assistance schemes. In addition, the GOSL would budget for some of the special needs of the project such as part of the costs of land surveys by the Forest Department and the Mahweli Development Department. The Government would cover the basic salary and allowances of all Government staff working on the project and the routine operational costs. All costs would be included by the Government in their annual budget applicable to each project year.

C. Summary benefits and economic analysis

97. **Beneficiaries:** The Project would be expected to benefit a total of about 32,000 households and 144,000 people. The beneficiaries would include both men and women from smallholder households. Women headed and poor households would be especially targeted under the project. Some targets would be especially earmarked for the youth. The table below summarise the project cost and overall number of beneficiaries with their outcomes.

PROJECT COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROJECT COSTS (in million USD)		65.4	Base costs	61.6	PMU	2.40
Beneficiaries	144 000 people	32 000	Households	48 groups	3 320 enterprises	
Cost per beneficiary	454 USD x person		2 044 USD x HH		Adoption rates	86%
Components and Cost (USD million)		Outcomes and Indicators				
<u>Tea Smallholders' Development</u>	42.446 M	Better organized Tea Smallholders able to more effectively and sustainably produce and market their products			Increased productivity by 466%	
<u>Rubber Smallholders' Development</u>	13.298 M	Better organized Rubber Smallholders able to effectively produce, process and market their products			New rubber yield will be RSS 2160 kg	
<u>Inclusive Rural Financing</u>	3.4 M	Tea & rubber smallholders get increased access to credits that is available in the market			Increasing agricultural finance access by 30%	

98. **Benefits:** The benefits from tea replanting would be increased productivity-through the introduction of improved plant materials, improved inputs and management practices. This would lead to increased yields from tea as well as from appropriate inter-crops such as pepper. On average, a household's production benefits would increase from 3000 kg/ha to over 14,000 kg/ha of fresh tea leaves in a year over a 20 year period at a minimum. Smallholders planting rubber would be able to benefit from a steady income from latex, the average production of which would be expected to be 2,160 kg per year for the next 30 years. About 10% of the rubber growers would intercrop rubber with maize, about 25% with banana, 5% pineapple, and about 10% with cocoa. Table 2 showed the number of beneficiaries by each enterprise. The expected incremental income from typical farm models with each enterprise is summarised in Table 5 (see Appendix 10 for details). The Project would also enhance labour productivity as it would assist in absorbing unutilised family labour and increase its utilization from the existing level of about 30 person-days per household to about 156 person-days.

Table 6 summarises the household income per year and the per capita income per day with and without project interventions showing that all interventions will increase the beneficiaries' income above the US \$ 2/day poverty line. The Project would also be expected to provide increased financial services to the target beneficiaries through banks through project supported credit linkages. It is expected that the increase in financial services and implementing business models would enable the smallholder households to undertake a range of activities on and off-farm and diversify their sources of livelihood.

Table 5: Incremental Income of Typical Farm and Business Models

F I N A N C I A L A N A L Y S I S	PRODUCTION							P-P BUSINESS MODELS		PROCESSING
	Farm models' net incremental benefits (in Rs '000/yr)							Business models' net incremental benefits (Rs '000)		Group Processing Business (Rs '000)
	Tea - mono crop	Tea + pepper	Rubber Mono	RB + Maize	RB + Banana	RB + Pine	RB+Cocoa	Passion fruit business	Orchid business	Rubber Processing
	0.5 ha	0.5 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1000 Sq ft	250 kg/day
PY1	-189	-189	-341	-216	-158	-249	-316	-30	-775	-2 789
PY2	-241	-301	-108	17	375	66	-193	1 307	119	348
PY3	-138	-153	-106	18	639	78	-107	1 007	1 013	348
PY4	-132	-143	-104	20	337	23	-114	659	1 013	348
PY5	267	392	-97	27	344	-72	99	171	1 013	348
PY6	271	536	-84	41	150	-59	162	41	1 013	348
PY7	271	746	222	247	247	247	559	1 307	1 013	348
PY8	237	852	322	347	347	347	659	1 007	1 013	348
PY9	237	852	363	388	388	388	684	659	1 013	348
PY10	237	852	398	423	423	423	719	171	1 013	348
NPV (Rs 1000)	563	3 674	1 377	2 037	3 328	1 978	3 112	3 875	1 899	306
NPV (USD 1000)	4.3	28.3	10.6	15.7	25.6	15.2	23.9	29.8	14.6	2.4
FIRR (@10%)	18%	42%	22%	40%	269%	39%	33%	4348%	40%	12%

Table 6: Income Sustainability Analysis - Annual Cash Flow from typical Farm Models

HH sustainability	Avg size (ha)	WOP Net HH Cash Flow (Rs/Yr)		WP Net HH Cash Flow (Rs/Yr) including wage labour income (less than WOP)				\$/day/head (full development)	
		Farming	Wage income	Yr : 1 (with IFAD Grant)	Yr : 2	Yr : 3	Full development	WP	WOP
Tea Mono	0.5	97 500	143 000	223 837	217 560	277 667	574 510	2.73	1.14
Tea + pepper	0.5	97 500	143 000	223 837	157 360	263 067	1 189 560	5.65	1.14
Rubber Mono	1.0	25 000	227 500	86 250	268 720	194 159	662 288	3.14	1.20
RB + Maize	1.0	25 000	227 500	185 800	368 270	293 709	662 288	3.14	1.20
RB + Banana	1.0	25 000	227 500	244 750	726 720	914 559	662 288	3.14	1.20
RB + Pine	1.0	25 000	227 500	153 650	418 120	353 359	662 288	3.14	1.20
RB + Cocoa	1.0	25 000	227 500	86 250	158 450	168 169	974 368	4.63	1.20

100. Through the private sector partnership and implementing the business models that the project is supporting, the beneficiaries would be better connected to markets. Such linkages will improve the margins that the beneficiaries can receive from the markets. The business plans that are developed with the tea factories and rubber processing companies are examples of such markets.

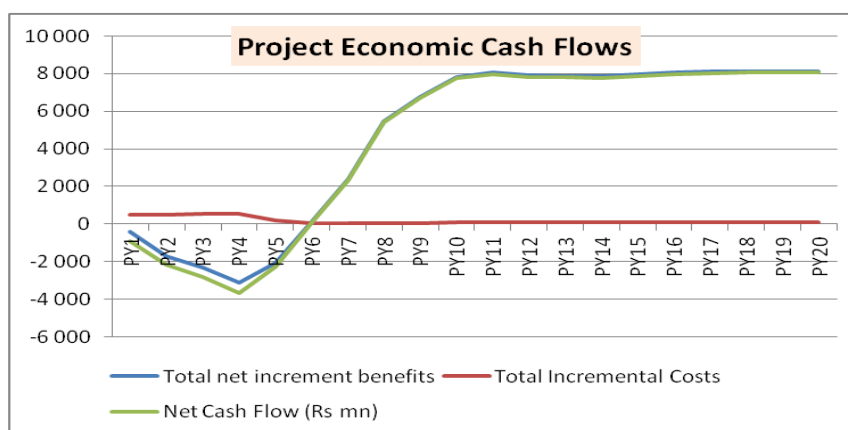
101. There would also be **qualitative benefits** in terms of positive social and environmental impacts. The social benefits would accrue mainly as a result of greater social cohesion among smallholders due to greater interaction with the Tea and Rubber Societies, security of land tenure due to the recognition of the usufruct rights of smallholders for both tea and rubber plantation, increased recognition of the role of women in the plantation sector and provision of capacity building and training opportunities and access to financial service for a range of on-farm and off-farm activities. These have not been quantified. There would be a positive impact on the environment as a result of the improved capacity and understanding of eco-restoration, soil conservation and principles of sustainable natural resource management. The creation of a buffer zone with rubber plants and provision of formal use right titles would serve to protect the forests from further encroachments.

102. The benefits have been estimated over a 20 year timeframe using a discount rate of 10% for financial analysis and 10.2% for the economic analysis. The benefits that have been included in computing the economic and financial analysis include only those benefits which could be realistically

quantified. The qualitative benefits would be in addition. Appendix 10 presents the details of both financial and economic analyses and Table 7 summarises the project economic cash flows.

Table 7: Economic Cash flows of the Project

	NET INCREMENTAL BENEFITS (Rs mn)						NET INCREMENTAL COSTS (Rs mn)				Net Cash Flow (Rs mn)
	Total Tea Cultivation	Total Rubber Cultivation	Passion fruit business model	Orchid business model	Rubber Processing centers	Total net increment benefits	Economic Investment Costs	Economic recurrent Costs	Economic O&M Costs	Total Incremental Costs	
PY1	-351	-61			-5	-417	440	34	0	474	-891
PY2	-1 316	-228	-2	-168	2	-1 713	413	62	0	475	-2 187
PY3	-2 331	-295	291	49	-12	-2 299	473	69	0	543	-2 842
PY4	-3 143	-266	224	49	5	-3 131	454	69	1	525	-3 656
PY5	-2 392	42	147	86	64	-2 051	132	59	2	193	-2 244
PY6	-190	44	39	86	168	147	1	36	3	40	107
PY7	1 989	39	12	174	168	2 381	0	36	7	43	2 338
PY8	4 499	348	291	174	168	5 479	0	36	17	53	5 426
PY9	5 369	824	224	174	168	6 759	0	36	27	63	6 696
PY10	5 932	1 404	147	174	168	7 824	0	36	37	73	7 751
PY11	6 051	1 633	39	174	168	8 065	0	36	43	79	7 986
PY12	5 925	1 764	39		168	7 896	0	36	43	79	7 817
PY13	5 795	1 871	39		168	7 873	0	36	43	79	7 794
PY14	5 666	1 979	39		168	7 852	0	36	43	79	7 773
PY15	5 666	2 092	39		168	7 965	0	36	43	79	7 885
PY16	5 666	2 210			168	8 043	0	36	43	79	7 964
PY17	5 666	2 263			168	8 096	0	36	43	79	8 016
PY18	5 666	2 294			168	8 127	0	36	43	79	8 048
PY19	5 666	2 293			168	8 127	0	36	43	79	8 047
PY20	5 666	2 291			168	8 124	0	36	43	79	8 045
NPV @ 10.2% (Rs mn)			19 139								
NPV @ 10.2% (US \$ mn)			147.2								
EIRR			26%								



103. The economic cash flows depicted in the line graph show that the net cash flow of the Project comes to a peak in the 10th and the 11th year. The main reason being the intercrops of rubber and the one cycle of business models giving income. Intercrops cannot be continued and also it was assumed that the 2nd cycle of business models of passion fruits and orchid will not continue.

104. The Project is expected to have an Economic Internal Rate of Return (EIRR) of 26%, a benefit-cost ratio 1.64, and the Net Present Value (NPV) at a discount rate of 10.2% would be LKR 19,139 million (USD 147.2 million) for 20 years project period.

105. Sensitivity analysis was undertaken to assess the project economic viability for the perceived risk factors that was presented in section F. Table 8 summarises the results of the sensitivity analyses for main risk factors. The table also summarises the risk factors. The colour codes indicate a quick interpretation of the sensitivity of the project to various risk factors. Green colour for base case scenario and the risk factors which are not affecting the project economic viability are coloured close to green. Red indicates the high sensitivity of the project to corresponding risk factors. Benefits getting delayed, yield drops and drop in adoption rates are the risk factors that the Project would face difficulties in generating viable cash flows. The project management and the supervision

process should monitor and minimise such risks. Appendix 10 provides more details on the assumptions and the resulting values. A switching value analysis was also calculated for some of the key variables used in the sensitivity analysis. The analysis shows that the cost would have to increase by 64% or benefits would have to decrease by 40% for the NPV to be zero.

Table 8: Results of the Sensitivity Analyses

	$\Delta\%$	Link with the risk matrix	IRR	NPV (USD M)
Base scenario			26%	147.2
Project benefits	-10%	<u>Institutional</u> : low quality planting material, weak technical and management capacities of district line agencies; <u>Groups</u> : Lack of financial capacity to invest in processing or other equipment	23%	109.6
Project benefits	-20%		19%	72.0
Project costs	10%	Increase cost of planting material and cost of group processing centers	23%	124.4
Project costs	20%		21%	53.4
1 year lag in ben.		Risks affecting adoption rates and low implementation capacity	20%	99.2
2 years lag in ben.			15%	55.5
Output prices	-10%	Low management & negotiating capacity of farmer groups; poor access, lack of transport and market information	24%	120.9
Output prices	-20%		22%	94.6
Input prices	10%	Market price fluctuations, remoteness & transport difficulties	23%	126.6
Input prices	20%		21%	106.1
Adoption rates	-10%	Extension service outreach is limited, low uptake of good practices, drought and plant growth is low	26%	132.5
Adoption rates	-20%		26%	117.8
Yields	-10%		23%	109.6

D. Sustainability

106. There are strong elements in the Project that would enhance the likelihood of the sustainability of the benefits for the smallholder. The most significant investment of the Project would be in the replanting of tea and plantation of rubber on new lands. The tea plantations are expected to provide yields for another 20 to 25 years while the plantation of rubber is expected to provide benefits for 30 to 35 years. The quality of produce would be ensured through the provision of high quality plants from nurseries certified by TRI and RRI. The marketing of tea and rubber is not an issue in the country as there is a high demand for both these products. The existing tea companies are generally running at less than full capacity and would easily absorb the additional production. There is an acute shortage of rubber in the country and the additional rubber production would also be easily marketed. The ability of smallholders to convert latex into ribbed sheets enhances the shelf life of the product and makes marketing even easier. The increased capacity of the smallholders to undertake intercropping and other small enterprises through project support would enhance the sustainability of their livelihoods.

107. Linkages with the private sector and the implementation of the business models will further support the livelihood through increased income. The matching grants that support either improvement of existing or new enterprises will also contribute to enhanced livelihood.

108. There are other measures built into the project design which would be expected to contribute to institutional sustainability at the village level. The strengthening of tea and rubber societies would be expected to enable them to continue their provision of services to its members. This aspect would be further aided by linking the societies to formal financial institutions to get loans and also to the private sector for business development. The capacity building of the Government line agencies and the improved mechanism for their interaction with the smallholders would be expected to continue beyond the project duration through the societies. The sustainability of the financial service provision by the formal sector institutions would also be expected to continue beyond the project period because of the linkages cemented during the project period.

109. The Project would also contribute to environmental and natural resource management sustainability in several ways. The planting of rubber trees in the buffer zones would help to protect forests by creating a natural boundary between the forests and the cropped lands where smallholders

were previously practising a system of shifting agriculture. The planting of rubber on land which has been formerly regularised by the Government would also provide smallholders a regular and more reliable source of income and reduce the temptation to encroach on forest lands. The tea smallholders would also be provided technical training on good agriculture practices, improved soil fertility and soil health management, eco-restoration techniques, planning along contour lines to prevent erosion, principles of rainforest alliance, organic farming, etc. These measures would not only enable the smallholders to meet the growing demand for products sourced from sustainable and responsible farming, but also improve the yields and productivity on their lands.

E. Social, Environmental and Climate Assessment

110. The environmental impacts of the components (i.e. project activities, locations and magnitude of components) of the STARR Project were assessed against the “**IFAD's Social, Environmental and Climate Assessment Procedures (2014)**” and National Environmental Policy and Country guidelines on environmental management of Sri Lanka. It is apparent from this evaluation that project activities will bring many positive environmental impacts and socio-economic benefits to the communities. No components or subcomponents in the STARR will have potentially severe environmental impacts, such as construction of roads, dams and buildings, or large scale harvesting of forests.

111. Following is apparent from this assessment: (i) STARR project activities (i.e. replanting of tea, cultivation of rubber, intercropping, private plant nurseries, organic and environmental compliant tea, access roads and rubber group processing centres, market linkages and product diversification, sustainable commercial business activities, strengthening tea and rubber societies) will bring many positive environmental impacts and socio-economic benefits to the communities with no or minimal negative environmental and social impacts. For example when consider the two main activities of the project that is replanting of tea and new planting of rubber in abandoned chena land (land used for shifting cultivation), it can be concluded that this will create better land use in terms of environmental indicators that is less soil erosion and higher biodiversity conservation and also positive social impacts such as increasing income of the smallholders resulting better socio-economic status and reducing the illegal activities that causes degradation of environment (i.e. reduction in poverty-driven environmental degradation); (ii) Components or subcomponents in the STARR will have no potentially severe environmental impacts, such as road development in ecologically sensitive areas, deforestation, loss of natural habitats and biodiversity, groundwater-based development, significant increased use of agrochemicals, risk of destruction and pollution, conversion and loss of physical cultural resources and project components which may result in significant adverse social impacts to local communities; (iii) on a positive note, perennial tree crop plantations could function as natural sponges for absorbing carbon dioxide (CO₂) from the atmosphere, called “Carbon sequestration” (CS). The reduction in atmospheric CO₂ contributes to reducing global warming. Rubber Research Institute, Sri Lanka has assessed the potential capacity of CS in mature rubber trees and has found that on the average, mature rubber is capable of sequestering 81 MT of CO₂ per hectare annually and, within the 24 years of mature phase, 1,296 MT of CO₂ per hectare. Thus planting of large extents of rubber by the project is favourable to mitigate global warming. Further rubber wood can be used to make furniture after treatment.

112. When consider the “IFAD's Social, Environmental and Climate Assessment Procedures (2014)” the most of the project activities falls within the environmental impact type (nature of components): “Agricultural intensification and/or expansion of cropping area in “non-sensitive areas, small and micro enterprise development projects, natural resources-based value chain development, projects involving operations that might have minor adverse impacts on physical cultural resources and construction or rehabilitation of rural roads in “non-sensitive areas”.

113. Due to the above facts (i.e. nature of components) when consider the “IFAD's Social, Environmental and Climate Assessment Procedures (2014)” the project falls under the *Category B where the impacts can be readily remedied by appropriate preventive actions and/or mitigation measures*. Satisfactory incorporation of mitigation measures identified in the ESMP fulfills the Environmental and Social Impact Assessment (ESIA) requirement for the project. Further environmental analysis will be undertaken in the course of project implementation. The environmental impacts caused by the project activities can be successfully mitigated by adopting suggested mitigation measures in the ESMP (see Scoping note for details).

Appendix 1: Country and Country Background

1. Introduction: Sri Lanka is often considered to be the South Asian outlier in terms of the incidence of absolute poverty and severe deprivation. In 2014, it was ranked 73 in the UN Human Development Index⁹, which is higher than any other country in South Asia, and grouped in the high human development category. Sri Lanka is one of the few countries in the world that provides universal free education. Healthcare indicators also remain amongst the highest in the region as a result of the free public healthcare system. The island state IMR is 14 per 1000 live births and MMR is 35 per 100,000 live births.

2. Economy: Sri Lanka's economy continued to grow robustly in 2014, inflation fell markedly, and the current account deficit narrowed. The election in January 2015 brought a new president into office on a mandate for political and economic change. With parliamentary elections expected in August 2015, the year will be marked by political transition. The outlook is for a continued strong economic performance aided by generally favorable global conditions. Sri Lanka has graduated from low income to low-middle income status, which it estimated to be US\$ 3,630 in 2014. Economic growth in Sri Lanka has been among the fastest in South Asia in recent years. Growth averaged 6.3 percent between 2002 and 2013, with Gross Domestic Product (GDP) per capita rising from US\$859 in 2000 to US\$3,256 in 2013. GDP further increased by 7.4 percent in 2014. The economy appears to shift towards a higher value added production and the services sector is developing. The government has been able to reduce budgetary deficit from 9.9% in 2009 to 6.0% in 2014 of the GDP. Tax revenue was 10.7% of the GDP in the same year. After a long period of sustained high inflation rates (averaging +12% from 2000 to 2008), it fell considerably. In October 2014, it eased to +1.6% y/y, lowest level since 2009. Low food and oil prices are the key reason behind this deceleration. It averaged to +3.8% in 2014 before a modest pick up to +5.4% on average in 2015 reflecting drought conditions. Sri Lanka ranks 99 out of 189 economies in the Doing Business 2015 survey, better than most economies in the region (India ranks 142).¹⁰ After the civil war, the government invested in infrastructures, mostly in the Eastern part of the country but further investment in this field would help sustain growth.

3. Rural sector: Nearly 80% of the population of 20.64 million live in the rural areas and of the 1.8 million poor in the country, about 85% live in the rural areas.¹¹ Poverty has spatial dimensions in the country and some of the selected project districts like Badulla, Moneragala and Ampara have the highest incidence of poverty. Development opportunities are skewed towards a few urban centres, resulting in migration to cities and poor living standards in several rural districts. Since 1950, agriculture growth has seen a steep decline in the Island state from 46% in 1950 to only 10.1% in 2014. This has been due to the steep rise of employment in the industry and services sector. Services sector contributed 57.6% to the GDP and the industry sector 32.3% in 2014. The agriculture sector, however, remains important to the rural areas for food security, income and employment. Restrictive land ownership further constrains agricultural productivity. Sri Lanka's primary form of agriculture is rice production and rice is cultivated during Maha and Yala seasons. Tea is cultivated in the central highlands and is a major source of foreign exchange. Vegetables, fruits and oilseed crops are also cultivated in the country. Rice is the single most important crop occupying 34 percent (0.77 /million ha) of the total cultivated area in Sri Lanka. On average 560,000 ha are cultivated during maha and 310,000 ha during yala making the average annual extent sown with rice to about 870,000 ha. About 1.8 million farm families are engaged in paddy cultivation island-wide. Sri Lanka currently produces 2.7 million tonnes of rough rice annually and satisfies around 95 percent of the domestic requirement. Rice provides 45% total calorie and 40% total protein requirement of an average Sri Lankan. The lack of secure property rights negatively influences investment, access to credit, transferability and long-term usage patterns. Cost of and access to finance is a major constraint for rural enterprises with collateral requirements and complex processing procedures.

4. Economic prospects: Growth in 2015 will be affected by the political transition and the revised priorities of the government elected in 17 August election. Construction was slow after leading growth in recent years, driven by large government infrastructure projects. Political uncertainty would retard private investment. While investment is likely to lose momentum in 2015, consumption is

⁹ UNDP, 2014

¹⁰ The World Bank Country profile

¹¹ FAO Country profile

expected to pick up. Price reductions for food and fuel will encourage private consumption, and government consumption will rise with the shift in the budget toward recurrent expenditure. Somewhat faster growth in advanced economies will benefit export industries such as apparel and tourism. How well agriculture performs after mixed fortunes over the past 5 years will depend on the weather, but increases in government-guaranteed prices for several agricultural products should boost production. Against this backdrop, assuming that politics settle in the second half of 2015 and that investment rebounds, growth is projected to ease to 7.0% in 2015 and then strengthen to 7.3% in 2016¹².

5. Youth: Youth is classified as those between the ages of 15 to 24 in Sri Lanka and comprises of nearly 20% of the population. The highest unemployment rate is found among those with at least a higher secondary education: 5.5 per cent for men and 11.7 per cent for women.¹³ The World Bank's World Development Report 2014 noted that one of the biggest challenges facing the country was to improve women's employment opportunities, especially for the young female population and to improve employable skills. Since 2005, Government spending on Education, as a percentage of GDP has been reduced from 2.9% of GDP to about 2.0% in 2014 which is a mismatch of the young graduates' aspirations and the actual opportunities available for them in the economy. Young people in rural areas, lack a diverse choice of employment because of limited employment opportunities. The demand for public sector jobs among the youth overrides the number of positions available thus creating high pressure on the government to provide jobs.

6. Tea Sector: The tea sector accounts for 14.6%¹⁴ of Sri Lanka's foreign earnings and provides direct employment to over a million people, mainly women. Sri Lanka is the leading tea exporter in the world with an annual export of 330 million kilograms per annum. The total area under tea was 203,020 hectares in 2014. Of this, 85,440 hectares was managed by the corporate sector and 120,955 (60%) hectares was owned by the smallholder sector. Tea smallholders who own less than 2.5 hectares contribute 70% of the country's total tea production. The present productivity of green leaf is about 815 kg/ha (330 Kg/acre) which is well below the potential of 1200 kg per hectare. Tea is grown throughout the year and is concentrated mainly in the central highlands and the southern inlands. Both international and internal challenges face the tea sector. Globally, exports compete with cheaper products from Kenya, India and other producers, where mechanized production is more common and production costs are lower. Domestically, largely the Tamil workforce, which is among the poorest in the country, is increasingly choosing to escape plantation life for opportunities in growing urban areas, resulting in a sector-wide labour shortage. Productivity is decreasing as plantations are left with over 20 year old plants, adverse climatic conditions and low soil productivity leading to social and environmental challenges in the tea growing areas of the country. Recently the government has allowed for the setting up of commercial tea hubs which will allow Sri Lankan industries to import products, make value addition and export it. The government is also investing heavily in provision of subsidies for replanting of old trees to rejuvenate the production.

7. Rubber sector: Rubber is another key crop in which smallholders dominate in terms of their share in total production. The total land under rubber plantation was 130,780 hectare of which 81,345 (62%) was under smallholder cultivation. The production dropped in 2014 to 98,573 MT from 130,420 MT in 2013, continuing the trend. Sri Lanka imports rubber due to scarcity of latex for the manufacture of finished products. With more of the traditional areas undergoing rapid changes in land use in the traditional rubber growing areas of the wet zones, the production has not been able to reach the national targets. The government has since looked at increasing rubber plantations in non-traditional areas in the Uva and Eastern province where land and labour availability are not assumed to be constraints. The government has made provisions for encroachers to be provided with usufruct rights on the land they have encroached with the added provision of support for new rubber plantations. Buffer zones in the forests have seen an increase in this programme (under the IFAD SPEnDP) which enables the smallholder a steady source of income and provides afforestation in areas which were previously under a system of shifting cultivation called "Chena".

8. Remittance: Remittances can help to improve a country's development prospects, maintain macroeconomic stability, mitigate the impact of adverse shocks, and reduce poverty. With nearly 1.7 million Sri Lankans working abroad, their total remittances amounted to \$ 5.9 billion in 2014. This is equivalent to 7.9 percent of Sri Lanka's GDP, 25 percent of the government's total revenue and 35 percent of total foreign exchange earnings. Migrant workers constitute 17 percent of

¹² Asian development Bank, Sri Lanka Outlook 2015

¹³ Sri Lanka Department of Census and Statistics, 2012

¹⁴ Central Bank of Sri Lanka – Annual Report 2014

the working population. Remittances received from the Middle East continue to be more than 50 per cent of the total since the 1990s. The use of remittances and income from foreign employment depends a great deal on the type of community and the migrants' socio-economic background. In Sri Lanka, two of the most significant sectors associated with the impacts of migration are housing and self-employment. Particularly, housing is reported to receive high priority by most migrants and their families. Apart from the investments made on income earning assets, migrants invest on physical immobile assets. Such investments include purchase of land, construction of new houses, repairs and extensions of existing houses, redemption of mortgages and liquidation of debts.

9. External trade and finance: Government revenue rose from LKR 699.9 billion in 2009 to LKR 1188.4 billion in 2014. Capital expenditure and net lending in 2014 was 5.6% of the GDP. Credit to the private sector saw a sharp decline since 2012 in response to the credit ceiling imposed by the Central Bank of Sri Lanka and higher policy rates. Agricultural exports increased from LKR 27,966 mn in 2011 to LKR 297,715 mn in 2012. Industrial exports increased from LKR 883,771 mn in 2011 to LKR 938,762 mn in 2012. The United States of America saw the bulk of exports from Sri Lanka at 21.7% (2012) while the collective EU saw 33%. Currency exchange saw a dip in the exchange rate from LKR 115 to the USD in 2011, to LKR 130 in 2014.

10. Banking and financial institutions: Banks dominate the financial sector, accounting for around two-thirds of financial sector assets, and have enhanced their resilience to shocks. Non-bank financial institutions such as provident funds hold around 20.9% of financial sector assets, with insurance companies, finance companies, and leasing companies each accounting for around 3% of financial sector assets. There are 24 commercial banks with 2717 branches across the country. The People' Bank has the highest number of branches across the country at 712, followed by Bank of Ceylon at 518 branches. There are 624 licensed specialised banks that offer different financial services to the people. There are about 3975 people per bank branch.

11. Poverty and poverty reduction strategies: Poverty in Sri Lanka continues to be a large problem. Sri Lanka being an exceptional country with its life expectancy, literacy rate and other social indicators nearly on par with those of developed countries, and even topping the rankings for the South Asia region.¹⁵ While all these indicate that Sri Lanka should be experiencing a high standard of living, until recently it has only ranked in the medium category of the Human Development Index (HDI). This is despite the fact that Sri Lanka has been experiencing moderate growth in its GDP averaging 5.5% per annum between 2006 and 2009. One of the reasons is due to its relatively low GDP per capita; currently ranked in the bottom one third of the world. This could be due to the issue of poverty, specifically, rural poverty. The Sri Lankan government has been successful in reducing poverty from 15.2% in 2006 to around 7% in 2013¹⁶, urban poverty was reduced from 6.7 to 5.3% while rural poverty was reduced from 15.7 to 9.5% and the nation is close to achieving Millennium Development Goals on Eradicating extreme poverty hunger. The government specifically targets achieving the MDGs ahead of the set time, with the eradication of hunger and hard-core poverty in Sri Lanka by 2016. It seeks to (i) ensure the betterment of villages to be emerged as "micro-centres of growth on modern lines"; (ii) focus on pro-regional development with a particular emphasis on the Northern and Eastern Provinces, to restore people's livelihoods, reactivate services and facilities, rehabilitate infrastructure and develop human capabilities; and (iii) encourage enterprise development as well as the development of domestic agriculture as the means to promote inclusive economic growth and better sharing of the development benefits. The key national poverty reduction and rural development programme was the "DiviNeguma" programme as a key pillar for implementing the Public Investment Strategy 2014-2016, which was defunct with the change of government in January 2015.

12. Poverty alleviation programmes of the Government: Samurdhi is the national poverty alleviation programme of the government launched in 1994 which is continued despite the change of the government in January 2015. The priority is on development of rural infrastructure facilities, improving health and nutritional conditions among rural community and creating employment opportunities. There is a loan component in this programme that caters for micro enterprises to either individuals or groups of poor. Apart from government policies, Non-Governmental Organizations (NGOs) help ease the situation too. One of them is Sarvodaya. Sarvodaya is Sri Lanka's largest NGO, which includes many other divisional units dedicated for different development projects. Sarvodaya Economic Empowerment Development Services (SEEDS) began its operation as a

¹⁵ Human Development Report 2013

¹⁶ World Bank, World Development Indicators

separate division in 1986 and now reaches Sri Lanka's 25 districts. SEEDS is responsible for building the economic capacity of the poorest groups within the communities. Its aim is to stimulate an attitude of entrepreneurship, innovation, thrift and sustainable development in the rural areas. DDFC, an extension of the SEEDS, was established in January 2013. SANASA is another leading NGO involved in uplifting the standard of poor. Its microfinance arm, SANASA Development Bank, has a wide-spread branch network.

13. Donor Programmes: The multilateral agencies are very active in the country. The Asian Development Bank's Country Partnership Strategy (2012-2016) focuses on three pillars: inclusive and sustainable economic growth, catalyzing private investment and enhancing the effectiveness of public investment, and human resource and knowledge development. Support to the transport sector aims to address connectivity issues that have held the economy back, improving institutional capability at all levels of government, and increasing road operation and maintenance funding¹⁷. A US\$ 1,200 million credit facility has been mobilized from ADB to connect the national road network to provincial and Pradesheeya Sabha roads including many feeder roads, that will provide accessibility to 1,000 most populace villages commencing 2014. This will be implemented in several of the operational areas of the IFAD supported project. The World Bank has supported the education sector and analytical work which has helped Sri Lanka's education authorities in identifying critical policy issues related to the demand and supply of skills in a changing labour market environment, with a view to making the workforce development system more responsive to the labour market. As the focus has shifted from post conflict reconstruction to an emphasis on equitable access and social inclusion, the majority of new projects under the current Country Partnership Strategy (CPS) are nationwide in design. The World Bank plans to invest USD 1.49 billion in the CPS¹⁸. IFAD and World Bank have partnership potential for policy dialogue on issues of rural poverty, private sector partnership and natural resource management.

¹⁷ Asian Development Bank and Sri Lanka Factsheet 2012-16

¹⁸ World Bank Country Partnership Strategy, 2013-16

Democratic Socialist Republic of Sri Lanka
 Smallholder Tea and Rubber Revitalization (STARR) Project
 Design completion report

Sri Lanka

Land area (km2 thousand) 2011 1/	63	GNI per capita (USD) 2011 1/	2 580
Total population (million) 2011 1/	20.87	GDP per capita growth (annual %) 2011 1/	7
Population density (people per km2) 2011 1/	333	Inflation, consumer prices (annual %) 2011 1/	7
Local currency Sri Lanka Rupee (LKR)		Exchange rate: USD 1 = LKR	
Social Indicators		Economic Indicators	
Population growth (annual %) 2011 1/	1	GDP (USD million) 2011 1/	59 172
Crude birth rate (per thousand people) 2011 1/	18	GDP growth (annual %) 1/	
Crude death rate (per thousand people) 2011 1/	7	2000	6.0
Infant mortality rate (per thousand live births) 2011 1/	11	2011	8.3
Life expectancy at birth (years) 2011 1/	75		
		Sectoral distribution of GDP 2011 1/	
Total labour force (million) 2011 1/	8.62	% agriculture	12
Female labour force as % of total 2011 1/	32	% industry	30
		% manufacturing	18
		% services	58
Education		Consumption 2011 1/	
School enrolment, primary (% gross) 2010 1/	99	General government final consumption expenditure (as % of GDP)	15
Adult illiteracy rate (% age 15 and above) 2010 1/	9		
		Household final consumption expenditure, etc. (as % of GDP)	70
Nutrition		Gross domestic savings (as % of GDP)	15
Daily calorie supply per capita	n/a		
Malnutrition prevalence, height for age (% of children under 5) 2009 1/	19		
Malnutrition prevalence, weight for age (% of children under 5) 2009 1/	22	Balance of Payments (USD million)	
		Merchandise exports 2011 1/	10 236
Health		Merchandise imports 2011 1/	20 269
Health expenditure, total (as % of GDP) 2011 1/	3	Balance of merchandise trade	-10 033
Physicians (per thousand people) 2010 1/	0.49	Current account balances (USD million) 2011 1/	-4 615
Population using improved water sources (%) 2010 1/	91	Foreign direct investment, net 2011 1/	-896
Population using adequate sanitation facilities (%) 2010 1/	92		
Agriculture and Food			
Food imports (% of merchandise imports) 2011 1/	13.3		
		Government Finance	
Fertilizer consumption (kilograms per ha of arable land) 2009 1/	258	Cash surplus/deficit (as % of GDP) 2011 1/	-6
Food production index (2004-2006=100) 2011 1/	117	Total expense (% of GDP) 2011 1/	18
Cereal yield (kg per ha) 2011 1/	3 503	Present value of external debt (as % of GNI) 2011 1/	37
		Total debt service (% of GNI) 2011 1/	2
Land Use		Lending interest rate (%) 2011 1/	9
Arable land as % of land area 2011 1/	19	Deposit interest rate (%) 2011 1/	6
Forest area as % of total land area 2011 1/	29		
Agricultural irrigated land as % of total agric. land 2011 1/	n/a		

1/ World Bank, *World Development Indicators* database
 CD ROM 2013-2014

Appendix 2: Poverty, targeting and gender

A. Poverty

1. Population and poverty: Sri Lanka has seen high income growth as well as notable increase in Human Development Indicators despite years of internal conflict. Sri Lanka has a lower percentage of its population below the official poverty line in comparison to other South Asian countries. The Sri Lankan government has been successful in reducing poverty from 15.2% in 2006 to around 7% in 2013¹⁹, urban poverty was reduced from 6.7 to 5.3% while rural poverty was reduced from 15.7 to 9.5% and the nation is close to achieving Millennium Development Goals on Eradicating extreme poverty hunger. The number of poor had dropped to 1.8 million people in 2009/10²⁰ a reduction of nearly 58% from 2002. Poverty reduction has taken place among all geographical areas. Nevertheless, rural areas still account for the majority of the poor. Inequality and geographical concentration are the two main characteristics of poverty in the country. A significant share of households are clustered just above the poverty line and various shocks – be it at the household level or macroeconomic level – could easily push them back into poverty. While there are a multitude of social protection programmes currently operational, most of them deliver grossly insufficient benefits, are poorly targeted, and do not adequately cover the risks and vulnerabilities of the poor.

2. Considering its overall human development indicators, inequalities between women and men are high. Gender differences are clearly visible in access to assets, employment and income. Sri Lanka's Gender Inequality Index is 0.565 (where 0 represents highly equal and 1 represents extremely unequal) and is ranked 75th in the world. The rate of women's participation in the labour force is only 34.4%²¹. This could be due to several reasons including cultural factors, opportunities offering flexible work hours and lower wages for women. Women lack awareness of land and property rights, and mechanisms for enforcing them. Many are hesitant to exercise their rights because of social and cultural pressures. Women feel more empowered when the land title is in their name and feel legitimate to voice opinions. Male outmigration is a critical area of concern for women and places much greater responsibility for farming on women. Among the youth, the main issues identified were non interest to continue in the tea farms and lack of opportunities for better economic growth²².

3. According to the Household Income and Expenditure Survey (HIES) 2009/2010, 23.2% or 1.2 million households in Sri Lanka are female headed households. The majority (80%) of the female headed households are in the age group 40 and above, with 64% of household heads being categorized as "widowed/separated".²³ The incidence of women managed households accounted for between 4 to 20% of the total households in the GNs covered.²⁴ Their assets are limited by discriminatory laws and by social practices. There is also the 'feminisation' of employment through the spread of employment practices and patterns of labour force participation associated with women. Sri Lanka does not have serious gender issues as compared to its South Asian countries but it has its own brand of issues that need critical reflection and immediate addressing.

4. The main causes of rural poverty include: (i) lack of or inadequate productive assets, (ii) engagement of a substantial portion of the labour force as unpaid family workers and/or poorly paid labour, (iii) low productivity and profitability in agriculture and limited alternative opportunities; (iv) women's relatively low engagement in the labour force and lack of remunerative or productive employment, (v) high rate of youth unemployment, (vi) malnutrition and disabilities, (vii) lack of access to markets; and (viii) events of disasters caused by, and impact of, climate changes.

5. Government poverty alleviation programme: In terms of social policy, the food stamps scheme and the introduction of cash transfer schemes such as *Janasaviya* – covering 265,000 families in 1995 – later replaced by the *Samurdhi* programme, cushioned the impact of high food price increases and the withdrawal of the universal subsidy in the late 1980s. There are four components to the programme; (i) a cash transfer for consumption; (ii) a savings and credit scheme through micro-finance institutions at the district-level; (iii) a social insurance scheme (for assistance during key life-

¹⁹ World Bank, World Development Indicators

²⁰ Department of Census and Statistics 2011, Government of Sri Lanka

²¹ Human Development Report, UNDP Sri Lanka 2012

²² Ibid.

²³ Household Income and Expenditure Survey, 2009-2010

²⁴ IFAD conducted a socio economic study. February 2014.

cycle events of birth, marriage, hospitalisation and death; (iv) economic (and social) infrastructure development at community-level. Income transfers, for consumption and for social insurance, account for 85% of the allocation.²⁵ The governments most recent policy initiative is the Divineguma (Village Uplift) launched in 2013. It focuses on the expansion of micro-finance in the rural economy through community-based banking societies. The government has launched special programmes for women like the Diriya Kantha Programme – a self-employment programme; Nangwamu Gamana Programme – revolving credit schemes and entrepreneurship trainings; establishment of the Vanitha Shakthi Foundation and the Laka Putra Bank programme that provides financial assistance to women for income generating projects.

B. Targeting Tea and Rubber Components

6. **Targeting strategy and criteria - General:** The targeting strategy adopted for both tea and rubber components were principally same except for inherent differences. It considered as its foremost focus the IFAD exclusive interest on rural poverty reduction by working with poor rural populations to eliminate poverty and raise productivity and incomes. This primary focus was then unified with tea and rubber national development objectives. *This approach was used as criteria of targeting.*

7. Targeting for tea and rubber was performed in three steps; i. *First Level District Targeting* ii *Second Level DSD*²⁶ *Targeting* and iii. *Third Level Beneficiary Targeting*. First level district targeting was to select the project implementation districts for tea and rubber. The second level DSD targeting was to select DS divisions *within* the targeted districts. They were based on pre-determined criteria. Beneficiary level targeting was to select base level implementing areas and project partners in the targeted DS divisions, where the potential project beneficiaries would reside or potential developable land would exist. They would be identified as specific tea society areas in the tea component and as GN divisions in rubber component.

8. **Specific targeting for the tea component:** The tea component was targeted in three steps detailed above following the criteria: i. presence of notable poverty incidences, ii. abundance of smallholder tea lands for replanting and iii. abundance of tea smallholders (criteria ii and iii together was the replanting potential).

9. Though smallholder tea is cultivated in 14 districts in Sri Lanka, it is predominantly cultivated only in 8 districts. They are (without any order): Ratnapura and Kegalle (Sabaragamuwa Province), Galle and Matara (Southern Province), Kalutara (Western Province), Badulla (Uva Province), and Kandy and Nuwaraeliya (Central Province). Nuwaraeliya is Sri Lanka's premium estate tea sector with lowest smallholder tea extent and lowest number of smallholders among the 8 districts. *Thus Nuwaraeliya was not considered further for targeting.*

10. The first criteria for district targeting; *notable incidences of poverty*, was assessed for the remaining seven districts using the latest poverty indices. The rankings are presented below. Six districts had notable incidences of poverty. The district Kalutara, apart from under considerable pressure of rapid urbanization as the adjoining district to Colombo, also has the lowest poverty, less than half the national poverty index. *Thus Kalutara was not considered further for targeting.*

Appendix Table 1: Ranking of seven main smallholder tea districts by incidence of poverty

District	Badulla	Ratna pura	Galle	Matara	Kegalle	Kandy	Kalutara
Province	Uva	Sabarag	South	South	Sabarag	Central	Western
Poverty Head Count Index (HCI)**	12.3	10.4	9.9	7.1	6.7	6.2	3.1
HCI Rank	1	2	3	4	5	6	7
** National poverty head count index is 6.7 Source: Adapted from "Poverty Indicators, Household Income and Expenditure Survey - 2012/13", Department of Census and Statistics, June 2015 Note: Ranking in (<i>negative quality</i>) descending order: 1 for the highest poverty index							

²⁵ In 2007 19% were below the official poverty level but 45% households received Samurdhi benefits that year.

²⁶ DSD=Divisional Secretary Divisions, sub administrative geographical areas in a the district

11. As the remaining six districts were part of the original significant 8 smallholder tea districts (ref. above), by default, all six districts had potential for replanting, but with different scaling, which were used to converge the targeting to best districts. The degree of potential for replanting was thus assessed by the combined ranking of available tea extents and smallholder populace in the remaining six districts. Following table presents the degree of potential for replanting. While all six districts had potential for replanting, Ratnapura had the highest degree potential for replanting, while Badulla and Kegalle had equal potential at the fifth place.

Appendix Table 2: Ranking of six main smallholder tea districts by tea extent, smallholder populace and degree of potential for replanting

District	Ratnapura	Galle	Matara	Kandy	Badulla	Kegalle
National Rank of smallholder tea extent^^	1	2	3	4	6	5
Tea extent hectares	41292	37017	36533	21191	11432	12352
National Rank of smallholders^^	1	2	3	4	5	6
No. of stallholders	97984	90524	67613	30747	29679	19637
Σ of Ranks++ Degree of scope for replanting	2	4	6	8	11	11
^^ Scale of 1-5; Ranking in descending order: 1 for the most abundant tea extent or most abundant smallholders						
++ Scale of 2-12; Ranking in descending order: 2= highest scale for potential for replanting, 12= lowest scale for potential for replanting (all have potential but degree varies)						

12. The above two tables were independent analyses of incidences of poverty and degree of potential for replanting. However the criteria for district targeting encompassed holistic consideration of all three criteria. Thus correlating Appendix Table 1 and Appendix Table 2 would yield the district targeting, taking into account the incidence of poverty, availability of smallholder tea land and availability of smallholders. The overlaid table is presented below.

13. Between Badulla and Kegalle, though potential for replanting was mostly same, Badulla had the highest poverty incidence among the six districts (ref: Appendix Table 1). Thus Badulla was considered over Kegalle.

Appendix Table 3: Targeting of six main smallholder tea districts by poverty and potential for replanting

District	Ratnapura	Galle	Matara	Kandy	Badulla	Kegalle
National Rank of SH tea extent (from Table #)	1	2	3	4	6	5
National Rank of smallholders (from Table #)	1	2	3	4	5	6
Poverty Head Count Index Rank (from Table 1.0)	2	3	4	6	1	5
Σ of Ranks### Potential to consider as a project target	4	7	10	14	12	16
Five Targeted Districts	Yes	Yes	Yes	Yes	Yes	No
### Scale of 3-18; Ranking in descending order; 3= ample potential to consider as a project target, 18=minimal potential to consider as a project target						

14. Accordingly under the First Level District Targeting, the targeted five tea districts would be Ratnapura (Sabaragamuwa Province), Galle (Southern Province), Matara (Southern Province), Badulla (Uva Province), and Kandy (Central Province). The above district targeting was most apposite as it: i. had considered relative poverty incidences, main smallholder tea growing areas, populace of tea extent and tea growing smallholders, ii. covers 5 out of 8 main smallholder districts based on poverty and scope, iii. represents 85% of smallholder grower locations, iv. represents 83% of smallholder tea land locations.

15. The next two levels of targeting, namely the *Second Level DSD Targeting* and *Third Level Beneficiary Targeting* would be undertaken together by each Tea Regional Manager and staff of the targeted districts at a series of workshops proposed to hold as one of initial steps in project implementation (see Annex 5: project implementation). The same set of criteria viz; incidence of poverty in the DSDs, availability of smallholder tea lands in the DSDs, availability of smallholders in the DSDs would be prudently examined by them to target the project implementation DSDs and within such DSDs the implementing tea societies. Members of such tea societies would be the project beneficiaries. Additionally ground level situations known to the district staff such as: though smallholder tea is available actual replanting needs as some plantations could be healthy and young, whether soil could be rehabilitated with grass if land had slides and drastically washed off, whether smallholders are employed elsewhere and not keen to replant, etc. would be considered at these workshops.

16. In order to assist the Tea Regional Manager and staff in targeting the DSDs and tea societies in the workshops, the Mission had compiled data sheets for all 5 districts²⁷, which could be used as working tools. The data sheets contain DSD wise poverty incidences²⁸, extent of tea less than half ha., and their number of smallholders, average yields, potential to rehabilitate²⁹ and likewise extent of tea more than half ha., to less than one ha., and their number of smallholders, average yields and potential to rehabilitate. Such data sheets for the five targeted districts are kept with TSHDA.

Following is a reproduction of the data sheet for Ratnapura, for illustration.

RATNAPURA DS DIVISION	LAND CATEGORY 1					LAND CATEGORY 2				
	POVERTY	EXTENT OF TEA LANDS LESS THAN ½ HA				EXTENT OF TEA LANDS MORE THAN ½ HA TO 1 HA				
		NUMBER OF SMALL HOLDERS	TEA EXTENT HA.	AVERAGE YIELD KG /MONTH (Per.Ha)	POTENTIAL TO REHAB. HIGH/AVERAGE/LOW	NUMBER OF SMALL HOLDERS	TEA EXTENT HA.	AVERAGE YIELD KG /MONTH (Per.Ha)	POTENTIAL TO REHAB. HIGH/AVERAGE/LOW	
EHELIYAGODA	26.9	2767	349	1000	A	91	60	900	A	
KURUWITA	28.9	9977	1630	1200	H	546	366	1100	H	
KIRIELLA	25.6	2325	297	1000	A	70	47	900	A	
RATNAPURA	21.9	11491	2676	1150	H	1413	917	950	H	
IMBULPE	32.0	8220	2030	1000	A	879	584	900	A	
BALANGODA	27.3	7400	1657	1000	A	682	449	900	A	
OPANAYAKA	34.1	4104	783	1000	L	237	160	900	L	
PELMADULLA	30.2	4149	824	1100	H	297	201	950	H	
ELAPATHA	40.1	3021	507	1200	H	184	119	1100	H	
AYAGAMA	33.7	5340	946	1100	L	347	231	1000	L	
KALAWANA	36.4	9858	2246	1200	H	1474	1040	1100	H	
NIVITHIGALA	32.8	4116	756	1200	H	255	171	1100	H	
KAHAWATHTHA	32.7	6425	1293	1100	H	586	413	1000	H	
GODAKAWELA	38.2	3734	716	1000	A	289	194	900	A	
WELIGAPOLA	39.2	1640	386	950	L	171	113	850	L	
EMBILIPITIYA	31.6	58	9	950	L	3	2	850	L	
KOLONNA	37.7	2445	569	1000	H	386	250	900	H	

Majority of tea lands are less than one hectare. *The targeted smallholders would be those who have replant-able tea lands of one hectare or less.* Following table illustrates the heavy bias of smallholder tea land size to less than one hectare.

²⁷ With the assistance of Regional Managers of TSHDA

²⁸ Source: Department of Census and Statistics; the data is the only set of DSD wise poverty data available in Sri Lanka, though out of time for size of poverty, the DSD wise relative trend may be assumed closely unchanged for above purpose.

²⁹ Best judgment of field extension staff

Appendix Table 4: Extent of tea by size class and number of holdings

Smallholder Tea Land - Size Class in Hectares				
Size Class, ha.	Extent, ha.	%	No. of Holdings	%
Less than 1/2	67982	51.4	350292	88.4
½ - < 1	22850	17.2	33840	8.5
1 - < 2	10155	7.6	7918	2.0
2 - < 3	5191	3.9	2286	0.5
3 - < 5	5541	4.2	1429	0.3
5 - < 10	5900	4.5	834	0.2
10 and above	14710	11.2	624	0.1
Total	132329	100	397223	100

Source: Census of Tea Smallholdings, 2005, TSHDA

17. The beneficiaries for the tea component would therefore be those households who are poor with little or no additional sizable sources of income other than tea, have replant-able tea lands of one hectare or less, have no comfortable access to financial assistance and are in dire need of replanting. Women headed households who fall within this criteria would be given special emphasis. The tea inspectors of the targeted DSDs would select such beneficiaries for the tea component of the Project, thereby completing the targeting procedure for tea.

18. **Annual tea replanting targets:** The tea replanting targets for the five targeted districts are given in following Appendix Table 5 and Appendix Table 6. Appendix Table 5 shows the commencing year of initial activities for the targeted extent, namely uprooting of existing tea, land preparation, establishment of grass crop for 18 months; *roughly two year period of activities*.

Appendix Table 5: Annual tea replanting targets for 5 districts

Tea replanting targeting** in 5 targeted districts over Project lifespan, extent in ha.							
District / Elevation for tea	2016	2017	2018	2019	2020	2021	Total
Galle (Low Country)	160	380	430	430			1400
Matara (Low C)	210	430	430	430			1500
Ratnapura (Low C)	210	430	430	430			1500
Badulla (Up C)	60	180	180	180			600
Kandy (Mid C)	35	155	155	155			500
Total (ha)	675	1575	1625	1625			5500

** Note: Indicates the land preparation commencing year for the two years later replanting

Appendix Table 5 displays the prior activities time span up to time of replanting of tea.

Appendix Table 6: Annual tea replanting targets with prior activities

Tea replanting targets: with actual planting year and prior activity years							
District	Land preparation, grass stand and Tea Replanting year and extent, ha.						
	2016	2017	2018	2019	2020	2021	Total
Galle			160	380	430	430	1400
Matara			210	430	430	430	1500
Ratnapura			210	430	430	430	1500
Badulla						430	1500

			60				
				180			
					180		
						180	600
Kandy							
			35				
				155			
					155		
						155	500
Total (ha)			675	1575	1625	1625	5500
Note: shaded area is activities prior to replanting: 6 months land preparation, 18 months under grass, followed by actual year of replanting and extent							

19. **Specific targeting for the rubber component:** Similar to the tea component, rubber component was also targeted in three steps (levels) following the criteria: i. government policy on new rubber ii. presence of notable poverty incidences, iii. abundance of new land and smallholders to cultivate (criteria iii is same as potential for new planting).

20. The criteria one, Government policy on rubber plantation expansion was to encourage new rubber cultivations to non-traditional areas where vast swaths of suitable land exist, as rubber in traditional areas were under threat of urbanization. Rubber had been grown traditionally in the low country wet zone covering the south western, southern and central parts of Sri Lanka for many years. Feasibility of rubber cultivation had been tested by RRISL in non-traditional district Ampara (Eastern Province) and small plantations had been established. Also feasibility is being observed in Batticaloa (Eastern Province), Mullaitivu and Vavuniya (Northern Province). Though a substantial cultivation exists in Monaragala, to a large extent from IFAD funded SPEnDP, the district is still considered a non-traditional area, having the best experience of growing rubber outside traditional districts. Thus Ampara and Monaragala were targeted as potential candidates.

21. In Monaragala, rubber could be grown in DSDs of SPEnDP (8 out of 11 DSDs) being intermediate climate required by the crop. The intermediate climate DSDs Padiyathalawa and Mahaoya would be targeted in Ampara. This was the Second Level DSD Targeting for rubber.

22. The poverty statistics for Ampara commenced only in 2012/13³⁰ and specific statistics were not available for Padiyathalawa and Mahaoya DSDs, which were needed as Ampara district poverty indicator could be skewed due to vastness of the district, large extents on the east on commercial rice cultivation, rice processing with associated packing, storage, transport etc., plus sprawling trade and fishing activities. This is in contrast to very rural, poor, agriculture based, Padiyathalawa and Mahaoya targeted DSDs. Thus Mission computed a proxy 2012/13 poverty indicator³¹ to Padiyathalawa and Mahaoya to assess the 'incidence of poverty' criteria in the candidate districts, as depicted in following table. Both districts have notable incidences of poverty.

Appendix Table 7: Poverty incidence in Monaragala and Ampara (P&M DSDs)

Poverty	Sri Lanka^^	Monaragala^^	Ampara (P and M DSDs)**
Poverty Head Count Index	6.7	20.8	14.2
** a proxy for 2012/13 Padiyathalawa and Mahaoya DSDs only, see footnote ^^ Source: "Poverty Indicators, Household Income and Expenditure Survey - 2012/13", Department of Census and Statistics, June 2015.			

23. Land is plenty available in the two districts, currently under state ownership but assignable with tenure regularization for worthy projects. It was estimated that 49000 ha were available in Monaragala among the 8 DSDs, 11000 ha in Padiyathalawa and 17000 in Mahaoya in the

³⁰ Due to prevailed civil unrest

³¹ a proxy Mission computation, based on averaging the poverty indices of adjoining DSDs (of other districts; Badulla, Monaragala and Polonnaruwa) which are boundaries of Padiyathalawa & Mahaoya DSDs, after updating their 2002 indices to 2012/13 poverty level using the district poverty indicator trend movement factor.

Ampara district³². Thus substantial eligible land is available in Monaragala and Ampara for the cultivation of rubber, satisfying the second criteria for district targeting. These lands belong to the Department of Land Commissioner, Forest Department or MASL. Currently farmers in most of these lands farm small patches of slash & burn type cultivation illegally. Thus smallholders of agricultural background are residentially available in the selected DSDs. The MPI assures that land can be alienated and tenure regularized for the rubber cultivation. Thus there is potential for planting rubber.

24. Based on above assessment of the three criteria, the districts Monaragala (Uva Province) and Ampara (Eastern Province) would be targeted for cultivation of rubber. In the Monaragala district, the DSDs; Monaragala, Buttalla, Madulla, Wellawaya, Bibila, Badalkumbura, Medagama, Siyambalanduwa being the only DSDs having the intermediate climate and in Ampara, the two intermediate climate DSDs; Padiyathalawa and Mahaoya would be targeted.

25. The beneficiaries for the rubber component would therefore be those households who have no land or have only illegally encroached patches of land or own very small extents, with little or no additional sizable sources of income other than from subsistence cultivation or as farm labourers and have no access to comfortable financial assistance and in dire need of a long standing profitable commercial crop. Women managed households who fall within this criteria would be given special emphasis.

26. The RDOs of the RDD in the targeted DSDs would select such beneficiaries for the rubber component of the Project, thereby completing the targeting procedure for rubber.

Annual rubber planting targets: The rubber planting targets for the two targeted districts are given in Appendix Table 8.

Appendix Table 8: Annual rubber planting targets for 2 districts

Rubber planting targets** in 2 targeted districts over Project lifespan, extent in ha.							
District	2016	2017	2018	2019	2020	2021	Total
Monaragala	105	215	215	215			750
Ampara	100	550	800	800			2,250
Total	205	765	1015	1015			3000
** Note: Indicates the year for land preparation and planting with rains. The shaded years are for much needed rehabilitation of the established plants for sustainability							

The above targets are subject to timely release of land, tenure regularisation and planting material reservation at or prior to commencement of the project.

27. **Specific targeting for Group Rubber Processing Centres:** Approximately 40% of processed rubber is Ribbed Smoked Sheets (RSS), primarily by smallholders producing poor grades; RSS3 or RSS4, fetching low prices. In contrast, certain local rubber product manufacturers require a reliable supply of quality sheet rubber of RSS1 and RSS2, in volume about 15-20% of the total RSS production. Price of RSS1&2 is approximately Rs. 5-10 above the RSS3&4 prices.

28. Establishing group processing centres (GPCs) will facilitate the smallholders with user friendly village level moderate cost processing plants for RSS1 production and empower them to become organised entrepreneurs. GPCs of capacity 250kg/day need to be established through "Thursaviya societies" under the MPI for ease of obtaining state assistance or credit assistance as they are state recognized societies.

29. **Criteria for targeting GPCs:** An appropriately modified four criteria were used to target the GPCs: i. presence of notable poverty incidences, ii. abundance of rubber crop yielding latex and iii. abundance of rubber smallholders currently processing rubber in sub-standard level and iv viable rubber latex producing Thursaviya societies or Village Rubber Development Clusters to administer sourcing-in, processing and marketing of rubber.

30. Abundance of poverty had been already assessed for all Project districts under tea and rubber planting component. On poverty incidence criteria Project rubber districts could be targeted for establishing GPCs. In Monaragala, part of Ampara and in Ratnapura, latex yielding mature rubber

³² STARR Detailed Design Report, 2014, WP 2

exists though not of same proportion (less in Ampara). The rubber smallholders in all targeted districts currently process latex in crude manner yielding low priced RSS3&4 grades. Transforming the existing VRDC farmer groups under SPEnDP to Thurusaviya societies and forming new Thurusaviya societies elsewhere is undemanding.

31. Thus rubber processing sub-component of the Project would be targeted at Monaragala, Ampara and Rathnapura. Under SPEnDP already 40 GPCs are being established in Monaragala. Harnessing its experience, 40 new GPCs would be established in Monaragala and 4 in Ampara after the completion of SPEnDP GPSs and assessing their viability (ref: annexes 4&5).

The number of GPCs in Moneragala was determined to cater to the requirement of processing at least 50% of expected yield of both SPEnDP and RDD rubber over and above the 40 GPCs of 100kg capacity currently being built under SPEnDP. As there are no quality processing facilities in Ampara, to instil the quality concept to smallholders with the arrival of STARR project, four GPCs would be targeted. Additionally four GPCs with facilities to manufacture non-conventional grades of rubber to fulfil 50% of demand for air dried sheets would be targeted to Ratnapura, where rubber cultivation is widespread and well established, opportune for high quality rubber processing with GPSs exist, trade access available being closer to Colombo rubber traders.

C. Gender Mainstreaming in STARR

32. Gender mainstreaming: STAAR gender mainstreaming strategy speaks about fostering of a woman's sense of self-worth, her decision-making power, her access to opportunities and resources, her power and control over her own life inside and outside the home, and her ability to affect change. IFAD's Household Methodologies (HHM) would appear to be highly relevant in the tea and rubber smallholder context in the STAAR project. The project has been designed keeping in mind the important role women play in the agricultural sector especially in tea and rubber sectors and in recognising their contribution and acknowledging their roles. Specific targets under each component have been identified for women. Project's inclusive rural financing component increasingly targets women (particularly for non-farming IGAs) because of their historically-proved higher repayment records compared to men, and potential contributions of female-targeted micro-finance to poverty reduction and women's empowerment. This is a learning experience from SPEnDP and IFAD-funded other projects in the country. Project focuses locating its rural financing programme within the wider development agenda – for example linkages with value chain operators. In all these attempts gender issues and specifically women's empowerment, continue to be regarded. The entry point would be the group sensitization where strong gender-sensitive elements need to be incorporated to training to transform the community towards acceptance of gender equality. Most important and deciding factor of whole this process is, however, the responsiveness for gender equality of project implementing partners, RDD and TSHDA, and other stakeholders in the value chains of rubber, tea and intercrops.

33. The design has a results based framework which incorporates gender disaggregated targets (Annex I). Proper determination of targets also allow for credible gender audits that would be conducted by the Gender Consultant of Supervision and Implementation Support (SIS) missions every year. Annex I provides a comprehensive and detailed gender mainstreamed project description. The Gender Mainstreaming Strategy would be based on the following principles; (i) **Develop gender responsive guidelines** for the implementation of the project reflecting the targets to be achieved in the project design; (ii) **Target interventions** to ensure the participation of women in planning and implementation processes and promote equal access to resources and benefit and (iii) **Monitor and evaluate** interventions to ensure that gender issues are well addressed.

34. The overall responsibility for the successful implementation of the Gender Mainstreaming Strategy would rest with the Project Manager, who would be assisted by all project-recruited PMU and district staff members. The M&E Coordinator in PMU will be the focal point for gender at PMU level who will integrate gender into the M&E system. CDO at the district cell is the focal point for gender at district level while RDD and TSHDA officers involved in project activities will also be given gender orientation at the outset. The Project Manager would be ultimately responsible for Gender mainstreaming in the project while all other staff including the field and professional staff would be responsible for ensuring that the gender targets are met. Project Manager will critically review the project design to see how it addresses gender issues, especially in relation to targeting and how project implementation approaches are aligned with the gender mainstreaming strategy and establishing a system for speedy feedback of results. The field staff (with CDOs' leadership BDOs and

animators) are the pillars to implement the gender strategy. PMU staff will integrate gender concerns by supporting AWPB, project M&E system, project progress reports and human resource management of the project staff.

35. It is also important that project partners and service providers should demonstrate a commitment to pro-poor development, gender equality and women's empowerment. PMU will be careful in selection of such service providers that these have adequate experience with community-based social targeting and participatory methods. PMU will also encourage service providers to recruit women field workers in order to improve outreach at the field level. Their ToRs will be specified with project gender targets.

36. The Project Manager would prepare the Gender Strategy and action plan of the project as part of the initial work to guide planning, implementation, monitoring and evaluation of all the components of the programme. An annual Gender Scorecard would be developed to keep track of how well the project has been progressing on gender and inclusion. The strategy would include a simple action plan to help in monitoring gender and inclusion in the project. The main guiding principles laid out in this report would facilitate the development of this strategy. SIS missions carry gender performance reviews every year and make recommendations for further improvements.

37. Managing risks in implementing the Gender Mainstreaming Strategy: There are some risks that might impede the successful implementation of the project Gender Mainstreaming strategy. Project implementation will be in the hands of its two partners, TSHDA for tea replanting and RDD for rubber new planting. Even the district level management of the project is in the hands of these partners. Hence, it is so important that TSHDA and RDD have clear receptiveness for project gender-related activities. The project will establish partners' long-term commitment which is important for sustainable progress towards gender equality at both macro and micro level. Provided project implementing partners demonstrate a commitment to pro-poor development, gender equality and women's empowerment, the PMU task would be easier.

Gender Integrated M&E system

38. Project M&E system reflects gender and youth perspectives throughout the system. It will design and monitor gender-sensitive indicators and engender logframe. It will also mainstream gender and poverty considerations into data collection, baseline survey, impact assessments, and mid-term review. PMU will ensure gender and poverty aspects integrated into main reports, as well as separate reporting when appropriate. M&E in a results-based framework reveals the extent to which a project has achieved improvements in the lives and overall social and economic well-being of women and men. It also helps to improve project performance during implementation, facilitates midterm adjustments, and helps to derive lessons for future projects. The Project would ensure through its M&E that it captures issues related to targeting and gender in all key project reports.

39. Reporting on gender: Sex disaggregated formats would be used for all monitoring protocols. Progress reporting and evaluation formats would be designed to capture sex-disaggregated data at all levels and to record progress against the baseline data. Project results and impacts would also be reported in sex disaggregated form, with the inclusion of gender outcome indicators from the outset. Project staff responsible for data collection (primarily animators, CDOs and BDOs, but also RDD and TSHDA field staff) and monitoring would be trained in understanding and applying gender indicators. Detailed gender-sensitive indicators would be developed by the Project Manager, for which necessary external expert assistance will be obtained as necessary. A key role of the M&E Coordinator in the PMU would be to effectively integrate these indicators within the project's performance measurement framework and to ensure all personnel with M&E responsibilities have the awareness and skills to measure against the gender-specific indicators.

40. IFAD's facilitation: IFAD would ensure that a specialist skilled in reviewing gender and poverty targeting issues is included in all SIS missions. The expert would assess the progress and performance of the project with reference to gender and poverty targeting, compare qualitative and quantitative achievements, highlight key issues, achievements and constraints. The specialist would review the level of the partner institutions' role for gender mainstreaming, assess the performance of the service providers and other stakeholders in the civil society, and identify areas for further improvement.

Annex I:

Results based project description by gender

Component and sub component	Gender targets
1. Tea Smallholders' Development	
A. Strengthening tea societies in production and marketing	
Selection and Identification	<ul style="list-style-type: none"> At least 30% of the members should be women with an equal representation in the executive committees. Priority for the incentives and grants offered by the Project would be given to those societies who have been able to successfully include women managed and other vulnerable households.
Developing management capacity	<ul style="list-style-type: none"> Gender sensitisation trainings for societies would focus on the triple roles that women play (productive, reproductive and households) and the importance of empowering women within the societies as they are mainly involved in the tea sector. At least 30% of the participants would be women in each of these capacity building training undertaken by the project.
Livelihoods Planning	<ul style="list-style-type: none"> Priority would be given to the woman managed households and other poor and vulnerable women who are members in the society. At least 40% participants would be women in livelihood planning exercises.
Mobilize internal society funding	<ul style="list-style-type: none"> At least 90% of the funds are managed by women members. At least 80% of the funds are to be used for women managed households/poor women who require such additional resources for their families.
Facilitating bank credits	<ul style="list-style-type: none"> The Project would ensure that at least 30% of the loans would be given to women for non-farming IGAs.
B. Market driven production support in tea	
Infilling programme	<ul style="list-style-type: none"> At least 30% of the infilling programme would be allotted to poor women.
Support to inter cropping	<ul style="list-style-type: none"> At least 40% of the beneficiaries would be poor women.
Supplementary livelihood options	<ul style="list-style-type: none"> At least 30% of the livelihoods would be given to women who would be enabled to own and manage their enterprises through trainings and exposure visits.
Support to input nurseries	<ul style="list-style-type: none"> The Project would maintain a reservation of 25% women and 25% youth for the nurseries.
Upgrading extension service	<ul style="list-style-type: none"> Women extension officers would be active participants and would be in proportion to their representation in the extension services in each district.
C. Income and market diversification for Tea Smallholders	
Provision of matching grants	<ul style="list-style-type: none"> At least 50% of non-farm matching grants to women
Collective marketing activities	<ul style="list-style-type: none"> At least 30% of beneficiaries represent women
Income generating activities	<ul style="list-style-type: none"> At least 40% of non-farm IGAs to women entrepreneurs
Business development advisory services (exposure visits, advisory services, business plan preparation etc.)	<ul style="list-style-type: none"> Women would constitute about 40% of the participants in advisory services. For exposure visits, there may be women only visits organised as per the convenience of women
Marketing infrastructure – access roads	<ul style="list-style-type: none"> This will be on need base but will make sure an active participation of women in making proposals
2. Rubber Smallholders' Development	
A. Strengthening rubber societies including processing and market sensitivity	
Selection and Identification	<ul style="list-style-type: none"> At least 30% of the members should be women with an equal representation in the executive committees. Priority for the incentives and grants offered by the Project would be given to those societies who have been able to successfully include women managed and other vulnerable households.
Developing management capacity	<ul style="list-style-type: none"> Gender sensitisation trainings for societies would focus on the triple roles that women play (productive, reproductive and households) and the importance of empowering women

	<p>within the societies as they are mainly involved in the tea sector.</p> <ul style="list-style-type: none"> At least 30% of the participants would be women in each of these capacity building exercises under taken by the project.
Livelihoods Planning	<ul style="list-style-type: none"> Priority would be given to the woman managed households and other poor and vulnerable women who are members in the society. At least 50% participants would be women in this component.
Mobilize internal society funding	<ul style="list-style-type: none"> At least 90% of the funds are managed by women members. At least 80% of the funds are to be used for women managed households/poor women who require such additional resources for their families.
Facilitating bank credits	<ul style="list-style-type: none"> The Project would ensure that at least 30% of the loans would be given to women for non-farming IGAs.
Private-public partnership linkages:	<ul style="list-style-type: none"> At least 20% of the PPP linkages with women
Processing centres:	<ul style="list-style-type: none"> At least 50% would be allocated to women to own and manage
B. Market driven tea production support	
New planting subsidy	<ul style="list-style-type: none"> The Project would provide support to at least 30% women beneficiaries
	<ul style="list-style-type: none">
Support to inter cropping	<ul style="list-style-type: none"> At least 40% of the beneficiaries would be poor women
Supplementary livelihood options	<ul style="list-style-type: none"> At least 30% of the livelihoods would be given to women who would be enabled to own and manage their enterprises through trainings and exposure visits
C. Market driven rubber production support	
Technical support for rubber growers:	<ul style="list-style-type: none"> Technical support would be given to about 30% women from poor and vulnerable households
Rubber processing training	<ul style="list-style-type: none"> At least 20% of the participants of the rubber processing trainings would be women
Para extension services	<ul style="list-style-type: none"> The Project would endeavour to identify at least 30% women as para extension workers, train and support them
Upgrading extension service	<ul style="list-style-type: none"> Women extension officers would be active participants and would be in proportion to their representation in the extension services in each district.
Exposure visits	<ul style="list-style-type: none"> Women would constitute about 30% of the participants; there may be women only visits organised as per the convenience of women
3. Inclusive Rural Financing	
Sensitization of different types of borrowers	<ul style="list-style-type: none"> Women would constitute about 40% of the participants; there may be women only groups organized for sensitization
Preparation of Business plan and linkages to banks	<ul style="list-style-type: none"> At least 50% beneficiaries include for non-farming BPs and 30% for rubber-related and intercrop loans.
GENDER MAINSTREAMING WITHIN THE LEARNING SYSTEMS	<ul style="list-style-type: none"> Monitoring and evaluation will be carried out on the basis of gender and household poverty disaggregated data. Systematically collect data disaggregated by sex wherever relevant (e.g. participants to capacity development activities for farmers, recipients of inputs, beneficiaries of facilities constructed, etc.) and further analyse; Ensure that all data collection has a gender lens – baseline, annual outcome surveys, impact studies etc. Provide (more qualitative) gender related information when reporting on progress (on a half-yearly and annual basis) by using a progress reporting format that encourages critical reflection on gender; Analyse the sex-disaggregated data and gender related information provided and present the consolidated information in the half-yearly and annual progress reports; Use the data and information in the annual planning exercise

ANNEX 2

DRAFT TERMS OF REFERENCE FOR THE GENDER CONSULTANT OF STARR

The Gender Consultant will assist in overall coordination of all the gender related activity and will help prepare the gender and inclusion strategy and action plan. She will :

1. Be responsible to ensure guidelines for gender equity and inclusion issues are adequately reflected in the project implementation and monitor them.
2. Work to sensitise all project and partners that project outcomes should be achieved with respect for the principle of gender equity and women's empowerment in line with Millennium Development Goal 3 for gender equity and women's empowerment.
3. Critically review project implementation to see how it addresses gender issues, especially in relation to targeting and how project implementation is aligned with project design on gender and inclusion.
4. Review basic project implementation processes and outputs to provide feedback and suggestions when needed on how to achieve best possible project outcomes with respect to targeting, gender equity, inclusion and women's empowerment. The basic processes to which inputs are required:
 - o Preparation of the Annual Work Plan and Budget;
 - o Design and implementation of project M&E system;
 - o Project Progress Reports;
 - o Project Supervision; and,
 - o Human Resource Management of project staff.
5. Review project plans and budgets to ensure that adequate attention is paid (and resources allocated) to support practical and strategic support to women, and to influence the wider policy/decision-making community to protect and promote equity.
6. Work with the M&E Officer to ensure that the M&E, Logframe and MIS is gender sensitive and reflective of the real time situation. Integrate relevant empowerment indicators in information systems
7. Work on emerging strategies and plan with each officer/specialist at ARIS, and recommend good-practice methods relevant to the sector/issue under consideration. These should include attention both to direct action on the ground, but also to advocating with decision-makers in each sector for gender/diversity sensitive response, and the rights of marginalized groups.
8. Ensure that there are adequate communication materials on Gender issues; ensure that the information materials the project develops are gender sensitive in their language and image.
9. Review monitoring reports, analyse them for impact evaluation and to identify the causes of potential bottlenecks in progress implementation. Prepare summary of such reports for each PMU to take corrective actions and report to Programme Director.
10. Undertake regular visits to the field to support implementation of M&E and to identify where adaptations might be needed.
11. Guide the regular sharing of the outputs of M&E findings with project staff, implementing agencies that s/he may require.
12. Prepare regular reports for the programme, highlighting areas of concern that might needs state's policy intervention and preparing the documentations for the project review meetings.
13. Contributes to KM resources by preparing best practices and capturing KM practices through written stories and video debriefings

Requirements:

Advance University Degree (Master's Degree or equivalent) in sociology, agriculture, social work or rural development and other social science with experience in gender and development;
Sound Understanding and awareness of issues relating to gender and women's issues in the context of Sri Lanka

Strong analytical and problem solving skills and is creative, innovative, persistent and resourceful
Experience in developing strategies for agriculture and community lead economic development programs is highly desirable;

Excellent oral and written communication skills

Demonstrated knowledge and experience of team building concepts;

Experience:

- At least 10 years of relevant experience in programming with at least 5 years of relevant experience at national level geared to support rural development and women's empowerment programs, with particular experience in complex and multi-component programmes;
- A proven track record in managing and monitoring results-based, including in-depth knowledge of results-based management approaches;
- Working experience and knowledge of programming and procedures of the government system and/or donor agencies will be an advantage
- Motivated, and capable of working under pressure;

ANNEX III

RESULTS BASED PROJECT DESCRIPTION BY GENDER

Component and sub component	Gender targets
I. STRENGTHENING TEA SOCIETIES	
A. Capacity building of societies:	
Selection and Identification:	<ul style="list-style-type: none"> At least 40% of the members should be women with an equal representation in the executive committees. Priority for the incentives and grants offered by the Project would be given to those societies who have been able to successfully include women managed and other vulnerable households.
Developing management capacity:	<ul style="list-style-type: none"> Gender sensitisation trainings for societies would focus on the triple roles that women play (productive, reproductive and households) and the importance of empowering women within the societies as they are mainly involved in the tea sector. At least 30% of the participants would be women in each of these capacity building exercises under taken by the project.
Livelihoods Planning:	<ul style="list-style-type: none"> Priority would be given to the woman managed households and other poor and vulnerable women who are members in the society. At least 50% participants would be women in this component.
Financial intermediation funds:	<ul style="list-style-type: none"> At least 50% of the funds are to be used for women managed households/poor women who require such additional resources.
Leveraging commercial funds:	<ul style="list-style-type: none"> The Project would ensure that at least 50% of the loans would be given to women.
Private-public partnership linkages:	<ul style="list-style-type: none"> At least 20% of the PPP linkages with women
II. PRODUCTION SUPPORT FOR TEA GROWERS	
A. Tea production enhancement:	
Infilling programme:	<ul style="list-style-type: none"> At least 30% of the infilling programme would be allotted to poor women.
Support to inter cropping:	<ul style="list-style-type: none"> At least 40% of the beneficiaries would be poor women.
Supplementary livelihood options:	<ul style="list-style-type: none"> At least 30% of the livelihoods would be given to women who would be enabled to own and manage their enterprises through trainings and exposure visits.
Innovative technologies:	<ul style="list-style-type: none"> The Project would ensure that at least 30% beneficiaries under this innovative approach would be women.
B. Support to private nurseries	
Support to input nurseries:	<ul style="list-style-type: none"> The Project would maintain a reservation of 25% women and 25% youth for the nurseries.
III. TECHNICAL SUPPORT FOR TEA GROWERS	
Technical support for tea growers:	<ul style="list-style-type: none"> Technical support would be given to about 50% women from poor and vulnerable households.
Sustainable NRM training:	<ul style="list-style-type: none"> at least 40% of the participants of the NRM trainings would be women
Para extension services:	<ul style="list-style-type: none"> The Project would endeavour to identify at least 30% women as para extension workers, train and support them to provide services to

	the small holder farmers.
Training nursery growers:	<ul style="list-style-type: none"> 25% of women who have been identified as input nurseries suppliers
Upgrading extension service:	<ul style="list-style-type: none"> Women extension officers would be active participants and would be in proportion to their representation in the extension services in each district.
Exposure visits:	<ul style="list-style-type: none"> Women would constitute about 50% of the participants; there may be women only visits organised as per the convenience of women
I. STRENGTHENING RUBBER PLANTATION SOCIETIES	
A. Capacity building of societies:	
Selection and Identification:	<ul style="list-style-type: none"> At least 40% of the members should be women with an equal representation in the executive committees. Priority for the incentives and grants offered by the Project would be given to those societies who have been able to successfully include women managed and other vulnerable households.
Developing management capacity:	<ul style="list-style-type: none"> Gender sensitisation trainings for societies would focus on the triple roles that women play (productive, reproductive and households) and the importance of empowering women within the societies as they are mainly involved in the tea sector. At least 30% of the participants would be women in each of these capacity building exercises under taken by the project.
Livelihoods Planning:	<ul style="list-style-type: none"> Priority would be given to the woman managed households and other poor and vulnerable women who are members in the society. At least 50% participants would be women in this component.
Financial intermediation funds:	<ul style="list-style-type: none"> At least 50% of the funds are to be used for women managed households/poor women who require such additional resources.
Leveraging commercial funds:	<ul style="list-style-type: none"> The Project would ensure that at least 50% of the loans would be given to women.
Private-public partnership linkages:	<ul style="list-style-type: none"> At least 20% of the PPP linkages with women
Processing centres:	<ul style="list-style-type: none"> At least 50% would be allocated to women to own and manage
II. PRODUCTION SUPPORT FOR RUBBER GROWERS	
B. New planting subsidy	
Project subsidy:	<ul style="list-style-type: none"> The Project would provide support to at least 30% women beneficiaries to gain land usufruct rights in their name
Government subsidy:	<ul style="list-style-type: none"> At least 30% of the programme would be allotted to poor women.
Support to inter cropping:	<ul style="list-style-type: none"> At least 40% of the beneficiaries would be poor women
Supplementary livelihood options:	<ul style="list-style-type: none"> At least 30% of the livelihoods would be given to women who would be enabled to own and manage their enterprises through trainings and exposure visits
III. TECHNICAL SUPPORT FOR RUBBER GROWERS	
Technical support for rubber growers:	<ul style="list-style-type: none"> Technical support would be given to about 50% women from poor and vulnerable households
Rubber processing training:	<ul style="list-style-type: none"> At least 40% of the participants of the rubber processing trainings would be women
Para extension services:	<ul style="list-style-type: none"> The Project would endeavour to identify at least 30% women as para extension workers, train and support them

Upgrading extension service:	<ul style="list-style-type: none"> • Women extension officers would be active participants and would be in proportion to their representation in the extension services in each district.
Exposure visits:	<ul style="list-style-type: none"> • Women would constitute about 50% of the participants; there may be women only visits organised as per the convenience of women
GENDER MAINSTREAMING WITHIN THE LEARNING SYSTEMS	<ul style="list-style-type: none"> • Monitoring and evaluation will be carried out on the basis of gender and household poverty disaggregated data. • Systematically collect data disaggregated by sex wherever relevant (e.g. participants to capacity development activities for farmers, recipients of inputs, beneficiaries of facilities constructed, etc.) and further analyse; • Ensure that all data collection has a gender lens – baseline, annual outcome surveys, impact studies etc • Provide (more qualitative) gender related information when reporting on progress (on a half-yearly and annual basis) by using a progress reporting format that encourages critical reflection on gender; • Analyse the sex-disaggregated data and gender related information provided and present the consolidated information in the half-yearly and annual progress reports; • Use the data and information in the annual planning exercise

Appendix 3: Country Performance and Lessons Learned

A. Country Performance

1. IFAD has financed a total of 16 projects in Sri Lanka since 1978, with loan commitments of US\$238.90 million and a total value of about US\$400 million. Currently, 3 projects are ongoing. IFAD's project approaches have evolved over time: those in the 1980s followed mainly the integrated rural development project approach; the projects in the 1990s gradually adopted a "collaborative" approach involving NGOs, community organizations and the private sector in project planning and implementation; and lately since early-2000s with the emerging commercialization of agriculture, project designs have adopted increasingly the value chain approach. Three geographic zones have been the focus of IFAD project support – the dry zone, smallholder plantation areas, and the coastal districts affected by the 2004 tsunami. The most recent project is located in the Northern Province, contributing directly to post-conflict reconstruction efforts. Altogether, IFAD-financed projects in Sri Lanka have benefitted over 2.2 million poor people.

2. The IFAD-financed projects have contributed to increasing the incomes of beneficiary households. In the dry zone, project-supported seed production led to increased farmer income by more than two-fold. The income of women participants in the loan scheme increased by 32 per cent for agro-based enterprises and 47 per cent for trading. In smallholder plantation areas, the use of water storage tanks and protective nettings improved vegetable productivity, resulting in an estimated 40 per cent increase in beneficiaries' gross income. The monthly mean household income of the coastal project beneficiary households averaged 15 per cent higher than that of the non-beneficiary households.

3. Improved food security has been reported by all the completed projects. In the dry zone, crop productivity was improved due to changed practices introduced through IFAD project interventions. The yield increase of seed potato averaged 30%. Project-supported small scale irrigation schemes improved water availability for paddy production, leading to a 50% increase in the cropping intensity in the Maha season of 2010-2011 and 410 per cent in the Yala season of 2011. About 20% of the project-supported coastal households reported an improvement in food security, as compared to 13% of the non-beneficiary households. Some of them were linked up with private sector for marketing their products (coir products, processed fish etc). The SPEnDP, would complete in 2017, reports that more than 9,000 households had been assisted in planting rubber on 5,000 hectares of land and would provide a reliable and sustainable source of monthly income for smallholders. Some of the latex from this rubber are processed in group processing centers funded by SPEnDP and managed by the Village Rubber Development Clusters (VRDC). Pending the production of the newly planted tea and rubber plantations, 20% of the project beneficiaries had undertaken other farming and livestock rearing activities such as mushroom cultivation, intercropping rubber with other crops and dairy farming. This had led to increase of incomes from 20% to 50%. The tea replanting in the mid-country under SPEnDP has superseded the target and replanted about 200 ha of unproductive tea. The yield increase of these in the 1st two years of yield cycle is about three times of the yield prior to replanting. About 20% of the lands have pepper as an intercrop, establish with SPEnDP assistance.

4. An assessment of the impact of these projects reveals that these projects have contributed to increasing the incomes of beneficiary households. In the dry zone, the support by IFAD for seed production led to increased farmer income by more than two-fold. The income of women participants in the loan scheme increased by 32% for agro-based enterprises and 47% for trading. In smallholder plantation areas, the use of water storage tanks and protective nettings improved vegetable productivity, resulting in an estimated 40% increase in beneficiaries' gross income. The monthly mean household income of the coastal project beneficiary households averaged 15% higher than that of the non-beneficiary households

5. The private sector linkages were observed in recent IFAD projects. Matale REAP project had initiated few such linkages for seen onion production and sale, seed paddy production, clay and confectionary production at cottage level and sale, and shoe making. These enterprises and still operational but with varying degree of private sector participation. The contribution of the private sector for the investment had been negligible. The SPEnDP progressed further in creating private sector linkages with forward sale agreement for maize with Prima Company and passion fruit with Cargills. Side selling of both products affected the continuity of the partnership. Supply of vegetable

by the Moneragala farmers to a collecting centre established by IFAD Dry Zone project and managed by Cargills is an example for a continuous business linkage that is in operation. National Agribusiness Development Programme (NADeP), would complete in 2016, has advanced design to initiate supply chain business models with the participation between the IFAD target group of farmers and the agribusiness companies or community based organizations which are willing to invest in commercial agriculture. About six such business models have already been in operation with NADeP funds being provided as farmers' equity capital to establish and operate such business. There are legal agreements between the producers and the agribusiness companies which stipulate the details about the business plans and the revenue sharing mechanisms etc. The legal provisions and fund management arrangements of NADeP indicate that they need high capacity of management which in certain cases beyond the reach of IFAD target group of producers. The most recent experience of private sector linkages emanates from Iranamadu Irrigation Development Project (IIDP) in Kilinochchi, Northern Province, would complete in 2017. Prima, Hayleys and Cargills have indicated their strong willingness to create supply chain linkages with the IIDP farmers to source in maize, gurkin, and passion fruit and daily milk. The weakness observed in the private sector involvement in IFAD projects are (i) side selling; (ii) irregular supply; (iii) poor and inconsistent quality; (iv) unwillingness of the private sector to contribute to farm investment and also absorb the risk of crop losses etc.

6. Rural empowerment represents an important impact of IFAD project interventions in Sri Lanka. Women's involvement in project activities has been in the range of 40% to 60%. However, it is not always highlighted in the monitoring and evaluation reports. Women are strongly represented in leadership roles in crop societies – 43% of presidents, 64% of secretaries and 54% of treasurers were women. The majority of loan beneficiaries of IFAD financed projects are also women (60-100%). The women groups in the coastal project districts have proved to be instrumental in further improving the social position of women.

Lessons learned

7. Based on IFAD's operational experience in Sri Lanka so far, a number of key lessons can be drawn: (i) application of participatory approaches in design and implementation is essential for empowerment and poverty reduction; (ii) proper identification of the target areas during design is key to ensuring poverty targeting, (iii) gender targeting requires the establishment of disaggregated gender targets and ensuring gender mainstreaming in all project components; (iv) rural grassroots institutions are often strong in common property development and management, but are weak in market-based commercial enterprises; (v) market based and value chain interventions are heavily dependent on the participation of individuals with entrepreneurial ability and with the capital to invest in small enterprises; (vi) project management, monitoring and evaluation, and financial management have been common and recurrent issues, and should be a key aspect of attention during design and implementation.

8. The proposed Project would also build on some of the key lessons learnt from SPEnDP which include the following; (i) importance of the role of the tea and rubber societies and the need to strengthen them for organizing smallholders, achieving economies of scale, enhancing bargaining power; and the input delivery of SATRR; (ii) the need to identify specific targets for women and poor households to highlight their inclusion; (iii) the smallholders cannot access the large volume of loan products available with banks because of collateral and surety requirements; (iv) term structures for loans should be lengthened in order to facilitate the financing of re-planting and related activities with a gestation period that exceeds short term lending; (v) the state-owned banks do not necessarily need a line of credit for providing financial services to smallholders but a mechanism which can reduce their risk of lending; (vi) for enhanced sustainability the partnership with the private sector should build on serving the mutual interests of smallholders and businesses; (vii) attracting the private sector requires the production of a minimum volume of produce with required quality; (viii) for enhanced sustainability the partnership with the private sector should build on serving the mutual interests of smallholders and businesses; (ix) working back from the market helps to understand market requirements and build buy-back and contract farming arrangements especially for products with a niche market; (x) using separate project management structure and modality creates friction with line agency staff, and does not lend itself to internalizing the lessons learnt during implementation; (xi) using Government line agencies builds much more ownership and sustainability for project activities and enhances Government capacity; (xii) there is strong willingness of the private sector to create partnerships with small producers if there is sustainable supply of products with required quality.

Appendix Tables below shows some of the performance parameters of SPEnDP including the yield levels which were based on an impact assessment study of SPEnDP tea and rubber farmers and the training performance.

Appendix Table 1: Successful replanted Tea yield - positive lesson from SPEnDP - Mid Country

Variable	Age of Replanted Tea Crop: Years after replanting								
	1st	2nd	3rd	4th	5th	6th	7th	8th	Exp.9th
1. SPEnDP field observed replanted tea yield as kg/ac/month		150	200	350	475	525	630	630	675
2. SPEnDP field observed replanted tea yield as kg/ha/yr		4446	5928	10375	14100	15556	18667	18667	20000
3. Adapting SPEnDP field yields to 5 STARR districts with a 0.9 correction factor for location variability: kg/ha/yr					14000	16800	16800	18000	18000
4. Tea yield data used in the FA Appendix 2: kg/ha/yr					14000	16800	16800	18000	18000
5. Tea yields in non-SPEnDP vicinity tea lands	Highly variable, depends on extensive unevenness of crop; 2000 – 4000 kg/ha/yr								
6. Tea yield WOP in the FA Appendix 2: kg/ha/yr	3000 kg/ha/yr								

Appendix Table 2: Successful Rubber Cultivate Yield - positive lesson from SPEnDP - Moneragala

Variable	Years after planting rubber								
	7	8	9	10	11	12	13	14	15-25
1. SPEnDP Rubber yields: first two yielding year field observed yields; kg/ha/yr		2150							
2. Rubber yields at farmer level advocated by RRISL, kg/ha/yr	1600	1975	2160	2300	2395	2445	2680	2725	2820
3. Rubber yield data used in the FA Appendix 3: kg/ha/yr	1600	1975	2160	2300	2395	2445	2680	2725	2820

Appendix Table 3: Successful TARGET ACHIEVEMENT IN TEA AND RUBBER - positive lesson from SPEnDP-MC and SPEnDP Monaragala

Programme Component	Programme Target	Trend in cumulative target achievement					
		2012 PY5	2013 PY6	2014 PY7	2015 PY8 anticipate	2016 PY9 anticipate	2017 PY10 anticipate
TEA							
1. Tea Replanting	Design target = 100 ha, up scaled to 250 ha in 2010.	106 ha replanted (+ 100 ha in preparatory stage) 43%	160 ha replanted (+67 ha in preparatory stage) 64%	202 ha replanted (+24 in preparatory stage) 81%	226 ha would be total replanted 90.4%	250 ha would be total replanted 100%	275 ha would be total replanted 110%
2. Tea Infilling	Design target = 300 ha, up scaled to 438 ha in 2010	428 ha 97.7%	440 ha 100%	520 ha 119%			
RUBBER							
1. Rubber new planting	Design target = 5000 ha	4825 ha 96.5%	5087 ha 101.7%	Plantation patch restoration	Plantation patch restoration		

Appendix Table 4: Successful ACTIVITY PLANNING & IMPLEMENTING - positive lesson from SPEnDP-MC on Tea Development Planning

Steps	Activity Planning / Implementing	How undertaken & implemented
1	Assessment of land use / crop suitability	1. Collaborative Institute DOA assisted with sample land use mapping 2. recommended existing land use (tea), with extra soil conservation for >60% slope, plus suitable intercrops
2	Development of crop models	1. Collaborative Institutes identified suitable crops, suitable animals to rear and agro business. 3. Some entrepreneurs agreed partnership 4. Prepared models with a market orientation. 5. Example:

Democratic Socialist Republic of Sri Lanka
 Smallholder Tea and Rubber Revitalization (STARR) Project
 Design completion report

		Main Crop: Tea replanting Intercrop 1: pepper Intercrop 2: mandarin Intercrop 3: coconut/ passion fruit /arecanut Livestock: Goat rearing, poultry
3	Preparation of farm plans	1. TSHDA agreed services of TIs for SPEnDP 2. Skilled training for TIs on farm plans given 3. SPEnDP prepared farm models, guidelines for each GN Division 4. TIs visited tea re-planters with EG leadership
4	Land/farm development	A. Tea replanting: 1. Removing old, unproductive tea and any other uneconomical trees, 2. Soil rehabilitation & conservation, Planting Gliricidia at 10' x 12', Mana grass at recommended spacing. 3. Tea planting with the onset of rains 4. Use of nursery plants certified by TSHDA B. Tea Infilling: 1. Tea infilling with the onset of rains 2. Use of nursery plants certified by TSHDA C. Intercropping: 1. DEA supported 4 spice crops; pepper, coffee, arecanut, cinnamon, supplied plants, training 2. DOA supported fruit plants, mandarin, passion 3. CDA supported coconut intercropping 4. Cargill's signed a buyback agreement with SPEnDP-MC.

Appendix Table 5: SPEnDP – Training provided to project beneficiaries as of 31 December 2014 (Cumulative)

Training field	No. of persons		
	Male	Female	Total
1. Training in community infrastructure management	191	85	276
2. Training to state officials (stakeholders)	100	2	102
3. People trained in community management topics	2,874	3,041	5,915
4. General training to community workers and volunteers	22	19	41
5. Training in crop production practices and technologies	10,467	6,833	17,300
6. Training in livestock production practices and technologies	1,068	962	2,030
7. Training in post-production, processing and marketing	1,799	1,701	3,500
8. Training in Income Generating Activities (technical)	2,729	1,567	4,296
9. Training in business and entrepreneurship development	1,820	1,957	3,777
10. Training in financial management and book keeping	358	232	590

Appendix 4: Detailed project description

1. **The Project:** The Project goal is to enable poor rural people to improve their food security, incomes and strengthen their resilience. The development objective is more profitable, productive and resilient economic activities of tea and rubber smallholders in the implementation districts. Project would assist about 23,420 existing tea smallholders, 3,330 poor households in new rubber production, and another 1,920 rubber producers in processing. The Project would target 5500 hectares of old tea lands in smallholdings and 3000 hectares of new lands for rubber. Project would be for six years commencing from the 1st quarter of 2016 to 2021.

2. **Targeting strategy:** The targeting strategy adopted for both tea and rubber components were principally same. It considered as its foremost focus the IFAD exclusive interest on rural poverty reduction by working with poor rural populations to eliminate poverty and raise productivity and incomes. This primary focus was then unified with tea and rubber national development objectives. This approach was used as three criteria of targeting done in three steps (*ref: Appendix 2: Poverty, Targeting, Gender*).

3. **Project area for tea:** Specific areas for tea were targeted adhering to the criteria: i. presence of notable poverty incidences, ii. abundance of smallholder tea lands for replanting and iii. abundance of tea smallholders (criteria ii and iii together was the replanting potential).

4. Though smallholder tea is cultivated in 14 districts in Sri Lanka, it is predominantly cultivated only in 8 districts: Ratnapura and Kegalle (Sabaragamuwa Province), Galle and Matara (Southern Province), Kalutara (Western Province), Badulla (Uva Province), and Kandy and Nuwaraeliya (Central Province). Of these districts based on targeting criteria, Galle and Matara (Southern Province), Ratnapura (Sabaragamuwa Province), Badulla (Uva Province) and Kandy (Central Province) had been targeted as Project districts.

5. The beneficiaries for the tea component would therefore be those households who are poor with little or no additional sizable sources of income other than tea, have replant-able tea lands of one hectare or less, have no comfortable access to financial assistance and are in dire need of replanting. Women managed households who fall within this criteria would be given special emphasis. The targeted smallholders would be those who have replant-able tea lands of one hectare or less.

6. **Project area for rubber:** Similar to the tea component, rubber component was also targeted in three steps (levels) following the criteria: i. government policy on new rubber ii. presence of notable poverty incidences, iii. abundance of new land and smallholders to cultivate (criteria iii is same as potential for new planting).

7. Government policy on rubber plantation expansion is to encourage new rubber cultivations in non-traditional areas where vast swaths of suitable land exist, as rubber in traditional areas is under threat of urbanization. Feasibility of rubber cultivation had been tested by RRISL in non-traditional district Ampara (Eastern Province) and small plantations already exist. Though a substantial cultivation exists in Monaragala, to a large extent from IFAD funded SPEnDP, the district is still considered a non-traditional area. Thus targeted districts for rubber would be Ampara and Monaragala.

8. The beneficiaries for the rubber component would therefore be those households who have no land or have only illegally encroached patches of land or own very small extents, with little or no additional sizable sources of income other than from subsistence cultivation or as farm labourers and have no access to comfortable financial assistance and in dire need of a long standing profitable commercial crop. Women managed households who fall within this criteria would be given special emphasis. The targeted smallholders would receive state land either normal highlands or forest buffer zones with tenure regularised of one hectare or less on a long term lease from the government.

9. **Project outcomes:** The Project outcomes would include: (i) 200 revitalized Tea and 100 strengthened Rubber Societies providing a range of services to members including processing, enhanced marketing and financial services; (ii) high yielding tea crops replanted on 5500 hectares and rubber planted on 3000 hectares by smallholders to provide a sustainable source of income and diversified livelihoods; and (iii) strengthened smallholders undertaking sustainable commercial business with the private sector based on Business Plans prepared with the support of the project.

10. **Project Components:** Project would have three main components: (A) Tea Smallholders' Development; (B) Rubber Smallholders' Development; and (C) Inclusive Rural Financing. The Project would also put in place project management arrangements to support the implementation of the first two components.

Component A: Tea Smallholders' Development

11. The purpose of the component is to enhance overall production of smallholder tea lands with better market linkages. This component has three sub-components: (i) Strengthening tea societies in production and marketing; (ii) Market driven production support in tea; and (iii) Income and market diversification for tea smallholders.

A1: Strengthening tea societies in production and marketing: This subcomponent has two main activities: (a) diagnostic analysis of the capacity of the tea societies; and (b) capacity building.

12. Tea smallholders are members of Tea Smallholder Development Societies established by TSHDA under Tea Smallholder Development Act No.35 of 1975.³³ To receive any state assistance such as subsidies, advisory services, training, etc. it is required for tea smallholders to be members of tea societies. Tea societies are at various functional levels but mostly as mere mandatory societies, without strong proactive programmes they can offer to its members. However the societies have the potential to offer a wide range of services to its members if properly mobilised and supported. Strengthening the societies would be essential for sustainability, equity and empowerment of its members.

13. **A diagnostic analysis** is the first step of the strengthening process. The Project will undertake a series of diagnostic analyses of the societies in the selected Divisional Secretary Divisions (DSD) of the targeted five districts. The Tea Inspectors are the grass root level officers of TSHDA having a broad familiarity of tea smallholders. Likewise the Grama Niladaris (GN) and Samurdhi Animators (SA) are ground level officers involved in social and economic development of small farmers. Thus the diagnostic analysis would be carried out by the GNs and SAs of the area coordinated by respective TIs. As the members of these societies would be the potential beneficiaries, selection of the societies would receive due attention in terms of poverty level of its members and agronomic potential for tea replanting. Once selected, service providers or resource persons will visit each selected society and conduct the analysis using a set of strategic indicators. The target would be about 200 tea societies for the analysis

14. **Capacity building process starts next.** Subsequently, based on status of different societies as revealed by the diagnostic analysis, a customised capacity building process will commence. The Project recruited Community Development Officer attached to each regional office of TSHDA with the assistance of the Tea Inspectors of the replanting targeted area and the Project recruited Animators will coordinate the capacity building process. The societies are expected to have the capacity in organising smallholders to receive project inputs, training, mobilise internal lending, initiate linkages with Banks for credit, and to initiate business activities including tea green leaf collection. Further the management and business development skills should be improved. The Project would finance the service providers / resource persons to develop training packages to facilitate training. Leadership development training would be given to women and men with the potential for leadership. Gender sensitization would focus on the importance of empowering women and youth within the societies. Members would be educated on management principles including financial analysis and planning. At least 30% of the participants in capacity building would be women.

15. The Project would also provide equipment and tools to worthy societies to facilitate cultivation such as machine-driven pruner, plucking shear and marketing equipment such as leaf collecting trays and weighing machines. Most of the existing tea societies do not have a proper asset base as currently they cater only to the bare minimum activities of the members. As the societies are revitalized to make them key smallholder organizations, they would need few pieces of basic office equipment such as tables, plastic chairs for group meetings, cabinets and stationery. Project would examine the needs of each society prior to providing such support.

16. **A2: Market driven production support in tea.** This subcomponent has three main activities: (a) replanting of low productive tea lands; and (b) tea rehabilitation- infilling of replanted tea lands and (c) training support.

³³ For convenience, the project would address them as tea societies.

17. **Replanting of low productive tea lands:** As one of major activities to increase productivity of tea, the Project would undertake to replant 5500 ha of low productivity tea lands in the five selected districts. In general, vegetative propagated tea (VP tea) which is over 20 years old or has not been managed properly gives poor yields. Seedling old tea also yields poorly. Though tea growers obtain some income from such lands, the productivity and incomes continue to decline and is a disincentive for further investment. TSHDA envisages replanting at least 2% of smallholder tea annually, but achieves less than half of its target due to inability of smallholders to pre- invest in the programme while losing income from uprooted tea.

18. In the identified five districts, 5500 ha of old tea will be replanted over a period of 6 years. The replanting target in the 1st project year (PY) would be 675 ha, followed by 1575 ha in 2nd PY and 1625 ha each in 3rd and 4th PY. Due to soil renovation gestation period prior to planting, any lands under grass in the 4th year would be replanted in the 6th PY.

19. How Project districts and DSDs were targeted (selected), and distribution of 5500 ha target among the districts and through lifespan of the Project are detailed in *Appendix 2: Poverty Targeting and Gender*

20. Extensive field observations by the mission in 2014 and 2015 and evidenced by almost all smallholders interviewed, revealed that the decisive factor for reluctance of tea smallholders to join the TSHDA replanting scheme is the need of a large sum of capital upfront at the commencement stage of replanting for land preparation. Land preparation includes many activities: complete uprooting and removal of old tea, removal of obstructing boulders, stones, weeds and stumps, establishing or repairing stone terraces, lateral and vertical drains, terraced soil preparation according to the relief and gradient of the land, and contour planting of Guatemala grass (*Tripsacum laxum*) or Maana grass (*Cymbopogon confertiflorus*) as a mean for soil rehabilitation. This preliminary activity accounts for 20-25% of the replanting cost, and smallholders need upfront capital. Grass is maintained for 18 months with no income from the land. Activities at 18 months include: cutting grass and mulching, pegging, digging holes (12350/ha), purchasing certified tea nursery plants, and planting the field at the rate of 12350 plants/ha. Most of the smallholders have few on no outside income, other than working as labourers elsewhere as and when opportunities arise. They have no capital generating ability and capacity. A smallholder joining the replanting scheme foregoes whatever income she or he was getting from that land as existing tea has to be uprooted, and new tea would yield after about five years from time of initiation of land preparation. This exacerbates the capital tight situation discouraging smallholders to replant tea.

21. Government assistance for replanting tea is the TSHDA tea replanting programme; a 5-step subsidy of Rs. 350,000/ha spread over 3-4 years. The 5 steps are; i. 'land preparation' ie after completing land preparation and planting grass, ii. 'Soil rehabilitation 1', ie. 6 months after planting grass, iii. 'Soil rehabilitation 2', ie 18 months after planting grass, iv. 'After tea planting' and v. 'One year after tea planting'. Instalments are paid after completing various replanting activities and often after a much delay due to need of time and staff for field inspection, certification and release of funds. This is the main setback of the subsidy for the cash strapped smallholders who are expected to find necessary capital upfront, and undertake all replanting activities strictly according to technical parameters of TSHDA to qualify for the partial support. Upfront cash to undertake costly activities is a big financial strain for most poor smallholders discouraging them from joining the scheme.

22. The project replanted tea would be eligible for all the existing and future production support of the Government notwithstanding any complementary support given by the Project. Thus inter-alia, they would be entitled to the replanting / planting subsidy, the extension interventions; group extension programmes and land visits, the extension support services; quality planting material and soil testing etc.

23. Project would additionally tender up-front partial funding for old tea uprooting and land preparation as Capital Grant amounting to Rs 150,000 per ha to encourage replanting. This would be proportionately paid based on actual area replanted through tea societies and administered by TSHDA. Additionally, Rs. 25,000 per ha will be paid upfront at the end of 18 months grass period to partially support quality planting material and planting activity. Thus the upfront total Project capital grant support for replanting would be Rs. 175,000 per ha. Training and advice and supply of small equipment previously mentioned (A1) will also be supported.

24. **Tea rehabilitation: infilling of replanted tea lands:** Maintenance of optimum plant density is necessary for both ecological and economic gains. The recommended optimum number of

tea bushes per hectare depending on elevation is 12,500–13,500 for VP fields. The plant densities in smallholder tea lands were visibly far less, often with large patches of bare land. High vacancy rates lead to low ground cover, thereby worsening erosion and causing declining soil fertility and yield. Smallholders experience high plant mortality due to drought, pest infestation or other plant diseases leading to low productivity from less than optimum plant stand. Thus there is a dire need to safeguard the Project replanted tea from excessive plant vacancies by assisting with a Project supported infilling programme.

25. The current procedure practiced by TSHDA is to support infilling of vacant patches when the plantation is at pruning stage, which is in cycles of 3yrs for low country, 4yrs for mid country and 5yrs for up country. Often tea growers do not strictly adhere to the cycle, delaying pruning for want of funds and convenience. Thus infilling under the current programme is late, incomplete and sporadic. The TSHDA programme assist the growers with Rs.15 per in-filled plant sourced-in by them, if mandatory prerequisites such as planting grass in the patches, or making compost and filling patches are undertaken and Rs.10 per survived in-filled plant if the plant survives one year. The poor smallholders are unwilling to join the scheme due to long wait till the pruning time to infill, difficulty to get good plants and unattractive monetary assistance.

26. The IFAD funded SPEnD Project in mid country, with consent from TSHDA successfully field tested among its beneficiaries a modified infilling programme where; the replanted land was eligible for infilling from the first year of replanting if more than 15 percent vacancies were observable, so as to attend to the problem as and when it occurs; certified nursery plants purchased by the project were physically distributed by the Project (arranged); and an allowance of Rs. 15 per plant was given one month after planting to cover planting expenses.

27. The STARR Project will implement the positive lesson learned from SPEnD by supporting infilling of Project replanted tea from 2nd PY onwards (1st yr. of planting onwards), providing smallholders with certified planting material from the Project cost and an allowance for planting instead of the current TSHDA scheme. On a need basis infilling of 800 ha of the replanted tea would be targeted.

28. **Support for nurseries:** Commercial nurseries for project purpose would be those with the objective of producing plants exclusively for sale. They would have an annual operational capacity of 50,000 to 200,000 plants. The Project would finance training for about 30 such nursery men in five districts to facilitate producing quality planting material. The self- nurseries would be small volume tea nurseries mainly to cater to own plantation needs for replanting or infilling, usually undertaken as a home garden venture but with TSHDA supervision. Project also encourages self-nurseries and support training of self-nurserymen. Women and youth would be encouraged to participate in the private commercial and input nursery training programme. The training modules will be collaboratively designed by TSHDA and TRI. The TRI would be actively involved in conducting the training programme. Of the total allocation for nurserymen training, if the TSHDA wishes, part may be set aside for nursery related material to be given to trainees, the specifics of which would be decided at a steering committee meeting. In addition the Project would facilitate nurserymen to get loans from BOC or PB who have agreed to support the Project activities through Bank's own credit lines.

29. **Technical support to tea smallholders:** Smallholders often have limited or varying access to specialised knowledge about modern crop management and plantation techniques. Knowledge on shade management, soil conservation, soil acidity levels, soil organic matter and carbon content, micro nutrients, pruning and plucking need to be upgraded. The Project would support technical and knowledge enhancement among smallholders. It would facilitate developing of training modules with TRI and assist TSHDA to conduct specialised trainings. The Project would arrange exposure visits such as to TRI and the tea auction in Colombo and visits to plantations practicing eco-restoration and high density plantation techniques, etc. Since women play an important role in the production, care and upkeep of the tea gardens, at least 50% of the trainees of such trainings would be women.

30. In certain localities, tea plantation management is hindered by lack of skilled pruners, shade tree loppers, agrochemical sprayers and even skilled tea leaf pluckers. Depending on the local requirement, the Project would train youth on these specialised activities and provide them with mechanised pruners and shear pluckers. At least 25% of the selected specialists would be youth.

31. **Upgrading extension service:** The Project would support training the TSHDA staff to enhance their level of technical knowledge, communication, gender sensitization and familiarise them

with new cultivation techniques such as eco-restoration, high density plantation, soil fertility and health, the principles of sustainable management such as of Rainforest Alliance and UTZ standards. The Project would also provide extension officers with opportunities for exposure visits.

32. Additionally TSHDA would get special training assistance from collaborating institutions: TRI on in-service knowledge upgrading, DOA, DEA, etc. on intercropping. The business linkage coordinator at PMU in MPI and Business Development Officer at tea regional offices would arrange specialized training on need basis. These will be supported through a well-developed business plan with identified markets. (*see sub-component 3*).

33. **Marketing infrastructure.** The smallholder tea lands are often deep inside village in difficult terrain, affecting the mobility of smallholders in their routine farming activities, such as transport of inputs like fertiliser, infilling plants, and harvested green leaves to a collection centre etc. With a view to facilitating mobility of both inputs and products the Project will finance overhauling strategic section of farm roads. A total of about US \$ four million would be allocated for this purpose for all Project tea districts. The TSHDA would submit a list of selected roads and technical and financial details related to sections identified for revamping to the steering committee for concurrence. The selection of roads and difficult stretches for improvements will be carefully done with full participation of the project assisted tea growers or societies using PRA tools. These tools will be applied by the district project staff with the full participation of the community through the Tea societies. On average one km of road developed should cover at least 30 ha of tea lands that are replanted with STARR. This eligibility criterion will be used and the community would ensure that this coverage will be the outcome of roads. The approval process will be one with two steps - the annual plan of road development will receive district level approval by the district coordinating committee (Appendix 5 #7) with the eligibility information, and with that approval the Project Steering Committee will finally approve. With the community getting involved at the very early stage of selection, the whole process will have three level of transparency - community, district and national.

34. **Support to TSHDA regional offices:** In addition to the technical sub-components highlighted above, the Project would support the TSHDA Regional Office in each of the five districts to manage the project interventions. The administrative and financial management arrangements are common to all districts. The Project management is in Annex 5: Institutional Aspects and arrangements.

35. **A 3: Income and market diversification for tea smallholders:** The objective of this sub-component is twofold: (a) to help tea smallholders diversify their income sources through profitable farming (including intercropping) and non-farming activities responding to market opportunities; (b) to strengthen the existing or introducing new marketing channels for green tea leaf marketing through the facilitation of mutually beneficial (win-win) business relationships between tea smallholders and the private sector (i.e. leaf collecting societies, green leaf collectors, tea factories, plantation companies).

36. **Smallholders' income diversification.** Building on SPEnDP experience, the STARR Project will operate a *Matching Grant Facility* which will provide start-up matching grants as a seed capital to individual tea smallholders willing to start a new income generating activity either in farming (e.g. intercropping tea with pepper or cinnamon) or in non-farming activities (e.g. concrete pieces for housing, clothing, footwear, backyard poultry, milk) always in response to a clear market opportunity identified with the support of project Business Development Officer and the field animators.

37. Matching grant facility IGAs would be in collaboration or in consultation with specialized agencies related to the activity. The DOA and DEA would arrange quality planting material, training and extension etc. for farm related intercropping; DAPH on backyard poultry and dairy; relevant small enterprise development and product purchasing agencies for non-farm household level industries. These organizations would be regional level collaborating agencies and would be invited as desired, for regional Project plan preparation and review meetings.

38. Matching grants will be provided on individual basis and just one time during project life span (no repeated grants will be allowed). The grants will be disbursed accordingly on a 70:30 ratio basis, i.e. 70% from project and 30% from the grant beneficiary. The 30% share can be either in cash or in kind. Total grant amount from project will not exceed LKR 70,000 per beneficiary. Following the experience of SPEnDP it is expected that a significant number of start-up grant beneficiaries will subsequently graduate as clients of the financial sector. Project will help those facilitating linkages with financial institutions and supporting the preparation of required documentation. The Animators

with the support of the tea societies will identify the beneficiaries for matching grants. The beneficiaries will be limited to those who are in the project target group that is, those who would undertake tea replanting.

39. The amount of the grant will be calculated on the basis of a simple financial analysis of the proposed economic activity carried out by the animator together with the potential beneficiary. The analysis will also check the potential market for the proposed product or service making sure that there is a reasonable expectation about the actual final demand. This is a key lesson learnt from the SPEnDP project where failures to develop solid market linkages have affected the profitability and sustainability of some of the activities supported by matching grants.

40. Whenever possible and viable, collective marketing of those crops will be promoted in order to achieve economies of scale and reach markets beyond the closest village. A Business Plan will be prepared with the support of a service provider to explore opportunities for bulking production in a unique collection point for subsequent transportation and marketing by a private sector buyer. A possible model is the one successfully developed with Cargill for fruits and vegetables in the SPEnDP project.

41. Matching grants proposal will be approved by the project Business Development Officer in the district after a verification of its financial and technical viability. The promotion of collective marketing in selected IGAs will be facilitated by the Animators in consultation with Colombo-based private sector linkage facilitator. It is expected that about 3,500 viable income generating activities and 10 collective marketing initiatives would be supported with matching grants.

42. **Market linkages and product diversification.** STARR will also actively help selected Tea Societies, i.e. those with greater level of organization and capacity based on the initial diagnostic and subsequent capacity building, explore opportunities for market diversification and for more formal linkages with the private sector in the tea value chain. Project staff in Colombo and in the field will act as facilitators looking for mutually beneficial (win-win) opportunities between smallholders and tea factories.

43. During the design mission at least two potential areas of win-win collaboration between tea societies and tea processors have been pre-identified. The first stems from improving and maintaining the quality of tea leaves in order to fetch premium price in the market as well as obtaining Government incentive (B60)³⁴. This strategy seems potentially promising in a district such as Ratnapura where, in a highly competitive environment (120 tea factories, 280 tea societies), certain tea factories (e.g. New Vithanakande, KDU Group, Cicilian) depend largely on smallholders for raw material (around 80% of leaves processed) and have a long-term reputation for the quality of their tea leaves which they are willing to maintain³⁵.

44. The PMU through MPI will solicit greater participation of Tea Commissioner Department for quality improvement of green leaf, obtain higher price for green leaf, assist organic tea production and improve linkages with tea factories. The staff of tea factories collecting Project smallholders' tea would undergo capacity building training arranged by PMU. The Tea Commissioner Department would arrange the trainers.

45. The second is related to developing new products for market diversification (i.e. tea eco-restoration, tea organic production and more sustainable and resilient tea production) with those private companies (e.g. Bio-Foods) that have already gained a solid position as exporter of these niche products to certain markets (mostly in Europe and North America). From preliminary discussion it is, however, important to acknowledge that it does not potentially seem a mass strategy for Sri Lanka smallholders tea development partly due to the high level of investments and income foregone (due to transition from conventional to organic cultivation) required initially as well and the limited number of private operators linked to equally small size of the end market. Nevertheless the Project has financing to explore the possibility of identifying smallholders with willingness to participate with such private sector and venture into market demanded production such as organic or bio-tea. The business development officer with the guidance of the private sector linkage facilitator will explore such possibilities.

³⁴ This is the additional money GOSL will pay to kg of green tea when the quality is good. It is Rs 20/kg. Some factories pay this once they get it. Factories have to qualify for this by producing quality black tea.

³⁵ The Tea Factory spends approximately LKR 12 million/year to pay a team of extension officers that provides technical advice, on-site inspection to small holders suppliers of the factory.

46. These win-win deals will be formalised in a joint Business Plan and related contract between smallholders and the business partner which will be prepared with the support of a specialised service provider. Whenever possible a cluster approach of tea societies will be promoted in order to achieve economies of scale and minimum volumes required by the private companies. About 40 such Business Plans will be developed.

47. The Project contribution to this type of Business Plan will be twofold: (i) a lump-sum allocation to the tea societies to cover the cost of business development advisory services as well as selected market intelligence and marketing activity (e.g. price information systems, participation in fairs, business to business trips) prioritised in the Business Plan; and (ii) extension support to smallholders through the TSHDA district staff. Private companies will also be expected to invest in the Business Plan (e.g. providing specialised extension and advisory services and other welfare support to smallholders) in order to consolidate and ensure the loyalty of their supply chain.

48. It is recommended that the business development advisory service link with Export Division of Sri Lanka Tea Board.

49. Joint Business Plans and related contracts between tea societies and tea factories will be reviewed by a Technical Review Committee composed of a local Tea Board representative, the project Business Development Officer and the Regional Director of TSHDA in consultation with Colombo-based private sector linkage facilitator. The review of the Business Plans will be based on three major aspects: (i) the track record and commitment (including expected contribution) of the private sector company (tea factory); (ii) the viability of the business proposal, and (iii) the governance and accountability mechanisms established between smallholders and tea factory to make it a truly win-win deal³⁶. If a Business Plans is assessed satisfactorily against the three criteria will be approved. Otherwise it will sent back for revision to the tea society and the service provider had worked on it.

50. In addition, the Project would finance 2 business plans to facilitate the two Tea Shakthi factories at Passara and Keppetipola to obtain bank loans to modernise the factories.

Component B: Rubber Smallholders' Development

51. The purpose of the component is to enhance rubber production and processing of quality rubber products with advantaged market linkages. This component has three sub-components: (i) Strengthening rubber societies including processing and market sensitivity; (ii) Market driven rubber production support; and (iii) Income and markets diversification for Rubber smallholders.

52. **B 1: Strengthening rubber societies including processing and market sensitivity:** This subcomponent has three main activities: Diagnostic analysis of potential new rubber growers in Monaragala and Ampara ii. Establishment of new VRDCs in Monaragala and Ampara, iii. Capacity building of new VRDCs including processing and marketing sensitisation.

53. Unlike with TSHDA where all smallholders are members of tea societies, it is not mandatory for RDD to organize rubber societies or rubber growers to join any society. The experience of SPEnDP in Monaragala is very positive on workability of VRDCs in carrying out Project activities. The effectiveness was mutual; for the Project staff to implement project activities; for grouped farmers to voice their needs, plan cultivation activities and subsequently marketing activities. Thus the STARR Project efforts would aim at: formation and strengthening of new rubber societies as VRDCs in the project implementation divisions of Monaragala and Ampare. All rubber growers under the Project would be mandated to be members of VRDCs. Women would be encouraged to actively take part in society activities and 40% of executive committee would be women.

54. The Rubber Development Officers (RDOs) of RDD and Grama Niladaris (GN) have a broad familiarity of rural farmers who would be the potential rubber growers in new lands of

³⁶ The review of the BPs would be based on the following criteria: (i) formal buy-in and commitment of the parties involved in the BP evidenced by a formal agreement (e.g. Contract Agreement); (ii) financial viability and sustainability of the proposed business; (iii) number of small producers reached and included in the BP including women and youth; (iv) the estimated increase in volume of produce sold by small producers; (iv) win-win features of the proposed business model (i.e. duration, existence of a transparent price setting mechanism, suitable payment terms, risk mitigation measures; (v) grievance mechanism foreseen to settle disputes among parties; (vi) no transfer of land rights from the farmers to the private company envisaged in the BP; (vii) contribution from the company with its own funds; (viii) evidence of a complementary loan from a financial institution for working capital and/or investment purposes (if needed).

Monaragala and Ampara. They if necessary with the help of Samurdhi Niladaris, would conduct a diagnostic analysis of the identified new rubber growers and grouped them into VRDCs, in line with SPEnDP. Though ideally formation of VRDCs should precede rubber cultivation, considering the short Project period and need to plant rubber on the very first available rainy season, priority would be for earliest establishment of the rubber plantation. VRDCs would be developed simultaneously.

55. A capacity building process will be customised according to the capacity of the VRDCs. The VRDCs are expected to have the capacity in organising rubber smallholder processors to receive project inputs, training, initiate linkages with Banks for credit, organise rubber processing in group processing centres and to initiate business activities including production and marketing of rubber sheets in a collectivize manner. Further the management and business development skills should be improved. Responding to the existing level of capacity, training and skill development in these areas would be the focus of the capacity building process. Service providers / resources persons would be used to develop the capacity building process and training packages to facilitate training. About 30% of the VRDC participants provided with capacity building would be women.

56. All women headed rubber growing households would be encouraged to become members of these societies and 40% of executive committee would be women. Once sufficiently developed, these societies would provide the forum for engaging with the smallholders, identifying beneficiaries, organizing capacity building support and to provide services which can assist the smallholder in rubber plantation, intercropping and eventually rubber processing and marketing.

57. **B 2: Market driven rubber production support.** The main development activity under this component would be assisting smallholders to plant a total of 3000 ha of rubber in new land in Monaragala and Ampara.

58. **Planting rubber in new land:** As a major activity to increase the availability of rubber for processing, the Project would undertake planting of 750 ha of rubber in eight DS Divisions in Monaragala; 150 ha in 1st PY and 200 ha each in 2nd to 4th PYs. Based on considerable experience from SPEnD, 5th and 6th PY are for much needed rehabilitation of the established plantations prior to project termination. New planting extent in Ampara would be 2250 ha in 5 DS Divisions; 250 ha in 1st PY, 500 ha in 2nd PY and balance in 3rd and 4th PYs.

59. How Project districts and DSDs were targeted (selected), and distribution of 3000 ha of new rubber between Monaragala and Ampara and through the lifespan of the Project are detailed in *Appendix 2: Poverty Targeting and Gender*

60. In order to achieve the planting objective, the Project efforts would aim at: formation and strengthening of new VRDCs in Monaragala and Ampare, facilitating MPI as needed, to secure user rights to smallholders for the new lands sourced-in from state departments, production support for the new plantations including government assistance and project assistance and technical support for the rubber growers and extension staff. Part of funds allocated for rural access road development (under marketing infrastructure) may be used to support the cost of land surveying of state lands earmarked for new rubber cultivation.

61. The RDD, Moneragala has identified land areas to be provided to the beneficiaries under different agencies. These include 200 ha of Mahaweli lands, 1850 ha of forest lands, and 250 ha of lands under the government agent. The respective agencies have provided the commitment to release these land areas. The Project would finance the land surveying cost and facilitate land distribution by way of coordinating concern agencies. The MPI and all other stakeholders concerning land releasing issues meet regularly to speed-up land distribution. The project is financing such meetings and also the land surveying cost.

62. Government assistance for rubber cultivation is the RDD subsidy assistance of Rs. 150,000/ha to new rubber growers whose plantations comply with RDD standards with respect to plant density, plantation health, and growth achievement etc., staggered over a period of 8 years at predetermined stages of the plantation. The administration of the programme involves several field visits by RDOs to check conformity of the plantation. Subsidy payments are paid several months later after the farmers have undertaken the tasks using their own capital. Often the payments are considerably late due to delays in inspection, processing applications and shortage of cash flow. Furthermore, the government subsidy offsets only a part of the cost of cultivation of rubber. Thus there is strong need to support the Project new rubber smallholders upfront to encourage them to undertake planting in an acceptable manner.

63. The project planted rubber would be eligible for all the existing and future production support of the Government notwithstanding any complementary support given by the Project. Thus *inter-alia*, they would be entitled to the replanting / planting subsidy, the extension interventions; group extension programmes and land visits, the extension support services; quality planting material and soil testing etc.

64. **Project assistance for rubber cultivation:** Prior to plantation of rubber on new lands, smallholders would have to undertake investment in land levelling, land clearing, removal of vegetation, digging pits for new plants and depending on relief and gradient of land, drainage facilities. The Project would support with a partial funding for land readiness activities amounting to Rs. 30000/ha, granted through the rubber societies to new rubber planting smallholders. The capital grant would be given upfront on the assurance of the rubber society that it would be used by the beneficiary members for the intended purpose. A working arrangement including proper assessment and supervision of the beneficiary, monitoring of planting activities and reporting of disbursement of funds would be designed between the Project and the rubber society. Women headed households would be given priority in the selection of households for new rubber plantations.

65. In addition to the Rs 30000/ha for land readiness, the full value of nursery plants amounting to Rs. 34000/ha and fertilizer requirement for the first year amounting to Rs. 5000/ha and second year amounting to Rs. 7000/ha would be granted totalling the assistance to Rs 76,000 per ha. These supports will be channelled through the participating rubber societies as capital grants. This assistance would encourage the new planters to reserve ahead of time or to buy without delays quality planting materials and fertiliser. Also assurance of funds would prompt the rubber societies to order in bulk and transport the materials to their members.

66. All training and technical advice will be undertaken by the RDD and RRISL, inclusive of rubber cultivation, latex collection and processing as detailed in a subsection below.

67. In addition to RRI staff involvement in training, all animators would be also trained on raw rubber processing to advice to group processing centres when required. For rubber production, the training approach would be similar to tea. The business linkage coordinator at PMU and Business Development Officer at RDA office would arrange specialized training on need arising basis.

68. **Support for rubber nursery:** There is a dearth need to have rubber nursery plants in sufficient quantity and on time to plant during the major rainy season towards end of the year. As all rubber planters in the district as well as in other rubber districts would plant (new, replant or infill) at the same time with the rains, reserving, obtaining and transporting are critical events from the farmers side. However if sufficient rubber plants are not available with nurseries, many frauds happen: selling of unsuitable, unhealthy, reject plants to first time planting farmers, sharp increase in prices etc. Thus the Project would provide partial assistance to upgrade and manage the rubber nursery of RDD at Padiyathalawa in Ampara which is currently in operation. This nursery would provide plants for rubber cultivation in Moneragala and Ampara districts.

69. **Equipment and materials:** The need to have basic facilities for the newly formed or existing rubber societies is recognised. The Project would provide equipment and material support assist them in their operations, to include office equipment, stationery, furniture, training materials, etc.

70. **Technical support rubber smallholders:** Project would provide technical knowledge and training to smallholder rubber growers, rubber processors and nursery growers organised through RDD and RRISL. The training module and course preparation would be done by RRISL and would include training on land preparation, soil conservation, fertilizer application, planting techniques, latex tapping, and latex processing. For intercropping relevant institutions: DOA, DEA will be collaborated. The Project would organize exposure visits for smallholder rubber growers to well-developed rubber plantations, RRI and rubber processing facilities. Up to 50% of women would participate in the training programme. In addition to RRISL staff involvement in training, all animators would be also trained on raw rubber processing to advice to group processing centres when required. For rubber production, the training approach would be similar to tea. The business linkage coordinator at PMU and Business Development Officer at RDA office would arrange specialized training on need arising basis.

71. **Upgrading the extension service:** The Project would support training the RDD staff in modern cultivation and inter-cropping techniques, eco-restoration, and principles of sustainable

management such as those promoted by the Rainforest Alliance and UTZ standards. Both male and female RDOs would be provided with required training.

72. An experience of SPEnDP in new extension approach will be shared with STARR to enhance the extension delivery during the production phase. In 2015 a group advisory approach, termed *Vihidum Sathkara (VS - disperse service)* was introduced to few VRDCs by the Head, Advisory Department of RRI (HD/AD-RRI), where a group of officers (10-12) would visit farmer fields for 3 days to advice in-situ followed by group training. The same modus operandi would be used as an approach to motivate farmers to implement the advice through VRDCs. The incremental cost is paid by the project.

73. Under the Rubber Master Plan of Sri Lanka there is an attempt to establish a **Rubber Industry Technology Consortium (RITC)**. The objective of RITC is to promote innovations through enhancing technological capabilities at industry level by sharing available resources among the public and private sectors. RITC will be a collaborative mechanism for stakeholders to identify technological gaps, develop strategies to bridge the gaps, agree on action plans, coordinate and implement technological solutions to rubber industry. The network of participating institutions will include RRISL, ITI, IDB, PRI, UOM, USJ and other relevant institutions together with the private sector. The RITC will develop and implement a collaborative R&D program geared towards serving industry needs. According to the Master Plan this would start its initial implementation in the 1st quarter of 2016. The project beneficiaries through the societies could be linked with some of the activities that RITC will initiate to improve the processing technologies and quality.

74. **Marketing infrastructure.** The smallholder rubber lands are often deep inside village, closer to forests sometimes in difficult terrain, affecting the mobility of smallholders in their routine farming activities, such as transport of inputs like fertiliser, infilling plants, and latex to a collection centre or group processing centre. With a view to facilitating mobility of both inputs and products the Project will finance overhauling strategic sections of farm roads. A total of about US \$ two million would be allocated for this purpose for rubber districts.

75. **B 3: Income and markets diversification for Rubber smallholders.** The objective of this sub-component is twofold: (i) to help rubber smallholders diversify their income sources through profitable farming (including intercropping) and non-farming activities responding to market opportunities; and (ii) to strengthen the existing or introducing new marketing channels for either latex (if competitive) or processed sheet rubber through the facilitation of mutually beneficial business relationships between rubber smallholders and the private sector (i.e. and rubber collectors and traders or rubber processing and/or manufacturing companies).

76. **Smallholders income diversification.** Building on SPEnDP experience, the STARR Project will operate a *Matching Grant Facility* which will provide start-up matching grants as a seed capital to individual rubber smallholders in the project target group who **would be** willing to start a new income generating activity either in farming (e.g. intercropping rubber with maize, cocoa, banana) or in non-farming activities (e.g. concrete pieces for housing, clothing, footwear, backyard poultry, milk) always in response to a clear market opportunity identified with the support of project Business Development Officer and the field animators.

77. Matching grants will be provided on individual basis and just one time during project life span (no repeated grants will be allowed). The grants will be disbursed according to a 70:30 basis: 70% from project and 30% from the grant beneficiary. Total grant amount from project will not exceed LKR 70,000 per beneficiary. Following the experience of SPEnDP it is expected that a significant number of start-up grant beneficiaries will subsequently graduate as clients of the financial sector. Project will help them facilitating linkages with financial institutions and supporting the preparation of required documentation. The Animators with the support of the Rubber Societies will identify the beneficiaries for matching grants. The beneficiaries will be limited to those who are in the project target group.

78. The amount of the grant will be calculated on the basis of a simple financial analysis of the proposed economic activity carried out by the animator together with the potential beneficiary. The analysis will also check the potential market for the proposed product or service making sure that there is a reasonable expectation about the actual final demand. This is a key lesson learnt from the SPEnDP project where failures to develop solid market linkages have affected the profitability and sustainability of some of the activities supported by matching grants.

79. Whenever possible and viable collective marketing of those crops will be promoted in order to achieve economies of scale and reach markets beyond the closest village. A Business Plan will be prepared with the support of a service provider to explore opportunities for bulking production in an unique collection point for subsequent transportation and marketing by a private sector buyer. A possible model is the one successfully developed with Cargill for fruits and vegetables in the SPEnDP project.

80. Matching grants proposal will be approved by the project Business Development Officer in the district in consultation with Colombo-based private sector linkage facilitator. It is expected that about 500 viable income generating activities and 10 collective marketing initiatives would be supported with matching grants.

81. Matching grant facility IGAs would be in collaboration or in consultation with specialized agencies related to the activity. The DOA and DEA would arrange quality planting material, training and extension etc. for farm related intercropping; DAPH on backyard poultry and dairy; relevant small enterprise development and product purchasing agencies for non-farm household level industries. These organizations would be regional level collaborating agencies and would be invited as desired, for regional Project plan preparation and review meetings.

82. **Market linkages and product diversification.** STARR through animators will also actively help selected Rubber Societies, i.e. those with greater level of organization and capacity based on the initial diagnostic and subsequent capacity building as well as the appropriate legal status, explore opportunities for product and market diversification and for more formal linkages with the private sector in the rubber value chain. Project staff in Colombo and in the field will act as facilitators looking for mutually beneficial (win-win) opportunities between smallholders and private rubber processing and manufacturing companies (e.g. CEAT, Lord Star, Elastomeric) as well as rubber traders, brokers and exporters.

83. During the design mission at least three business development strategies for Rubber Societies have been pre-identified. They are as follows: (i) improving locally-produced rubber in order to allow smallholders to retain a larger share of margins by producing better quality rubber sheets (RSS 1,2) that fetch a significant premium price in the market; (ii) expanding volumes of rubber produced by smallholders hence enhancing their bargaining power in the negotiation with the buyers; and (iii) diversifying on non-traditional types of rubber products to explore new marketing channels. The Project would encourage and provide the financial assistance to acquire technical know-how and required resources to diversify production to non-conventional types of sheet rubber such as air Dried Sheet rubber (ADS) and Easy Process Rubber (EPR) sheet after a careful assessment by the project Business Development Officer together with technical experts.

84. **Rubber group processing centres.** In order to pursue the above-mentioned strategies, STARR will build on the SPEnDP experience in supporting the construction of village-based group *Rubber Processing Centers (RPCs)*. To this end the project will wait for a comprehensive analysis of the results and lessons learnt of SPEnDP-supported RPCs in the forthcoming two years before starting the construction of new RPCs. To this end the Project will finance a demand *feasibility study* of latex production and RSS sheet marketing before establishing rubber processing centres.

85. Under STARR the setting up of any RPC (starting with a careful choice of its location) will not only address technical and agronomic criteria but will clearly respond to market and business opportunities as identified in a Business Plan formulated by the Rubber Societies in a participatory way with the support of a specialized service provider. Whenever possible a cluster approach of Rubber Societies³⁷ will be promoted in order to achieve economies of scale to make the RPC sustainable and minimum volumes required by the private companies (e.g. 5,000 Kg/week). Project will finance resource persons to prepare business plans and business development service providers for entrepreneurship development.

86. Depending on the outcome of the proposed post evaluation study of SPEnDP rubber processing centres, at the time of Mid Term Review, the MPI and IFAD would decide the number of RPCs to be established in Monaragala and Ampara under STARR Project. They would be RPCs with daily processing capacity of 250 kg at a cost of LKR 3 million on 80:20 basis from the Project and rubber societies. RPCs will be designed by RRI and construction work will be monitored and supervised by RRI which include both technical and engineering aspects.

³⁷ For business purposes four Rubber Societies operating RPCs would be grouped into one business cluster.

87. The Project would establish four RPCs in Ratnapura district (taking into consideration the readiness and preliminary work has already been carried out by the existing societies to establish business linkages with the private sector (CEAT/DSI), with product diversifying facilities to manufacture non-traditional type sheet rubber such as Air dried sheet on demand. The Thurusaviya Fund office in collaboration with RRISL would select suitable Thurusaviya societies based on pre identified criteria to establish the RPCs.

88. About 25 Business Plans will be developed involving approximately 60 Rubber Societies. Business Plans and related contracts between Rubber Societies and the private sector will be reviewed by a Technical Review Committee composed of the project Business Development Officer, Fund and the Regional Director of RDD in consultation with Colombo-based private sector linkage facilitator. The review of the Business Plans will be based on three major aspects: (i) the track record and commitment (including expected contribution) of the private sector company; (ii) the viability of the business proposal, and (iii) the governance and accountability mechanisms established between smallholders and the company to make it a truly win-win deal.³⁸ If a Business Plans is assessed satisfactorily against the three criteria it will be approved. Otherwise it will sent back for revision to the Rubber Society and the service provider had worked on it.

89. In addition to co-financing the construction of the RPC, the Project will provide a lump-sum allocation to the Rubber Society involved in that RPC to cover the cost of business development advisory services as well as selected market intelligence and marketing activity (e.g. price information systems, participation in fairs, business to business trips) prioritised in the Business Plan. Depending on the nature of the business relationship, rubber purchasing private companies will also be expected to invest (e.g. providing specialised extension and advisory services and other welfare support to smallholders) in order to consolidate and ensure the loyalty of their supply chain.

90. **Marketing infrastructure** will be supported to enhance the business activities of the beneficiaries. The new rubber lands are inside villages and about 2000 ha are in forest areas in difficult terrain, affecting the mobility of smallholders for transporting inputs like fertiliser, rubber plants, and harvested latex to processing centres etc. With a view to facilitating mobility of both inputs and products the Project will finance overhauling strategic section of farm roads. A total of about US \$ two million would be allocated to improve a total of about 80 km in Ampara mainly and also in Moneragala. The selection of roads and difficult stretches for improvements will be carefully selected with full participation of the project assisted rubber growers or societies using PRA tools. On average one km of road developed should cover at least 40 ha of new rubber lands that are planted with STARR.

91. The Project will provide necessary **support to Rubber District offices** in Moneragala and Ampara districts to manage the project interventions. These include additional staff, office equipment, mobility, incremental cost of travelling, and DSA for existing and newly recruited staff at the district level. The Project also will contribute 50% of the rent of the Ampara Project office that will be established to manage project activities. The administrative and financial management arrangements are common to all districts and detailed in Appendix 5 and summarised in Section III below.

Component C: Inclusive Rural Financing

92. The objective of this component is to facilitate access of targeted smallholders to available financing for production, harvesting and marketing of green tea leaf and to a lesser extent also for rubber products. This annex will detail the arrangements to be put in place in the areas of borrowing from the banking system for both working capital and the capital expenditure.

93. The component has two sub-components: (i) facilitating access to financial services; and (ii) supporting implementation arrangements.

³⁸The review of the BPs would be based on the following criteria: (i) formal buy-in and commitment of the parties involved in the BP evidenced by a formal agreement (e.g. Contract Agreement); (ii) financial viability and sustainability of the proposed business; (iii) number of small producers reached and included in the BP including women and youth; (iv) the estimated increase in volume of produce sold by small producers; (v) win-win features of the proposed business model (i.e. duration, existence of a transparent price setting mechanism, suitable payment terms, risk mitigation measures; (vi) grievance mechanism foreseen to settle disputes among parties; (vii) no transfer of land rights from the farmers to the private company envisaged in the BP; (viii) contribution from the company with its own funds; (ix) evidence of a complementary loan from a financial institution for working capital and/or investment purposes (if needed).

Facilitating access to loan financing from the Sri Lankan banking system

94. **Design considerations.** The two partner financial institutions (PFIs), the Bank of Ceylon (BoC) and the People's Bank (PB) were selected in view of their dense branch presence in rural areas and their interest and availability of specific loan types that are accessible in principle to tea and rubber smallholders, but with no adequate lending performance in place at present to service the requirements of this sector. STARR will take advantage of already existing facilities for tea (BoC and PB) and rubber processing (BoC) that are offered by the banks, but with scope for more traction using the benefits of a project context and staff and promotional facilities offered at the divisional secretariat level.

95. The main reasons cited by both bank branch level staff interviewed and their dealing head office departments was that the available facilities are

- not adequately promoted and few potential clients are aware of them
- special schemes are not provided with lending targets at branch and district level, bank branch performance assessments are not affected by low disbursements and recoveries
- offered at promotional and low rates of interest attracting special parties and there is apprehension that these schemes will result in problems for the banking sector.
- Provided in isolation and without a supervisory or project context, and that
- Branch level staff do not have the prerequisite lending and client handling skills.

96. **STARR Approach to Addressing Present Constraints:** STARR component activities would aim at addressing these current constraints to utilizing available resources and liquidity in the Sri Lankan banking sector. The Project would

- (i) offer information and promotional activities through specific credit linkage activities
- (ii) operate with a target driven approach to lending operations, with precise district and divisions wise lending targets. These will guide the work of the branches and will be reviewed regularly.
- (iii) Apply interest rate levels as currently applied by the two commercial banks as a result of their own interest rate setting for their loan types financed out of their own financial resources
- (iv) Embed the bank loan financing in a project context with supporting training, awareness and production level activities. This project umbrella itself has shown to work effectively as a risk reducing measure in smallholder financing.

97. **Arrangements for Facilitating Credit Access:** The following concrete district wide targets were agreed with the lending departments of the Bank of Ceylon and the People's Bank:

Table 1: district-wise lending targets under STARR

	PY 2016	PY 2017	PY 2018	PY 2019	PY 2020	PY 2021		
A.1.1 Rubber Smallholder	15.769	50.962	63.462				107.500	3,90%
Moneragala	8.077	12.500	4.231	0	(++ reflow)	(++ reflows)	24.808	
Ampara	7.692	38.462	36.538	0	(++reflow)	(++reflow)	82.692	
A.1.2 Tea Smallholders	645.261	1.231.971	502.747	24.038			2.404.018	87,28%
Galle	153.846	288.462	153.846	24.038	(++ reflow)	(++ reflows)	620.192	
Matara	173.077	267.857	90.659	0	(++reflow)	(++reflow)	531.593	
Ratnapura	201.923	312.500	105.769	0	(++reflow)	(++reflow)	620.192	
Badulla	65.934	164.835	65.934	0	(++reflow)	(++reflow)	296.703	
Kandy	50.481	198.317	86.538	0	(++reflow)	(++reflow)	335.337	
A.1.3 Rubber Processing Units	12.692	9.519	63.462	79.327	68.221		242.740	8,81%

Moneragala			63.462	79.327	55.529	(++reflow)	198.317	
Ampara					12.692	9.519	22.212	
Ratnapura	12.692	9.519	(++reflow)	(++reflow)	(++reflow)	(++reflow)	22.212	
							2.754.258	100,00%

98. For rubber smallholders (A.1.1), STARR loans would finance new plantings of small rubber plots. In the case of one district, rubber cultivation would be introduced new in the district, in other districts, the focus would be on financing new plantings of existing smallholders. The client wise loan requirements are calculated as an average of expected highly fluctuating borrowing requirements. The projections were made on the assumption of an average loan size of LKRS 100,000 as well.

99. For tea smallholder lending (A.1.2) the credit requirements would comprise re planting, in filling and intercropping on existing plots of up to 1 ha. Projections are based on a maximum loan amount of LKRS. 150,000 and an average transaction size of LKRS 100,000. For the sake of simplicity, the data do not include the different types of grace periods that may be applicable and during which the borrower would have to service loan interest rates only.

100. Projected lending requirements to society-owned rubber processing units (A.1.3) were calculated with a total investment volume of LKRS 3,000,000 and an additional initial working capital provision of LKRS 300,000. The project will provide 75% of the initial costs of this as seed capital, so the bank loan finances only the balance 25 per cent of the total 3.3 mn investment. For the 48 units to be envisaged for financing in three different districts, the loan is assumed to have tenors between two and six years. Calculations were based on an average recovery period of 4 years (net of grace periods if any). In the case of the Ampara district as a non-conventional location for rubber planting, the processing units would become operational only at the tail end of the project when a sufficient quantity of latex supply can be ensured to run these units cost covering from the beginning.

Lending terms and conditions for tea and rubber smallholders:

101. The People`s Bank offers two lending facilities of interest to the STARR Project. Both are financed out of the bank`s own resources. (i) the **People Fast** is a flexible small loan type that is used a lot in branches for flexible small lending requirements. This loan type is offered with 10.5 per cent interest rate, a minimum loan size of SLKR 50,000 and usually runs for 3 to 5 years. No prior account business is required making this suited for new and walk-in clients. He bank uses this loan type as an entry level loan to win new client segments in the small and retail scale of the market. The **Loan for Small Tea Factories** is geared towards financing investment requirements of small private and publicly owned tea factories.

102. The Bank of Ceylon offers special a special **Thurusaviya loan scheme** to tea smallholders organized in these government supported societies. The scheme operates with initial lending amounts starting from LKRS 50,000 and runs already since September 2014. The scheme operates with monthly repayments of individual borrowers, the interest rate as of end June 2015 stood at 8 per cent, down from an initial 16 per cent at the launch of this product. Borrower identification and loan processing is carried out in close cooperation with the line agency and the Thurusaviya Fund in Colombo. Rubber Development Department staff in the districts and Thurusavia officers identify and assist in the initial preparation of the loan file. Prior to final approval or otherwise) by the bank, the loan request is also sent to the Thurusaviya fund head office for their approval. BoC keeps the final discretion on loan approval. A **scheme for tea smallholders** works with similar terms and conditions and in cooperation with the Tea Smallholder Development Authority. Tea smallholder loans of BoC are not provided through societies but are transacted directly with individuals. Tea societies are not involved. District level tea inspectors propose loan applicants to the banks and are available for technical review and back up of the bank. This scheme in particular would benefit greatly from the STARR project collaboration since implementation is currently lacking, given adequate incentive structures for BoC staff and many other responsibilities of tea inspectors. The BoC is also about to launch another scheme that would be well suited to finance the society owned rubber processing units under STARR: the **Perennial Crop Development Scheme**. Loans up to 25 mn. SLRS for investments into processing facilities for tea and rubber can be financed through this product. The interest rate is set by the bank at 8 per cent. The loan tenor (including grace periods of up to 5 years) can extend up to 10 years for larger scale investments in processing factories.

A. Supporting Implementation Arrangements

103. Facilitating credit linkage:

There would be two areas of accelerating this linkage in STARR. First, the activities of the STARR facilitators in the districts would comprise sensitization of borrowers. Their close coordination with the two concerned line agencies will ensure that the role in particular of the TSHDA and its inspectors in borrower identification and technical back up of loan requests will be properly carried out.

104. There will also be a separate pool of credit linkage and community mobilization specialists that would be recruited locally. These service providers would organize information meetings for potential loan applicants and ensure that productive and sensitization activities of the project are complemented with the adequate information on existing facilities that the two state banks offer to provide financial support to the STARR smallholders. This would focus on different credit facilities currently available from BoC and PB, but would not be restricted to this. Information on savings and current account facilities and on services for money transfer and remittance services could also be provided through this information and sensitization channel.

105. District credit committees:

An integral element of the component activities are the constitution and active conduct of meetings of all concerned stakeholders of component activities. This will ensure that the target driven approach of the project to lending of tea and rubber facilities of smallholders will be put in practice and continue to be pursued by concerned branch and line agency staff, given the wide range of other activities they are engaged in. The committee would be headed by the district level MPI representative, and consist of branch level staff of the two partner banks, the two line agencies for tea and rubber development and STARR district level project staff to coordinate these meetings. STARR facilitators and the service providers to carry out credit linkage activities should receive copies of the minuted and signed minutes of these meetings. These minutes should consist of a section on issues and constraints and jointly agreed follow up action (with deadlines for action). The subsequent meeting should then assess progress and maintain a close focus on the lending targets agreed under STARR.

Appendix 5: Institutional aspects and implementation arrangements

1. The Project would have three main components: (A) Tea Smallholders' Development; (B) Rubber Smallholders' Development; and (C) Inclusive Rural Financing.
2. **Project management model:** The Project management model is based on (i) utilising the considerable public sector workforce and extension staff that exists at the district and DSD level, (ii) the need for long-term sustainability of the proposed arrangements, (iii) strengthening the capacity of community institutions and ensuring that the activities undertaken as part of the Project build Government capacity, and (iv) knowledge management and influence the manner in which Government organizes its interaction with smallholders in the tea and rubber sectors. The model also intends to take the advantage of the existing financial institutions and the private sector. A Project Management Unit (PMU) would be established at MPI.
3. **Accountable Project agency:** The overall accountable agency for the Project would be the Ministry of Plantation Industry (MPI). The MPI would have in Colombo (i) Additional Secretary (Development), assigned among other duties, to supervise the overall implementation of the Project, who would liaise with the PMU on implementation matters and with NPD, ERD and IFAD on policy matters; (ii) a national steering committee under Secretary MPI and represented by all stakeholder institutions to meet periodically to guide the implementation and steer the Project. Specifically, the role of the NSC would be to provide overall policy guidance and clearing implementation obstacles, approve the annual work plans and budgets and ensure that Project performance is within the legal and technical framework agreed between the Government and IFAD. Initially, and as long as it is necessary, the NSC would meet monthly to launch and steer the project in its critical early phase, and at least once in three months subsequently. The heads of the following institutions among others nominated by the Secretary, would be members of the PSC; TSHDA, RDD, TRI, RRI, Department of Land Commissioner, Department of Forestry, Thurusaviya fund. The participating banks, agencies involved with intercropping and micro enterprises such as the DEA, DOA, DAPH, would be invited to attend the meeting as and when required. The Project Manager of PMU would act as the Secretary of NSC; responsible for dissemination of decisions and follow-up action.
4. **Project Implementers:** MPI's main constituents, the TSHDA and the RDD would be the project implementers. The Project management mechanism will extensively utilize existing public sector administrative and extension staff as well as the hierarchy within TSHDA and RDD for field level implementation. For specialised support, coordinators and service providers will be competitively recruited from outside (detailed below). The TRI and RRISL would play a major role on regulatory, technical advice and training; collaborating agencies such as DOA, DEA on supplementary programmes such as intercropping; Banks on credit support. Private sector is expected to link on advisory and marketing aspects. The Forest Department, Mahaweli Authority and Divisional Secretariat would provide land permits for the rubber producers.
5. **Project Management Unit:** A PMU would be constituted at MPI as an apex body in overall project management having a dedicated staff, headed by a Project Manager. The Project Manager would be a well experienced senior officer released from state service on available options for such releases, assisted by a government accountant, procurement coordinator initially for 3 years and office support staff recruited likewise from state service. These recruitments will not have any effect on the SPEnDP which is in operation till the end of 2017 for the following reasons: MPI in Colombo will release only the Project Manager for STARR, who would be a senior MPI staff member who has no responsibility towards SPEnDP. At present the senior MPI staff who has responsibility for SPEnDP are the Additional Secretary (Administration) and the Secretary as the final accounting officer. These two officials will not get involved in the regular implementation activities of STARR Project. Furthermore SPEnDP has its dedicated National Programme Coordinator and NPC Unit to manage the daily implementation of SPEnDP. The other staff that will be released from the state services for STARR is indicated in the table below with a comment from where they will come.
6. The PMU would also competitively engage a few professionals for specialised subjects such as; an M&E coordinator for developing and executing a monitoring and evaluation system; a training coordinator to liaise with all relevant technical institutions in modelling needed trainings and executing them in the field and; a Public Private Partnership Linkages Coordinator initially on a 3-year contract for developing and executing business models with the private sector and financial institutions. Thus the composition of PMU would be as follows:

Appendix Table 9: Staff Composition of Project Management Unit

Position in the PMU	Way of recruitment	Source of releasing the staff and a brief comment on the impact of staff release on SPEnDP
Project Manager	Released from state service	MPI, not the one who is closely involved in SPEnDP. Most likely that the Add Secretary, Development would be appointed to cover the duties.
Training Coordinator	Released from state service	It could be from the MPI. Even if, currently there is no involvement of such staff with SPEnDP and also the training of SPEnDP beneficiaries was outsourced and the Community Development Officers of SPEnDP managed the services.
Accountant	Released from state service	There is a separate service in Sri Lanka, namely Accountancy Service. This has a pool of qualified accountant and the practice is that the required ministry request for Accountant from this service. This will not disrupt the on-going work of SPEnDP or the MPI.
Procurement Coordinator (for 3 years)	Released from state service	This could be from MPI or any other state Department. No impact on SPEnDP since no overlapping.
Financial Assistant	Released from state service	Same as above from the SL Accountancy service
Clerical Assistants (2-3)	Released from state service	Same as above form the Sri Lanka Combine Services which provides such staff to all needy state departments.
Monitoring & Evaluation Coordinator	Competitively contracted	Competitively recruited from open market
Public Private Partnership Linkages Coordinator (initially for 3 years)	Competitively contracted	Competitively recruited from open market
Office Assistant	Released from state service / Direct Recruitment	Government service
Driver	Released from state service / Direct Recruitment	Government service or open market

7. **District level project management:** TSHDA and RDD would be in charge of managing and implementing the district level sub components. The district management setup at a TSHDA or RDD office would be called "district project management cell (DPMC)" In order to get the district government administration involved in this Project, the Secretary, MPI would officially inform the District Secretary of each project district at the onset of the Project. The district project management cell would represent the Project at the District Coordinating Committee and include the project activities in the committee agenda.

8. **Supplementary remuneration to staff of DPMC:** All state officers in TSHDA and RDD or other collaborating institutions directly and significantly involved in regional /district level implementation of the Project would be remunerated with a "Target Related Incremental Remuneration" paid by IFAD funds, over and above their state salary. The modalities of which, including in each district who should be significantly working in the Project, on what, assigned target and how much would be the target related incremental remuneration and verification of target achievement would be worked out by MPI before the commencement of the Project, for the staff participants to know their benefits and to get their unrestricted commitment from the first day of Project implementation. The payment on the basis of performance principle for the TSHDA staff in the mid-country sub-programme and for RDD staff of the Moneragala sub-programme of SPEnDP was based on this principle. The performance is based on the number of holdings being serviced (i.e. various stages of subsidy payment for tea and rubber, and extension visit to both tea and rubber) by the Tea Inspectors and the Rubber Development Officers (field staff). This principle will not apply to Regional Directors of TSHDA of Assistant Directors of rubber and the Ministry level government staff

who is attached to the Project. Their incremental payment is decided by the Department of Management Services of the Ministry of Finance, which is a government accepted fixed rate. The total financial allocation given to cover the incremental cost of all the field staff will be a percentage of the volume of subsidy disbursement, which in turn depends on the number of holdings targeted to develop in a particular DS division. The total allocation of the incremental payment is then divided among the DS divisions as a proportion to the number of holdings. The rate at which the field officers are paid is a constant (for example the DSA, holiday pay, over-time work etc) but the total payment for each officer will depend on the number of holdings (or units) that will be reached by the Project in a given area times the rate. This has worked for the SPEnDP when RDD and TSHDA staff facilitated the related work, and also for IFAD funded Dry Zone Project when the Extension Officers of the Provincial Department of Agriculture undertook Farmer Field School - total payment was a factor of number of schools conducted and rounds of training visits made. This principle and the system has been accepted by the MOF and also both lead agencies - MPI for SPEnDP and Ministry of Agriculture for the Dry Zone project.

Component A: Tea Smallholders' Development

9. The tea smallholder development component would be implemented under overall responsibility of the General Manager TSHDA by the Regional Managers of targeted districts as coordinated by PMU at MPI. In each tea district, the Project would cover the geographical areas in need of replanting as targeted in Annex 2, hence only the staff relevant to such areas would be involved in project implementation with additional recruitments detailed below. The Regional Manager (RM) of selected tea district will be overall in-charge of the district tea component, assisted if needed by ARM(s). Depending on the DSDs and tea societies targeted for given Project years, the relevant zone Officer-in-Charge and Tea Inspectors (TI) who would implement the Project at the ground level.

10. As supporting staff, a Business Development Officer (BDO) and a Community Development Officer (CDO) (SPEnDP model experience) will be recruited by PMU and positioned with RM for capacity building of societies and development and execution of business models. Likewise field animators (FA), as one FA to serve two TIs ranges would be recruited by PMU and posted at preferred TI offices to assess field needs, assist field programmes and generate information for M&E. In addition one office animator similarly recruited would be assigned to RM primarily to assist him in compiling M&M information coming from field animators and all office work related to the Project which could be assigned to an animator.

11. As the full district administrator of the Project, the RM office would handle all the financial matters related to the Project. Thus government accountant at RM office would be encumbered with additional fiduciary matters, including the need to maintain separate project records from TSHDA records, receiving and paying of cash, preparation of balance sheets for the PMU etc. The MPI would intervene and transfer to RM office a suitable financial (clerical) assistant from the government combined services, as they are more experienced in government accounting and responsibilities than an outside temporary recruit.

12. For the implementation of the business plans, the project will apply target selection of the willing private sector to work with project beneficiaries. This is similar to the experience of the IFAD funded National Agribusiness Development Project (NADeP) in Sri Lanka. The expression of interest is called and then the responded will be selected on the willingness basis rather than competitively. The PMU would do the selection with the participation of the Tea Commissioner's Department. Under the PMU guidance the Business Development Officer will prepare the BP. The Project will provide funds to implement the BP. The BP ensures that there is investment either way of technical assistance or funds, to implement the BPs.

Appendix Table 10: Staff Composition at District RM Office on District Project Implementation of Component A: Tea Smallholders Development**

Position	Work station	Way of recruitment
Regional Manager (RM)	Tea Regional Manager Office	Already in service with TSHDA,
Assistant Regional Manager(s) if needed, prerogative of RM, PMU, Addl S/MPI	At RM office	Already in service with TSHDA,
Clerk as financial assistant	At RM office	From combined service t/f to RM office

Zone Officer-in-charge of targeted DSDs	In the field, TSHDA sub office	Already in service with TSHDA,
Tea Inspectors of targeted DSDs	In the field, TI range office	Already in service with TSHDA,
Business Development Officer	At RM office	Direct recruitment for project
Community Development Officer	At RM office	Direct recruitment for project
Office Animator	At RM office	Direct recruitment for project
Field Animators	At TI range offices	Direct recruitment for project
** This is a model for one RM office; for the 5 districts, numbers will be multiplied with district-wise need		

Component B: Rubber Smallholders' Development

13. The rubber smallholder development component would be implemented under overall responsibility of the Director General, RDD by the Assistant Director of RDD Monaragala for the targeted districts of Monaragala and Ampara. The work will be coordinated by PMU at MPI. The staff relevant for the targeted implementation areas would implement the Project with additional recruitments detailed below. The Assistant Director (AD) of RDD office Monaragala will be overall in-charge of the rubber component supported by RDOs of the two districts.

14. The rubber component Project management office for both Monaragala and Ampara would be AD's Office of RDD at Monaragala. The proposed management system is broadly similar to tea component. As supporting staff, a Business Development Officer (BDO) and a Community Development Officer (CDO) (SPEnDP model experience) will be recruited by PMU and positioned with AD for capacity building of rubber societies and development and execution of business models. When a RDD office opens in Ampara, they would be stationed at Ampara office. Likewise animators; 1-2 animators to assist AD, 4 animators to assist RDOs in Monaragala, and 12 animators to assist RDOs in Ampara would be recruited. They would assess field needs, assist field programmes and generate information for M&E. The animators assigned to AD would be primarily to assist him in compiling M&M information coming from field animators and all office work related to the Project which could be assigned to an animator.

15. As the full district administrator of the Project, the AD office would handle all the financial matters related to the Project. Thus government accountant at AD office would be encumbered with additional fiduciary matters, including the need to maintain separate project records from RDD records, receiving and paying of cash, preparation of balance sheets for the PMU etc. The MPI would intervene and transfer to AD office a suitable financial (clerical) assistant from the government combined services, as they are more experienced in government accounting and responsibilities than an outside temporary recruit.

Appendix Table 11: Staff Composition at Monaragala RDD AM Office and Ampara RDD office on District Project Implementation of Component B: Rubber Smallholders Development

Position	Work station	Way of recruitment
Assistant Director, RDD	RDD AD Office at Monaragala	Already in service with RDD
Office Animator (1)	AD office, Monaragala	Direct recruitment for project
Office Animator (1)	sub office, Ampara	Direct recruitment for project
Clerk as financial assistant	At AD office	From combined service t/f to AD office
Rubber Development Officers (8)	In the field RDO zone offices, Monaragala	Already in service with RDD,
Rubber Development Officers (6)	In the field RDO zone offices, Ampara	Already in service with RDD,
Business Development Officer**	At AD office	Direct recruitment for project
Community Development Officer**	At AD office	Direct recruitment for project
Field Animators 4	At RDO offices, Monaragala	Direct recruitment for project
Field Animators 12	At RDO offices, Ampara	Direct recruitment for project
** If a RDD office is opened in Ampara, BDO & CDO would be stationed at Ampara office		

16. **Rubber group processing** sub-component of the Project would be targeted at Monaragala, Ampara and Rathnapura. Under SPEnDP already 40 GPCs are being established in

Monaragala. Harnessing its experience, 40 new GPCs would be established in Monaragala and 4 in Ampara after the completion of SPEnDP GPSs and assessing their viability and consented by MPI.

17. The number of GPCs in Moneragala together with SPEnDP units would assist processing at least 50% of expected yield of both SPEnDP and RDD rubber. There are no quality processing facilities in Ampara, and GPCs will instil the quality processing concept to Ampara rubber smallholders. Additionally four GPCs with facilities to manufacture non-conventional grades of rubber (air dried sheets) would be targeted to Ratnapura, where rubber cultivation is widespread and well established.

18. Selection of the societies for GPCs will be carried out by a committee appointed by the Steering Committee. GPCs will be designed by RRI and construction work will be monitored and supervised by RRI. The GPC societies would be formed under the Thurusaviiya Fund.

Component 3: Inclusive Rural Finance

19. **Main implementing partners – roles and responsibilities.** The two partner financial institutions (PFIs), the Bank of Ceylon (BoC) and the People's Bank (PB) would sign operational MoUs with the MPI to specify roles and responsibilities of the project and the two partner banks.

20. For both tea and rubber, Project activities will involve an initial sensitization and awareness creation of bank staff at district, DSD and branch level. Regular training and capacity development measures will ensure that STARR financial services targets will be met and implementation challenges addressed timely.

21. These MoUs are proposed to include the following provisions:

- Commitment of the PFI to the STARR project for the entire project implementation period of six years
- Approval of the appropriate higher authorities in the two banks of this project cooperation
- Reporting separately in three monthly intervals on the progress of dedicated and specially funds for the project
- Consent for releasing branch and district level staff for training and capacity development measures for banks under STARR
- Commitment to submit all books, reports and transaction details for periodic STARR project supervision and IFAD audit and inspection, if required.
- Confirmation that project required data will be submitted timely and no later than four weeks after the due date including at least names and current outstanding principal and interest receivables, approval and disbursement dates and status of recoveries; stated loan purpose and details of guarantees provided by the borrower.
- Application of terms and conditions as they are in use by the concerned PFIs in the regular banking operations
- Assigning and releasing concerned bank branch staff for attendance and follow up of the credit committee meetings
- If requested, rationalize the lending terms and conditions of different applicable schemes specifically in STARR/ project circulars.

22. On the part of the project, the operational MoUs are proposed to include the following provisions:

- Confirmation of districts and divisional secretariats (in attachment) to be covered with the three main types of lending activities under STARR (tea smallholder financing, rubber smallholder financing, and the financing of society owned rubber processing factories).
- Excerpt of terms or reference governing the work of facilitators and service providers for credit linkage to evidence concrete support in the field of specialized project staff and recruited specialists
- A first provisional schedule of training measures at district level (main topics, length and format of the trainings and proposed attendees)
- Participant evaluation techniques of trainings and the management of training measures

- Assigning and releasing concerned ministry (chair and venue), project and line agency staff for attendance and follow up of the credit committee meetings

23. **Line agencies and facilitation of access to loans:** Different schemes of the two partner banks already contain agreed on systems and procedures involving TSHDA, RDD and The Thurusaviya Fund officials. These procedures are fine-tuned as these schemes are under implementation. Under STARR, the line agencies would be required to provide the requisite staff and technical back up at borrower and district level to facilitate the technical appraisal of loan requests. Facilitators and staff of the STARR PMU need to monitor in particular, to what extent the tea inspectors and the district staff of the RDD will remain involved, and whether there will be capacity limits to be addressed in project implementation.

24. There will be regular meetings between the bankers, the PMU and concerned line agencies on implementation challenges and emerging areas of action and follow up. Banks will report to the PMU separately on the STARR loan portfolio with M&E data including borrower location, loan purpose, status of loans and overdues (if any), listed separately for each borrower.

Service providers:

25. The Project has provisions to hire service providers for special tasks as and when necessary. Services of experienced service providers would be competitively recruited for the first three years of the Project to assist in activities of the 1st and the 3rd sub-components of and tea and rubber.

26. Some of the tasks foreseen at Project design stage are: In the tea component, once the TIs identify potential tea societies, service providers or resource persons would visit each selected society and conduct a diagnostic analysis using a set of strategic indicators. The target would be about 200 tea societies for the analysis; during the capacity building stage, of such societies Project would finance service providers / resource persons to develop training packages to facilitate training; in Ratnapura as there is no project recruited staff, thurusaviya staff would select the societies which are worthwhile having the diagnostic analysis. Once selected, service providers or resource persons who are undertaking the same exercise for tea societies will visit each selected thurusaviya society and conduct the analysis using a set of strategic indicators; for capacity building of thurusaviya societies, same service providers / resources persons in the tea sector would be used to develop the training packages to facilitate training.

Other Key Institutions:

27. The Tea Research Institute and the Rubber Research Institute would have a critical role to play in providing technical backstopping to the project for certification of plant material, development of training modules and testing and approving any new technologies for tea and rubber cultivation. In addition, key Government line agencies such as the Department of Agriculture, Department of Livestock, Department of Export Agriculture, etc are expected to play a critical role in the introduction and technical backstopping of intercrops and livestock development activities.

28. Government departments would be informed prior to project implementation about their specific role and the mechanisms for coordination. The Commercial and Government Banks would also be expected to play a role in the provision of financial services to the target households. Private sector players are also expected to play a key role in engaging in contractual relationships with smallholders. These key players would be invited at project start-up and throughout the project life. If required a MOU or business development plans would be agreed between the project and these implementing agencies.

Project initiation workshops:

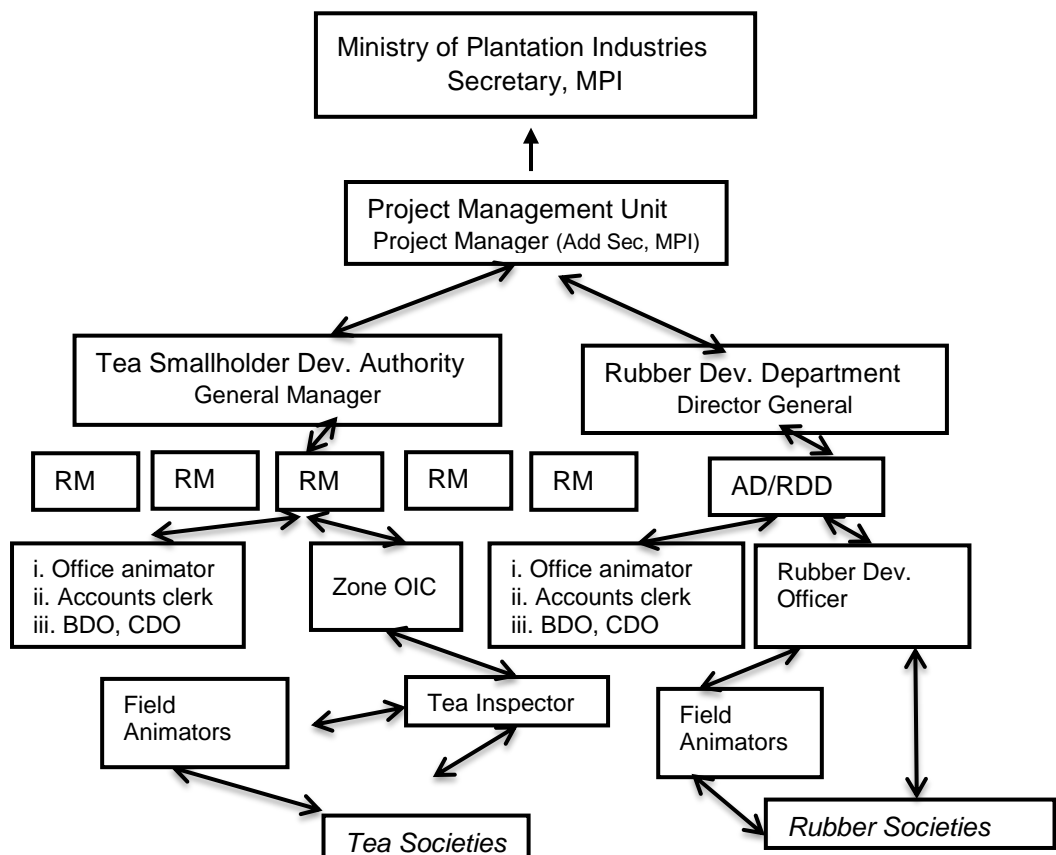
29. The MPI together with PMU, TSHDA and RDD will conduct workshops (separately for tea and rubber) prior to any activities in the field. These workshops are crucial and essential. The primary purpose would be to understand the project in detail and each partner's responsibilities, target achievements, line of communications, troubleshooting methods, advance actions or reservations (example; planting material) to avoid delays, administrative matters involving MPI and IFAD, etc.

30. The TSHDA would bring RMs, ARMs, zone OICs of five targeted districts to these workshops with all field data, including the data set prepared by the Mission with them and currently at TSHDA office. They would analyse carefully the field situation and complete the DSD and TI range targeting as the first priority and carve out preliminary steps for tea society diagnostic analysis, capacity building, planned time frames for tea replanting, infilling, intercropping, IGS etc. The workshops could be one or few.

31. The RDD would bring AD Monaragala, zone RDOs of Monaragala and Ampara for their one or few workshops and deliberate on same topics as for tea, essentially GN division targeting, and other preparations as for tea component. The workshops should be meticulously planned as results oriented workshops so that immediately after them the Project could commence in the field.

32. Organizational Chart, TOR of Project Manager, PPP Linkages Coordinator and M&E Coordinator: The Organizational Chart is given below. The Terms of Reference for the posts of i. Project Manager ii. PPP Linkages Coordinator and iii. M&E specialist are appended. *They should be considered as guidelines, as final legally framed vacancy announcements would be drafted by MPI. MPI may modify TOR to facilitate recruiting a better candidate for the above posts.* The TOR for the service provider and field facilitator would be drafted after the project is in place and the PMU has made an initial survey on requirements of smallholders

The Organizational Chart



RM - Regional Manager; AD - Assistant Director; RDD - Rubber Development Department; OIC - Officer-in-Charge; BDO - Business Development Officer

Attachment 1: Terms of Reference of Key Staff

A. Terms of Reference of Project Manager

Objective of the assignment

MPI is seeking the services of an experienced Project Manager to establish an effective PMU of STARR project, its peripheral office network and to successfully implement the project. S/he will be accountable to Secretary, MPI on all project matters, especially on results based achievement.

Tasks and responsibilities

- The PM will develop and establish an effective and efficient PMU as the apex body of the project implementation, reorient the applicable regional offices, TI offices of TSHDA in the tea developing five districts and applicable sections of RDD office at Monaragala and RDO offices at Monaragala and Ampara into a project implementing peripheral office network.
- S/he will develop the network with technical and material requirements for efficient accomplishment of project contractual obligations.
- S/he will attend to preparing and consolidating annual work programme, annual budgets, and all reports related to the project, especially cumulative periodic reports, as required by MPI and IFAD.
- S/he will attend to all administrative obligations as a head of an operational unit. As the implementation network consists of permanent officers of other institutions, S/he will amicably coordinate with them on all administrative matters for a smooth implementation.
- S/he will attend with the accountant and Secretary, MPI to receiving funds from the treasury and reimbursement of funds from IFAD.
- S/he will ensure that project's gender strategy is applied and the gender objectives are achieved.
- Where s/he has the responsibility, s/he will attend to procurements with the procurement specialist.
- S/he will oversee and guide the senior staff, especially the M&E coordinator, training coordinator to focus them on project objectives.
- S/he will guide the regional staff, especially the tea regional managers and deputy director RDD to focus them on project objectives.
- S/he will be the secretary of the NSC and responsible for calling the meetings, presenting progress and issues, disseminating decisions and carrying out the decisions and suggestions.

Qualifications

Should have a post graduate degree in Agriculture, Development Management or related subjects.

Experience

S/he will have at least 15 years of progressively responsible demonstrated work experience in the field of agriculture, plantation agriculture, or related field of which at least 10 years in a senior position of an agricultural development project or related project.

B. Terms of Reference of Public Private Partnership Linkages Coordinator

Objective of the assignment

As Public Private Partnership Linkages Coordinator, the incumbent will work under the Project Manager in the areas of value chain development for farmer produce and to establish linkages with government and private commercial and development banks and other resource agencies. S/he will play a catalytic role in developing and maintaining business partnerships with private companies involved in input supply, processing, and marketing (both domestic and exporting companies) and provide the professional guidance to tea and rubber societies on the implementation of the project's

Tasks and responsibilities

Financial Intermediation Fund. Specifically, the incumbent will be required to:

- Lead negotiations with private companies and CBOs (tea and rubber societies) in business partnerships for the better interest of the rural poor and farmers and along with project objectives,
- Ensures strong collaboration between private sector companies, government line departments and CBOs to link farmers and farmer groups for business partnerships,

- Build effective partnerships with a broad range of stakeholders in private-public partnership development including government and non-governmental institutions, technology providers and research institutions, and standard and certification organizations
- Support the CBOs in preparation of business plans, analyse financial and risk components, and manage PPP contracts
- Develop, in consultation with commercial and development banks, operational guidelines and a MoU between banks and the project for the implementation of the Financial Intermediation Fund,
- Guide tea and rubber society leaders for the implantation of the fund and facilitate registration of societies,
- Assist project's training Co-ordinator to develop training for society member empowerment, microenterprise development, and PPP policies and practices
- Guide Monitoring and Evaluation Specialist in developing monitoring tools,
- Provide PMU staff with up-to-date professional advice on business operations, and
- Undertake regular support visits to programme districts to monitor programme delivery, identify gaps and support needs to ensure high standards are met.

Qualifications

- Postgraduate degree in Business Administration or Agricultural Economics, preferable with a first degree in Agriculture, from recognized universities.
- At least fifteen years of relevant experience in agri-business development,
- Familiarity with project development, implementation and supervision, and
- Exposure to current issues and trends in agriculture and agribusiness.
- Knowledge and experience of working in donor funded projects.
- Excellent written and verbal communication skills in English and local languages, and
- Excellent working knowledge of Microsoft packages and electronic communication.

C. Terms of References of Monitoring & Evaluation Coordinator

Objective of the assignment

MPI is seeking the services of an experienced M&E coordinator to establish an effective M&E system at the PMU of STARR project, to use M&E tools for data management, progress monitoring and for project implementation. S/he will be directly accountable to the Project Manager and Secretary, MPI.

Tasks and responsibilities

- The M&E coordinator will develop and establish a monitoring & evaluation framework for STARR at PMU, according to the Result Framework (RF) prescribed in the project implementation manual (PIM)
- S/he will help the PMU on all the project related monitoring & evaluation matters and helps PD and MPI to monitor progress in achieving the target results.
- S/he will help in preparing and consolidating the annual programme of the project, producing all reports related to the project, especially cumulative periodic reports, requiring the input from him
- S/he will prepare monitoring guidelines and templates to the regional project directors and his M&E officers (EDOs at Regional office level) attached to his office. S/he will train such officer to be capable of collecting required information from field and relaying to him at PMU.
- S/he will, if required, assist in the HRD of tea and rubber societies

Qualifications

S/he should have a post graduate degree in Development Management or related subjects.

Experience

S/he will have at least 10 years of demonstrated work experience in the field of Monitoring and Evaluation of which at least 5 years in agricultural development projects or related projects

Appendix 6: Planning, M&E and learning and knowledge management

1. Log-frame and Annual Work Plan and Budgets (AWPB): The project log-frame would show the main activities for the life of the project and would be the basis for the AWPB. A preliminary Log-Frame has been prepared (and revised) which is appended with the main report. The Project log-frame will be refined periodically to reflect changes and modifications that may be necessary during the project life. The AWPB would represent the key planning document of the STARR project. It would serve as the instrument for identifying specific targets, activities and integrating management priorities for implementation, forecasting procurement requirements and facilitating the mobilization of staff and financial resources. The overall responsibility for the preparation of the AWPB would be assumed by the Project Manager supported by Regional Managers of the TSHDA for tea (Ratnapura, Baadulla, Galle, Matara and Kandy) and the Deputy Directors of RDD for rubber plantations (Monaragala and Ampara) at the district level. Each of the participating district cell heads would integrate the existing targets of the Government into the plan and add the specific targets for each district and present them as an integrated plan (but identified separate) for the district. These plans would be prepared in close coordination with the Tea Inspectors and the Rubber Development Officers at the district level and integrated into combined targets at the national level by the PMU.

2. The lead for establishing the plan for organization of Tea and Rubber Societies and their capacity building would be undertaken by a service provider/s contracted for the first three years of the project. The lead for planning with respect to the training and business plan (BP) development and market linkages would be undertaken by the Training Coordinator and the Business Linkages Coordinator at the PMU in collaboration with the district cells by incorporating their feedback and plans. At each district cell, a Business Development Officer (BDO) and a Community Development Officer (CDO) will be stationed who will liaise with the community and the PMU. TRI and RRI consent in each training module would be obtained and a training schedule included in the plans. The role of the private sector in the plans would be identified by the Business Linkages Coordinator who would coordinate with the private sector partners and identify the role and contribution of each. The PMU would coordinate the preparation of a consolidated AWPB which would be finalized with the approval of the Project Steering Committee (PSC). The AWPB would be submitted to IFAD for its concurrence. If required, the PMU may propose adjustments in the AWPB during the relevant project year. The AWPB would be disaggregated into quarterly segments for ease of implementation. It would be also the foundation for monitoring the progress at the activity level and regarding resource use/allocation. IFAD guidelines would be used for the preparation of the AWPB.

3. Monitoring & Evaluation: The main purpose of an M&E system is to provide comprehensive, frequent and reliable data and information for sound result-based management and decision-making. It would be designed to inform project management of whether implementation is going as planned or corrective action is needed. M&E system would capture the relevant knowledge and disseminate lessons learned in a targeted and strategic manner to facilitate the achievement of the project objectives. The project M&E system would consist of four interlinked parts:

- a. setting up the M&E system by identifying information needs to guide the project strategy, ensure effective operations and meet external reporting requirements – *prime responsibility of the M&E Coordinator at the PMU.*;
- b. Implementing the M&E system - gathering and managing information – information is scattered around in seven project districts and five district cells to oversee the information floor. CDOs and BDOs in each cell supported with animators will be responsible for gathering and managing information;
- c. Involve project stakeholders in reflecting critically - once information has been collected it would be analyzed and discussed by project stakeholders – prime responsibility of M&E Coordinator who will interact with project implementing partners, TSHDA and RDD, for a smooth information floor and results generated. Quarterly (or monthly as required) physical and financial progress reports as against AWPB targets to NSC and other stakeholders is the basic reporting with annual report and interim reporting;

- d. Results of M&E would be communicated to the people who need to use it. This includes policy makers, project stakeholders and beneficiaries at large - Keeping track of the details of project implementation and gathering good information about what has been achieved would be the key in M&E. But in the end, what makes the difference is how people interact, how ideas are shared and developed, and by doing so, how people are motivated and supported to learn and contribute.
4. The overall responsibility for the project M&E activities would lie with the PMU and its M&E Coordinator which would be responsible for collecting and analyzing the data gathered from the district cells and implementing partners/service providers on the basis of agreed reporting formats and timing. The Project would be given specialist expertise for M&E at the PMU and District level for the purpose. The M&E Coordinator at the PMU would be responsible for ensuring consistency, accuracy and timeliness of all reporting undertaken under the project. All M&E activities would be based on the IFAD Guidelines for project M&E and IFAD RIMS first and second level Indicators Handbook. IFAD would provide M&E and RIMS training to CDOs, BDOs, animators as well as TIs/RDOs. All indicators would be disaggregated according to gender and socio-economic status so as to enable a proper assessment as to whether the project is reaching its intended target beneficiaries, poor households, women and vulnerable households.
 5. The project M&E system would include both progress monitoring and impact monitoring and evaluation. Performance indicators identified in the project log-frame would be further refined as required during implementation. Progress Monitoring would focus on the financial and physical performance of the project. Each district cell would provide regular reports on the progress which would be coordinated by each CDO and BDO and consolidated at the PMU. The service provider/s recruited to mobilize and strengthen the tea and rubber societies would be required to provide regular reports on membership data, training provided, achievement of societies such as formation of small groups, creation of savings and credit funds, formal registration, IGAs commenced etc. CDO in each cell is responsible for the data relevant to rural credit component such as numbers of credit financing in each society/district with standard data and loan performance. M&E Coordinator with the assistance of two partnering banks will prepare a data templates. Annual and quarterly reports would be produced which would contain data relevant to project inputs, outputs and emerging impact.
 6. The project M&E system would be participatory, decentralized, and all data analysis and reporting would be disaggregated by gender. The output indicators would include the number of Tea and Rubber Societies formed or strengthened, number of men and women members, number trained, number provided financial services, land replanted under tea, lands in filled with tea (no. of plants), land planted under rubber, production and financial progress of group rubber processing centres, number of nurseries established, number of smallholders involved with IGAs and with buy-back and marketing contract arrangements, village access road schemes completed, number of people trained in technical skills and sustainable resource management, etc.
 7. The project M&E system would be expected to provide data not only on output monitoring but also on outcome and impact monitoring. The main impact indicators that would be used to monitor and assess project impact are the two anchor indicators used by IFAD to assess project impact namely; a) the number of households with improvement in household asset ownership index; and b) percentage reduction in the prevalence of child malnutrition. The former is an indicator of increased income and the latter, an indicator of reduction in hunger. Several 2nd level and 3rd level RIMS indicators relevant for the current project have also been identified and are given in the project Log-frame.
 8. Participatory Community Based Monitoring: An annual workshop would be organized by the PMU in which the participating smallholder farmers, women, progressive farmers, representatives from the Tea and Rubber Societies, private sector representatives from tea processing factories, rubber processors, technical partners such as the TRI, RRI, partner banks, etc., would be given the opportunity for sharing their views about the project and identify mechanisms for improvement.
 9. Baseline Survey (BLS): To capture baseline information relevant for the project, several questionnaires would be developed and administered to participating households, Tea and Rubber societies and private sector nursery growers to capture the impact of project activities. These questionnaires would capture the socio-economic status of the households and the Societies before the implementation of project activities. The same households and societies would be tracked at the end of the project to assess the impact. The BLS would be contracted to a third party service provider.

10. Comparison with a control group would also be undertaken to identify and isolate project specific impact. The sample size for the survey would be based on a 95% level of confidence.

11. Impact Monitoring would focus on the outcome and impact level indicators specified in the project log-frame. Surveys would be undertaken at critical times during the project to measure changes in these indicators. The impact surveys would be outsourced to a third party firm skilled in such surveys. Various methods of impact monitoring and evaluation would be used including: participatory impact assessment as an annual exercise to review activities and plans by beneficiaries and record any change achieved, whether positive or negative, in the lives of the beneficiaries due to project interventions. Special studies would be undertaken from time to time to examine critical aspects of project implementation.

12. Mid-Term Review (MTR): A Mid-term review would be conducted at the end of project year three, to assess the progress, achievements, constraints and emerging impact and likely sustainability of project activities and make recommendation and necessary adjustments for the remaining project period. The MTR would be carried out jointly by the MPI and IFAD, and assess the role of the TSHDA and RDD, the role of the Tea and Rubber Societies, the role of the private sector and government, partnering banks, etc. At the end of the project, a completion evaluation would be conducted, as an input into the Project Completion Report (PCR) through a formal survey preferably undertaken by an agency with no previous involvement in project implementation. IFAD itself may also undertake a formal Evaluation of the project through its Independent Office of Evaluation (IOE).

13. Result & Impact Management System (RIMS): Since 2004, IFAD has promoted the RIMS as a standardized system of reporting project results and impact which all IFAD funded projects must provide to the Fund. RIMS attempts to measure results at the three levels of the logical framework concerned with outputs (level one), outcome (level 2) and impact (level 3). It relies on specific indicators as instruments to measure results at each level. Each AWPB and annual report would be regularly supplemented with selected RIMS indicators which have been specially identified in the project log-frame to enable the project to report on these indicators of special importance to IFAD.

14. STARR Project would emphasize that M&E tasks are not the sole responsibility of M&E staff alone. Making the M&E system and processes more participatory means sharing these functions. This, in turn, makes shared learning through M&E possible. A clear distribution of such tasks among the PMU and district cell staff would be defined and articulated. The key tasks to be undertaken by the PMU, as the project starts, would include:

- a) Launching the baseline data collection, including a baseline survey for impact indicators – using an experienced service provider;
- b) Developing a detailed M&E plan which articulates, inter alia, methods and resources for collecting data, responsibility for data collection for analysis, frequency of data collection, resources needed for collection and analysis, reporting and use of analyzed data. Responsibilities specified under the plan would be discussed with key partners, TSHDA and RDD and with existing tea/rubber societies, that will be involved in data collection and analysis;
- c) Defining clear and easily measurable indicators (disaggregated according to gender and socio-economic status) as well as their baseline measurement requirements;
- d) Reporting on gender: Sex disaggregated formats would be used for all monitoring protocol. Progress reporting and evaluation formats would be designed to capture sex-disaggregated data at all levels and to record progress against the baseline data. Project staff responsible for data collection and monitoring would be trained in understanding and applying gender analysis. A key role of the PMU's M&E Coordinator would be to effectively integrate the gender outcome indicators within the project's performance measurement framework and to ensure all personnel with M&E responsibilities at the field level have the awareness and skills to measure against the gender-specific indicators.
- e) Co-ordinating with IFAD to arrange M&E and RIMS training to CDOs, BDOs, TIs/RDOs and animators involved in the implementation of the project;

- f) Assisting project partners, TSHDA , RDD and tea/rubber societies, in formulating data collection tools;
- g) Developing a Management Information System (MIS) and Geographical Management Information System (GMIS) to manage the data and information of individual as well as group and tea/rubber societies and increase the access of all users of the STARR;
- h) Integrating lessons learned from presently on-going IFAD-funded projects, SPEnDP in particular; and
- i) Timely fine-tuning log-frame to ensure clear outcome statements that define the change required for the target group and the scale of that change.

15. Learning and knowledge management: Learning and knowledge management would be a key underlining theme of the project. The main purpose of KM processes within STARR would be to ensure that knowledge generated is systematically identified, analyzed, documented, used to improve project performance and shared with key stakeholders. The Project would provide opportunities for considerable learning at the policy, operational and technical level given that it would be including certain novel features to make the existing Government strategy for replanting of tea and rubber more effective; restructuring the manner in which the group rubber processing centres are financed and operated as business enterprises; restructuring the manner in which extension services are delivered and research and extension are coordinated; demonstrating the use of eco-restoration to enhance tea yields; Partnership with the private sector to engage smallholders in sustainable farming; and the use of banks' existing loan products to finance tea/rubber-related and other IGAs.

16. Success with any of these elements would have a significant impact on the strategies currently used in the plantation and rural finance sector. It would be important to document the experience and disseminate the results for wider policy impact. The Project would provide the opportunity to compile and disseminate and share the lessons in a systematic manner. Provision would be made in the budget for preparation of case studies of successes and failures and for technical and learning notes on key aspects of the project.

Appendix 7: Financial Management and Disbursement Arrangements

I. SUMMARY OF RISK ASSESSMENT :

1. A financial management (FM) assessment of the Lead Programme Agency (LPA), the Ministry of Plantation Industries (MPI), was carried out in accordance with IFAD's FM risk assessment Guidelines, issued on 1 November 2012. The objective of the assessment was to determine whether the implementing entity has acceptable financial management arrangements, which will ensure that: (1) programme funds are used only for the intended purposes in an efficient and economical way, (2) accurate, reliable and timely periodic financial reports are prepared, and (3) the entities' assets are safeguarded.

2. The fiduciary assessment for STARR rated both inherent and control risk in FM as 'medium'. The main drivers of the FM risks identified are: (i) the involvement of multiple implementing entities and accounting centers, (ii) lack of dedicated staff or/and high staff turnover; (iii) the timeliness of FM reports. Measures will be put in place to mitigate these risks, as detailed in table 1 below, including *inter alia* qualified and experienced financial staff, a detailed financial and accounting manual, automated accounting processes (accounting software), quarterly financial reporting, internal and external audit.

II. PROJECT FINANCIAL PROFILE:

3. The total indicative project cost will be US\$ 65.4 million over a six year period, of which IFAD will provide a loan equivalent to USD 25.76 million. Expenditure categories for IFAD funding include civil works, vehicles, equipment & materials, consultancies, goods, services and inputs, grants, training and recurrent costs. In addition to duties and taxes, the Government's contribution to the budget includes subsidy payment for tea and rubber implemented according to the government scheme as well as cost-sharing on other expenditure categories. Participating banks are expected to provide USD 3.2 million as a line of credit from their own funds. Beneficiaries will make a substantial contribution in terms of their own labour and capital for replanting of tea, cultivation of rubber, inter-crops as well as their contribution to private nurseries, access roads and rubber processing units provided under the Project. Thus the beneficiary contribution shown in the table may not fully reflect their contribution or the contribution of the private sector.

	The Government		IFAD		Banks		Private sector		Beneficiaries		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs												
A. Civil works	1 162	15.6	4 491	60.5	-	-	-	-	1 772	23.9	7 425	11.4
B. Vehicles	987	59.0	686	41.0	-	-	-	-	-	1 674	2.6	
C. Equipment and materials	219	4.0	3 985	72.0	-	-	-	-	1 332	24.1	5 536	8.5
D. Consultancies	69	10.5	587	89.5	-	-	-	-	-	656	1.0	
E. Credit	-	-	-	-	3 000	100.0	-	-	-	-	3 000	4.6
F. Goods, services and inputs	169	6.2	2 028	75.1	-	-	-	-	505	18.7	2 702	4.1
G. Capita Grants and Gov Subsidies	26 000	73.0	9 624	27.0	-	-	-	0	-	35 624	54.5	
H. Training	364	18.9	1 294	67.3	251	13.0	15	0.8	-	1 923	2.9	
Total Investment Costs	28 969	49.5	22 695	38.8	3 251	5.6	15	-	3 610	6.2	58 540	89.5
II. Recurrent Costs												
A. Salaries and allowances	2 369	59.0	1 645	41.0	-	-	-	-	-	4 014	6.1	
B. Operating costs	1 424	50.0	1 424	50.0	-	-	-	-	-	2 847	4.4	
Total Recurrent Costs	3 792	55.3	3 068	44.7	-	-	-	-	-	6 861	10.5	
Total PROJECT COSTS	32 762	50.1	25 764	39.4	3 251	5.0	15	-	3 610	5.5	65 401	100.0

III. IMPLEMENTATION ARRANGEMENTS

4. The MPI as LPA will be responsible for overall financial management of the Project in compliance with the Financing Agreement, Letter to the Borrower (LTB), and applicable IFAD guidelines (Procurement, Audit). The PMU, embedded within MPI, will implement all fiduciary functions, in liaison with the District Project Management Cells (DPMCs) attached to District level TSHDA and RDD offices.

5. Respective financial management roles and responsibilities of the PMU and the DPMCs are described in section V below.

IV. FINANCIAL MANAGEMENT RISK ASSESSMENT

6. The fiduciary assessment rated the inherent risk at design as “medium”. Transparency International (TI) index for Sri Lanka is 3.8, a 0.1 improvement on the previous year, and RSP for the region is 3.6. Amongst other measures of ongoing PFM reform, the GoSL has enacted new Anticorruption provisions under the 19th Amendment to the Constitution widening the scope of the “the Commission to Investigate Allegations of Bribery or Corruption”.

7. The fiduciary risk of the MPI, RDD and TSHDA was assessed as part of the project design process through interviews and collection of information. The MPI is currently implementing another IFAD-funded project, whose financial management performance is rated ‘mostly satisfactory’ and FM risk assessed as ‘medium’.

8. The assessment for STARR rated the risk in FM as “medium”, as detailed in table 1 below. The main drivers of the FM risks identified are: (i) the involvement of multiple implementing entities and accounting centers, (ii) staff capacity; (iii) the timeliness of FM reports.

9. The level of FM risk will be mitigated by a series of measures. These include (i) qualified PMU finance staff with experience of development projects, (ii) a detailed finance procedures manual, (iii) automated financial records (accounting software), (v) qualified and competent staff at district level maintaining separate accounts for project expenditure; (vi) quarterly financial reporting by districts, consolidated by PMU, (vii) strict monitoring of DPMC reports and imprests by PMU finance team; (viii) internal audit at PMU and district level, (ix) annual or bi-annual supervision/implementation support by IFAD and (x) annual audits, in line with IFAD’s audit guidelines.

10. Disbursement conditions will include the recruitment of qualified PMU finance staff and approval of the finance manual. Installation of the accounting software will be a condition for disbursing the first replenishment of the project’s initial deposit.

Table 1. Summary of Project Fiduciary Risk Assessment at Design

	Initial risk assessment	Proposed mitigation	Final risk assessment
Inherent risk			
<u>Country level</u> Weak oversight regarding transparency and accountability TI Index 38 RSP Score 3.63	Medium	Strengthened FM capacity of Government institutions through ongoing PFM reform & capacity building	Medium
<u>Entity level</u> Ability of MPI and PMU to effectively coordinate implementation with district level	Medium	Adequate staffing arrangements at PMU & district levels Steering Committee oversight	
Control risk			
1. Organization and staffing Insufficient capacity of FM staff, high staff turnover	Medium	Finance staff with appropriate qualifications and experience selected competitively; performance assessments; training; dedicated project accountant at district level	Medium
2. Budgeting Delays by PMU in consolidating AWPB and PP Risk of cost overruns; budgets may be based on unrealistic projections and unit cost Lack of clarity at district level in preparing budgets	Medium	Expected to be addressed through institutional hierarchies: STARR budget will be part of MPI’s budget which has to be prepared within specified timeline Interim financial reports showing progress against budget to be submitted quarterly Templates for budget preparation at DPMC	Low

		level included in project manual	
<p>3. Funds flow and disbursement arrangements</p> <p>Non-compliance with IFAD requirements and weak FM capacity of DPMCs hinder fund flow arrangements, undermining implementation progress</p> <p>Delayed submission of documentation by DPMCs, service providers and other entities</p> <p>Lack of counterpart funding</p>	Medium	<p>Training to accounts staff on finance manual and IFAD procedures</p> <p>PMU responsibility to monitor DPMC reporting and payment documentation</p> <p>Funding requirements will be included in to the Public Investment Programme and adequate provision of IFAD and counterpart funds made in the annual National Budget</p>	Low
<p>4. Internal Controls</p> <p>Risk of non- compliance with internal control processes.</p> <p>Possible weaknesses (lack of transparency) in procurement and award of contracts</p>	Medium	<p>Approval and authorization hierarchies for processing financial transactions described in manual</p> <p>Regular IFAD supervision missions, internal audits and annual external audits to ascertain compliance with internal controls and procurement processes</p>	Medium
<p>5. Accounting systems, policies and procedures</p> <p>Manual and EXCEL based accounts with weaknesses in tracking funding and expenditure from various sources and recording expenditure</p>	Medium	<p>Installation of suitable accounting software meeting project reporting requirements</p> <p>Training for PMU and DPMCs</p>	Medium
<p>6. Reporting and monitoring</p> <p>Delays in preparing and submitting IFRs, withdrawal applications and other progress reports</p> <p>PMU may lack administrative control to supervise participating districts to submit timely and acceptable reports</p>	Medium	<p>Procedures manual to include standard reporting formats</p> <p>Training on financial reporting provided to accounts staff at PMU and district level</p> <p>Steering Committee oversight</p>	Medium
<p>7. Internal Audit</p> <p>Capacity of internal audit staff at MPI, RDD and TSHDA levels may be insufficient</p> <p>IA audit recommendations may not be followed up</p>	Medium	<p>Project to be included in annual work programme of MPI and RDD and TSHDA IA units (district level)</p> <p>IA reports submitted to PMU and IFAD</p> <p>Implementation of recommendations monitored as part of supervision process</p>	Medium
<p>8. External Audit</p> <p>Delays in submitting audits to IFAD lead to project suspension</p> <p>Scope of audit work may not be comprehensive to cover all programme activities</p>	Medium	<p>Annual financial statements submitted to Auditor General within two months of year end, to ensure timeliness of audit processes</p> <p>Scope of audit covering field verifications to beneficiary level</p>	Medium
FM Control Risk	Medium		Medium

V. FINANCIAL MANAGEMENT AND DISBURSEMENT ARRANGEMENTS

a) Organization and staffing

11. The finance unit of the PMU, established under the MPI, will be composed of a qualified Accountant, with solid experience of donor-funded projects, supported by two qualified Accounts Assistants (Management Assistants or Economic Development Officers) with appropriate background and experience. The finance staff will be released from Public service to work on the project on a full time basis. In addition, a Procurement Coordinator with appropriate experience in National Procurement Procedure will be recruited and assigned to the PMU. The Project will utilize the current administrative structure at district level of TSHDA and RDD. A Management Assistant with accounting qualification and experience will be attached to each DPMC to work as STARR Accounts Assistant, in collaboration with the district level Accountant.

12. The **PMU's** FM role will include consolidation of the AWPB, daily expenditure reporting, managing funds flow, maintaining dual currency accounts, monthly reconciliation statements for the DA and other project bank accounts and preparation of withdrawal applications to IFAD for regular replenishment of the designated account. The PMU will ensure timely release of adequate funds to DPMCs on the basis of verified DPMC quarterly reports and supporting documentation, preparation of consolidated quarterly reports for submission to IFAD and MPI, and preparation of annual financial statements complying with international standards within the required time-frame (two months from year-end). Other responsibilities of the PMU will be preparing and updating the annual procurement plan, dealing with major procurements of high value and maintaining the project's Contract Register and Fixed Asset Register (FAR). The PMU will support the Auditor General in the coordination of the annual audit mission and will maintain a log of audit recommendations and their resolution. The PMU will also be responsible for ensuring that district level finance staff have sufficient capacity, are provided with appropriate training and guidance with regard to reporting expenditure and procurement, and that DPMCs comply with laid down procedures for the project.

13. The **DPMC** finance staff will be responsible for (i) preparing the district-level AWPB, (ii) maintaining accounting records of project expenditure, separate from district accounts, (iii) managing and reconciling the district-level bank account for the project, (iv) monitoring imprests received from the PMU, (v) submitting timely financial reports to PMU in line with agreed standards, and (vi) facilitating internal and external audit processes

b) Budgeting

14. Annual budget processes will be aligned to Government's existing budget framework and timetable, as part of MPI's regular budget submission. MPI will make adequate annual budgetary provisions for IFAD funds and Counterpart Funds (CF) in its budget request, based on the project's approved Annual Work Plan and Budget (AWPB). Provision of counterpart funds for the project to meet salaries, operating expenses, local taxes and other expenditure that will be met by the GoSL under the Project will be included in the National Budget as Counterpart Funds (CF). The budget line under which IFAD funds will be allocated will be clearly identified to ensure that the principle of 'aid on budget' is observed.

15. The overall process of budgeting will be participatory, with the commitment of DPMCs and relevant stakeholders such as smallholder societies and government institutions, Survey Department, Forest Department and Mahaveli Authority. Each DPMC will prepare its AWPB in advance, for consolidation by the PMU. The consolidated AWPB will indicate the annual financial provision required to be included in the National Budget, based on the provisions of financing agreement as regards Government's contribution to the project. It will be an essential tool to convince the Treasury for inclusion of required financial provisions in the National Budget. Estimated monetary value of contribution by beneficiaries and other financiers will be included in the AWPB for completeness and progress monitoring purpose.

c) Disbursement Arrangements and Flow of Funds

Disbursement arrangements

16. Disbursement procedures will be detailed in the project's Letter to the Borrower (LTB), which will be issued upon signature of the financing agreement. Before disbursement can commence, IFAD will require a letter from the representative of the Borrower designating the names and titles of the officials authorized to sign Withdrawal Applications, with their authenticated specimen signatures.

17. Disbursement conditions will be specified in the financing agreement. They will include: (i) opening of the Designated Account at Central Bank of Sri Lanka to receive IFAD's Funds; (ii) opening of project accounts for the PMU in a commercial bank acceptable to IFAD and GoSL; (iii) appointment of key Project Staff including PMU Accountant on a fulltime basis; (iv) IFAD's No objection for AWPB and Procurement Plan for the first project year; (v) IFAD's approval of the finance and administration manual. The first replenishment of the DA will be subject to the installation and operationalization of a suitable accounting software at PMU level, to be extended to DPMCs.

18. **Designated Account (DA).** Signatories of the DA will be communicated to IFAD by the representative of the Borrower. The DA will be operated the Ministry of Finance and Planning, following imprest arrangements, in accordance with Section 3.1 of IFAD's Loan Disbursement Handbook (LDH). Once the disbursement conditions have been fulfilled, IFAD will release an Initial Deposit equivalent to approximately six months' of eligible expenditure (USD 2 million). The ceiling of the Initial Deposit may be revised during implementation, depending on the project's liquidity requirements. DA funds will be utilized exclusively for expenditure eligible for IFAD financing.

19. Although all payments made from the DA will be in Sri Lanka Rupees, allocation and retention of funds in the account will be in US Dollars, as will be the bank statements. Any difference in exchange rate applicable on the date of receipt and payment will result in Sri Lanka rupee exchange gains or losses. All such exchange gains or losses would be borne by Government of Sri Lanka (GoSL) and no exchange gains or losses would be charged against IFAD funds. The FIFO system will be utilised in Withdrawal Application DA reconciliations.

20. The DPMCs will submit a monthly schedule of expenditure for the previous month along with supporting documentation by the 10th of each month, to enable the PMU to regularly submit DA replenishment claims to IFAD. The PMU will consolidate Withdrawal Applications for eligible project expenditure regularly. A replenishment WA should cover approximately thirty percent (30%) of the Initial Deposit or 90 days of eligible expenditure incurred from the DA, whichever occurs first. The SOE threshold will be USD 50,000, which implies that for expenditure related to *contracts* exceeding this amount, detailed documentation must be submitted to IFAD. In the case of contracts below the SOE threshold, supporting documentation must be retained by the project for review during supervisions and audits.

21. As will be detailed in the LTB, other available disbursement methods for the project will be direct payment, reimbursement and special commitment.

22. **Project Accounts:** PMU will open two Project Accounts at a commercial bank, to receive DA and GoSL funds respectively from the General Treasury. Signatories of the Project Accounts will be communicated to IFAD.

23. **DPMC Accounts.** Each DPMC will open two accounts for the project, to receive IFAD and GoSL funds respectively. Signatories of the DPMC Accounts will be communicated to IFAD. They are expected to be the Regional Manager or Deputy Director and Accountant or Accounts Officer of the DPMC.

Fund-flows

24. At the request of the General Treasury of MoF&P, CBSL will release an initial advance to the PMU based on the expenditure forecast for the first three month period of the approved AWPB, not to exceed the Sri Lanka Rupee equivalent of USD 850,000. The imprest will be renewed on a quarterly basis or as otherwise indicated in the manual.

25. The PMU will release an initial imprest to the DPMCs on the same basis, up to a maximum of Sri Lanka Rupee equivalent of USD 100,000 for each DPMC. No bank account at district level other than the one dedicated to the project will receive project funds from the PMU.

26. Imprests to DPMCs will be renewed quarterly or as otherwise specified in the manual, based on their budget and upon submission of certified interim financial reports (IFRs) and other supporting documents specified in the manual. DPMCs IFRs will report available cash balance, details of expenditure categories for which funds are sought, availability of budgetary provision, bank account reconciliation and bank statements. A model interim financial report (IFR) for DPMCs will be provided in the manual.

27. **Taxes and duties** are not eligible for IFAD funding.

28. **Retroactive Financing:** IFAD may agree to finance eligible preliminary expenditure of the project that would be incurred before the date of loan effectiveness as an exception. Such expenditure would include cost of accounting software and related training, basic office equipment and furniture for the PMU and DPMCs etc. For this purpose, the mission recommends a lump sum provision of USD 50,000.

29. **Counterpart funds.** General Treasury will release counterpart funds on request by the PMU, based on the AWPB for the ensuing period. The PMU, in turn, will allocate counterpart funds based on the requirements of the DPMCs.

30. A diagram of project Flow of funds is provided as Annex 1.

d) **Internal controls**

31. A sound system of internal control is required to ensure proper accountability, traceability and transparency of transactions. MPI, RDD and TSHDA have in place an internal control system based on annually approved delegation of authority and segregation of duties among the accounting staff. As the staff seconded for the Project at district level will be limited to one Accounts Assistant, a mechanism will be devised with RDD and TSHDA district management to ensure that segregation principles prevail.

32. The project's internal controls will be specified in the finance & administration manual, whose approval will be a disbursement condition for the financing. The manual will include procedures for budgeting, expenditure approvals, monthly bank reconciliations, accounting processes, chart of accounts, use of accounting software and financial reporting. The manual will focus on safeguarding resources against fraud, corruption and misuse of assets, through stringent asset management controls. All Project fixed assets will be coded and inventoried indicating source of funding separately, and requirements of Government financial regulations and IFAD, such as periodical asset verification, annual inventory, assignment of custodians, and regulations for appropriate use of project assets, will be implemented. Annual asset verification reports will be forwarded to the relevant authorities as required by Government Financial Regulations, with a copy kept at the PMU for audit and supervision mission reviews. The Fixed Asset Register (FAR) will be periodically reconciled with accounting records to ensure that all assets procured under the Project are included in the FAR. The records will also be reconciled with claims to IFAD against different categories of expenditure pertaining to specific assets. Asset disposal or scrapping will be carried out in compliance with applicable government regulations and necessary approvals.

33. Adherence to the internal control framework will be verified during annual internal and external audit exercises and reported to IFAD. Compliance to the manual will also be an element of the fiduciary checks performed during supervision missions. The Project's financial performance will be periodically reviewed by a Steering Committee set up at the MPI.

e) **Accounting systems, policies and procedures**

34. All spending units will maintain double entry accounts in line with internationally recognised accounting standards, by financier, component and expenditure category. The PMU will record all expenditure by district, at exchange rate applicable on the date of funds transferred from DA to DPMCs based on quarterly / monthly reports submitted by DPMCs to PMU.

35. Financial reporting and accounting system will be organized in a manner to monitor implementation progress, identifying the works, goods and services financed by IFAD and other sources separately and disclosing their uses in the project. The accounting system will (i) ensure proper disbursements from IFAD proceeds for efficient and economical implementation of the project, (ii) allow performance evaluation of the project and comparison of actual expenditure versus Budget and find reasons for the discrepancy (iii) internal control for ensuring efficient utilisation of project resources and protection of project assets. The government accounting system is robust, however the software package (Central Integrated Accounting System – "CIGAS") presently used in government departments and ministries does not generate financial reports in the format required by IFAD. Therefore, a suitable off-the-shelf accounting software package will be installed, to minimize human error in accounting and to strengthen financial reporting and the internal control system. procured from a competitively selected service provider who will be tasked with installing and operationalizing it. The software will be enabled to automatically generate WAs, SOEs and periodic financial statements in accordance with IFAD's standard reporting formats.

36. The Accounts staff of the PMU and District will be trained in using the accounting software by the service provider, whose contract will include providing periodic off-site and on-site support. In addition, this training will be extended to the staff of the Auditor General (AG) who will be assigned to audit the project accounts.

37. An appropriate mechanism will be devised to assess the value of beneficiary contributions received in kind. The bank's contribution to the project will be calculated on the basis of a monthly or quarterly return on loans paid by the banks to the smallholders.

f) Financial reporting

38. The PMU will prepare consolidated annual Project Financial Statements (PFS) and submit them within two months of fiscal year end to the Auditor General and to IFAD. The Statements will be prepared in line with the requirements specified in IFAD's Audit Guidelines. In addition, PMU will prepare quarterly interim financial reports (IFRs) for monitoring purposes by the Steering Committee, which will be sent to IFAD no later than 45 days after the end of each quarter. The IFRs will be designed to provide relevant information to management, financiers and other stakeholders monitoring the programme's performance. They will include sources and uses of funds, expenditure by categories and by project components, comparison of actual expenditure against the budget, reconciliation of the DA and audit log. The project manual will include a template IFR.

39. DPMCs will be required to submit simplified quarterly financial reports to the PMU offices for validation, with their imprest replenishment requests. Such reports shall be submitted to PMU within 30 days following the end of each quarter, accompanied by copies of bank statements relating to the reporting period and required supporting documentation. The project manual will include a template simplified IFR for DPMCs, with clear instructions on supporting documentation to be provided.

g) Internal Audit

40. The Internal Audit (IA) Unit of MPI is responsible for internal auditing of the project at PMU level. Their work will be supplemented by the regular internal audits conducted by the IA units of RDD and TSHDA. IA Unit of MPI is under a qualified Accountant reporting directly to the Secretary to MPI. The two Chief Internal Auditors at the TSHDA and RDD report directly to their heads of Institution. MPI will issue necessary instructions to the concerned IA units to include the project in their annual work programme. Internal Audit will be able to provide technical assistance to the project in ensuring the appropriate maintenance of accounts, disbursement and other records, the effectiveness of accounting and internal controls, the safeguard of cash, the maintenance of assets, inventory and other related processes.

External Audit

41. All public accounts are audited by the Auditor General of Sri Lanka as a requirement of the Constitution. Sri Lanka Auditing Standards are aligned to international standards (ISAs).

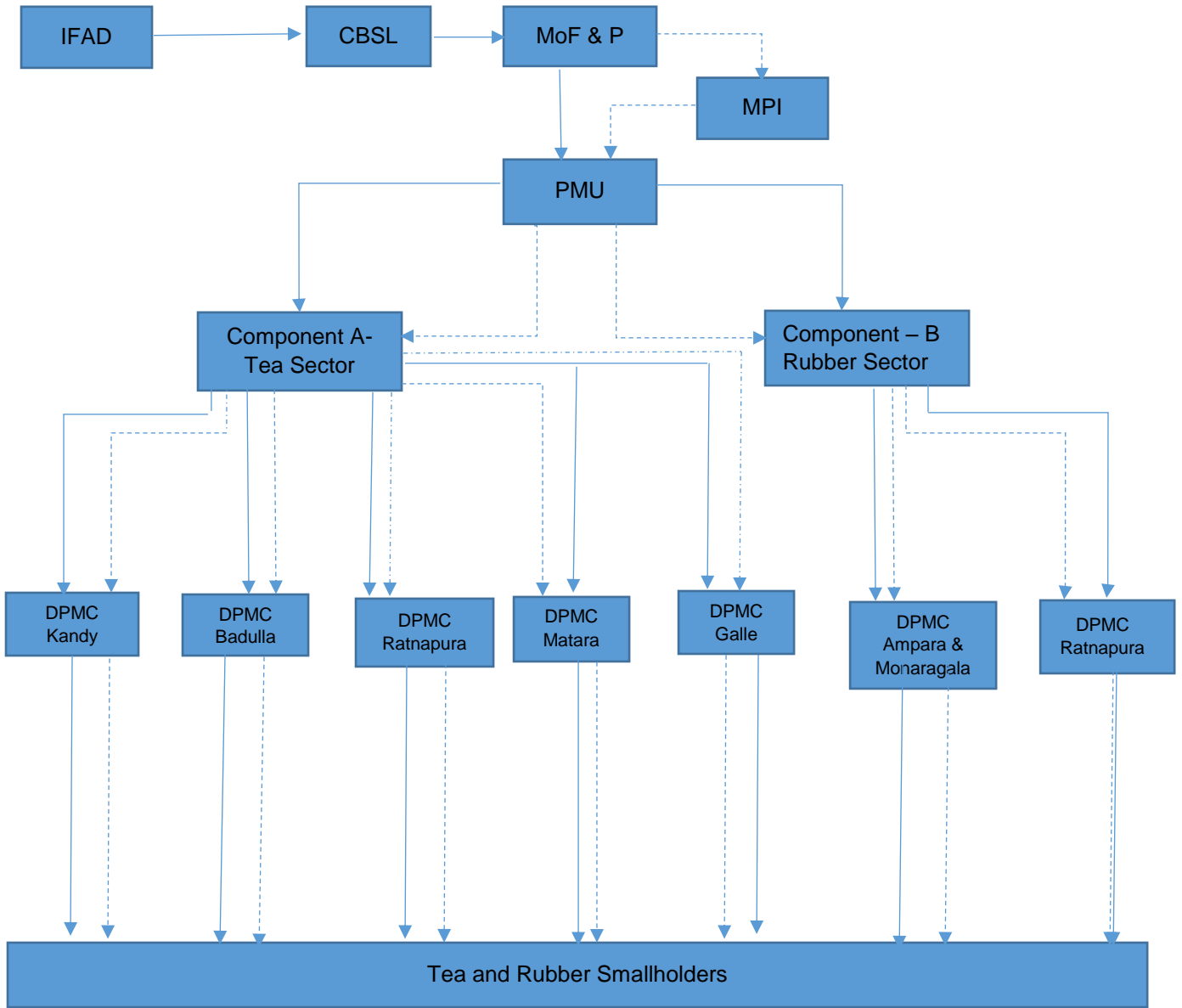
42. Within 90 days from entry into force of the Financing Agreement, the MPI will formally request AG to ensure the annual audit of project accounts. The Secretary of MPI will provide AG with IFAD's Audit guidelines, detailing specific auditing requirements. The Auditors will be expected to review financial management arrangements at the various implementing entity levels, including field visits to provide assurance of funds reaching targeted beneficiaries.

43. A standard TOR for audit is provided as annex VI of IFAD's Guidelines. IFAD may request AG to provide additional opinions from time to time.

44. To ensure timeliness of audit report finalisation, projects will be expected to submit their signed financial statements to AG within two months of year end. Failure to comply with IFAD's requirement for submission of audit reports within six months of year end may lead to IFAD requesting for audit arrangements to be supplemented with the services of a private audit firm.

45. The PMU will maintain an Audit Log to track observations raised by the Auditors, values involved, action taken by the PMU to resolve them and number of outstanding audit issues. The Audit Log will be available for review by IFAD Supervision Missions and as part of the annual audit exercise.

Annex 1
Flow of Funds



Key ———> IFAD Funds
 - - - - -> Counterpart Funds
 DD =Deputy Director RDD
 RDD = Rubber Development Department
 TSHDA= Tea Smallholder Development Authority

RM= Regional Manager TSHDA PMU = Project Management Unit
 Note: At the PMU funds of the Project would be divided into Component A Tea smallholders Development and Component B – Rubber Smallholder Development and distribute to the District Project Management Cells according to their Budgets.

Appendix 8: Procurement

Introduction

1. The Government of Sri Lanka (GoSL) has a long established procurement management system that was introduced as far back as 1950s. The Procurement management was one of the section of the “Financial Regulations” introduced by the British administration. Later, in the year 1997, under a Presidential Decree, National Procurement Agency (NPA) was established to develop and implement National Procurement Guidelines in association with all major International Funding Agencies such as the World Bank, Asian Development Bank and the JAICA. National Procurement Guidelines consist of four volumes covering procurement of Goods and Works, Selection and Employment of Consultants and procedure relating to Private Sector Infrastructure Projects (BOO/BOOT/BOT) and Procurement of Pharmaceutical and Medical Equipment. These Guidelines are supplemented with two Manuals covering Procurement of Goods and Works and Consulting Services. In addition “Bidders guide to success in Public Procurement” also has been issued. These guidelines were released under the hand of President of Sri Lanka for implementation by all government department and ministries, semi Government institutions and provincial Councils without any exception. Until the National Procurement Commission is in full operation, Department of Public Finance of the General Treasury is entrusted with the responsibility of smooth implementation, monitoring and updating of the Procurement Guidelines and assist the implementing agencies providing necessary guidance on procurements. For Civil construction works, Institute for Construction Training and Development Institute (ICTAD) has published a separate set of Standard Bidding documents to facilitate implementation of National Procurement Guidelines.

2. As part of reform agenda the Government of Sri Lanka (GoSL) recently enacted 19th Amendment to the Constitution, establishing National Procurement Commission, Audit Commission and widening the scope of the “Commission to Investigate Allegations of Briary or Corruption”. The law provide for measures to implement the UN Convention against Corruption and any other international conventions relating to the prevention of corruption. While the National Audit Commission ensure independency of the Auditor General Department to conduct government audit which include all public procurements, National Procurement Commission to be appointed by the President, will be entrusted with the function of formulating fair, equitable, transparent, competitive and cost effective procedures and guidelines for the procurement of goods and services, works, consultancy services and information systems by the government institutions. The Commission has legal power to summon any public officer before the Commission and investigate any complaint relating to public procurement and file legal action for any fraud or malpractices. In addition, newly set-up Financial Crime Investigation Division (FCID) under the Police Department has been provided with specially trained officers to investigate financial crimes.

3. Transparency International (TI) index for Sri Lanka is 3.8 and RSP for the region is 3.6 which are not below the IFAD threshold 3. The current assessment of the procurement capacity of the Ministry of Plantation Industries (MPI) the Lead Agency is attached as Annex 1.

4. Mission is of the view that the National Procurement Guidelines that were drafted in association with major funding agencies are largely consistent with IFAD guidelines and robust enough to meet procurement requirements of the Project. However, in case of any inconsistency, IFAD guidelines would supersede National Procurement Guidelines. It is also noted that all IFAD funded project in Sri Lanka adopt National Procurement Guidelines.

Arrangements for Procurement under STaRR

5. Procurement of goods, works and services financed from resources provided or administered by IFAD will be undertaken in accordance with National Procurement Guidelines to the extent that there is no any contradiction between the National Guidelines and IFAD Guidelines. In any inconsistency, IFAD guidelines supersedes the National Guidelines.

6. **Procurement Plan:** The PMU would be responsible for preparing and forwarding procurement plans to IFAD for “No objection” on an annual basis 60 days prior to the commencement of the relevant financial year. Procurements would be made according to the approved procurement plan and AWPB of the project. As provided in appendix I, paragraph 1 of IFAD’s Procurement Guidelines, IFAD review of and no objection to the PMU’s procurement plans is compulsory. The procurement plans submitted by the PMU would include as a minimum:

- a. A brief description of each procurement activity to be undertaken during the period and name of the implementing agency responsible for the procurement;
- b. The estimated value of each procurement activity;
- c. The method of procurement to be adopted for each procurement activity and;
- d. The method of review IFAD will undertake for each procurement activity indicating either post review or prior review.

7. Any changes and amendments to the procurement plan shall be subject to IFAD's No Objection. A draft Procurement Plan based on the Detailed Cost Tables of the Project Design Report is attached as Annex 2. However, it should be noted that procurement plan should always be in line with the Annual Work Plan and Budget (AWPB) of the project.

Procurement Methods Thresholds

8. Since all procurements under this Project are below the threshold for International Competitive Bidding, the following methods would be applicable for procurement of Goods, Works and services which would be dealt with by Ministry Procurement Committee (MPC) or Project Procurement Committee (PPC) depending on the total cost estimate of the procurement. All minor procurements would be dealt with by the by district authorities within their limit of delegated authority.

9. **Procurement of Goods and Works:** Methods for procurement of goods/works as per thresholds is established as follows:

- a. Goods
 - i. National Competitive Bidding (NCB), for contract values greater than LKR 2.5 million,
 - ii. National shopping for contracts less than LKR 2.5 million,
 - iii. Direct contracting for contracts below LKR 100,000.
- b. Works
 - i. National Competitive Bidding (NCB), for contract values greater than LKR 3 million,
 - ii. National shopping for contracts less than LKR 3 million.
 - iii. Direct procurements from Government Departments and Institutions (RDD, TRI and RRI etc.) are permitted after negotiation of rates. The details of the implementation would be elaborated in the PIM.

10. **Consultancy and Services:** Consulting service will include implementation support, technical assistance for different components, conducting studies, mobilisation/establishment of community groups, technical training and strengthening of community groups, and monitoring and evaluation. Services would be provided by consulting firms and individual consultants. If the duration of consultancy services is more than six months it should be advertised.

11. Each contract for the selection of consultancy services estimated to cost USD 50,000 equivalent or above, shall be selected in accordance with the National Procurement Guidelines following any one of the selection methods listed below:

- a. Quality and Cost Based Selection
- b. Fixed Budget Selection
- c. Least Cost Selection

12. Each contract for the selection of consultancy services estimated to cost below USD50,000 equivalent, shall be selected in accordance with the National Procurement Guidelines following any one of the selection methods listed below:

- a. Quality and Cost Based Selection
- b. Fixed Budget Selection
- c. Least Cost Selection
- d. Selection Based on Consultants Qualification

13. Selection of individual consultants: Individual consultants are selected on the basis of their qualifications for the assignment. They shall be selected through comparison of qualifications of at least three candidates among those who have expressed interest in the assignment or have been approached directly by the Project Management. Individuals employed by the Project shall meet all

relevant qualifications and shall be fully capable of carrying out the assignment. Capability is judged on the basis of academic background, experience and, as appropriate, knowledge of the local conditions, such as local language, culture, administrative system, and government organization.

14. Consultancy Services and Individuals consultants may be selected on a sole-source basis with due justification in exceptional cases such as: (a) tasks that are a continuation of previous work that the consultant has carried out and for which the consultant was selected competitively; (b) assignments lasting less than six months; (c) emergency situations resulting from natural disasters; and (d) when the individual consultant or consulting firm is the only consultant qualified for the assignment

Review of Procurement Decisions by IFAD

15. IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement process is carried out in conformity with its Procurement Guidelines. For the purposes of IFAD's Procurement Guidelines, the following procurement decisions shall be subject to prior review by the Fund for the award of any contract for goods, equipment, materials, works, consultancy and services under STARR.

- a. Procurement of goods, materials and works
 - i. Prequalification documents and shortlist when prequalification is undertaken;
 - ii. Bid Documents for goods, materials and works;
 - iii. Evaluation Report and Recommendation for Award; and
 - iv. Contract and amendments.
- b. Procurement of consultancy services and services
 - i. Prequalification documents and shortlist when prequalification is undertaken;
 - ii. Request for Proposal;
 - iii. Technical evaluation report;
 - iv. Combined (technical and financial) evaluation report and the recommendation for award; and
 - v. Contract and amendments.

16. Prior or Post Review. Except as IFAD may otherwise agree, the prior or post which applies to various procurement of good, works and consultant recruitments shall be defined as follows:

Procurement Method	Prior or Post	Comments
Procurement of Goods and Works		
Civil Works	Prior	All Contracts
NCB Works and Goods	Prior	Except procurement valued below USD 50,000
Shopping for works (quotations)	Post	
Shopping for goods (quotations)	Post	
Direct Works	Prior	All Contracts
Direct Goods	Prior	Except procurement valued below USD 1,000
Recruitment of Consulting Firms		
Quality and Cost-Based Selection (QCBS)	Prior	Except procurement valued below USD 50,000
Fixed Budget Selection (FBS)	Prior	Except procurement valued below USD 50,000
Least Cost Selection (LCS)	Prior	Except procurement valued below USD 50,000
Selection Based of Consultants Qualification	Prior	Except procurement valued below USD 50,000
Sole Source Selection (SSS)	Prior	All contracts
Recruitment of Individual Consultants		
Individual Consultants	Prior	Except procurement valued below USD 10,000
Sole source selection	prior	All contracts

GOVERNANCE AND ANTI-CORRUPTION (GAC)

17. The project's inherent risk at design is at medium level. Transparency International (TI) index for Sri Lanka is 3.8 and RSP for the region is 3.6. In comparison to the previous year there is an improvement in TI index by 0.1. It is pertinent to mention at this point that the GoSL has enacted new Anticorruption provisions under 19th Amendment to the Constitution widening the scope of the "the Commission to Investigate Allegations of Bribery or Corruption" and also to take measure to implement the UN Convention against corruption and any other international conventions relating to the prevention of corruption to which Sri Lanka is a party. Since the Corruption Perception Index published by Transparency International (TI) for Sri Lanka is not below the IFAD's threshold 3, no specific Governance and Anticorruption (GAC) strategy would be included in the design of this project. However, in order to maintain a corruption free environment in the activities of the project, it is suggested to comply with international best practices and standards for the purpose of preventing corruption, and also with the IFAD's Policy on Preventing Fraud and Corruptions. The project management would allow potential Project beneficiaries and other stakeholders to channel and address any complaints they may have on the implementation of the Project.

ANNEX 1

MPI CAPACITY ASSESSMENT

Part A. General Agency Resource Assessment	Response
A.1. Is there a procurement department?	There are no organizational units with direct responsibility for handling procurements. An officer attached to the Finance Division attend to the procurements at Ministry level and all other work relating to procurements are handled by respective Implementing Agencies. The decisions are made respective Procurement Committees depending on the value of the procurement as per National Guidelines.
A.2. What procurement does it undertake?	The Ministry undertakes all kinds of public procurement related to goods, works and services.
A.3. Are the staff provided with written job descriptions?	Yes as explained above. Department of Rubber Development (RDD) and Tea Smallholder Development Authority (TSHDA) has their Department Procurement Committees appointed by the Ministry. Project Procurement Committee would be appointed by the Ministry.
A.4. How many years' experience does the head of the procurement unit have in a direct procurement role?	N/A – No specific individual appointed as head of procurement unit. It is under the Head of finance and supervision of the Additional Secretary.
A.5. How many staff in the procurement department are:	One
i. Full Time?	
ii. Part Time?	As procurement alone does not provide fulltime work for an officer, he attends to procurements in addition to his normal works. But for the proposed project a Procurement Officer would be recruited.
iii. Seconded?	N/A-
A.7. Does the staff that will be involved with the procurement have sufficient English language skills	Yes. A separate post would be created under the project to handle procurements and an experienced officer would be recruited at the beginning of the project.
A.8. Is the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	The Project would be undertaking a ring fenced approach which ensures separation of functions, roles and responsibilities and it would have a procurement officer selected from the open competitive basis.
A.9. Does the unit have adequate facilities such as PCs, internet connections, photocopy facilities, printers etc. to undertake the expected procurement?	No. The procurement under the proposed project will be undertaken by the Project Management Unit (PMU). The PMU will be equipped with adequate facilities such as PCs, Internet Connections, photocopy facilities, printers etc. for smooth implementation of procurement.
A.10. Is there a procurement training program?	Training is provided by training arm of the Finance Ministry for updating knowledge of the officers involved. The Project will be supported by IFAD periodically to build capacities of the Unit.
Part B. Agency Procurement Processes, Goods and Works	
B1. Are there individual procurement plans prepared for each department and consolidated by the Ministry	The Ministry and institutions under the ministry's expected to prepare annual procurement plans as per the guidelines.
B.2. If the above is yes, what where the major challenges?	No specific challenges have been observed
B.3. Is there a procurement process manual for goods and works?	Yes
B.4. If there is a manual is it up to date and does it cover foreign assisted procurement?	Yes.
B.5. Is there a systematic process to identify procurement requirements (1 year or more)	All procurements are identified before preparation of annual budget of the following year.
B.6. Who drafts the specifications?	A subject specialist nominated for the purpose.
B.7. Who approves the specification?	Appropriate Procurement Committee on the recommendation of the Technical Evaluation Committee (TEC) appointed for the procurement.

B.8. Are there standard bidding documents in use and have they been approved for use on IFAD funded projects?	Standard bidding documents are available in the guidelines. For civil works ICTAD has issued standard bidding documents. The same bidding documents with appropriate modifications would be adopted for procurement under the project.
B.9. Who drafts the bidding documents?	Procurement specialist as explained above.
B.10. Who manages the sale of the document?	By the project Accountant.
B.11. Are all queries from bidders replied to in writing?	Yes.
B.12. Is there a minimum period for preparation of bids and if yes how long?	As per procurement plan.
B.13. Does the bidding document state the date and time of opening and how close is it to the Deadline for submission?	Yes.
B.14. Is the opening public?	Yes.
B.15. Can late bids be accepted?	No.
B.16. Can bids be rejected at bid opening?	Only on late submission.
B.17. Are minutes taken?	Yes.
B.18. Who may have a copy of the minutes?	Procurement Committee. Usually other parties do not request copies.
B.19. Are the minutes free of charge?	Yes.
B.20. Who undertakes the evaluation (individual(s), permanent committee, ad-hoc committee)?	Separate TEC are appointed according to the requirement and nature of the procurement.
B.21. What are the qualifications of the evaluators in respect to procurement and the goods and works under evaluation?	Senior and experienced Public officers who are knowledgeable in the field.
B.22. Is the decision of the evaluators final or is the evaluation subject to additional approvals?	Their recommendations are considered final decision is taken by procurement committees.
B.23. Using at least three real examples how long between the issue of the invitation for bids and contact effectiveness?	It varies between one to three months depending the nature of the procurement.
B.24. Are there processes in place for the collection and clearance of cargo through ports of entry?	N/A. For imports local agents clear the cargo on behalf of the client.
B.25. Are there established goods receiving procedures?	Yes.
B.26. Are all goods received recorded as assets or inventory in a register or similar?	Yes
B.27. Is the agency/ procurement department familiar with letters of credit?	Yes
B.28. Does the procurement department register and track warranty and latent defects liability periods?	N/A
Part C. Agency Procurement Processes, Consulting Services	
C.1. Has the agency undertaken foreign assisted procurement of consulting services recently (last 12 months, or last 36 months)?	National Project Coordinating Unit setup under the Ministry for the implementation of SPEnD project assisted by IFAD has undertaken procurement of consultancy services. Time to time Ministry involved in these procurements.
C.2. If the above is yes what where the major challenges?	N/A
C.3. Is there a procurement process manual for consulting services procurement?	Yes.
C.4. Is the manual up to date and does it cover foreign assisted projects?	Yes
C.5. Who identifies the need for consulting services requirements?	As per project Documents.

C.6. Who drafts the ToR?	By a subject specialist identified for the purpose.	
C.7. Do the ToR followed a standard format such as background, tasks, inputs, objectives and outputs?	yes	
C.8. Who prepares the request for proposals?	Procurement officer of the project	
C.9. Are assignments advertised and expressions of interest called for?	Yes as per guidelines.	
C.10. Is a consultants' selection committee formed with appropriate individuals in terms of	Yes as per guidelines	
C.11. What criteria is used to evaluate EOs?	Yes as per guidelines	
C.13. Do firms have to pay for the proposal document?	Depending on the cost involved in preparation of bid documents and nature of the proposals expected.	
C.14. Does the evaluative criteria follow a pre-determined structure and is it detailed in the RFP?	Yes as per guidelines	
C.15. Are pre-proposal visits and meetings arranged?	Done as per the Guidelines	
C.16. Are minutes prepared and circulated after pre-proposal meetings?		
C.17. To who are minutes distributed?		
C.18. Are all queries from consultants answered to in writing?		
C.19. Are the financial and technical proposals in separate envelopes?		
C.20. Are proposal securities required?		
C.21. Are technical proposals opened in public?		
C.22. Do the financial proposals remain sealed until technical evaluation is completed?		
C.23. Are minutes of technical opening distributed?		
C.24. Who determines the final technical ranking and how?		
C.25. Are the technical scores published and sent to all firms?	As per the Guidelines these are requirements .	
C.26. Is the financial proposal opening public?		
C.27. Are there minutes taken and distributed of financial proposal opening?		
C.28. How is the financial evaluation completed?		
C.29. Are face to face contract negotiations held?		
C.30. How long after financial evaluation is the selected firm to negotiate?		
C.31. What is the usual basis for negotiation?		
C.32. Are minutes of negotiation taken and signed?		
C.33. How long after negotiations until the contract is signed?		Depending of the nature of the consultancy and urgency of the consultancy
C.34. Are advance payments made?		As per the Agreement
C.35. Is there an evaluation system for measuring the outputs of consultants?	Yes before making payment.	
Part D. Process Oversight and Control		
D.1. Is there a standard statement of	Yes.	

ethics and are those involved in procurement required to formally commit to it?	
D.2. Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes
D.3. Is the commencement of procurement dependent on external approvals (formal or de-facto) outside of the budgeting process?	As per the Project Document.
D.4. Who approves procurement transactions and do they have procurement experience and qualifications?	On the recommendation of the procurement Committee appropriate authority according to the value of the contract approve the procurement. Mostly Secretary to the Ministry or the Project Manager under delegated authority of the Secretary to the Ministry.
D.5. Which of the following actions require approval outside of the procurement unit or a permanent evaluation committee and who grants the approval?	N/A
a) Bidding document, invitation to pre-qualify or request for proposal	N/A
b) Advertisement of an invitation for bids, pre-qualification or call for expressions of interest	N/A
c) Evaluation reports	N/A
d) Notice of award	N/A
e) Invitation to consultants to negotiate	N/A
f) Contracts	N/A
D.6. Is contractual performance systematically monitored and reported upon?	By the PMU.
D.7. Does the agency monitor and track its contractual payment obligations?	Yes.
D.8. On average how long is it between receiving a firm's invoice and making payment?	Normally payments are made within a week.
D.9. What is the standard period for payment included in contracts?	Usually within one month.
D.10. When payment is made late are the beneficiaries paid interest?	N/A
D.11. Are payments authorized by the same individuals empowered to approve invitation documents, evaluations and contracts?	No.
D.12. Is there a written auditable trail of procurement decisions attributable to individuals and committees?	As per steps given in Guidelines.
D.13. Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Yes.
D.14. Is there a formal non-judicial mechanism for dealing with complaints?	Arbitration is available
D.15. Is a complaints resolution mechanism described in national procurement documents?	Yes
Part E. Records Keeping	
E.1. Is there a referencing system for procurement files?	Yes. Documents are kept secured for period of five years at the Implementing Agency and transfer to Record Room.

E.2. Are original contracts secured in a fire and theft proof location?	Yes
E.3. Are copies of bids or proposals retained with the evaluation?	Yes
E.4. Are copies of the original advertisements retained with the pre-contract papers?	Yes
E.5. Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	N/A
E.6. Are copies of invoices included with contract papers?	Yes
E.7. For what period are records kept?	Minimum five years.

N/A = Not Applicable.

Details of the procedures and processes would be outlined in the PIM in reference to this evaluation.

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Annex 2

18 months Procurement Plan

Smallholder Tea and Rubber Revitalization Project (Loan No.....)

Lead Project Agency : Ministry of Plantation Industries

Basic Data								Bidding /RFP period					Bid Evaluation period			Contract finalization			
Item No.	Description of Goods / Works/ Services	Unit	Prior/post Review	Qty	Cost LKR million	Method of selection	Responsibility	Advertisement or EOI / Bids prepared	TOR / Prequalified/shortlist finalized	Date proposed	IFAD's NOL date	Bid / RFP invitation date	Bid/RFP closing & opening date	Bid/RFP evaluation report date	IFAD's NOL date	Contracted amount (LKR) & date	Name of the contractor / Nationality	IFAD's Ref No. and Contract No.	Scheduled date of completion
Comp A Tea smallholder's Development																			
1	Service provider -Tea Societies	BPs	Post	5	0.65	Ind. Con	PMU	N/A				Feb,16	Mar,16		N/A				
2	Training Material Development	Lsum	Post		1	Direct TRI	PMU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
3	Farm Roads ¹	Km	Post	30	120	LS/CPP	DPMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
	Subtotal				121.7														
* Cost of rehabilitation of each road would be less than LKR 2 to 3 million																			
Component B Rubber Smallholder's Development																			
1	Service provider- Rub. Societies	BPs	Post	5	0.975	Ind.con.	PMU	N/A	N/A	N/A	N/A								
2	Equipment & Materials	Societ.	Post	5	1	LS	DPMC	N/A	N/A	N/A	N/A								
7	Planting Materials & Fertilizer ²	ha.	Prior rev.	400	30.4	NCB/LS	PMU												
8	RDD Nurseyr - Padiyatalava	No	Prior rev.	1	80	DirectRDD	PMU			Jan, 16									
9	Village Access Roads ¹	Km.	Post rev.	20	79.8	LS/CPP	DPMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
10	Training Material Development		Post rev.	LS	0.01	Direct RRI	PMU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
11	Training		Post rev.	LS	4.6	Direct RRI	PMU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
	Sub total				196.8														
¹ Cost of rehabilitation of each road would be less than LKR 2 to 3 million																			

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Annex 2 cont.

18 months Procurement Plan

Smallholder Tea and Rubber Revitalization Project (Loan No.....)

Lead Project Agency : Ministry of Plantation Industries

Basic Data								Bidding /RFP period				Bid Evaluation period			Contract finalization				
Item No.	Description of Goods / Works/ Services	Unit	Prior/post Review	Qty	Cost LKR million	Method of selection	Responsibility	Advertisement or EOI/ Bids prepared	TOR/ Prequalified/sh ortlist finalized	Date proposed	IFAD's NOL date	Bid / RFP invitation date	Bid/RFP closing & opening date	Bid/RFP evaluation report date	IFAD's NOL date	Contracted amount (LKR) & date	Name of the contractor / Nationality	IFAD's Ref No. and Contract No.	Scheduled date of completion
Component C - Project Management																			
1	4WD Pick-ups	No	Prior rev.	10	100	NCB	PMU	Jan,16		Mar,01		Mar, 16	April,16	May, 16					
2	Motor Cycles	No	Prior rev.	82	28.2	NCB	PMU	Jan,16		Mar,01		Mar, 16	April,16	May, 16					
3	Laptops	No	Post rev.	33	4.29	NCB	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
4	Desktops	No	Post rev.	21	1.68	LS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
5	Printers	No	Post rev.	26	1.04	LS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
6	UPS Inverters	No	Post rev.	21	1	LS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
7	Photocopiers	No	Post rev.	9	4.5	NCB	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
8	Multimedia Projectors	No	Post Rev.	10	1.25	LS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
9	Furniture		Post Rev.	Lsum	2.7	LS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
11	Annual Audit		Post rev.	Lsum	0.5	Direct	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
12	Short term expert	Mnths	Prior rev.	10	5	QCBS	PMU	Jan,16	Feb, 16	Mar,01		Mar, 16	April,16	May, 16					
13	Short term Gender Consultant	Mnths	Post rev.	6	3	QCBS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
14	Annual outcome survey	No	Post rev.	2	1	QCBS	PMU	Jan,16				Mar, 16	April,16	May, 16	N/A				
15	RIMS	No	Prior rev.	1	7	QCBS	PMU	Jan,16	Feb, 16	Mar,01		Mar, 16	April,16	May, 16					
16	Baseline survey	No	Prior rev.	1	10	QCBS	PMU	Jan,16	Feb, 16	Mar,01		Mar, 16	April,16	May, 16					
17	Accounting software & training		Prior rev.	Lsum	6	QCBS	PMU	Jan,16	Feb, 16	Mar,01		Mar, 16	April,16	May, 16					
Sub total					177.2														
Grand Total					495.6														

Appendix 9: Project Cost and Financing

A. MAIN ASSUMPTIONS

Physical and Price Contingencies

1. As all project interventions are on a project mode, no specific physical contingencies have been applied. Price contingencies at 5% have been applied on all items except for credit and guarantee funds, grants and subsidies and staff salaries and allowances. As the current domestic inflation rate is 6%, price contingencies have been assumed at constant rate of 6%. Foreign inflation rate has been assumed at 2%. All unit costs are estimated in Sri Lankan Rupees (LKR).

Exchange Rates

2. The initial exchange rate for the analysis has been set at Sri Lankan Rupees (LKR) 130 to one USD, the rate prevailing at the time of data collection (June 2015). Exchange rates during implementation phase and the foreign exchange rate forecasts for the Project costs estimates, and conversions from current LKR values into USD are calculated using current exchange rate (LKR/USD). Both foreign and local inflation rates are compounded at mid-year.

Taxes and Duties

3. Taxes and duties have been estimated using the prevailing prices in June 2015. All items, which contained implicit duties and taxes, have accordingly been accounted for. Consulting services and surveys are contracted or sourced out and contracted entities are responsible for their national tax liabilities and a flat rate of 12% is assumed. A tax rate of 10% has been assumed for goods and equipment, office operations costs, service providers' contracts, civil work, training, etc.

4. Starting from the baseline-cost, annual amounts are calculated for contingencies, which may occur during project implementation. Such contingencies include both physical events, specific to each type of activity, and price contingencies deriving from domestic inflation. The resulting price contingencies calculated have been added to all expenditure categories, except the categories mentioned above.

Project Life and Fiscal Year

5. The Project life is six year starting in January 2016 and expected to be completed in June 2021. Cost estimates for the project period have accordingly been calculated. Fiscal year for Sri Lanka is from January to December.

Unit costs

6. Unit costs together with physical units have been identified for most items and these are input in domestic currency unit (Sri Lanka Rupees, LKR). In certain instances, lump sum allocations have been computed so as to give flexibility in procurement or for the implementation of such activity/task. Vehicles and office equipment such as laptops, printers, desk-tops and furniture and materials are categorized under the equipment category. Leveraged credit and capital support for the tea and rubber societies by the project have been categorised as credit and guarantee funds. It is noted that *"all unit costs are indicative and are used for the purposes of estimating the overall project costs. These are, therefore, subject to changes and revision during project implementation and also at the time of preparing Annual Work Plans and Budgets"*.

Financiers

7. The Project would be financed by the following financiers: (i) IFAD, (ii) Government of Sri Lanka, (iii) Banks, (iv) beneficiaries and (v) the private sector.

B. PROJECT COSTS

Total Project Costs

8. Total Project Costs is estimated at USD 65.4 million. This is inclusive of all contingencies of USD 3.8 million, beneficiary contribution of USD 3.6 million equivalent primarily in the form of labour and materials, private sector USD 0.15 million equivalents and USD 32.7 million equivalents as counterpart funding from the government including staff salaries, in the form of waiver of taxes and duties. See Table 1 below.

Table-1: Total Project Costs

	(US\$ '000)				(LKR '000)			
	Foreign	Local	Total	Percent	Foreign	Local	Total	Percent
The Government	-0	32 762	32 762	50.1	-	4 259 014	4 259 014	50.1
IFAD	231	25 533	25 764	39.4	30 011	3 319 273	3 349 284	39.4
Banks	-	3 251	3 251	5.0	-	422 619	422 619	5.0
Private sector	-	15	15	-	-	1 893	1 893	-
Beneficiaries	-	3 610	3 610	5.5	-	469 274	469 274	5.5
Total	231	65 170	65 401	100.0	30 011	8 472 073	8 502 084	100.0

Project Costs by Project Component

9. The total project cost is estimated at LKR 8,502 million (USD 65.4 million) including contingencies (USD 3.8 million) over a six year period. Project costs are organized into: (i) tea smallholders development (69% of total base costs); (ii) rubber smallholders development (22% of total baseline costs); (iii) inclusive rural financing (6% of the base cost); and (iv) project management (4% of total baseline costs). Project baseline costs together with contingencies are summarised in Table 2 (a). Table 2(b) summaries the project component cost by financiers.

Table-2 (a): Total Project Costs by Project Components

Components Project Cost Summary	(LKR '000)	(US\$ '000)	% Total Base Costs
	Total	Total	
A. Tea Smallholders' Development			
Strengthening Tea Societies in Production & Marketing	97 774	752	1
Market Driven Production Support for Tea	3 968 071	30 524	50
Income and markets diversification for Tea smallholders	831 707	6 398	10
TSHDA Districts units	620 443	4 773	8
Subtotal	5 517 996	42 446	69
B. Rubber Smallholders' Development			
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	45 622	351	1
Market Driven Production & Processing Support for Rubber	913 225	7 025	11
Income and markets diversification for Rubber smallholders	587 367	4 518	7
RDD Districts units	182 582	1 404	2
Subtotal	1 728 796	13 298	22
C. Inclusive Rural Financing			
Financing Tea Smallholders	260 000	2 000	3
Financing Rubber Smallholders	130 000	1 000	2
Awareness Creation and Credit Linkages	53 000	408	1
Subtotal	443 000	3 408	6
D. Project Management			
Project Management Unit	312 579	2 404	4
Subtotal	312 579	2 404	4
Total BASELINE COSTS	8 002 371	61 557	100
Physical Contingencies	-	-	-
Price Contingencies	499 713	3 844	6
Total PROJECT COSTS	8 502 084	65 401	106

Table-2 (b): Project Component Cost by Financiers (LKR 1000 and US \$ 1000)

	The Government		IFAD		Banks		Private sector		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Tea Smallholders' Development															
Strengthening Tea Societies in Production & Marketing	7 402	6.2	100 011	84.2	-	-	-	-	11 329	9.5	118 742	1.4	-	111 378	7 364
Market Driven Production Support for Tea	2 931 935	73.8	1 039 917	26.2	-	-	-	-	-	-	3 971 852	46.7	-	3 969 917	1 935
Income and markets diversification for Tea smallholders	63 077	6.3	700 684	69.6	-	-	-	-	242 882	24.1	1 006 643	11.8	-	943 566	63 077
TSHDA Districts units	391 455	57.5	288 759	42.5	-	-	-	-	-	-	680 214	8.0	22 382	554 068	103 764
Subtotal	3 393 870	58.7	2 129 370	36.9	-	-	-	-	254 211	4.4	5 777 451	68.0	22 382	5 578 929	176 140
B. Rubber Smallholders' Development															
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	5 143	9.2	46 987	83.9	-	-	-	-	3 906	7.0	56 037	0.7	-	51 089	4 948
Market Driven Production & Processing Support for Rubber	516 577	54.1	394 993	41.4	-	-	-	-	42 531	4.5	954 101	11.2	-	922 706	31 395
Income and markets diversification for Rubber smallholders	74 942	10.5	467 561	65.6	-	-	1 893	0.3	168 626	23.6	713 022	8.4	-	639 342	73 680
RDD Districts units	115 704	58.2	82 967	41.8	-	-	-	-	-	-	198 672	2.3	7 629	159 095	31 948
Subtotal	712 367	37.1	992 509	51.6	-	-	1 893	0.1	215 063	11.2	1 921 832	22.6	7 629	1 772 231	141 972
C. Inclusive Rural Financing															
Financing Tea Smallholders	-	-	-	-	260 000	100.0	-	-	-	-	260 000	3.1	-	260 000	-
Financing Rubber Smallholders	-	-	-	-	130 000	100.0	-	-	-	-	130 000	1.5	-	130 000	-
Awareness Creation and Credit Linkages	26 095	40.0	6 524	10.0	32 619	50.0	-	-	-	-	65 239	0.8	-	58 715	6 524
Subtotal	26 095	5.7	6 524	1.4	422 619	92.8	-	-	-	-	455 239	5.4	-	448 715	6 524
D. Project Management															
Project Management Unit	126 681	36.4	220 881	63.6	-	-	-	-	-	-	347 562	4.1	-	325 702	21 860
Total PROJECT COSTS	4 259 014	50.1	3 349 284	39.4	422 619	5.0	1 893	-	469 274	5.5	8 502 084	100.0	30 011	8 125 577	346 496

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	The Government		IFAD		Banks		Private sector		Beneficiaries		Total		For. Exch.	(Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Tea Smallholders' Development															
Strengthening Tea Societies in Production & Marketing	57	6.2	769	84.2	-	-	-	-	87	9.5	913	1.4	-	857	57
Market Driven Production Support for Tea	22 553	73.8	7 999	26.2	-	-	-	-	-	-	30 553	46.7	-	30 538	15
Income and markets diversification for Tea smallholders	485	6.3	5 390	69.6	-	-	-	-	1 868	24.1	7 743	11.8	-	7 258	485
TSHDA Districts units	3 011	57.5	2 221	42.5	-	-	-	-	-	-	5 232	8.0	172	4 262	798
Subtotal	26 107	58.7	16 380	36.9	-	-	-	-	1 955	4.4	44 442	68.0	172	42 915	1 355
B. Rubber Smallholders' Development															
Strengthening Thurusaviya Societies or VRDC for Production & Marketing	40	9.2	361	83.9	-	-	-	-	30	7.0	431	0.7	-	393	38
Market Driven Production & Processing Support for Rubber	3 974	54.1	3 038	41.4	-	-	-	-	327	4.5	7 339	11.2	-	7 098	241
Income and markets diversification for Rubber smallholders	576	10.5	3 597	65.6	-	-	15	0.3	1 297	23.6	5 485	8.4	-	4 918	567
RDD Districts units	890	58.2	638	41.8	-	-	-	-	-	-	1 528	2.3	59	1 224	246
Subtotal	5 480	37.1	7 635	51.6	-	-	15	0.1	1 654	11.2	14 783	22.6	59	13 633	1 092
C. Inclusive Rural Financing															
Financing Tea Smallholders	-	-	-	-	2 000	100.0	-	-	-	-	2 000	3.1	-	2 000	-
Financing Rubber Smallholders	-	-	-	-	1 000	100.0	-	-	-	-	1 000	1.5	-	1 000	-
Awareness Creation and Credit Linkages	201	40.0	50	10.0	251	50.0	-	-	-	-	502	0.8	-	452	50
Subtotal	201	5.7	50	1.4	3 251	92.8	-	-	-	-	3 502	5.4	-	3 452	50
D. Project Management															
Project Management Unit	974	36.4	1 699	63.6	-	-	-	-	-	-	2 674	4.1	-	2 505	168
Total PROJECT COSTS	32 762	50.1	25 764	39.4	3 251	5.0	15	-	3 610	5.5	65 401	100.0	231	62 504	2 665

Project Costs by Expenditure Accounts

10. Total investment costs are estimated at USD 58.5 million and these accounts for about 90% of the total project costs and the balance, USD 6.86 million are recurrent costs. Grants and subsidies account for about 54.5%, followed by civil work 11%, good, services and inputs 4.1%, equipment and material 8.5% and other investment cost are very minor cumulatively accounting for about 22% of the total project costs including the recurrent cost. The recurrent costs are incremental salary and allowances accounting for 6.1% and office operating costs account for 4.4%.

Project Costs by Disbursement Accounts

11. Disbursement accounts, derived from the expenditure accounts described above, provide the basis for determining the financing plan for the Project. In estimating the semester disbursement, a ratio of 5:5 has been assumed between first and second semester for each fiscal year. The disbursement accounts have been organised into following categories as presented in Table 3.

Table-3: Disbursement Accounts by Financiers (LKR 1000 & US \$ 1000)

Disbursement Accounts by Financiers

	(LKR '000)														
	The Government		IFAD		Banks		Private sector		Beneficiaries		Total		For.	Local (Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
1. Civil works	151 012	15.6	583 855	60.5	-	-	-	-	230 384	23.9	965 251	11.4	-	849 421	115 830
2. Vehicles	61 543	60.0	41 029	40.0	-	-	-	-	-	-	102 571	1.2	30 011	11 018	61 543
3. Equipment & materials	95 312	11.4	566 193	67.8	-	-	-	-	173 223	20.8	834 728	9.8	-	808 613	26 115
4. Consultancies	8 936	10.5	76 369	89.5	-	-	-	-	-	-	85 305	1.0	-	76 369	8 936
5. Credit	-	-	-	-	390 000	100.0	-	-	-	-	390 000	4.6	-	390 000	-
6. Goods, services and inputs	21 915	6.2	263 608	75.1	-	-	-	-	65 605	18.7	351 128	4.1	-	329 655	21 473
7. Capital Grants and Gov Subsidies	3 380 000	73.0	1 251 063	27.0	-	-	-	-	63	-	4 631 125	54.5	-	4 631 125	-
8. Training	47 277	18.9	168 298	67.3	32 619	13.0	1 893	0.8	-	-	250 087	2.9	-	223 643	26 444
9. Salaries and allowances	307 962	59.0	213 813	41.0	-	-	-	-	-	-	521 775	6.1	-	480 033	41 742
10. Operating costs	185 057	50.0	185 057	50.0	-	-	-	-	-	-	370 114	4.4	-	325 700	44 414
Total PROJECT COSTS	4 259 014	50.1	3 349 284	39.4	422 619	5.0	1 893	-	469 274	5.5	8 502 084	100.0	30 011	8 125 577	346 496

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(US\$ '000)

Disbursement Accounts by Financiers

	The Government		IFAD		Banks		Private sector		Beneficiaries		Total		For.	Local	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes
1. Civil works	1 162	15.6	4 491	60.5	-	-	-	-	1 772	23.9	7 425	11.4	-	6 534	891
2. Vehicles	473	60.0	316	40.0	-	-	-	-	-	-	789	1.2	231	85	473
3. Equipment & materials	733	11.4	4 355	67.8	-	-	-	-	1 332	20.8	6 421	9.8	-	6 220	201
4. Consultancies	69	10.5	587	89.5	-	-	-	-	-	-	656	1.0	-	587	69
5. Credit	-	-	-	-	3 000	100.0	-	-	-	-	3 000	4.6	-	3 000	-
6. Goods, services and inputs	169	6.2	2 028	75.1	-	-	-	-	505	18.7	2 701	4.1	-	2 536	165
7. Capital Grants and Gov Subsidies	26 000	73.0	9 624	27.0	-	-	-	-	0	-	35 624	54.5	-	35 624	-
8. Training	364	18.9	1 295	67.3	251	13.0	15	0.8	-	-	1 924	2.9	-	1 720	203
9. Salaries and allowances	2 369	59.0	1 645	41.0	-	-	-	-	-	-	4 014	6.1	-	3 693	321
10. Operating costs	1 424	50.0	1 424	50.0	-	-	-	-	-	-	2 847	4.4	-	2 505	342
Total PROJECT COSTS	32 762	50.1	25 764	39.4	3 251	5.0	15	-	3 610	5.5	65 401	100.0	231	62 504	2 665

Project Costs by Procurement Accounts

12. Procurement accounts are identical to those of expenditure accounts except that all accounts are treated under one group whereas the expenditure accounts are grouped into two: namely investment and recurrent cost accounts by default. All three costab accounts are maintained in identical format in order to get results without any errors. Proposed procurement arrangements by procurement method are summarised in Table 4 below.

Table-4: Procurement Arrangements by Procurement Methods

STARR Preparation Mission Procurement Arrangements (US\$ '000)	Procurement Method								Total
	Local		Consulting		Community		Financial		
	Competitive	Services:	Local	Direct	Participation	Intermediaries	N.B.F.		
	Bidding	QCBS	Shopping	Contracting	in				
A. Civil works	7 425 (4 491)	-	-	-	-	-	-	-	7 425 (4 491)
B. Vehicles	-	-	789 (316)	-	-	-	-	-	789 (316)
C. Equipment & materials	-	-	6 421 (4 355)	-	-	-	-	-	6 421 (4 355)
D. Consultancies	-	156 (137)	-	-	-	-	-	-	156 (137)
E. Credit	-	-	-	-	-	3 000	-	-	3 000
F. Guarantee fund	-	-	-	-	-	-	-	-	-
G. Goods, services and inputs	-	-	769 (769)	-	1 932 (1 259)	-	-	-	2 701 (2 028)
H. Grants and Subsidies	-	-	5 (4)	11 004 (9 619)	-	-	24 615	-	35 624 (9 624)
I. Training	-	-	2 424 (1 745)	-	-	-	-	-	2 424 (1 745)
J. Salaries and allowances	-	-	-	4 014 (1 645)	-	-	-	-	4 014 (1 645)
K. Operating costs	-	-	2 847 (1 424)	-	-	-	-	-	2 847 (1 424)
Total	7 425 (4 491)	156 (137)	13 255 (8 613)	15 018 (11 264)	1 932 (1 259)	3 000	24 615	-	65 401 (25 764)

Note: Figures in parenthesis are the respective amounts financed by IFAD

C. PROJECT FINANCING

Financing plan

13. The proposed financiers for the Project are IFAD, the Government of Sri Lanka, banks, beneficiaries, and the private sector. IFAD would finance about USD 25.55 million, without contingencies, about 39% of total project costs, the government counterpart funding would be about USD 32.7 million equivalent including taxes, financing institutions would provide about USD 3.2 million equivalent, the beneficiaries USD 3.6 million mostly in the form of labour and the funds from the private sector would be about USD 0.15 million equivalents. The financing plan is summarised in Table 5 below.

Table-5: Financing Plan

	(US\$ '000)				(LKR '000)			
	Foreign	Local	Total	Percent	Foreign	Local	Total	Percent
The Government	-0	32 762	32 762	50.1	-	4 259 014	4 259 014	50.1
IFAD	231	25 533	25 764	39.4	30 011	3 319 273	3 349 284	39.4
Banks	-	3 251	3 251	5.0	-	422 619	422 619	5.0
Private sector	-	15	15	-	-	1 893	1 893	-
Beneficiaries	-	3 610	3 610	5.5	-	469 274	469 274	5.5
Total	231	65 170	65 401	100.0	30 011	8 472 073	8 502 084	100.0

D. DETAIL PROJECT COSTS

Table- 1.1 Strengthening Tea Growers Societies Total including contingencies

Table 1.1. Strengthening Tea Societies in Production & Marketing																
Detailed Costs	Unit	Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						
		2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total
I. Investment Costs																
A. Diagnostic Analysis of the Capacity of Tea Societies																
Identification of Tea Societies /a	Societies	20	60	60	60	-	-	200	1,000	23	74	78	83	-	-	257
Participatory Diagnostic Analysis /b	month	20	60	60	60	-	-	200	10,000	231	736	780	827	-	-	2,575
Subtotal										255	810	858	910	-	-	2,832
B. Capacity Building																
Training package development for capacity building /c	modules	2	-	-	-	-	-	2	20,000	46	-	-	-	-	-	46
Developing management & business capacity /d	Society	20	60	60	60	-	-	200	230,000	5,324	16,929	17,945	19,022	-	-	59,219
Tools and equipment for facilitating production & business /e	Sets	20	60	60	60	-	-	200	220,000	5,092	16,193	17,165	18,195	-	-	56,644
Subtotal										10,462	33,122	35,109	37,216	-	-	115,910
Total										10,717	33,932	35,968	38,126	-	-	118,742

\a TSHDA staff will do the initial selection of the existing societies with the help of Animators
 \b Animators trained Service Providers and they with the help of resource persons will conduct the analysis
 \c Based on the categorization (from diagnostic study) modules will be developed
 \d Handholding support, business development and credit linkage at the society level
 \e Societies who starts business (green tea leaf trade etc) required capital items will be provided

Table- 1.1 Strengthening Tea Growers Societies: Total costs and Financing Rules

STARR Preparation Mission													
Table 1.1. Strengthening Tea Societies in Production & Marketing													
Detailed Costs	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)							Summary Divisions			Other Accounts Fin. Rule
			2016	2017	2018	2019	2020	2021	Total	Component	Expenditure Account		
I. Investment Costs													
A. Diagnostic Analysis of the Capacity of Tea Societies													
Identification of Tea Societies /a	200	1,000	23	74	78	83	-	-	257	SOC_TEA	GSI_EA	IFAD (85%)	
Participatory Diagnostic Analysis /b	200	10,000	231	736	780	827	-	-	2,575	SOC_TEA	GSI_EA	IFAD (100%)	
Subtotal			255	810	858	910	-	-	2,832				
B. Capacity Building													
Training package development for capacity building /c	2	20,000	46	-	-	-	-	-	46	SOC_TEA	GSI_EA	IFAD (100%)	
Developing management & business capacity /d	200	230,000	5,324	16,929	17,945	19,022	-	-	59,219	SOC_TEA	TRAINING_EA	IFAD (90%)	
Tools and equipment for facilitating production & business /e	200	220,000	5,092	16,193	17,165	18,195	-	-	56,644	SOC_TEA	GSI_EA	IFAD (80%), BEN (20%)	
Subtotal			10,462	33,122	35,109	37,216	-	-	115,910				
Total			10,717	33,932	35,968	38,126	-	-	118,742				

\a TSHDA staff will do the initial selection of the existing societies with the help of Animators
 \b Animators trained Service Providers and they with the help of resource persons will conduct the analysis
 \c Based on the categorization (from diagnostic study) modules will be developed
 \d Handholding support, business development and credit linkage at the society level
 \e Societies who starts business (green tea leaf trade etc) required capital items will be provided

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Table- 1.2 Production Support for Tea Growers: Total costs including contingencies

Detailed Costs	Unit	Quantities						Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						Total
		2016	2017	2018	2019	2020	2021			2016	2017	2018	2019	2020	2021	
I. Investment Costs																
A. Tea Production enhancement																
Replanting support, Project /a	ha	675	1 575	1 625	1 625	-	-	5 500	175,000	118 125	275 625	284 375	284 375	-	-	962 500
Replanting support, Govt /b	ha	675	1 575	1 625	1 625	-	-	5 500	500,000	337 500	787 500	812 500	812 500	-	-	2 750 000
Infilling programme /c	ha	-	-	50	150	300	300	800	300,000	-	-	15 000	45 000	90 000	90 000	240 000
Subtotal										455 625	1 063 125	1 111 875	1 141 875	90 000	90 000	3 952 500
B. Training and Extension																
Training materials development	LS									1 157	1 227	650	689	-	-	3 723
Extension support to tea growers /d	SHs	300	600	600	600	600	300	3 000	380	132	280	296	314	333	177	1 532
Sustainable NRM training /e	sessions	5	15	15	15	15	5	70	15,000	87	276	293	310	329	116	1 410
Training nursery growers /f	training	-	5	5	5	-	-	15	100,000	-	613	650	689	-	-	1 953
Exposure visits /g	LS	-	20	20	20	20	-	80	100,000	-	2 453	2 601	2 757	2 922	-	10 733
Subtotal										1 376	4 849	4 490	4 760	3 584	293	19 352
Total										457 001	1 067 974	1 116 365	1 146 635	93 584	90 293	3 971 852

\a The capital grant is provided up-front through the societies

\b Government subsidy scheme provided by TSHDA with standard instalments

\c Assuming 12500 plants per ha at Rs 15 per plant and Rs 10 for planting. The 800 ha could be distributed over the entire area of project supported tea.

\d Extension support to week SHs will be organised by the Animators with the support of TIs and ITs provide extension

\e These will cover the cost of organic tea and other environmentally tea cultivation practices.

\f A three day training for a batch of 30 persons

\g relating to micro-enterprises, certification, RFA & UTZ, waste management, organic tea, fair trade etc

Table- 1.2 Production Support for Tea Growers: Total costs including contingencies and financing rule

Detailed Costs	Unit	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						Total	Summary Divisions		
				2016	2017	2018	2019	2020	2021		Component	Expenditure Account	Other Accounts Fin. Rule
I. Investment Costs													
A. Tea Production enhancement													
Replanting support, Project /a	ha	5 500	175,000	118 125	275 625	284 375	284 375	-	-	962 500	PRO_TEA	GAS_EA	IFAD (100%)
Replanting support, Govt /b	ha	5 500	500,000	337 500	787 500	812 500	812 500	-	-	2 750 000	PRO_TEA	GAS_EA	GOVT
Infilling programme /c	ha	800	300,000	-	-	15 000	45 000	90 000	90 000	240 000	PRO_TEA	GAS_EA	IFAD (25%)
Subtotal				455 625	1 063 125	1 111 875	1 141 875	90 000	90 000	3 952 500			
B. Training and Extension													
Training materials development	LS			1 157	1 227	650	689	-	-	3 723	PRO_TEA	TRAINING_EA	IFAD (90%)
Extension support to tea growers /d	SHs	3 000	380	132	280	296	314	333	177	1 532	PRO_TEA	TRAINING_EA	IFAD (90%)
Sustainable NRM training /e	sessions	70	15,000	87	276	293	310	329	116	1 410	PRO_TEA	TRAINING_EA	IFAD (90%)
Training nursery growers /f	training	15	100,000	-	613	650	689	-	-	1 953	PRO_TEA	TRAINING_EA	IFAD (90%)
Exposure visits /g	LS	80	100,000	-	2 453	2 601	2 757	2 922	-	10 733	PRO_TEA	TRAINING_EA	IFAD (90%)
Subtotal				1 376	4 849	4 490	4 760	3 584	293	19 352			
Total				457 001	1 067 974	1 116 365	1 146 635	93 584	90 293	3 971 852			

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Table- 1.3 Business Development and Market Linkages - Total costs including contingencies

Detailed Costs	Unit	Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						
		2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total
I. Investment Costs																
A. Business Plan Development /a	BPs	-	5	15	20	-	-	40	130,000	-	797	2 536	3 584	-	-	6 917
B. Business Plan Development for Tea Shakti Factory /b	LS	-	-	-	-	-	-	-	-	-	1 227	-	-	-	1 227	
C. Private Sector Linkages for Business Plan Implementation /c	BPs	-	5	15	20	-	-	40	650,000	-	3 987	12 678	17 919	-	-	34 584
D. Matching Grant for Business Plan Implementation /d	BPs	-	800	1 000	500	570	-	2 870	100,000	-	98 140	130 035	68 919	83 281	-	380 375
E. Implement collective marketing business plans /e	Centers	-	5	10	10	10	-	35	300,000	-	1 840	3 901	4 135	4 383	-	14 260
F. Rehabilitation of village road for market facilitation /f	km	-	30	30	30	-	-	90	4,000,000	-	147 210	156 042	165 405	-	-	468 656
G. Support for Self Nursery Development /g	LS	10	10	5	-	-	-	25	25,000	250	250	125	-	-	-	625
H. Innovative technologies /h	LS	-	-	-	-	-	-	-	-	-	25 000	25 000	25 000	25 000	-	100 000
Total										250	278 450	330 317	284 961	112 664	-	1 006 643

\a Service provider or resource persons will assess potentials & prepare business plans with the private sector companies that would be selected by the project.

\b Service provider or resource persons will assess two tea shakti factories and prepare a business plan to obtain credit.

\c Through workshops, business forums and one-to-one contact with the private sector. Also to support investments.

\d Matching grants will be provided to individual investments identified in the business plans and also individual ones. IGA with business plans including intercropping, plant nurseries etc

\e Low cost building will be provided to support product collection for marketing and initiate linkages with factories.

\f Farm roads, which are needed for green tea leaf collection and marketing etc would be supported

\g Selected small scale nurseries will be supported

\h Introduction of eco-restoration, organic fertiliser, high density planting etc

Table- 1.3 Business Development and Market Linkages - Total costs including contingencies and financing rule

Detailed Costs	Unit	2016	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						Total	Summary Divisions		Other Accounts Fin. Rule
					2016	2017	2018	2019	2020	2021		Component	Expenditure Account	
I. Investment Costs														
A. Business Plan Development /a	BPs	-	40	130,000	-	797	2 536	3 584	-	-	6 917	VC_TEA	GSI_EA	IFAD (80%), BEN (20%)
B. Business Plan Development for Tea Shakti Factory /b	LS	-	-	-	-	1 227	-	-	-	-	1 227	VC_TEA	GSI_EA	IFAD (100%)
C. Private Sector Linkages for Business Plan Implementation /c	BPs	-	40	650,000	-	3 987	12 678	17 919	-	-	34 584	VC_TEA	GSI_EA	IFAD (100%)
D. Matching Grant for Business Plan Implementation /d	BPs	-	2 870	100,000	-	98 140	130 035	68 919	83 281	-	380 375	VC_TEA	EQUIP_EA	IFAD (70%), BEN (30%)
E. Implement collective marketing business plans /e	Centers	-	35	300,000	-	1 840	3 901	4 135	4 383	-	14 260	VC_TEA	GSI_EA	IFAD (70%), BEN (30%)
F. Rehabilitation of village road for market facilitation /f	km	-	90	4,000,000	-	147 210	156 042	165 405	-	-	468 656	VC_TEA	WORKS_EA	IFAD (70%), BEN (30%)
G. Support for Self Nursery Development /g	LS	10	25	25,000	250	250	125	-	-	-	625	VC_TEA	GAS_EA	IFAD (90%), BEN (10%)
H. Innovative technologies /h	LS	-	-	-	-	25 000	25 000	25 000	25 000	-	100 000	VC_TEA	GSI_EA	IFAD (100%)
Total					250	278 450	330 317	284 961	112 664	-	1 006 643			

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Table- 1.4 TSHDA District Support - Total costs including contingencies

Table 1.4. TSHDA district units																	
Detailed Costs	Unit	Quantities						Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)							
		2016	2017	2018	2019	2020	2021			2016	2017	2018	2019	2020	2021	Total	
I. Investment Costs																	
A. Vehicles																	
Pick ups, 4WD	Each	5	-	-	-	-	-	5	10,000,000	53 872	-	-	-	-	-	-	53 872
Motor cycles	Each	60	-	-	-	-	-	60	350,000	22 626	-	-	-	-	-	-	22 626
Subtotal										76 498	-	-	-	-	-	-	76 498
B. Office equipment																	
Laptops	each	20	-	-	-	-	-	20	130,000	3 009	-	-	-	-	-	-	3 009
Desktops	each	10	-	-	-	-	-	10	80,000	926	-	-	-	-	-	-	926
Printers	each	10	-	-	-	-	-	10	40,000	463	-	-	-	-	-	-	463
Photocopiers	each	5	-	-	-	-	-	5	500,000	2 893	-	-	-	-	-	-	2 893
UPS inverter	each	10	-	-	-	-	-	10	50,000	579	-	-	-	-	-	-	579
Multi-media projectors	each	5	5	-	-	-	-	10	250,000	1 447	1 533	-	-	-	-	-	2 980
Furniture set	each	5	-	-	-	-	-	5	100,000	579	-	-	-	-	-	-	579
Subtotal										9 895	1 533	-	-	-	-	-	11 428
Total Investment Costs										86 393	1 533	-	-	-	-	-	87 926
II. Recurrent Costs																	
A. Staff salaries																	
Regional Managers /a	person-months	30	60	60	60	60	60	330	100,000	3 000	6 000	6 000	6 000	6 000	6 000	6 000	33 000
Assistant Regional Managers /b	person-months	60	120	120	120	120	120	660	75,000	4 500	9 000	9 000	9 000	9 000	9 000	9 000	49 500
Accountant /c	person-months	60	60	60	60	60	60	360	60,000	3 600	3 600	3 600	3 600	3 600	3 600	3 600	21 600
Account Assistant /d	person-months	60	60	60	60	60	60	360	30,000	1 800	1 800	1 800	1 800	1 800	1 800	1 800	10 800
Officer in Charge of Divisions /e	person-months	120	240	240	240	240	240	1 320	40,000	4 800	9 600	9 600	9 600	9 600	9 600	9 600	52 800
Tea Inspectors /f	person-months	90	480	900	900	900	900	4 170	30,000	2 700	14 400	27 000	27 000	27 000	27 000	27 000	125 100
Field Animators /g	person-months	45	240	450	450	-	-	1 185	25,000	1 125	6 000	11 250	11 250	-	-	-	29 625
Drivers	person-months	30	60	60	60	60	30	300	26,000	780	1 560	1 560	1 560	1 560	780	780	7 800
Subtotal										22 305	51 960	69 810	69 810	58 560	57 780	330 225	
B. Operating costs																	
Office operating costs /h	month	30	60	60	60	60	30	300	200,000	6 944	14 721	15 604	16 540	17 533	9 292	-	80 635
Vehicle operating costs /i	vehicle_month	30	60	60	60	60	30	300	150,000	5 208	11 041	11 703	12 405	13 150	6 969	-	60 476
Bike operating costs /j	bike_month	30	60	60	60	60	30	300	300,000	10 416	22 081	23 406	24 811	26 299	13 939	-	120 952
Subtotal										22 568	47 843	50 714	53 757	56 982	30 200	262 063	
Total Recurrent Costs										44 873	99 803	120 524	123 567	115 542	87 980	592 288	
Total										131 265	101 337	120 524	123 567	115 542	87 980	680 214	

\a All are government staff from the TSHDA

\b Government staff from the TSHDA

\c TSHDA staff

\d Transferred from the Combine Services of the Government

\e TSHDA staff responsible for selected DSD

\f TSHDA staff responsible for selected societies of a DSD

\g To be recruited from open market and linked with Tea Inspectors

\h Office equipment etc

\i assuming LKR 30,000 per vehicle per month for 5 pickups

\j assuming an incremental expenditure of LKR 5000 per bike per month for 60 bikes

Table- 1.4 TSHDA District Support - Total costs and financing rules

Table 1.4. TSHDA district units		Totals Including Contingencies (LKR '000)								Summary Divisions		
Detailed Costs		Unit Cost							Total	Component	Expenditure Account	Other Accounts Fin. Rule
	Total	(LKR)	2016	2017	2018	2019	2020	2021				
I. Investment Costs												
A. Vehicles												
Pick ups, 4WD	5	10,000,000	53 872	-	-	-	-	-	53 872	TSHDA	VEH_EA	IFAD (40%)
Motor cycles	60	350,000	22 626	-	-	-	-	-	22 626	TSHDA	VEH_EA	IFAD (40%)
Subtotal			76 498	-	-	-	-	-	76 498			
B. Office equipment												
Laptops	20	130,000	3 009	-	-	-	-	-	3 009	TSHDA	EQUIP_EA	IFAD (90%)
Desktops	10	80,000	926	-	-	-	-	-	926	TSHDA	EQUIP_EA	IFAD (90%)
Printers	10	40,000	463	-	-	-	-	-	463	TSHDA	EQUIP_EA	IFAD (90%)
Photocopiers	5	500,000	2 893	-	-	-	-	-	2 893	TSHDA	EQUIP_EA	IFAD (90%)
UPS inverter	10	50,000	579	-	-	-	-	-	579	TSHDA	EQUIP_EA	IFAD (90%)
Multi-media projectors	10	250,000	1 447	1 533	-	-	-	-	2 980	TSHDA	EQUIP_EA	IFAD (90%)
Furniture set	5	100,000	579	-	-	-	-	-	579	TSHDA	EQUIP_EA	IFAD (90%)
Subtotal			9 895	1 533	-	-	-	-	11 428			
Total Investment Costs			86 393	1 533	-	-	-	-	87 926			
II. Recurrent Costs												
A. Staff salaries												
Regional Managers /a	330	100,000	3 000	6 000	6 000	6 000	6 000	6 000	33 000	TSHDA	SAA_EA	IFAD (30%)
Assistant Regional Managers /b	660	75,000	4 500	9 000	9 000	9 000	9 000	9 000	49 500	TSHDA	SAA_EA	IFAD (30%)
Accountant /c	360	60,000	3 600	3 600	3 600	3 600	3 600	3 600	21 600	TSHDA	SAA_EA	IFAD (30%)
Account Assistant /d	360	30,000	1 800	1 800	1 800	1 800	1 800	1 800	10 800	TSHDA	SAA_EA	IFAD (30%)
Officer in Charge of Divisions /e	1 320	40,000	4 800	9 600	9 600	9 600	9 600	9 600	52 800	TSHDA	SAA_EA	IFAD (30%)
Tea Inspectors /f	4 170	30,000	2 700	14 400	27 000	27 000	27 000	27 000	125 100	TSHDA	SAA_EA	IFAD (30%)
Field Animators /g	1 185	25,000	1 125	6 000	11 250	11 250	-	-	29 625	TSHDA	SAA_EA	IFAD (90%)
Drivers	300	26,000	780	1 560	1 560	1 560	1 560	780	7 800	TSHDA	SAA_EA	IFAD (30%)
Subtotal			22 305	51 960	69 810	69 810	58 560	57 780	330 225			
B. Operating costs												
Office operating costs /h	300	200,000	6 944	14 721	15 604	16 540	17 533	9 292	80 635	TSHDA	OPC_EA	IFAD (50%)
Vehicle operating costs /i	300	150,000	5 208	11 041	11 703	12 405	13 150	6 969	60 476	TSHDA	OPC_EA	IFAD (50%)
Bike operating costs /j	300	300,000	10 416	22 081	23 406	24 811	26 299	13 939	120 952	TSHDA	OPC_EA	IFAD (50%)
Subtotal			22 568	47 843	50 714	53 757	56 982	30 200	262 063			
Total Recurrent Costs			44 873	99 803	120 524	123 567	115 542	87 980	592 288			
Total			131 265	101 337	120 524	123 567	115 542	87 980	680 214			

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Table- 2.1 Strengthening Thurusaviya Societies or VRDC for Rubber - Total costs including contingencies

Table 2.1. Strengthening Thurusaviya Societies or VRDC for Rubber																
Detailed Costs	Unit	Quantities						Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						Total
		2016	2017	2018	2019	2020	2021			2016	2017	2018	2019	2020	2021	
I. Investment Costs																
A. Diagnostic Analysis of the Capacity of Thurusaviya Societies																
Identification of Thurusaviya Societies /a	Societies	5	25	35	35	-	-	100	10,000	58	307	455	482	-	-	1 302
Participatory Dignostic Analysis /b	Society	5	25	35	35	-	-	100	20,000	116	613	910	965	-	-	2 604
Subtotal				174	920	1 365	1 447	-	-	3 906						
B. Equipment and materials for Thurusaviya /c	society	5	25	35	35	-	-	100	200,000	1 157	6 134	9 102	9 649	-	-	26 042
C. Capacity Building																
Training package development for capacity building /d	modules	2	-	-	-	-	-	2	20,000	46	-	-	-	-	-	46
Developing management & business capacity /e	Society	5	25	35	35	-	-	100	100,000	579	3 067	4 551	4 824	-	-	13 021
Tools and equipment for facilitating business /f	Society	5	25	35	35	-	-	100	100,000	579	3 067	4 551	4 824	-	-	13 021
Subtotal				1 204	6 134	9 102	9 649	-	-	26 088						
Total				2 535	13 188	19 570	20 745	-	-	56 037						

/a RDD staff will do the initial selection of the existing societies with the help of Animators

/b Assisted by a service providers, animators undertake the analysis

/c such as computers, tools, furniture, plastic crates etc

/d Based on the categorization (from diagnostic study) modules w ill be developed

/e Handholding support and business development at the Thurusaviya society level

/f Societies w ho starts business (rubber processing and marketing) required capital items w ill be provided

Table- 2.1 Strengthening Thurusaviya Societies or VRDC for Rubber - Total costs and financing rules

Table 2.1. Strengthening Thurusaviya Societies or VRDC for Rubber													
Detailed Costs	Unit	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						Total	Summary Divisions		Other Accounts Fin. Rule
				2016	2017	2018	2019	2020	2021		Component	Expenditure Account	
I. Investment Costs													
A. Diagnostic Analysis of the Capacity of Thurusaviya Societies													
Identification of Thurusaviya Societies /a	Societies	100	10,000	58	307	455	482	-	-	1 302	SOC_RUB	GSLEA	IFAD (85%)
Participatory Dignostic Analysis /b	Society	100	20,000	116	613	910	965	-	-	2 604	SOC_RUB	GSLEA	IFAD (100%)
Subtotal				174	920	1 365	1 447	-	-	3 906			
B. Equipment and materials for Thurusaviya /c	society	100	200,000	1 157	6 134	9 102	9 649	-	-	26 042	SOC_RUB	EQUIP_EA	IFAD (100%)
C. Capacity Building													
Training package development for capacity building /d	modules	2	20,000	46	-	-	-	-	-	46	SOC_RUB	GSLEA	IFAD (100%)
Developing management & business capacity /e	Society	100	100,000	579	3 067	4 551	4 824	-	-	13 021	SOC_RUB	TRAINING_EA	IFAD (100%)
Tools and equipment for facilitating business /f	Society	100	100,000	579	3 067	4 551	4 824	-	-	13 021	SOC_RUB	GSLEA	IFAD (70%), BEN (30%)
Subtotal				1 204	6 134	9 102	9 649	-	-	26 088			
Total				2 535	13 188	19 570	20 745	-	-	56 037			

Table- 2.2 Production support for Rubber - Total costs including contingencies

Table 2.2. Production support for rubber plantation																
Detailed Costs	Unit	Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						
		2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total
I. Investment Costs																
A. New planting subsidy /a																
Project support /b	ha	400	700	950	950	-	-	3 000	76,000	30 400	53 200	72 200	72 200	-	-	228 000
Government support /c	ha	400	700	950	950	-	-	3 000	150,000	60 000	105 000	142 500	142 500	-	-	450 000
Subtotal										90 400	158 200	214 700	214 700	-	-	678 000
B. Inter-cropping /d	household	200	350	475	475	-	-	1 500	50,000	11 573	21 468	30 883	32 736	-	-	96 661
C. Training materials development /e	LS									12	61	65	-	-	138	
D. Training Rubber Grow ers /f	households	230	850	1 130	1 130	-	-	3 340	20,000	5 324	20 855	29 388	31 151	-	-	86 717
E. Support to Padiyathalawa Rubber Nursery /g	unit	1	-	-	-	-	-	1	80,000,000	92 585	-	-	-	-	-	92 585
Total										199 893	200 584	275 036	278 588	-	-	954 101

\a Moneragala - 750; and Ampara - 2250 ha. Assistance include transporting planting material.

\b Start-up grant for land clearance, planting material and fertilizer

\c Regular government subsidy payment

\d such as maize, banana, pine apple, passion fruits, cocoa etc; cost include beneficiary contribution

\e These will include material for tapping instruction, intercropping and processing. Outsoure to a resource person(s)

\f On fertiliser, other management practices, tapping and processing. Resource persons will be used.

\g A new RDD nursery; details to be provided at appraisal

Table- 2.2 Production support for Rubber - Total costs including contingencies and financing rules

Table 2.2. Production support for rubber plantation													Summary Divisions		
Detailed Costs	Unit	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)							Total	Expenditure		Other Accounts Fin. Rule	
				2016	2017	2018	2019	2020	2021	Component		Account			
I. Investment Costs															
A. New planting subsidy /a															
Project support /b	ha	3 000	76,000	30 400	53 200	72 200	72 200	-	-	228 000	PRO_RUB	GAS_EA	IFAD (100%)		
Government support /c	ha	3 000	150,000	60 000	105 000	142 500	142 500	-	-	450 000	PRO_RUB	GAS_EA	GOVT		
Subtotal				90 400	158 200	214 700	214 700	-	-	678 000					
B. Inter-cropping /d	household	1 500	50,000	11 573	21 468	30 883	32 736	-	-	96 661	PRO_RUB	GSL_EA	IFAD (50%), BEN (50%)		
C. Training materials development /e	LS			12	61	65	-	-	-	138	PRO_RUB	TRAINING_EA	IFAD (100%)		
D. Training Rubber Grow ers /f	households	3 340	20,000	5 324	20 855	29 388	31 151	-	-	86 717	PRO_RUB	TRAINING_EA	IFAD (90%)		
E. Support to Padiyathalawa Rubber Nursery /g	unit	1	80,000,000	92 585	-	-	-	-	-	92 585	PRO_RUB	WORKS_EA	IFAD (50%)		
Total				199 893	200 584	275 036	278 588	-	-	954 101					

Table- 2.3 Business Development and Market Linkages for Rubber Processing- Total costs including contingencies

Table 1.6. Business Development and Market Linkages for Rubber Proc																
Detailed Costs	Unit	Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						
		2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total
I. Investment Costs																
A. Business Plan Development																
1. Business Plan Development for Processing Units /a	BPs	5	10	10	-	-	-	25	195,000	1 128	2 392	2 536	-	-	-	6 056
2. Business Plan Development for Rubber Societies /b	BPs	-	5	10	10	-	-	25	65,000	-	399	845	896	-	-	2 140
Subtotal										1 128	2 791	3 381	896	-	-	8 196
B. Support for Rubber Processing Units /c																
1. Demand Feasibility Study for Rubber Processing Centres /d	LS	-	-	-	-	-	-	-	-	579	-	-	-	-	-	579
2. Establishing Rubber Processing Centres /e	Units	-	10	20	18	-	-	48	3,627,500	-	44 500	94 340	90 001	-	-	228 842
3. Processing related extension and training /f	Units	-	10	20	18	-	-	48	100,000	-	1 227	2 601	2 481	-	-	6 309
Subtotal										579	45 727	96 941	92 482	-	-	235 729
C. Matching Grant for Othas Business of Rubber Producers /g	Units	-	100	100	250	-	-	450	100,000	-	12 267	13 004	34 459	-	-	59 730
D. Collective Marketing w ith the Private Sector /h	Societies	-	-	10	10	-	-	20	200,000	-	-	2 601	2 757	-	-	5 357
E. Rehabilitation of village access road /i	km	20	20	20	20	-	-	80	3,990,000	92 353	97 894	103 768	109 994	-	-	404 010
Total										94 060	158 680	219 694	240 588	-	-	713 022

/a Service provider or resource persons will assess potentials & prepare business plans w ith the private sector companies that w ould selected by the project.
 /b With the same method of BP preparation and rubber intercropping w ould be focused
 /c Group processing centers w ill be established afte the feasibility study (80% IFAD and 20% beneficiaries)
 /d Demand feasibility study w ill be conducted about the need for rubber processing centers prior to establishing processing centres.
 /e Grant w ill be provided to Thurusaviya for processing centres.
 /f RRI and linked private sector w ill provide extension and training to the growers w ho provide latex.
 /g Matching Grant w ill be provided throughThurusaviya. This includes planting material for intercropping w ith rubber.
 /h Through w orkshops, business forums and one-to-one contact w ith the private sector
 /i Farm roads, w hich are needed for rubber marketing etc w ould be supported

Table- 2.3 Business Development and Market Linkages for Rubber Processing- Total costs and financing rules

Table 1.6. Business Development and Market Linkages for Rubber Proc																
Detailed Costs	Unit	Total	Unit Cost (LKR)	Totals Including Contingencies (LKR '000)							Total	Component	Summary Divisions Expenditure Account	Other Accounts Fin. Rule		
				2016	2017	2018	2019	2020	2021							
I. Investment Costs																
A. Business Plan Development																
1. Business Plan Development for Processing Units /a	BPs	25	195,000	1 128	2 392	2 536	-	-	-	6 056	VC_RUBBER	GSL_EA	IFAD (80%), BEN (20%)			
2. Business Plan Development for Rubber Societies /b	BPs	25	65,000	-	399	845	896	-	-	2 140	VC_RUBBER	GSL_EA	IFAD (80%), BEN (20%)			
Subtotal				1 128	2 791	3 381	896	-	-	8 196						
B. Support for Rubber Processing Units /c																
1. Demand Feasibility Study for Rubber Processing Centres /d	LS	-	-	579	-	-	-	-	-	579	VC_RUBBER	GSL_EA	IFAD (100%)			
2. Establishing Rubber Processing Centres /e	Units	48	3,627,500	-	44 500	94 340	90 001	-	-	228 842	VC_RUBBER	EQUIP_EA	IFAD (80%), BEN (20%)			
3. Processing related extension and training /f	Units	48	100,000	-	1 227	2 601	2 481	-	-	6 309	VC_RUBBER	TRAINING_EA	PRIVATE (30%), IFAD (40%)			
Subtotal				579	45 727	96 941	92 482	-	-	235 729						
C. Matching Grant for Othas Business of Rubber Producers /g	Units	450	100,000	-	12 267	13 004	34 459	-	-	59 730	VC_RUBBER	EQUIP_EA	IFAD (70%), BEN (30%)			
D. Collective Marketing w ith the Private Sector /h	Societies	20	200,000	-	-	2 601	2 757	-	-	5 357	VC_RUBBER	GSL_EA	IFAD (70%), BEN (30%)			
E. Rehabilitation of village access road /i	km	80	3,990,000	92 353	97 894	103 768	109 994	-	-	404 010	VC_RUBBER	WORKS_EA	IFAD (70%), BEN (30%)			
Total				94 060	158 680	219 694	240 588	-	-	713 022						

Table- 2.3 Rubber Development Department District Units Support - Total costs including contingencies

Detailed Costs		Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)						
Unit		2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total
I. Investment Costs																
A. Vehicles																
Pick ups, 4WD	Each	2	-	-	-	-	-	2	10,000,000	21 549	-	-	-	-	-	21 549
Motor cycles	Each	12	-	-	-	-	-	12	350,000	4 525	-	-	-	-	-	4 525
Subtotal										26 074	-	-	-	-	-	26 074
B. Office equipment																
Laptops	each	6	-	-	-	-	-	6	130,000	903	-	-	-	-	-	903
Desktops	each	6	-	-	-	-	-	6	80,000	556	-	-	-	-	-	556
Printers	each	6	-	-	-	-	-	6	40,000	278	-	-	-	-	-	278
Photocopiers	each	2	-	-	-	-	-	2	500,000	1 157	-	-	-	-	-	1 157
UPS inverter	each	6	-	-	-	-	-	6	50,000	347	-	-	-	-	-	347
Furniture set	each	2	-	-	-	-	-	2	100,000	231	-	-	-	-	-	231
Subtotal										3 472	-	-	-	-	-	3 472
Total Investment Costs										29 546	-	-	-	-	-	29 546
II. Recurrent Costs																
A. Staff salaries																
Assistant Director RDD /a	pers_month	24	24	24	24	24	24	144	75,000	1 800	1 800	1 800	1 800	1 800	1 800	10 800
Accountants	pers_month	12	24	24	24	24	24	132	57,000	684	1 368	1 368	1 368	1 368	1 368	7 524
Financial Assistants EDOs	pers_month	12	24	24	24	24	24	132	22,000	264	528	528	528	528	528	2 904
Rubber Development Officers	pers_month	200	200	200	200	200	200	1 200	45,000	9 000	9 000	9 000	9 000	9 000	54 000	
Field Animators /b	pers_month	96	192	192	192	192	192	1 056	20,000	1 920	3 840	3 840	3 840	3 840	21 120	
Drivers	pers_month	12	24	24	24	24	24	132	26,000	312	624	624	624	624	3 432	
Subtotal										13 980	17 160	17 160	17 160	17 160	17 160	99 780
B. Operating costs																
Office operating costs /c	month	12	24	24	24	24	12	120	250,000	3 472	7 360	7 802	8 270	8 766	4 646	40 317
Vehicle operating costs /d	vehicle_month	12	24	24	24	24	12	120	120,000	1 667	3 533	3 745	3 970	4 208	2 230	19 352
Bike operating costs /e	vehicle_month	12	24	24	24	24	12	120	60,000	833	1 767	1 873	1 985	2 104	1 115	9 676
Subtotal										5 972	12 660	13 420	14 225	15 078	7 991	69 346
Total Recurrent Costs										19 952	29 820	30 580	31 385	32 238	25 151	169 126
Total										49 497	29 820	30 580	31 385	32 238	25 151	198 672

\a Two Directors (Ampara and Moneragala), and Ratnapura

\b Moneragala will get 4 animators and Ampara gets 12.

\c Per month per district PMU including Ampara Office rent

\d assuming LKR 60,000 per vehicle per month and for 2 vehicles

\e assuming LKR 5000 per bike for 12 bikes

Table- 2.3 Rubber Development Department District Units Support - Total costs and financing rules

Table 2.4. RDD district units											Summary Divisions		
Detailed Costs			Unit Cost	Totals Including Contingencies (LKR '000)						Expenditure Other Accounts			
	Unit	Total	(LKR)	2016	2017	2018	2019	2020	2021	Total	Component	Account	Fin. Rule
I. Investment Costs													
A. Vehicles													
Pick ups, 4WD	Each	2	10,000,000	21 549	-	-	-	-	-	21 549	RDD	VEH_EA	IFAD (40%)
Motor cycles	Each	12	350,000	4 525	-	-	-	-	-	4 525	RDD	VEH_EA	IFAD (40%)
Subtotal				26 074	-	-	-	-	-	26 074			
B. Office equipment													
Laptops	each	6	130,000	903	-	-	-	-	-	903	RDD	EQUIP_EA	IFAD (90%)
Desktops	each	6	80,000	556	-	-	-	-	-	556	RDD	EQUIP_EA	IFAD (90%)
Printers	each	6	40,000	278	-	-	-	-	-	278	RDD	EQUIP_EA	IFAD (90%)
Photocopiers	each	2	500,000	1 157	-	-	-	-	-	1 157	RDD	EQUIP_EA	IFAD (90%)
UPS inverter	each	6	50,000	347	-	-	-	-	-	347	RDD	EQUIP_EA	IFAD (90%)
Furniture set	each	2	100,000	231	-	-	-	-	-	231	RDD	EQUIP_EA	IFAD (90%)
Subtotal				3 472	-	-	-	-	-	3 472			
Total Investment Costs				29 546	-	-	-	-	-	29 546			
II. Recurrent Costs													
A. Staff salaries													
Assistant Director RDD /a	pers_month	144	75,000	1 800	1 800	1 800	1 800	1 800	1 800	10 800	RDD	SAA_EA	IFAD (20%)
Accountants	pers_month	132	57,000	684	1 368	1 368	1 368	1 368	1 368	7 524	RDD	SAA_EA	IFAD (20%)
Financial Assistants EDOs	pers_month	132	22,000	264	528	528	528	528	528	2 904	RDD	SAA_EA	IFAD (20%)
Rubber Development Officers	pers_month	1 200	45,000	9 000	9 000	9 000	9 000	9 000	9 000	54 000	RDD	SAA_EA	IFAD (20%)
Field Animators /b	pers_month	1 056	20,000	1 920	3 840	3 840	3 840	3 840	3 840	21 120	RDD	SAA_EA	IFAD (90%)
Drivers	pers_month	132	26,000	312	624	624	624	624	624	3 432	RDD	SAA_EA	IFAD (20%)
Subtotal				13 980	17 160	17 160	17 160	17 160	17 160	99 780			
B. Operating costs													
Office operating costs /c	month	120	250,000	3 472	7 360	7 802	8 270	8 766	4 646	40 317	RDD	OPC_EA	IFAD (50%)
Vehicle operating costs /d	vehicle_month	120	120,000	1 667	3 533	3 745	3 970	4 208	2 230	19 352	RDD	OPC_EA	IFAD (50%)
Bike operating costs /e	vehicle_month	120	60,000	833	1 767	1 873	1 985	2 104	1 115	9 676	RDD	OPC_EA	IFAD (50%)
Subtotal				5 972	12 660	13 420	14 225	15 078	7 991	69 346			
Total Recurrent Costs				19 952	29 820	30 580	31 385	32 238	25 151	169 126			
Total				49 497	29 820	30 580	31 385	32 238	25 151	198 672			

Table- 3.1 Inclusive Rural Financing - Total costs and financing rules

Detailed Costs		Totals Including Contingencies (LKR '000)						Summary Divisions			
		Unit	2016	2017	2018	2019	2020	2021	Total	Component	Expenditure Account
I. Investment Costs											
A. Tea Financing Facility											
1. Capacity facilitation for District level Bank Branches /a	Lumpsum	6 944	7 360	7 802	8 270	8 766	-	39 143	CREDIT_LINK	TRAINING_EA	BANKS (50%), IFAD (10%)
2. Tea Revitalization Financing Facility /b	Rs	52 000	52 000	52 000	52 000	52 000	-	260 000	TEA_CREDIT_FIN	CREDIT_EA	BANKS (100%)
Subtotal		58 944	59 360	59 802	60 270	60 766	-	299 143			
B. Rubber Financing Facility											
1. Capacity facilitation for District level Bank Branches /c	Lumpsum	4 629	4 907	5 201	5 513	5 844	-	26 095	CREDIT_LINK	TRAINING_EA	BANKS (50%), IFAD (10%)
2. Rubber Revitalization Financing Facility /d	Rs	26 000	26 000	26 000	26 000	26 000	-	130 000	RUBBER_CREDIT_FIN	CREDIT_EA	BANKS (100%)
Subtotal		30 629	30 907	31 201	31 513	31 844	-	156 095			
Total		89 573	90 267	91 004	91 784	92 611	-	455 239			

\a Capacity improvement and facilitating financial product delivery including training workshops

\b The credit line will on-lend to tea smallholders for tea cultivation and other IGA with PFI own funds

\c Capacity improvement and facilitation financial product delivery including training workshops

\d The credit line will on-lend to rubber smallholders for rubber cultivation and other IGA with PFI own funds

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Table- 4.1 Project Management Unit - Total costs including contingencies INVESTMENT COSTS

Table 3.1. Project Management Unit																
Detailed Costs																
Unit	Quantities							Unit Cost (LKR)	Totals Including Contingencies (LKR '000)							
	2016	2017	2018	2019	2020	2021	Total		2016	2017	2018	2019	2020	2021	Total	
I. Investment Costs																
A. Vehicle & office equipment																
Vehicles, 4 WD	Each	3	-	-	-	-	3	30,000,000	104 158	-	-	-	-	-	-	104 158
Motor Bikes /a	Each	10	20	-	-	-	30	300,000	3 472	7 360	-	-	-	-	-	10 832
Laptops	Each	7	-	-	-	-	7	130,000	1 053	-	-	-	-	-	-	1 053
Desktops	Each	5	-	-	-	-	5	800,000	4 629	-	-	-	-	-	-	4 629
Printers	each	10	-	-	-	-	10	40,000	463	-	-	-	-	-	-	463
UPS, inverters	sets	5	-	-	-	-	5	40,000	231	-	-	-	-	-	-	231
Photocopiers	Each	2	-	-	-	-	2	500,000	1 157	-	-	-	-	-	-	1 157
Furniture	set	1	-	-	-	-	1	2,000,000	2 315	-	-	-	-	-	-	2 315
Subtotal									117 478	7 360	-	-	-	-	-	124 839
B. Surveys and Audits																
Annual outcome surveys	each	1	1	1	1	1	5	500,000	579	613	650	689	731	-	-	3 262
RIMS	each	1	-	1	-	1	3	7,000,000	8 101	-	9 102	-	10 228	-	-	27 431
Baseline survey	each	1	-	-	-	-	1	10,000,000	11 573	-	-	-	-	-	-	11 573
MTR survey	each	-	-	1	-	-	1	7,000,000	-	-	9 102	-	-	-	-	9 102
Project completion	each	-	-	-	-	1	1	7,000,000	-	-	-	-	10 228	-	-	10 228
Annual audits	each	-	1	1	1	1	5	500,000	-	613	650	689	731	774	-	3 458
Subtotal									20 253	1 227	19 505	1 378	21 916	774	-	65 054
C. Technical Assistance																
Short term experts	pers_month	5	5	5	5	-	20	500,000	2 893	3 067	3 251	3 446	-	-	-	12 657
Short term Gender consultants	pers_month	3	3	3	3	-	12	500,000	1 736	1 840	1 951	2 068	-	-	-	7 594
Establishing accounting software and related training /b	Rs	-	-	-	-	-	-	-	6 944	-	-	-	-	-	-	6 944
Subtotal									11 573	4 907	5 201	5 513	-	-	-	27 195
Total Investment Costs									149 304	13 494	24 707	6 892	21 916	774	-	217 088
II. Recurrent Costs																
A. Staff salaries																
Project Manager Govt /c	pers_months	6	12	12	12	12	6	60	125,000	750	1 500	1 500	1 500	1 500	750	7 500
Training Coordinator, Govt /d	pers_months	6	12	12	12	12	6	60	85,000	510	1 020	1 020	1 020	1 020	510	5 100
PPP Linkages Coordinator, private /e	pers_months	6	12	12	12	-	-	42	85,000	510	1 020	1 020	1 020	-	-	3 570
M&E Coordinator, private /f	pers_months	6	12	12	12	12	6	60	85,000	510	1 020	1 020	1 020	1 020	510	5 100
Accountant, Govt /g	pers_months	12	12	12	12	12	-	60	75,000	900	900	900	900	900	-	4 500
Procurement Officer /h	pers_months	6	12	12	12	-	-	42	60,000	360	720	720	720	-	-	2 520
Account Assistant, Govt	pers_months	6	12	12	12	12	6	60	40,000	240	480	480	480	480	240	2 400
TSHDA Staff for the Project /i	pers_months	24	24	24	24	24	144	144	50,000	1 200	1 200	1 200	1 200	1 200	1 200	7 200
RDD Staff for the Project /j	pers_months	24	24	24	24	24	144	144	50,000	1 200	1 200	1 200	1 200	1 200	1 200	7 200
Community Development Officer /k	pers_months	84	84	84	84	84	420	420	50,000	4 200	4 200	4 200	4 200	4 200	-	21 000
Business Development Officer /l	pers_months	84	84	84	84	84	420	420	50,000	4 200	4 200	4 200	4 200	4 200	-	21 000
Drivers, Govt	pers_months	18	36	36	36	36	180	180	26,000	468	936	936	936	936	468	4 680
Subtotal									15 048	18 396	18 396	18 396	16 656	4 878	-	91 770
B. Operating costs																
Office operating costs	month	6	12	12	12	12	6	60	300,000	2 083	4 416	4 681	4 962	5 260	2 788	24 190
Vehicle operating costs /m	vehi_month	6	12	12	12	12	6	60	180,000	1 250	2 650	2 809	2 977	3 156	1 673	14 514
Subtotal									3 333	7 066	7 490	7 939	8 416	4 460	-	38 705
Total Recurrent Costs									18 381	25 462	25 886	26 335	25 072	9 338	-	130 475
Total									167 685	38 956	50 593	33 227	46 988	10 113	-	347 562

^a All field staff and the Animators will get bikes

^b PMU and the District Office will receive the software with training

^c Govt Government staff seconded to the project

^d Competitively recruited

^e Competitively recruited

^f Competitively recruited

^g On secondment basis

^h Recruited competitively for initial 3 years

ⁱ Head Office level two senior staff members

^j Head Office level two senior staff members

^k Competitively selected and placed in each districts (7 districts)

^l Competitively selected and placed in each districts (7 districts)

^m at the rate of LKR 60,000 per month per vehicle; LKR 180,000 for three vehicle

Table- 4.2 Project Management Unit - Total costs including contingencies and finance rule

Table 3.1. Project Management Unit											
Detailed Costs											
	Unit	Unit Cost (LKR)	2016	2017	2018	2019	2020	2021	Total	Expenditure Account	Other Accounts Fin. Rule
I. Investment Costs											
A. Vehicle & office equipment											
Vehicles, 4 WD	Each	30,000,000	104 158	-	-	-	-	-	104 158	VEH_EA	IFAD (40%)
Motor Bikes /a	Each	300,000	3 472	7 360	-	-	-	-	10 832	VEH_EA	IFAD (60%)
Laptops	Each	130,000	1 053	-	-	-	-	-	1 053	EQUIP_EA	IFAD (90%)
Desktops	Each	800,000	4 629	-	-	-	-	-	4 629	EQUIP_EA	IFAD (90%)
Printers	each	40,000	463	-	-	-	-	-	463	EQUIP_EA	IFAD (90%)
UPS, inverters	sets	40,000	231	-	-	-	-	-	231	EQUIP_EA	IFAD (90%)
Photocopiers	Each	500,000	1 157	-	-	-	-	-	1 157	EQUIP_EA	IFAD (90%)
Furniture	set	2,000,000	2 315	-	-	-	-	-	2 315	EQUIP_EA	IFAD (90%)
Subtotal			117 478	7 360	-	-	-	-	124 839		
B. Surveys and Audits											
Annual outcome surveys	each	500,000	579	613	650	689	731	-	3 262	CON_EA	IFAD (90%)
RIMS	each	7,000,000	8 101	-	9 102	-	10 228	-	27 431	CON_EA	IFAD (90%)
Baseline survey	each	10,000,000	11 573	-	-	-	-	-	11 573	CON_EA	IFAD (90%)
MTR survey	each	7,000,000	-	-	9 102	-	-	-	9 102	CON_EA	IFAD (90%)
Project completion	each	7,000,000	-	-	-	-	10 228	-	10 228	CON_EA	IFAD (90%)
Annual audits	each	500,000	-	613	650	689	731	774	3 458	CON_EA	IFAD (90%)
Subtotal			20 253	1 227	19 505	1 378	21 916	774	65 054		
C. Technical Assistance											
Short term experts	pers_month	500,000	2 893	3 067	3 251	3 446	-	-	12 657	CON_EA	IFAD (90%)
Short term Gender consultants	pers_month	500,000	1 736	1 840	1 951	2 068	-	-	7 594	CON_EA	IFAD (90%)
Establishing accounting software and related training /b	Rs		6 944	-	-	-	-	-	6 944	GSLEA	IFAD (85%)
Subtotal			11 573	4 907	5 201	5 513	-	-	27 195		
Total Investment Costs			149 304	13 494	24 707	6 892	21 916	774	217 088		
II. Recurrent Costs											
A. Staff salaries											
Project Manager Govt /c	pers_months	125,000	750	1 500	1 500	1 500	1 500	750	7 500	SAA_EA	IFAD (30%)
Training Coordinator, Govt /d	pers_months	85,000	510	1 020	1 020	1 020	1 020	510	5 100	SAA_EA	IFAD (100%)
PPP Linkages Coordinator, private /e	pers_months	85,000	510	1 020	1 020	1 020	-	-	3 570	SAA_EA	IFAD (100%)
M&E Coordinator, private /f	pers_months	85,000	510	1 020	1 020	1 020	1 020	510	5 100	SAA_EA	IFAD (100%)
Accountant, Govt /g	pers_months	75,000	900	900	900	900	900	-	4 500	SAA_EA	IFAD (30%)
Procurement Officer /h	pers_months	60,000	360	720	720	720	-	-	2 520	SAA_EA	IFAD (100%)
Account Assistant, Govt	pers_months	40,000	240	480	480	480	480	240	2 400	SAA_EA	IFAD (30%)
TSHDA Staff for the Project /i	pers_months	50,000	1 200	1 200	1 200	1 200	1 200	1 200	7 200	SAA_EA	IFAD (20%)
RDD Staff for the Project /j	pers_months	50,000	1 200	1 200	1 200	1 200	1 200	1 200	7 200	SAA_EA	IFAD (20%)
Community Development Officer /k	pers_months	50,000	4 200	4 200	4 200	4 200	4 200	-	21 000	SAA_EA	IFAD (100%)
Business Development Officer /l	pers_months	50,000	4 200	4 200	4 200	4 200	4 200	-	21 000	SAA_EA	IFAD (100%)
Drivers, Govt	pers_months	26,000	468	936	936	936	936	468	4 680	SAA_EA	IFAD (30%)
Subtotal			15 048	18 396	18 396	18 396	16 656	4 878	91 770		
B. Operating costs											
Office operating costs	month	300,000	2 083	4 416	4 681	4 962	5 260	2 788	24 190	OPC_EA	IFAD (50%)
Vehicle operating costs /m	vehi_month	180,000	1 250	2 650	2 809	2 977	3 156	1 673	14 514	OPC_EA	IFAD (50%)
Subtotal			3 333	7 066	7 490	7 939	8 416	4 460	38 705		
Total Recurrent Costs			18 381	25 462	25 886	26 335	25 072	9 338	130 475		
Total			167 685	38 956	50 593	33 227	46 988	10 113	347 562		

Appendix 10: Economic and Financial Analysis

A. Introduction

1. The goal of the Project would be to enable poor rural people to improve their food security, increase their incomes and strengthen their resilience. The specific development objective of the Project would be a more profitable, productive and resilient economic activities of tea and rubber smallholders in selected districts. The Project would assist 23,420 existing tea smallholders, 3,330 poor households in rubber production and 1 920 rubber producing households in processing. The project outcomes would include; (i) Smallholders' economic activities in tea and rubber become more productive, profitable and resilient; (ii) Better organized Tea & rubber SH able to effectively and sustainably produce & market their products; (iii) Tea and rubber SH get increased access to credits.

2. The **Project Life** is six years commencing from 2016 and last till 2021. Crop establishment will be completed during the 1st four years and for the next two years the Project will support initial maintenance of tea and rubber and intercrops.

3. **Cost and benefit structure:** The Project Design Report (PDR) describes the project structure. The following table summarises the component and sub-components with a view to facilitating the understanding of the cost and benefit structure of the project.

Component and sub-component of the project cost structure

Project component and sub-component	Cost structure and the contribution to the benefits
A: Tea smallholders development	
A 1: Strengthening tea societies in production and marketing	Project funds as an investment cost are provided to identify potential tea societies and assess the capacity and gaps of them. The investment will identify the capacity development needs without which effective capacity improvement cannot be targeted. Once need assessment was done, the project will invest to develop the society capacity through resource persons / service providers to mobilise / facilitate tea smallholders to undertake replanting, various other livelihood activities, and link up with the private sector with business models. This investment is needed for other development activities.
A 2: Market driven production support	Both IFAD loan and government funds will support tea replanting, which is the main economic activity. Tea will generate income after 4 years of replanting. All costs are treated as production cost and income flow from tea is the benefit.
A 3: Income and market diversification	Facilitate private sector linkages through business models to diversify income. Pepper intercropping with market linkages will be supported for additional income. Matching grants are provided to establish enterprises which are developed as business models. Typical models are passion fruit production and orchid floriculture. Also business model will be developed with some tea factories for improving green tea sale and quality which eventually increases the green tea leaf price as the benefit. In order to facilitate input and output mobility, farm roads are provided. The current price structure of both cannot be realised without improved road facilities. Except matching grants, others represent investment cost. Business models and pepper income contribute to the benefit flow.
B: Rubber smallholders development	
B 1: Strengthening rubber societies for processing & marketing	Project funds are provided to identify potential rubber societies (thurusaviya or VRDCs) and assess the capacity and gaps of them as in the case of tea. Additionally the capacity needs for rubber processing would also be focused. Once need assessment was done, the project will invest to develop the society capacity through resource persons / service providers to mobilise / facilitate new farmers for production and existing ones for processing. Capacity development for other livelihood activities, and link up with the private sector with business models will also be focused. This investment is needed for other development activities.
B 2: Market driven rubber production support	Rubber planting will be supported by IFAD loan funds and government funds. After 7 years, income flow will commence. The investment cost includes training and capacity building etc. Capacity built rubber societies would be used in input effective and timely delivery. All costs are treated as production cost and income flow from rubber is the benefit.
B 3: Income & market diversification	Funds will be provided to intercrop rubber with maize, cocoa, pineapple, and banana with market linkages. Matching grants meets the production cost. Business

for rubber smallholders	models will lead the activity. Additional income will be generated. Rubber sheet marketing will be facilitated with the private sector to have a better price. Roads will be improved for mobility as in the case of tea. Private sector linkages and road will facilitate achieving the assumed prices for rubber sheets with market demanded quality. Group rubber processing centres are supported to produce required quality rubber which further ensures rubber prices for the beneficiaries. Except matching grants, others are investment costs. Income from intercrop business models and processed rubber contributes to benefits.
Programme management	The PMU at the MPI in Colombo and each district Tea and Rubber District Offices will be supported to implement the project. All incremental costs except non-incremental salaries are considered as investment cost.

4. **Purpose of Analysis** of the project are to: (i) evaluate the financial viability of the improved tea and rubber production models and also to demonstrate that these models are viable livelihood options for the targeted households; and (ii) demonstrate the financial and economic viability of the proposed project activities and the whole project.

B. Assumptions of the Financial Assessment

5. The key assumptions made to estimate the incremental benefits from the project have been highlighted below (see Working Paper 7 for details):

- a. With training, technology support and better input services, the smallholder tea and rubber are capable of undertaking improved farming practices and thereby enhancing production at farm level;
- b. Soil health is poor in the tea replanting area and as a result overall production potential is low. Application of compost and other organic manure is necessary for improving soil health and fertility and obtaining a sustained yield;
- c. Under the project, about 23,430 households participate in tea replanting programme covering some 5,500 ha area and 3,330 households participate in planting rubber on 3,000 hectares. Table below shows the phasing of the cultivated extent.

Project targets	Units	ProjYr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6
		Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Yr 2021
Total Tea	ha	675	1575	1625	1625	0	0
Total Rubber	ha	205	765	1015	1015	0	0
<i>Intercrop combinations on extents</i>							
Tea mono	40%	270	630	650	650	0	0
Tea+PP	60%	405	945	975	975	0	0
Rubber mono crop	50%	103	383	508	508	0	0
RB + Maize	10%	21	77	102	102	0	0
RB + Banana	25%	51	191	254	254	0	0
RB + Pine	5%	10	38	51	51	0	0
RB + Cocoa	10%	21	77	102	102	0	0
Rubber group processing centres		2	2	10	17	17	0

- d. For rubber planting, about 2,500 ha of forest and MASL is surveyed and distributed to smallholders and another 500 private land is developed;
- e. On average, a household's production benefits would increase from 3000 kg/ha to over 14,000 kg/ha of fresh tea leaves in a year over a 20 year period at a minimum. Smallholders planting rubber would be able to benefit from a steady income from latex. Average rubber yield is assumed at 2,160 kg/ha of dry rubber during the initial years and 2,800 kg/ha at full development stage for the next 30 years. About 3 320 business enterprises will also contribute to the project benefit. The expected yields could be realised at full development, and are based on the following assumptions: (i) soil rehabilitation would be practiced for tea as per TRI recommendations and the up-front grant provide with project fund will encourage smallholders to adopt soil rehabilitation with grasses; (ii) both tea and rubber planting material will come from quality maintained nurseries having high yielding varieties; (iii) only the TSHDA and TRI, and RRI certified plants will be issues to the farmers (which has been the practice in SPEnDP). Appendix 3

(Appendix Table 1-5) shows the SPEnDP yield that were used as the basis for the assumptions.

- f. About 60% of the smallholders would intercrop pepper with tea. About 10% of the rubber growers would intercrop rubber with maize, about 25% with banana, 5% pineapple for the initial 5 to 6 years, and about 10% with cocoa after three years.
- g. One latex processing unit caters to the requirement of a group of 20 smallholder households producing 250 kg of dry rubber sheets per day for 200 days per year with a cost of Rs 20/dry kg of rubber sheets;
- h. Production foregone in tea replanting has been assumed at 3,000 kg/ha/year thereby the associated income. The income forgone for rubber is the wage labour that was used before rubber planting and shifting cultivation of some of the lands that would come under rubber. The net income from both sources that was forgone was assumed at Rs 25,000 per year;
- i. Average wage rate is LKR 650/person day for both male and female labour.
- j. A loan of Rs 50,000 was also included from Banks own resources and household farm models will generate adequate cash to repay the loan interest at 9% (as there is a possibility of using this rate) or even at 10% interest with one year grace period (WP 7 shows details).

C. Household or Farm Models

6. Ten household models were prepared using excel sheets to broadly illustrate the STARR's expected impact on yields, incomes and value added activities. Table A below summarises the typical farm models and their financial returns. The average size of the model is presented in hectares. All models are financially viable (see Working Paper 7 for details of the financial analysis of each crop model, the business models, and the group processing centres). The next table summarises the household income per year and the per capita income per day with and with-out project interventions showing that all interventions will increase the beneficiaries' income above the US \$ 2/day poverty line (see Working Paper 7 for details of the sustainability assessment of each farm model, the household cash flow including credit financing of Rs 50,000 and repayment schedule).

Table A		PRODUCTION						P-P BUSINESS MODELS		PROCESSING
F I N A N C I A L A N A L Y S I S	Farm models' net incremental benefits (in Rs '000/yr)									
	Tea - mono crop	Tea + pepper	Rubber Mono	RB + Maize	RB + Banana	RB + Pine	RB+Cocoa	Passion fruit business	Orchid business	Rubber Processing
	0.5 ha	0.5 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1 ha	1000 Sq ft	250 kg/day
PY1	-189	-189	-341	-216	-158	-249	-316	-30	-775	-2 789
PY2	-241	-301	-108	17	375	66	-193	1 307	119	348
PY3	-138	-153	-106	18	639	78	-107	1 007	1 013	348
PY4	-132	-143	-104	20	337	23	-114	659	1 013	348
PY5	267	392	-97	27	344	-72	99	171	1 013	348
PY6	271	536	-84	41	150	-59	162	41	1 013	348
PY7	271	746	222	247	247	247	559	1 307	1 013	348
PY8	237	852	322	347	347	347	659	1 007	1 013	348
PY9	237	852	363	388	388	388	684	659	1 013	348
PY10	237	852	398	423	423	423	719	171	1 013	348
NPV (Rs 1000)	563	3 674	1 377	2 037	3 328	1 978	3 112	3 875	1 899	306
NPV (USD 1000)	4.3	28.3	10.6	15.7	25.6	15.2	23.9	29.8	14.6	2.4
FIRR (@10%)	18%	42%	22%	40%	269%	39%	33%	4348%	40%	12%

HH sustainability	Avg size (ha)	WOP Net HH Cash Flow (Rs/Yr)		WP Net HH Cash Flow (Rs/Yr) including wage labour income (less than WOP)				\$/day/head (full development)	
		Farming	Wage income	Yr : 1 (with IFAD Grant)	Yr : 2	Yr : 3	Full development	WP	WOP
Tea Mono	0.5	97 500	143 000	223 837	217 560	277 667	574 510	2.73	1.14
Tea + pepper	0.5	97 500	143 000	223 837	157 360	263 067	1 189 560	5.65	1.14
Rubber Mono	1.0	25 000	227 500	86 250	268 720	194 159	662 288	3.14	1.20
RB + Maize	1.0	25 000	227 500	185 800	368 270	293 709	662 288	3.14	1.20
RB + Banana	1.0	25 000	227 500	244 750	726 720	914 559	662 288	3.14	1.20
RB + Pine	1.0	25 000	227 500	153 650	418 120	353 359	662 288	3.14	1.20
RB + Cocoa	1.0	25 000	227 500	86 250	158 450	168 169	974 368	4.63	1.20

D. Application of the Household Model to the Project

7. The household models presented in Table A above will form the basis for the project under the conditions shown in Table B. The table also shows the key outcomes and the target indicators which is expected by the Project.

Table B) PROJECT COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROJECT COSTS (in million USD)		65.4	Base costs	61.6	PMU	2.40
Beneficiaries	144 000 people	32 000	Households	48 groups	3 320 enterprises	
Cost per beneficiary	454 USD x person	2 044 USD x HH		Adoption rates	86%	
Components and Cost (USD million)		Outcomes and Indicators				
<u>Tea Smallholders' Development</u>	42.446 M	Better organized Tea Smallholders able to more effectively and sustainably produce and market their products		Increased productivity by 466%		
<u>Rubber Smallholders' Development</u>	13.298 M	Better organized Rubber Smallholders able to effectively produce, process and market their products		New rubber yield will be RSS 2160 kg		
<u>Inclusive Rural Financing</u>	3.4 M	Tea & rubber smallholders get increased access to credits that is available in the market		Increasing agricultural finance access by 30%		

E. Economic analysis

8. Purpose of Economic Analysis is to evaluate the expected contribution of the Project to the economic development of the project area and to determine whether the economic benefits sufficiently justify the use of the scarce resources that the Project would invest through the project. The economic indicators are estimated to provide this assessment.

Assumptions

9. The key assumptions made to estimate the incremental benefits from the Project have been highlighted below:

- A twenty year analysis period has been assumed with a six year project investment period;
- Agricultural goods move freely within the project area in response to market signals;
- All inputs and outputs that are traded are valued at farm-gate prices as of June 2015;
- Economic investment costs are net of taxes and price contingencies, credit, office rent etc. All costs directly associated with the incremental production are included in full, including incremental farm inputs and family labour;

- e. A standard conversion factor (SCF) of 0.9 is applied to both traded and non-traded items for adjusting financial prices but with the following variations: labour 0.95 since there is some wage labour opportunities, and all inputs at 0.95 since farm road structure that is supported by the Project would minimise market distortions.
- f. The average financial rural wage rate is taken to be the best estimate of the economic value of labour. The financial price of labour reflects seasonal variation in employment opportunities in the area. The financial wage rate is thus taken to reflect the value of the marginal product of agricultural male and female labour without the project;
- g. The analysis includes only on-farm benefits including attributable benefits from latex processing units;
- h. All costs and benefits are relating to investments made on targeted project area households and the resultant benefits;
- i. Time required for the full development has been assumed over 8 years including dissemination of information and technology transfer, and establishment of improved farming practices road improvement, etc.
- j. The financial value of rubber sheets has been adjusted to reflect the import value (economic price) of rubber since there is demand for imported rubber. Part of the rubber production will substitute imports of rubber and as such the import price will be the economic price. The computation of the economic price of rubber based on the import price is presented in detail in the Working Paper 7. The computed economic price used for the analysis is Rs 357/kg for RSS 1 as against the market price of Rs 275/kg, 30% higher than the financial price. A conversion for tea was not used since green tea leaf, which is the outcome of the project, is only one input, although it is the main one, to the production of black tea that is exported (details below).
- k. The analysis employs an Opportunity Cost of Capital (OCC) at 10.2% based on the World Bank statistics.

10. Key assumptions that were used in the financial analysis and in the economic analysis are summarised in Table C below.

c)		MAIN ASSUMPTIONS & SHADOW PRICES			
FINANCIAL	Output	Av. Incremental	Price (in Rs/kg)	Input prices	Price (Rs)
	Replanted Tea	466%	65	Fertilizer / kg	26
	Rubber (RSS 1)	New	275	Pest control / ha	2000
	Pepper	New	700	Plant material - tea/ha	187 500
	Maize	74%	900	Plant material - Rb/ha	42500
	Banana	67%	40	Plant material -PP/ha	22 500
	Pine apple	New	40	Plant material -Cocoa/ha	15000
	Cocoa	New	250	Rural wage	650
	BM - Passion	New	60	Sale value of RB latex	185
	BM - Orchid	New	25		
ECONOMIC	Official Exchange rate (OER)	130		Discount rate (opportunity cost of capital)	10%
	Shadow Exchange rate (SER)	130		Social Discount rate	10.20%
	Standard Conversion Factor	0.90		Output conversion factor:tea & Rb	1.1 & 1.3
	Labour Conversion factor	0.95		Input Conversion factor	0.95

Beneficiaries and the Economic Cost and Benefit of the Project

11. The total number of beneficiaries, their adoption rates and the phasing are presented in the Table D below. The farm models' costs and benefits have been applied to these beneficiaries to obtain the full benefit and cost of the Project. There are 32,000 beneficiaries at the end of the Project with 100% adoption rate and 8, 473 at the midterm. The adoption rate that is assumed at 86% in the log-frame and in the economic analysis is the number of beneficiaries who would be finally taking up the tea rehabilitation to make the 5500 ha targets in tea, and 3000 ha in rubber. 86% adoption is that

only 4730 ha would be replanted in the case of tea and 2580 ha in case of rubber. This could be monitored through the annual output monitoring system that each district would be adopting. Technical recommendations will not have any impact on this “adoption” rate. If the adoption rate is less than 100%, then the project would under achieve.

12. The **project economic costs** were calculated from the financial project costs excluding price contingencies, subsidies, development credit, taxes and duties, using the assumptions listed above. Recurrent costs for continued extension/training support, operations and maintenance and periodic replacement of vehicles have been included. Economic prices for inputs and output models were estimated by applying the conversion factors on the financial prices.

13. **Environmentally-related aspects** have been taken into consideration, but not valued. These includes planting rubber and cocoa inter-crops in the land allotted to farmers and thereby protecting the forest lands and preserving the forest cover, adopting soil and moisture conservation before replanting tea, mulching tea planted area with appropriate drainage, adopting inter-cropping system to enhance improved productivity and conserve soil health and fertility by using organic composts and bio-fertilisers, eco-restoration, good agricultural practices and promoting the principles of the rainforest alliance. These would yield substantial environmental benefits that have not been quantified in the economic analysis.

Table D	BENEFICIARIES, ADOPTION RATES AND PHASING							Adoption rates
	PY1	PY2	PY3	PY4	PY5	PY6	Total	86%
Tea mono crop	2 800	6 737	6 945	6 945	0	0	23 427	
<i>Adjusted (adoption rate)</i>	2 352	5 659	5 834	5 834	0	0	19 678	84%
Tea + Pepper	1 400	3 368	3 472	3 472	0	0	11 713	
<i>Adjusted (adoption rate)</i>	1 120	2 695	2 778	2 778	0	0	9 371	80%
Rubber mono crop	228	850	1 128	1 128	0	0	3 333	
<i>Adjusted (adoption rate)</i>	182	680	902	902	0	0	2 667	80%
Rubber & maize intercrop	23	85	113	113	0	0	333	
<i>Adjusted (adoption rate)</i>	18	68	90	90	0	0	267	80%
Rubber & banana intercrop	57	213	282	282	0	0	833	
<i>Adjusted (adoption rate)</i>	57	213	282	282	0	0	833	100%
Rubber & pineapple intercrop	11	43	56	56	0	0	167	
<i>Adjusted (adoption rate)</i>	11	43	56	56	0	0	167	100%
Rubber & cocoa intercrop	32	119	158	158	0	0	467	
<i>Adjusted (adoption rate)</i>	19	71	95	95	0	0	280	60%
Passion fruit business model	0	450	0	0	0	0	450	
<i>Adjusted (adoption rate)</i>	0	347	0	0	0	0	347	77%
Orchid business model	0	2 870	0	0	0	0	2 870	100%
Rubber Group Processing	80	80	400	680	680	0	1 920	100%
			8 473				32 000	

The economic costs and benefits flows, so computed, are summarised in Table E below. Working Paper 6 presents the details of the cash flows.

	NET INCREMENTAL BENEFITS (Rs mn)						NET INCREMENTAL COSTS (Rs mn)				Net Cash Flow (Rs mn)	
	Total Tea Cultivation	Total Rubber Cultivation	Passion fruit business model	Orchid business model	Rubber Processing centers	Total net increment benefits	Economic Investment Costs	Economic recurrent Costs	Economic O&M Costs	Total Incremental Costs		
E C O N O M I C A N A L Y S I S	PY1	-351	-61			-5	-417	440	34	0	474	-891
	PY2	-1 316	-228	-2	-168	2	-1 713	413	62	0	475	-2 187
	PY3	-2 331	-295	291	49	-12	-2 299	473	69	0	543	-2 842
	PY4	-3 143	-266	224	49	5	-3 131	454	69	1	525	-3 656
	PY5	-2 392	42	147	86	64	-2 051	132	59	2	193	-2 244
	PY6	-190	44	39	86	168	147	1	36	3	40	107
	PY7	1 989	39	12	174	168	2 381	0	36	7	43	2 338
	PY8	4 499	348	291	174	168	5 479	0	36	17	53	5 426
	PY9	5 369	824	224	174	168	6 759	0	36	27	63	6 696
	PY10	5 932	1 404	147	174	168	7 824	0	36	37	73	7 751
	PY11	6 051	1 633	39	174	168	8 065	0	36	43	79	7 986
	PY12	5 925	1 764	39		168	7 896	0	36	43	79	7 817
	PY13	5 795	1 871	39		168	7 873	0	36	43	79	7 794
	PY14	5 666	1 979	39		168	7 852	0	36	43	79	7 773
	PY15	5 666	2 092	39		168	7 965	0	36	43	79	7 885
	PY16	5 666	2 210			168	8 043	0	36	43	79	7 964
	PY17	5 666	2 263			168	8 096	0	36	43	79	8 016
	PY18	5 666	2 294			168	8 127	0	36	43	79	8 048
	PY19	5 666	2 293			168	8 127	0	36	43	79	8 047
	PY20	5 666	2 291			168	8 124	0	36	43	79	8 045
NPV @ 10.2% (Rs mn)			19 139									
NPV @ 10.2% (US \$ mn)			147.2									
EIRR			26%									

Results of the Economic Analysis

14. **Project Performance Indicators:** Cost-benefit analysis method was used for the economic analysis of the project, using three indicators to assess the overall performance of the project. These are (i) economic internal rate of return (EIRR), (ii) net present value (NPV), and (iii) benefit cost ratio (BCR). These were estimated using a 20 year incremental cash flows of benefit and cost streams.

15. The Project is expected to have an Economic Internal Rate of Return (EIRR) of 26%, a benefit-cost ratio 1.64, and the Net Present Value (NPV) at a discount rate of 10.2% would be LKR 19,139 million (USD 147.2 million) for 20 years project period, a positive NPV under the current Opportunity Cost of Capital (OCC) of 10.2%.

16. Sensitivity **analysis** was undertaken to assess the project economic viability for the perceived risk factors that was presented in section F of the main report. Table F below summarises the results of the sensitivity analyses for main risk factors. The table also summarises the risk factors. The colour codes indicate a quick interpretation of the sensitivity of the project to various risk factors. Green colour for base case scenario and the risk factors which are not affecting the project economic viability are coloured close to green. Red indicates the high sensitivity of the project to corresponding risk factors. Benefits getting delayed, yield drops and drop in adoption rates are the risk factors that the Project would face difficulties in generating viable cash flows. The project management and the supervision process should monitor and minimise such risks. Working Paper 7 provides more details on the assumptions and the resulting values. A switching value analysis was also calculated for some of the key variables used in the sensitivity analysis. Costs would have to increase by 64% or benefits would have to decrease by 40% for the NPV to be zero.

SENSITIVITY ANALYSIS (SA)							
		Δ%	Link with the risk matrix			IRR	NPV (USD M)
Base scenario						26%	147.2
Project benefits	-10%	Institutional: low quality planting material, weak technical and management capacities of district line agencies; Groups: Lack of financial capacity to invest in processing or other equipment				23%	109.6
Project benefits	-20%					19%	72.0
Project costs	10%	Increase cost of planting material and cost of group processing centers				23%	124.4
Project costs	20%					21%	53.4
1 year lag in ben.		Risks affecting adoption rates and low implementation capacity				20%	99.2
2 years lag in ben.						15%	55.5
Output prices	-10%	Low management & negotiating capacity of farmer groups; poor access, lack of transport and market information				24%	120.9
Output prices	-20%					22%	94.6
Input prices	10%	Market price fluctuations, remoteness & transport difficulties				23%	126.6
Input prices	20%					21%	106.1
Adoption rates	-10%	Extension service outreach is limited, low uptake of good practices, drought and plant growth is low				26%	132.5
Adoption rates	-20%					26%	117.8
Yields	-10%					23%	109.6

17. **Other benefits:** Additional benefits come from the STARR's capacity building interventions. First, at the end of the project, all participating villages will have the benefit and advantages of the services of their societies, which are capacitated and provided fund support for various social and economic developments. Secondly, women from the poor and very poor groups will be participating in and managing their social and economic development and will have better access to markets and inputs and marketing their products. Third, the beneficiaries will have better market linkages and exposure to high value markets through the participation with the private sector as value chain actors. Fourth, the roads that are supported by the Project will enhance the mobility of farm inputs and outputs providing less marketing cost which is a benefit.

F. Risks and Sustainability

18. There are a number of risks associated with STARR. These relate to farm technology, reluctance on the part of the farmers, inadequate extension support, and poor price margins to farmers, inadequate flow of funds from the convergence programme, institutional credit, lack of service providers and poor coordination and institutional support, These issues and risks are addressed in the project design as described below:

Risks	Risk description	Probability of occurrence	Mitigation measures in programme design
Institutional	Institutional: low quality planting material, weak technical and management capacities of district line agencies;	High to Medium	Promotion of seedling nurseries with private sector and smallholders and development of rubber nursery by government with support from IFAD
	Groups: Lack of financial capacity to invest in processing or other equipment	Medium	
	Increase cost of planting material and cost of group processing centers	Medium	Maximum capacity of the GPC to be used to minimise the operational cost
Market	Low management & negotiating capacity of farmer groups; poor access, lack of transport and market information	Medium	Market information, improved technology advice, promotion of producers' groups and market linkages and support for road rehabilitation.
	Lower market prices for commodities	Medium	Improved market information and

Risks	Risk description	Probability of occurrence	Mitigation measures in programme design
			emphasis on inter-crops
Policy	Extension service outreach is limited, low uptake of good practices, drought and plant growth is low	Medium	Project grants provided; more convergence funds organised and facilities for leveraging credit provided
Others	Remoteness of upland villages and difficulty of access during rainy season	High	Promotion of products that combine high farmer margin for small volumes and are easy to transport
	Shortage of labour for taking up inter-crops and adopting suggested packages of practices		Low-volume high value crops proposed; farmer-friendly package of practices proposed

G. Details of the Economic Analysis

Rubber economic price

Formula and variables	Variable	Units	Value
$IPP [(P_{(cif)}) * XR(1+ T)] + Tr$	Pcif (Vietnam RSS 1)	US \$ / mt	2200
IPP: Import parity price (US \$ /Mt)	Transport + handling	US \$ / mt	77.0
Pcif : CIF import price (US\$/Mt)	Exchange rate	Rs/US \$	130
XR: Exchange rate of Rs vs. US\$	Tariff (%) (10% tariff+15% VAT)	%	25%
cif: cost, insurance and freight, i.e. price of a good in China at the border	IPP	Rs/mt	357, 577.0
T: ad valorem tariff (in %)	IPP	Rs/kg	357.577
Tr: transport costs, port handling, etc. (US\$/Mt)	Market price - project	Rs/kg	275
Difference between the financial & economic price	Difference		30%

APPENDIX-1: INCOME, LABOUR AND INPUTS OF TEA REPLANTING (LKR/ha)

Tea replanting - 1 ha	in SL Rs											
		WOP Tea										
Investment	Units		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25
Planting material (PM)	Rs/ha			187 500								
PM for vacancy filling	Rs/ha				15 000							
Fertiliser	Rs/ha		9 620	24 180	31 200	63 180	44 980	44 980	44 980	44 980	44 980	44 980
Shade tree PM	Rs/ha		6 000									
High shade tree PM	Rs/ha		1 800									
Mulching material	Rs/ha			2 000	2 000							
Dolomite	Rs/ha		11 856									
Nematode control	Rs/ha			7 500	7 500							
Blister blight control	Rs/ha				16 300	16 300	16 300					
Pest control	Rs/ha			2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Field operations												
Uprooting old plants	Rs/ha		67 600									
Land leveling & preparation	Rs/ha		81 250									
Soil conservation	Rs/ha		65 000		26 000	6 500	3 250	3 250	3 250	3 250	3 250	3 250
Planting Gauthamala	Rs/ha		35 100									
Lopping grass	Rs/ha			36 400								
Removal of grass	Rs/ha			13 000								
Planting tea	Rs/ha			39 000	13 000							
Dolomite application	Rs/ha			1 300								
Lining, pegging & holing	Rs/ha			117 000								
Planting shade trees	Rs/ha		9 100									
Fertiliser application	Rs/ha		19 500	19 500	32 500	32 500	32 500	32 500	32 500	32 500	32 500	32 500
Weeding	Rs/ha	19 500				13 000	65 000	65 000	65 000	65 000	65 000	65 000
Shade management	Rs/ha				7 800	9 750	9 750	6 500	6 500	6 500	6 500	6 500
Mulching	Rs/ha				65 000	48 750						
Plucking green leaves	Rs/ha	104 000					130 000	325 000	325 000	471 250	471 250	471 250
Total material cost	Rs/ha	0	29 276	223 180	74 000	81 480	63 280	46 980	46 980	46 980	46 980	46 980
Total labour cost	Rs/ha	123 500	277 550	226 200	144 300	110 500	240 500	432 250	432 250	578 500	578 500	578 500
Total cost	Rs/ha	123 500	306 826	449 380	218 300	191 980	303 780	479 230	479 230	625 480	625 480	625 480
Gross income												
Tea leaves	Rs/ha	195 000					910 000	1 092 000	1 092 000	1 170 000	1 170 000	1 170 000
Net income	Rs/ha	71 500	-306 826	-449 380	-218 300	-191 980	606 220	612 770	612 770	544 520	544 520	544 520
Incremental net income	Rs/ha		-378 326	-520 880	-289 800	-263 480	534 720	541 270	541 270	473 020	473 020	473 020
IRR		23%										

APPENDIX-2: YIELDS, INPUTS AND LABOUR OF TEA REPLANTING (Ha)

Tea replanting	Quantity											
		WOP Tea										
Investment	Units		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25
Planting material (PM)	ha			1								
PM for vacancy filling	ha				1							
Fertiliser	kg		370	930	1200	2430	1730	1730	1730	1730	1730	1730
Shade tree PM	no		300									
High shade tree PM	ha		1									
Mulching material	ha			1	1							
Dolomite	kg		1976									
Nematode control	ha			1	1							
Blister blight control	ha				1	1	1					
Pest control	ha			1	1	1	1	1	1	1	1	1
Operating												
Uprooting old plants	pers-day		104									
Land leveling & preparation	pers-day		125									
Soil conservation	pers-day		100		40	10	5	5	5	5	5	5
Planting Gauthamala	pers-day		54									
Lopping grass	pers-day			56								
Removal of grass	pers-day			20								
Planting tea	pers-day			60	20							
Dolomite application	pers-day			2								
Lining, pegging & holing	pers-day			180								
Planting shade trees	pers-day		14									
Fertiliser application	pers-day		30	30	50	50	50	50	50	50	50	50
Weeding	pers-day	30				20	100	100	100	100	100	100
Shade management	pers-day				12	15	15	10	10	10	10	10
Mulching	pers-day				100	75						
Plucking green leaves	pers-day	160					200	500	500	725	725	725
Total labour	pers-day	190	427	348	222	170	370	665	665	890	890	890
Production												
Tea leaves	kg	3000					14000	16800	16800	18000	18000	18000

APPENDIX-3: INCOME, LABOUR, AND INPUT COSTS OF RUBBER PLANTING (LKR/ha)

<i>Rubber planting - 1 ha</i>	in SL Rs																		
	Units	WOP Chena	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10	Yr : 11	Yr : 12	Yr : 13	Yr : 14	Yr : 15-25		
Investment																			
Labour																			
Land preparation	pers-day		120																
Fencing	pers-day		6		1		1		1		1		1		1		1		1
Digging, filling & planting	pers-day		90																
Fertiliser application	pers-day		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Maintenance	pers-day		10	5	3	2	2	2											
Weeding	pers-day		40	60	60	60	40	40	20	10	10	10	10	10	10	10	10	10	10
Shoot cutting	pers-day			1	1														
Soil conservation	pers-day		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Mulching & water supply	pers-day		20	20	20	20	20												
Transporting	pers-day								10	20	27	27	27	27	27	27	27	27	27
Tapping & latex collection	pers-day								150	150	150	150	150	150	150	150	150	150	150
Total labour	pers-day		75	302	102	101	98	79	58	197	196	204	203	204	203	204	203	204	204
Labour cost	Rs/ha		48 750	196 300	66 300	65 650	63 700	51 350	37 700	128 050	127 400	132 600	131 950	132 600	131 950	132 600	131 950	132 600	132 600
Investment																			
Implements	Rs/ha		5000						5000									5000	
Fencing material	Rs/ha		25000																
Terracing	Rs/ha		15000																
Budded rubber plants	plants		500	50															
Plants	Rs/ha		42500	4250															
Mulching matter	Rs/ha		2000	2000															
Nb of plants	ha		450																
Fertiliser	kg		200	400	600	600	800	800	800	800	800	800	800	800	800	800	800	800	800
Cost of fertiliser	Rs/ha		5 200	10 400	15 600	15 600	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800	20 800
Compost	ton		5																
Cost of compost	Rs/ha		25000																
Material cost	Rs/ha		119 700	16 650	15 600	15 600	20 800	20 800	25 800	20 800	20 800	20 800	20 800	20 800	25 800	20 800	20 800	20 800	20 800
Total cost of latex production	Rs/ha		316 000	82 950	81 250	79 300	72 150	58 500	185 850	187 700	196 600	198 750	201 300	201 650	212 000	207 250	209 800	209 800	209 800
Total cost of latex production net of labour			119 700	16 650	15 600	15 600	20 800	20 800	25 800	20 800	20 800	20 800	20 800	20 800	25 800	20 800	20 800	20 800	20 800
Return																			
Net return from Chena (or HH wage labour)	Rs/ha		25000																
Latex production (equivalent RSS - covertn=3.3:1)	kg/ha								1600	1975	2160	2300	2395	2445	2680	2725	2820		
Sale value of latex	Rs/kg	185																	
Gross return	Rs/ha		0	0	0	0	0	0	296 000	365 375	399 600	425 500	443 075	452 325	495 800	504 125	521 700		
Net return	Rs/ha		-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	117 150	192 175	221 200	247 750	264 675	274 575	312 400	326 375	343 300		
IRR - latex			17%																
RSS production																			
Cost of sheet production	Rs/ha	20							32000	39500	43200	46000	47900	48900	53600	54500	56400		
Total cost of sheet production	Rs/ha		316 000	82 950	81 250	79 300	72 150	58 500	185 850	187 700	196 600	198 750	201 300	201 650	212 000	207 250	209 800		
Sale value of RSS1	Rs/ha	275							396 000	488 813	534 600	569 250	592 763	605 138	663 300	674 438	697 950		
Sale value of RSS3-4	Rs/ha	230							36 800	45 425	49 680	52 900	55 085	56 235	61 640	62 675	64 860		
Total gross return	Rs/ha		0	0	0	0	0	0	432 800	534 238	584 280	622 150	647 848	661 373	724 940	737 113	762 810		
Net return from RSS1	Rs /ha		-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	221 950	321 538	362 680	398 400	421 548	434 723	487 940	504 863	528 010		
IRR - RSS1 (50%) & other 50%			22%																
Total cash flow:																			
Total cost	Rs /ha		316 000	82 950	81 250	79 300	72 150	58 500	185 850	187 700	196 600	198 750	201 300	201 650	212 000	207 250	209 800		
Total gross revenue	Rs /ha		0	0	0	0	0	0	432 800	534 238	584 280	622 150	647 848	661 373	724 940	737 113	762 810		

APPENDIX-4: YIELDS, INPUTS AND LABOUR FOR RUBBER BASED BUSINESS MODEL

Farm Model for Passion fruit - 1 ha business model with the Private Sector											
Cost Item	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Land preparation	md/ha	10									
Planting / transplanting	md/ha	19					19				
Weeding & cultivation	md/ha	15	15	15	0	0	15	15	15		
Fertiliser application	md/ha	127	40	40	40	20	127	40	40	40	20
Trellising & Training	md/ha	40	5	5	5	5	40	5	5	5	5
Pollination	md/ha	30	30	30	20	15	30	30	30	20	15
Irrigation	md/ha	20	20	20	20	20	20	20	20	20	20
Harvesting/hauling/sorting/packing	md/ha	20	40	40	40	20	20	40	40	40	20
Total labour	md/ha	281	150	150	125	80	271	150	150	125	80
Wage rate	Rs/md	465									
Total labour cost	Rs/ha	130 665	69 750	69 750	58 125	37 200	126 015	69 750	69 750	58 125	37 200
Cost of material	Rs/ha	148 750					148 750				
Plants	Rs/ha	16 875					16 875				
Chemical fertiliser	Rs/ha	51 960	71 225	71 225	71 225	60 000	51 960	71 225	71 225	71 225	60 000
Organic fertiliser	Rs/ha	11 250	20 250	20 250	20 250	0	11 250	20 250	20 250	20 250	0
Other Costs	Rs/ha	66 250									
Irrigation cost	Rs/ha	9 000	9 000	9 000	9 000	9 000	9 000	9 000	9 000	9 000	9 000
Total Material Cost	Rs/ha	304 085	100 475	100 475	100 475	69 000	237 835	100 475	100 475	100 475	69 000
Total cost	Rs/ha	434 750	170 225	170 225	158 600	106 200	363 850	170 225	170 225	158 600	106 200
Average Yield	mt/ha	7	25	20	14	5	7	25	20	14	5
Average Farmgate Price	Rs/kg	60									
Total income	Rs/ha	427 500	1 500 000	1 200 000	840 000	300 000	427 500	1 500 000	1 200 000	840 000	300 000
Net Income	Rs/ha	-7 250	1 329 775	1 029 775	681 400	193 800	63 650	1 329 775	1 029 775	681 400	193 800
<i>With project net income</i>	Rs/ha	-7 250	1 329 775	1 029 775	681 400	193 800	63 650	1 329 775	1 029 775	681 400	193 800
Opportunity cost of land and labour assuming maize is the option	Rs/ha	22 653	22 653	22 653	22 653	22 653	22 653	22 653	22 653	22 653	22 653
Incremental net income	Rs/ha	-29 903	1 307 122	1 007 122	658 747	171 147	40 997	1 307 122	1 007 122	658 747	171 147
		4348%									
Return on Investment (ROI) - with labour cost		WP									
Present Value gross return (10% DR, 10 yr)	Rs	5 332 655									
Present Value of all cost	Rs	1 318 423									
ROI		404%									

APPENDIX-5: PRODUCTION COST, LABOUR, AND YIELD OF PEPPER (LKR Per ha)

Pepper intercropping (50% plant density - 1/2 ha)	in SL Rs											
		WOP										
Investment	Units		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	10-25
Pepper cuttings	each		900	90								
Fertiliser	kg		150	200	200	200	200	200	200	200	200	200
Cost of cuttings	Rs		22 500	2 250								
Cost of fertiliser	Rs		3 900	5 200	5 200	5 200	5 200	5 200	5 200	5 200	5 200	5 200
Total investment cost	Rs		26 400	7 450	5 200	5 200	5 200	5 200	5 200	5 200	5 200	5 200
Field operations												
Pegging	pers-day		3									
Holing	pers-day		8									
Plant Supports	pers-day		6									
Filling Holes	pers-day		6									
Plant Pepper	pers-day		10									
Mulching	pers-day		2									
Infilling	pers-day			1								
Ring-weeding	pers-day		8									
Slash/mulch/lopping	pers-day		2	2	2	2	2	2	2	2	2	2
Train pepper	pers-day		2	3	3	4	4	2	2	2	2	2
Fertilizing	pers-day		3	3	3	3	3	3	3	3	3	3
Plant Protection	pers-day		2	2	2	2	2	2	2	2	2	2
Harvesting	pers-day					3	3	4	4	4	4	4
Process/grade	pers-day					1	1	2	2	2	2	2
Total Labour	pers-day		52	11	10	15	15	15	15	15	15	15
Labour Cost	Rs		33 800	7 150	6 500	9 750	9 750	9 750	9 750	9 750	9 750	9 750
Total cultivation cost	Rs		60 200	14 600	11 700	14 950	14 950	14 950	14 950	14 950	14 950	14 950
Production and Income												
Pepper yield	Kg					200	400	700	900	900	900	800
Pepper gross income	kg					140 000	280 000	490 000	630 000	630 000	630 000	560 000
Net income	Rs		-60 200	-14 600	-11 700	125 050	265 050	475 050	615 050	615 050	615 050	545 050
			97%									

APPENDIX-6: YIELD AND INPUTS FOR ORCHID BUSINESS PLAB

CULTIVATION OF ORCHIDS - OUT GROWERS 1000 Sq ft - Business Plan											
	Units	Proj Yr 1	Proj Yr 2	Proj Yr 3	Proj Yr 4	Proj Yr 5	Proj Yr 6	Proj Yr 7	Proj Yr 8	Proj Yr 9	Proj Yr 10
Investment cost											
Mammoties 2 nos @ Rs 600.00	Rs	1 200									
Crow bars 1 nos @ Rs1000.00	Rs	2 000									
Fertigation	Rs	10 000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Water Pump	Rs	5 000									
Sundries	Rs	10 000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Green house construction	Rs	410 000									
Racks and supports	Rs	50 000									
Orchid plants (8-10cm) 1200 @ Rs 80.00	Rs	609 200									
Cultivation of orchids	Rs	100 000									
Coconut husks	Rs	48 000									
Total cost	Rs 1000	1 245	7	7	7	7	7	7	7	7	7
Output											
Orchids - 45cm: 3 spikes/plant/year	1200	3600									
Orchids - 50cm: 7 spikes/plant/year	1200	8400	9240	9240	16170	16170	32340	32340	32340	32340	32340
Orchids - 45cm: price	25										
Orchids - 50cm: price	25										
Income from orchid	Rs 1000	300	231	231	404	404	809	809	809	809	809
Net benefit		-945	224	224	397	397	802	802	802	802	802
	40%										
Return on Investment (ROI) - with labour cost		WP									
Present Value gross return (10% DR, 10 yr)	Rs 1000	3 067									
Present Value of all cost	Rs 1000	1 169									
ROI		262%									

APPENDIX-7: PRODUCTION COSTS, LABOUR, AND YIELD OF BANANA (LKR/HA)

Bana intercrop with rubber: 1 ha							
	Units	Yr: 1	Yr: 2	Yr: 3	Yr: 4		Yr: 5
Investment							
Banana suckers	Suckers	2000					
Cost of suckers	Rs	120 000					
Fertiliser	Kg	1300	800				
Cost of fertiliser	Rs	33 800	20 800				
Cost of material	Rs	153 800	20 800				
Operating cost							
Land preparation	pers-day	50					
Planting	pers-day	40					
Harvesting	pers-day		24	24	12	12	6
Total labour	pers-day	90	24	24	12	12	6
Total labour cost	Rs	58 500	15 600	15 600	7 800	7800	3900
Total cost	Rs 1000	212 300	36 400	15 600	7 800	7800	3900
Production and income							
Banana	kg	9270	12360	18400	10600	10600	5300
Sale value of banana	Rs	370 800	494 400	736 000	424 000	424000	212000
						0	0
Net revenue	Rs	158 500	458 000	720 400	416 200	416200	208100

APPENDIX-8: PRODUCTION, INPUTS AND LABOUR OF PINE APPLE (LKR/ha)

Pineapple intercrop with rubber: 1 ha					
	Units	Yr: 1	Yr: 2	Yr: 3	Yr: 4
Investment					
Pineapple suckers	Rs	24000			
Fertiliser	kg	300	300		
Cost of fertiliser	Rs	7800	7800		
Cost of homones	Rs	5000			
Pest control	Rs	2000	2000		
Cost of material	Rs	38800	9800		
Operation					
Planting	pers-day	20			
Fertiliser application	pers-day	5	5	5	
Maintenance	pers-day	15	15	15	15
Harvesting	pers-day	12	12	12	12
Total labour	pers-day	52	32	32	27
Cost of labour	Rs	33 800	20 800	20 800	17 550
Total cost	Rs	72 600	30 600	20 800	17 550
Return					
Pineapple	Kg	3500	4500	4500	3000
Gross revenue	Rs	140 000	180 000	180 000	120 000
Net revenue	Rs	67 400	149 400	159 200	102 450

APPENDIX-9: YIELDS, INPUTS, LABOUR OF COCOA (ha)

Cocoa intercropping with rubber (1 ha)											
	in SL Rs										
Investment	Units	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25
Cocoa planting material	plants	1000	100								
Fertiliser	kg	270	540	840	840	420	420	420	420	420	420
Organic fertiliser	kg	2000	200								
Cocoa planting material	Rs	15000	1500								
Fertiliser	Rs	7 020	14 040	21 840	21 840	10 920	10 920	10 920	10 920	10 920	10 920
Organic fertiliser	Rs	20000	2000								
Total investment cost	Rs	42 020	17 540	21 840	21 840	10 920	10 920	10 920	10 920	10 920	10 920
Operation											
Land preparation	pers-day	80	8								
Planting	pers-day	25	5								
Pruning and training	pers-day			20	25	30	30	30	30	30	30
Harvesting	pers-day				20	30	40	40	60	60	60
Processing of cocoa beans	pers-day				5	7.5	10	10	15	15	15
Total labour	pers-day	105	13	20	50	67.5	80	80	105	105	105
Total labour cost	Rs	68 250	8 450	13 000	32 500	43 875	52 000	52 000	68 250	68 250	68 250
Total cost	Rs	110 270	25 990	34 840	54 340	54 795	62 920	62 920	79 170	79 170	79 170
Production and income											
Process Cocoa beans	kg				900	1100	1500	1500	1500	1500	1500
Gross income	Rs				225 000	275 000	375 000	375 000	375 000	375 000	375 000
Net income	Rs	-110 270	-25 990	-34 840	170 660	220 205	312 080	312 080	295 830	295 830	295 830
IRR		63%									

Appendix-10: Production, inputs and labour of Maiz (LKR/ha)

Maiz intercrop with rubber: 1 ha							
	Units	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6
Investment							
Maze seeds	kg	12	12	12	12	12	12
Cost of seeds	Rs	10 800	10 800	10 800	10 800	10 800	10 800
Fertiliser	kg	175	175	175	175	175	175
Cost of fertiliser	Rs	4 550	4 550	4 550	4 550	4 550	4 550
Operations							
Land preparation & planting	pers-day	15	15	15	15	15	15
Weeding	pers-day	12	12	12	12	12	12
Pest & disease control	pers-day	2	2	2	2	2	2
Harvesting	pers-day	15	15	15	15	15	15
Threshing & drying etc	pers-day	10	10	10	10	10	10
Total labour	pers-day	54	54	54	54	54	54
Labour cost	Rs	35 100	35 100	35 100	35 100	35 100	35 100
Total cost	Rs	50 450	50 450	50 450	50 450	50 450	50 450
Revenue							
Dryed maize seeds	kg	5000	5000	5000	5000	5000	5000
Gross revenue	Rs	150 000	150 000	150 000	150 000	150 000	150 000
Net revenue	Rs	99 550	99 550	99 550	99 550	99 550	99 550

Appendix-11: Inputs and Machinery for establishing a Latex Processing Unit

Approximate Budget for 250 Kg daily capacity processing unit												
	Item	Size	Area/capacity/No	Unit cost (Rs.)		% of society contribution	% of Project share	Project support (Rs.)	Depreciation %	Rs		
1	Latex receiving area	15'x15'	225	500.00	112 500.00	60	40	45 000.00	2%	900		
	Latex processing area	50 x 14'	700	1 750.00	1 225 000.00	20	80	980 000.00	2%	19 600		
3	Drying unit	Item		500 000.00	500 000.00	15	85	425 000.00	2%	8 500		
4	Paking and storage area	20'X10'	200	1 000.00	200 000.00	20	80	160 000.00		0		
5	Effluent treatment		2.5 m ³ daily capacity	400 000.00	400 000.00	40	60	240 000.00	2%	4 800		
6	Rubber processing mill		1	650 000.00	650 000.00	0	100	650 000.00	4%	26 000		
7	pans		1	400.00	200 000.00	0	100	200 000.00		0		
8	Weighing scale		1	60 000.00	60 000.00	0	100	60 000.00	2%	1 200		
9	Water pump		1	50 000.00	50 000.00	0	100	50 000.00	5%	2 500		
10	Water Tank		1		30 000.00	0	100	30 000.00		0		
11	Well		1	100 000.00	100 000.00	40	60	60 000.00	2%	1 200		
12	Electricity supply	Item	1	100 000.00	100 000.00	0	100	100 000.00		0		
	Total				3627500			3 000 000.00		64 700		

Appendix-12: Production, inputs and labour of Group Rubber Processing Centre

Rubber Group processing	in SL Rs											
	Units	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25	
Total cost of processing unit	Rs 1000 - GPC	3627.5										
Depreciation	Rs 1000 /year		64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
Working capital	Rs/kg	20										
Production capacity	kg/day	250										
Production days	days/yr	220										
Total production	kg/yr	27 500	55 000	55 000	55 000	55 000	55 000	55 000	55 000	55 000	55 000	55 000
Cost of latex	Rs 1000/Yr	6 050	12 100	12 100	12 100	12 100	12 100	12 100	12 100	12 100	12 100	12 100
Total cost	Rs 1000/yr	10 228	13 265	13 265	13 265	13 265	13 265	13 265	13 265	13 265	13 265	13 265
RSS 1	90%											
Other	10%											
Total revenue	Rs 1000/Yr	7 439	13 613	13 613	13 613	13 613	13 613	13 613	13 613	13 613	13 613	13 613
Total net revenue	Rs 1000/Yr	-2 789	348	348	348	348	348	348	348	348	348	348
	12%											
Sale value of RSS1	275											
Sale value of RSS3-4	230											

APPENDIX-13: Tea Replanting Household Model (0.5 ha household mono-crop tea) financial

Tea replanting - 1/2 ha replant of 1 ha farm		in SL Rs		0.5									
		WOP Tea		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25
Investment													
Tea Planting material (PM)	Rs/0.5ha				93 750								
PM for vacancy filling	Rs/0.5ha					7 500							
Fertiliser	Rs/0.5ha		4 810	12 090	15 600	31 590	22 490	22 490	22 490	22 490	22 490	22 490	22 490
Shade tree PM	Rs/0.5ha		3 000										
High shade tree PM	Rs/0.5ha		900										
Mulching material	Rs/0.5ha			1 000	1 000								
Dolomite	Rs/0.5ha		5 928										
Nematode control	Rs/0.5ha			3 750	3 750								
Blister blight control	Rs/0.5ha				8 150	8 150	8 150						
Pest control	Rs/0.5ha			1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Field operations													
Uprooting old plants	Rs/0.5ha		33 800										
Land leveling & preparation	Rs/0.5ha		40 625										
Soil conservation	Rs/0.5ha		32 500		13 000	3 250	1 625	1 625	1 625	1 625	1 625	1 625	1 625
Planting Gauthamala	Rs/0.5ha		17 550										
Lopping grass	Rs/0.5ha			18 200									
Removal of grass	Rs/0.5ha			6 500									
Dolomite application	Rs/0.5ha			650									
Lining, pegging & holing	Rs/0.5ha			58 500									
Planting shade trees	Rs/0.5ha		4 550										
Fertiliser application	Rs/0.5ha		9 750	9 750	16 250	16 250	16 250	16 250	16 250	16 250	16 250	16 250	16 250
Weeding	Rs/0.5ha	9 750				6 500	32 500	32 500	32 500	32 500	32 500	32 500	32 500
Shade management	Rs/0.5ha				3 900	4 875	4 875	3 250	3 250	3 250	3 250	3 250	3 250
Mulching	Rs/0.5ha				32 500	24 375							
Plucking green leaves	Rs/0.5ha	52 000					65 000	162 500	162 500	235 625	235 625	235 625	235 625
Total material cost	Rs/0.5ha	0	14 638	111 590	37 000	40 740	31 640	23 490	23 490	23 490	23 490	23 490	23 490
Total labour cost	Rs/0.5ha	61 750	138 775	93 600	65 650	55 250	120 250	216 125	216 125	289 250	289 250	289 250	289 250
Total cost	Rs/0.5ha	61 750	153 413	205 190	102 650	95 990	151 890	239 615	239 615	312 740	312 740	312 740	312 740
Gross income													
Tea green leave	Rs/0.5ha	1500	0	0	0	0	7000	8400	8400	9000	9000	9000	9000
From Tea leaves	Rs/0.5ha	97 500					455 000	546 000	546 000	585 000	585 000	585 000	585 000
Net income	Rs/0.5ha	35 750	-153 413	-205 190	-102 650	-95 990	303 110	306 385	306 385	272 260	272 260	272 260	272 260
Net income net of labour cost	Rs/0.5ha	97 500	-14 638	-111 590	-37 000	-40 740	423 360	522 510	522 510	561 510	561 510	561 510	561 510
Incremental net income	Rs/0.5ha		-189 163	-240 940	-138 400	-131 740	267 360	270 635	270 635	236 510	236 510	236 510	236 510
IRR		24%											
Pay-back period computation			-189 163	-430 103	-568 503	-700 243	-432 883	-162 248	108 387	344 897			
Pay-back period: yrs													
Return on Investment (ROI) - with labour cost		WP											
Present Value gross return (10% DR, 25 yr)	Rs	2 368 113											
Present Value of all cost	Rs	2 120 463											
ROI		112%											
Return on Investment (ROI) - net of labour cost		WP											
Net Present Value gross return (10% DR, 25 yr)	Rs	2 368 113											
Present Value of all cost	Rs	1 815 487											
ROI		130%											

APPENDIX-14: Tea Replanting household model: Household sustainability analysis

Household Financial sustainability of tea		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Current crop extent (low productive tea)	ha		0.5							
Replanted extent with STARR	ha		0.25							
Wage labour availability - WOP	md/yr	220								
labour use for replating of tea	md/yr		214	174	111	85	185	333	333	445
Labour saving from non-managing 0.5 ha	md/yr		95	95	95	95	95	95	95	95
Wage labour availability - WP (operate only 0.5 ha)	md/yr		102	141	204	230	130	-18	-18	-130
Wage labour income - WP	md/yr		65 975	91 650	132 600	149 500	84 500	-11 375	-11 375	-84 500
Green leaf YD from unreplanted 0.5 ha	Kg/yr		1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Income from green leaf	Rs/yr		97 500	97 500	97 500	97 500	97 500	97 500	97 500	97 500
Family income without new tea	Rs/yr		163 475	189 150	230 100	247 000	182 000	86 125	86 125	13 000
Household income with project tea (net of labour cost)	Rs/yr		148 837	77 560	193 100	206 260	605 360	608 635	608 635	574 510
IFAD up-front grant			75 000							
GOSL subsidy				90 000	100 000	60 000				
Total cash for the family	Rs/yr		223 837	167 560	293 100	266 260	605 360	608 635	608 635	574 510
Total cash for the family	Rs/month		18 653	13 963	24 425	22 188	50 447	50 720	50 720	47 876
Project assistance	Rs									
Proposed Grant / ha	150 000									
GOSL subsidy - Yr 2	180 000									
GOSL subsidy - Yr 3	200 000									
GOSL subsidy - Yr 4	70 000									
GOSL subsidy - Yr 5	50 000									
Working capital loan	Rs			50 000						
Years for having the loan					1	2	3	4		
Annual interest rate (%)	9%									
Loan repayment period (yrs)	4									
Interest payment (%)	Rs				(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)		
Payment of principal	Rs				(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)		
Total payment	Rs				15 433	16 016	14 943	13 774		
Net cash flow after loan repay	Rs		223 837	217 560	277 667	250 244	590 417	594 861	608 635	574 510

APPENDIX-15: Tea Intercropping household model

Tea replanting - 1/2 ha replant of 1 ha form		In SL Rs	0.5		Rs/0.5ha							
		WOP Tea	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8		
Investment		Units										
Tea Planting material (PM)	Rs/0.5ha			93 750								
PM for vacancy filling	Rs/0.5ha				7 500							
Fertiliser	Rs/0.5ha		4 810	12 090	15 600	31 590	22 490	22 490	22 490	22 490		
Shade tree PM	Rs/0.5ha		3 000									
High shade tree PM	Rs/0.5ha		900									
Mulching material	Rs/0.5ha			1 000	1 000							
Dolomite	Rs/0.5ha		5 928									
Nematode control	Rs/0.5ha			3 750	3 750							
Blister blight control	Rs/0.5ha				8 150	8 150	8 150					
Pest control	Rs/0.5ha			1 000	1 000	1 000	1 000	1 000	1 000	1 000		
Field operations												
Uprooting old plants	Rs/0.5ha		33 800									
Land leveling & preparation	Rs/0.5ha		40 625									
Soil conservation	Rs/0.5ha		32 500		13 000	3 250	1 625	1 625	1 625	1 625		
Planting Gauthamala	Rs/0.5ha		17 550									
Lopping grass	Rs/0.5ha			18 200								
Removal of grass	Rs/0.5ha			6 500								
Dolomite application	Rs/0.5ha			650								
Lining, pegging & holing	Rs/0.5ha			58 500								
Planting shade trees	Rs/0.5ha		4 550									
Fertiliser application	Rs/0.5ha		9 750	9 750	16 250	16 250	16 250	16 250	16 250	16 250		
Weeding	Rs/0.5ha	9 750			3 900	4 875	4 875	3 250	3 250	3 250		
Shade management	Rs/0.5ha				32 500	24 375						
Mulching	Rs/0.5ha						65 000	162 500	162 500	235 625		
Plucking green leaves	Rs/0.5ha	52 000										
Total material cost	Rs/0.5ha	0	14 638	111 590	37 000	40 740	31 640	23 490	23 490	23 490		
Total labour cost	Rs/0.5ha	61 750	138 775	93 600	65 650	55 250	120 250	216 125	216 125	289 250		
Total cost	Rs/0.5ha	61 750	153 413	205 190	102 650	95 990	151 890	239 615	239 615	312 740		
Gross income												
Tea green leaf	kg/0.5ha	1 500	0	0	0	0	7 000	8 400	8 400	9 000		
From Tea leaves	Rs/0.5ha	97 500					45 000	546 000	546 000	585 000		
Net income	Rs/0.5ha	35 750	-153 413	-205 190	-102 650	-95 990	303 110	306 385	306 385	272 260		
Net income net of labour cost	Rs/0.5ha	97 500	-14 638	-111 590	-37 000	-40 740	423 360	522 510	522 510	561 510		
Incremental net income	Rs/0.5ha		-189 163	-240 940	-138 400	-131 740	267 360	270 635	270 635	236 510		
IRR			24%									
Pepper intercrop												
Total cost of pepper	Rs		0	60 200	14 600	11 700	14 950	14 950	14 950	14 950		
Total gross revenue	Rs		0	0	0	0	140 000	280 000	490 000	630 000		
Total net revenue	Rs		0	-60 200	-14 600	-11 700	125 050	265 050	475 050	615 050		
Total cash flow:												
Total cost	Rs /ha		153 413	265 390	117 250	107 690	166 840	254 565	254 565	327 690		
Total gross revenue	Rs /ha		0	0	0	0	595 000	826 000	1036 000	1215 000		
Total net revenue	Rs /ha		-189 163	-301 140	-153 000	-143 440	392 410	535 685	745 685	851 560		
IRR			42%									
NPV			3 673 546									
Pay-back period computation			-189 163	-490 303	-643 303	-786 743	-394 333	141 352	887 037	1 738 597		
Pay-back period: yrs												
Return on Investment (ROI) - with labour cost												
Present Value gross return (10% DR, 25 yr)	Rs		5 310 700									
Present Value of all cost	Rs		2 277 487									
ROI			233%									
Return on Investment (ROI) - net of labour cost												
Net Present Value gross return (10% DR, 25 yr)	Rs		5 310 700									
Present Value of all cost	Rs		1 972 512									
ROI			269%									
Household Financial sustainability of tea												
Farming scenario												
Current crop extent (low productive tea)	ha		0.5									
Replanted extent with STARR	ha		0.5									
Wage labour availability - WOP	md/yr	220										
labour use for replating of tea	md/yr		214	174	111	85	185	333	333	445		
Labour saving from non-managing 0.25 ha	md/yr		95	95	95	95	95	95	95	95		
Wage labour availability - WOP (operate only 0.25 ha)	md/yr		102	141	204	230	130	-18	-18	-130		
Wage labour income - Wp	md/yr		65 975	91 650	132 600	149 500	84 500	-11 375	-11 375	-84 500		
Green leaf YD from unreplanted 0.25 ha	Kg/yr		1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500		
Income from green leaf	Rs/yr		97 500	97 500	97 500	97 500	97 500	97 500	97 500	97 500		
Income from pepper	Rs/yr		0	-60 200	-14 600	-11 700	125 050	265 050	475 050	615 050		
Family income without new tea	Rs/yr		163 475	128 950	215 500	235 300	307 050	351 175	561 175	628 050		
Household income with project tea (net of labour)												
IFAD up-front grant	Rs/yr		148 837	17 360	178 500	194 560	730 410	873 685	1 083 685	1 189 560		
GOSL subsidy	Rs/yr		75 000									
Total cash for the family	Rs/yr		223 837	107 360	278 500	254 560	730 410	873 685	1 083 685	1 189 560		
Total cash for the family	Rs/month		18 653	8 947	23 208	21 213	60 868	72 807	90 307	99 130		
Project assistance												
Proposed Grant / ha	Rs		150 000									
GOSL subsidy - Yr 2	Rs		180 000									
GOSL subsidy - Yr 3	Rs		200 000									
GOSL subsidy - Yr 4	Rs		70 000									
GOSL subsidy - Yr 5	Rs		50 000									
Working capital loan	Rs			50 000								
Years for having the loan					1	2	3	4				
Annual interest rate (%)			9%									
Loan repayment period (yrs)			4									
Interest payment (%)	Rs				(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)				
Payment of principal	Rs				(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)				
Total payment	Rs				15 433	16 016	14 943	13 774				
Net cash flow after loan repay	Rs		223 837	157 360	263 067	238 544	715 467	859 911	1 083 685	1 189 560		

APPENDIX-16: Tea Intercropping household model: sustainability analysis

Household Financial sustainability of tea		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Current crop extent (low productive tea)	ha		0.5							
Replanted extent with STARR	ha		0.5							
Wage labour availability - WOP	md/yr	220								
labour use for replating of tea	md/yr		214	174	111	85	185	333	333	445
Labour saving from non-managing 0.25 ha	md/yr		95	95	95	95	95	95	95	95
Wage labour availability - WP (operate only 0.25 ha)	md/yr		102	141	204	230	130	-18	-18	-130
Wage labour income - WP	md/yr		65 975	91 650	132 600	149 500	84 500	-11 375	-11 375	-84 500
Green leaf YD from unreplanted 0.25 ha	Kg/yr		1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Income from green leaf	Rs/yr		97 500	97 500	97 500	97 500	97 500	97 500	97 500	97 500
Income from pepper	Rs/yr		0	-60 200	-14 600	-11 700	90 050	111 050	195 050	405 050
Family income without new tea	Rs/yr		163 475	128 950	215 500	235 300	272 050	197 175	281 175	418 050
Household income with project tea (net of labour)	Rs/yr		148 837	17 360	178 500	194 560	695 410	719 685	803 685	979 560
IFAD up-front grant			75 000							
GOSL subsidy				90 000	100 000	60 000				
Total cash for the family	Rs/yr		223 837	107 360	278 500	254 560	695 410	719 685	803 685	979 560
Total cash for the family	Rs/month		18 653	8 947	23 208	21 213	57 951	59 974	66 974	81 630
Project assistance	Rs									
Proposed Grant / ha	150 000									
GOSL subsidy - Yr 2	180 000									
GOSL subsidy - Yr 3	200 000									
GOSL subsidy - Yr 4	70 000									
GOSL subsidy - Yr 5	50 000									
Working capital loan	Rs			50 000						
Years for having the loan					1	2	3	4		
Annual interest rate (%)	9%									
Loan repayment period (yrs)	4									
Interest payment (%)	Rs				(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)		
Payment of principal	Rs				(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)		
Total payment	Rs				15 433	16 016	14 943	13 774		
Net cash flow after loan repay	Rs		223 837	157 360	263 067	238 544	680 467	705 911	803 685	979 560

APPENDIX-17: Rubber New Planting Household Model, (1ha/household) Financial

Rubber planting - 1 ha		in SL Rs										
		WOP Chena	Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10
Investment	Units											
Labour												
Land preparation	pers-day		120									
Fencing	pers-day		6		1		1		1		1	
Digging, filling & planting	pers-day		90									
Fertiliser application	pers-day		8	8	8	8	8	8	8	8	8	8
Maintenance	pers-day		10	5	3	2	2	2				
Weeding	pers-day		40	60	60	60	40	40	20	10	10	10
Shoot cutting	pers-day			1	1							
Soil conservation	pers-day		8	8	8	8	8	8	8	8	8	8
Mulching & water supply	pers-day		20	20	20	20	20					
Transporting	pers-day								10	20	27	27
Tapping & latex collection	pers-day								150	150	150	150
Total labour	pers-day		75	302	102	101	98	79	58	197	196	204
Labour cost	Rs/ha		48 750	196 300	66 300	65 650	63 700	51 350	37 700	128 050	127 400	132 600
Investment												
Implements	Rs/ha			5000						5000		
Fencing material	Rs/ha			25000								
Terracing	Rs/ha			15000								
Budded rubber plants	plants			500	50							
Plants	Rs/ha			42500	4250							
Mulching matter	Rs/ha			2000	2000							
Nb of plants	ha			450								
Fertiliser	kg			200	400	600	600	800	800	800	800	800
Cost of fertiliser	Rs/ha			5 200	10 400	15 600	15 600	20 800	20 800	20 800	20 800	20 800
Compost	ton			5								
Cost of compost	Rs/ha			25000								
Material cost	Rs/ha			119 700	16 650	15 600	15 600	20 800	20 800	25 800	20 800	20 800
Total cost of latex production	Rs/ha			316 000	82 950	81 250	79 300	72 150	58 500	153 850	148 200	153 400
Total cost of latex production net of labour				119 700	16 650	15 600	15 600	20 800	20 800	25 800	20 800	20 800
Return												
Net return from Chena (or HH wage labour)	Rs/ha			25000								
Latex production (equivalent RSS - covertn=3.3:1)	kg/ha								1600	1975	2160	2300
Sale value of latex	Rs/kg			185								
Gross return	Rs/ha			0	0	0	0	0	296 000	365 375	399 600	425 500
Net return	Rs/ha			-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	117 150	192 175	221 200
IRR - latex					17%							
RSS production												
Cost of sheet production	Rs/ha			20					32000	39500	43200	46000
Total cost of sheet production	Rs/ha			316 000	82 950	81 250	79 300	72 150	58 500	185 850	187 700	196 600
Sale value of RSS1	Rs/ha			275						396 000	488 813	534 600
Sale value of RSS3-4	Rs/ha			230						36 800	45 425	49 680
Total gross return	Rs/ha			0	0	0	0	0	0	432 800	534 238	584 280
Net return from RSS1	Rs /ha			-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	221 950	321 538	362 680
IRR - RSS1 (50%) & other 50%					22%							
Total cash flow:												
Total cost	Rs /ha			316 000	82 950	81 250	79 300	72 150	58 500	185 850	187 700	196 600
Total gross revenue	Rs /ha			0	0	0	0	0	0	432 800	534 238	584 280
Pay-back period computation				-341 000	-448 950	-555 200	-659 500	-756 650	-840 150	-618 200	-296 663	66 018
Pay-back period: yrs												10
Return on Investment (ROI) - with labour cost												
Present Value gross return (10% DR, 25 yr)	Rs											3 105 546
Present Value of all cost	Rs											1 501 862
ROI												207%
Return on Investment (ROI) - net of labour cost												
Net Present Value gross return (10% DR, 25 yr)	Rs											3 105 546
Present Value of all cost	Rs											272 655
ROI												1139%

APPENDIX-18: Rubber New planting household model - sustainability analysis (1ha)

Household Financial sustainability of rubber		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Planted extent of rubber with STARR	ha		1							
Wage labour availability - WOP	md/yr	350								
labour use for planting rubber	md/yr		302	102	101	98	79	58	197	196
Labour saving from non-chena cultivation	md/yr		75	75	75	75	75	75	75	75
Wage labour availability - WP	md/yr		123	323	324	327	346	367	228	229
Wage labour income - WP	md/yr		79 950	209 950	210 600	212 550	224 900	238 550	148 200	148 850
Family income	Rs/yr		-39 750	193 300	195 000	196 950	204 100	217 750	555 200	662 288
IFAD up-front grant			76 000							
GOSL subsidy				90 853	15 175	30 352	13 620			
Total cash for the family	Rs/yr		36 250	284 153	210 175	227 302	217 720	217 750	555 200	662 288
Grants (Rs/ha)										
Project assistance (Rs)	76000									
Rubber subsidy - 2nd	90853									
Rubber subsidy - 3rd	15175									
Rubber subsidy - 4th	30352									
Rubber subsidy - 5th	13620									
Total	150000									
Working capital loan	Rs		50 000							
Years for having the loan				1	2	3	4			
Annual interest rate (%)	9%									
Loan repayment period (yrs)	4									
Interest payment (%)	Rs			(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)			
Payment of principal	Rs			(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)			
Total payment	Rs			15 433	16 016	14 943	13 774			
Net cash flow after loan repay	Rs		86 250	268 720	194 159	212 359	203 946	217 750	555 200	662 288

APPENDIX-19: Rubber and Maize intercropping household model - sustainability analysis

			Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	
Net return from RSS1	Rs /ha		-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	221 950	
IRR - RSS1 (50%) & other 50%			22%							
Intercropping - Maize										
Total cost of maize	Rs		50 450	50 450	50 450	50 450	50 450	50 450		
Total gross revenue	Rs		150 000	150 000	150 000	150 000	150 000	150 000		
Total net revenue	Rs		99 550	99 550	99 550	99 550	99 550	99 550		
Total cash flow:										
Total cost	Rs /ha		366 450	133 400	131 700	129 750	122 600	108 950	185 850	
Total gross revenue	Rs /ha		150 000	150 000	150 000	150 000	150 000	150 000	432 800	
Total net revenue	Rs /ha		-216 450	16 600	18 300	20 250	27 400	41 050	246 950	
IRR			40%							
Pay-back period computation			-216 450	-199 850	-181 550	-161 300	-133 900	-92 850	154 100	
Pay-back period: yrs									9	
Return on Investment (ROI) - with labour cost										
		WP								
Present Value gross return (10% DR, 25 yr)	Rs		3 758 836							
Present Value of all cost	Rs		1 721 585							
ROI			218%							
Return on Investment (ROI) - net of labour cost										
		WP								
Net Present Value gross return (10% DR, 25 yr)	Rs		3 758 836							
Present Value of all cost	Rs		432 575							
ROI			869%							
Household Financial sustainability of rubber										
		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Planted extent of rubber with STARR	ha		1							
Wage labour availability - WOP	md/yr	350								
labour use for planting rubber	md/yr		302	102	101	98	79	58	197	196
Labour saving from non-chena cultivation	md/yr		75	75	75	75	75	75	75	75
Wage labour availability - WP	md/yr		123	323	324	327	346	367	228	229
Wage labour income - WP	md/yr		79 950	209 950	210 600	212 550	224 900	238 550	148 200	148 850
Family income	Rs/yr		59 800	292 850	294 550	296 500	303 650	317 300	555 200	662 288
IFAD up-front grant			76 000							
GOSL subsidy				90 853	15 175	30 352	13 620			
Total cash for the family	Rs/yr		135 800	383 703	309 725	326 852	317 270	317 300	555 200	662 288
Grants (Rs/ha)										
Project assistance (Rs)		76000								
Rubber subsidy - 2nd		90853								
Rubber subsidy - 3rd		15175								
Rubber subsidy - 4th		30352								
Rubber subsidy - 5th		13620								
Total		150000								
Working capital loan	Rs		50 000							
Years for having the loan				1	2	3	4			
Annual interest rate (%)		9%								
Loan repayment period (yrs)		4								
Interest payment (%)	Rs		(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)				
Payment of principal	Rs		(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)				
Total payment	Rs		15 433	16 016	14 943	13 774				
Net cash flow after loan repay	Rs		185 800	368 270	293 709	311 909	303 496	317 300	555 200	662 288

APPENDIX-20: Rubber and Banana intercropping household model - sustainability analysis

Net return from RSS1	Rs /ha		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	
IRR - RSS1 (50%) & other 50%			-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	221 950	
			22%							
Intercropping - Banana										
Total cost of banana	Rs		212 300	36 400	15 600	7 800	7 800	3 900		
Total gross revenue	Rs		370 800	494 400	736 000	424 000	424 000	212 000		
Total net revenue	Rs		158 500	458 000	720 400	416 200	416 200	208 100		
Total cash flow:										
Total cost	Rs /ha		528 300	119 350	96 850	87 100	79 950	62 400	185 850	
Total gross revenue	Rs /ha		370 800	494 400	736 000	424 000	424 000	212 000	432 800	
Total net revenue	Rs /ha		-157 500	375 050	639 150	336 900	344 050	149 600	246 950	
IRR			269%							
Pay-back period computation			-157 500	217 550	856 700	1 193 600				
Pay-back period: yrs				2						
Return on Investment (ROI) - with labour cost										
		WP								
Present Value gross return (10% DR, 25 yr)	Rs		4 693 798							
Present Value of all cost	Rs		1 512 378							
ROI			310%							
Return on Investment (ROI) - net of labour cost										
		WP								
Net Present Value gross return (10% DR, 25 yr)	Rs		4 693 798							
Present Value of all cost	Rs		512 786							
ROI			915%							
Household Financial sustainability of rubber										
		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Planted extent of rubber with STARR	ha		1							
Wage labour availability - WOP	md/yr	350								
labour use for planting rubber	md/yr		302	102	101	98	79	58	197	196
Labour saving from non-chena cultivation	md/yr		75	75	75	75	75	75	75	75
Wage labour availability - WP	md/yr		123	323	324	327	346	367	228	229
Wage labour income - WP	md/yr		79 950	209 950	210 600	212 550	224 900	238 550	148 200	148 850
Family income	Rs/yr		118 750	651 300	915 400	613 150	620 300	425 850	555 200	662 288
IFAD up-front grant			76 000							
GOSL subsidy				90 853	15 175	30 352	13 620			
Total cash for the family	Rs/yr		194 750	742 153	930 575	643 502	633 920	425 850	555 200	662 288
Grants (Rs/ha)										
Project assistance (Rs)		76000								
Rubber subsidy - 2nd		90853								
Rubber subsidy - 3rd		15175								
Rubber subsidy - 4th		30352								
Rubber subsidy - 5th		13620								
Total		150000								
Working capital loan	Rs		50 000							
Years for having the loan				1	2	3	4			
Annual interest rate (%)	9%									
Loan repayment period (yrs)	4									
Interest payment (%)	Rs			(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)			
Payment of principal	Rs			(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)			
Total payment	Rs			15 433	16 016	14 943	13 774			
Net cash flow after loan repay	Rs		244 750	726 720	914 559	628 559	620 146	425 850	555 200	662 288

APPENDIX-21: Rubber and Pineapple intercropping household model - sustainability analysis

		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	
Intercropping - Pineapple									
Total cost of pineapple	Rs	72 600	30 600	20 800	17 550				
Total gross revenue	Rs	140 000	180 000	180 000	120 000				
Total net revenue	Rs	67 400	149 400	159 200	102 450				
Total cash flow:									
Total cost	Rs /ha	388 600	113 550	102 050	96 850	72 150	58 500	185 850	
Total gross revenue	Rs /ha	140 000	180 000	180 000	120 000	0	0	432 800	
Total net revenue	Rs /ha	-248 600	66 450	77 950	23 150	-72 150	-58 500	246 950	
		39%							
Pay-back period computation		-273 600	-207 150	-129 200	-106 050	-178 200	-236 700	10 250	
Pay-back period: yrs			9						
Return on Investment (ROI) - with labour cost									
	WP								
Present Value gross return (10% DR, 25 yr)	Rs		3 598 778						
Present Value of all cost	Rs		1 391 150						
ROI			259%						
Return on Investment (ROI) - net of labour cost									
	WP								
Net Present Value gross return (10% DR, 25 yr)	Rs		3 598 778						
Present Value of all cost	Rs		391 558						
ROI			919%						
Household Financial sustainability of rubber									
	WoP								
	WP								
Farming scenario		Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Planted extent of rubber with STARR	ha	1							
Wage labour availability - WOP	md/yr	350							
labour use for planting rubber	md/yr	302	102	101	98	79	58	197	196
Labour saving from non-chena cultivation	md/yr	75	75	75	75	75	75	75	75
Wage labour availability - WP	md/yr	123	323	324	327	346	367	228	229
Wage labour income - WP	md/yr	79 950	209 950	210 600	212 550	224 900	238 550	148 200	148 850
Family income	Rs/yr	27 650	342 700	354 200	299 400	204 100	217 750	555 200	662 288
IFAD up-front grant		76 000							
GOSL subsidy			90 853	15 175	30 352	13 620			
Total cash for the family	Rs/yr	103 650	433 553	369 375	329 752	217 720	217 750	555 200	662 288
Grants (Rs/ha)									
Project assistance (Rs)	76000								
Rubber subsidy - 2nd	90853								
Rubber subsidy - 3rd	15175								
Rubber subsidy - 4th	30352								
Rubber subsidy - 5th	13620								
Total	150000								
Working capital loan	Rs	50 000							
Years for having the loan			1	2	3	4			
Annual interest rate (%)	9%								
Loan repayment period (yrs)	4								
Interest payment (%)	Rs		(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)			
Payment of principal	Rs		(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)			
Total payment	Rs		15 433	16 016	14 943	13 774			
Net cash flow after loan repay	Rs	153 650	418 120	353 359	314 809	203 946	217 750	555 200	662 288

APPENDIX-22: Rubber and Cocoa intercropping household model - sustainability analysis

			Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	
Net return from RSS1	Rs /ha		-341 000	-107 950	-106 250	-104 300	-97 150	-83 500	221 950	
IRR - RSS1 (50%) & other 50%			22%							
Intercropping - Cocoa										
Total cost of cocoa	Rs			110 270	25 990	34 840	54 340	54 795	62 920	
Total gross revenue	Rs			0	0	0	200 000	250 000	275 000	
Total net revenue	Rs			-110 270	-25 990	-34 840	145 660	195 205	212 080	
Total cash flow:										
Total cost	Rs /ha		316 000	193 220	107 240	114 140	126 490	113 295	248 770	
Total gross revenue	Rs /ha		0	0	0	0	200 000	250 000	707 800	
Total net revenue	Rs /ha		-316 000	-193 220	-107 240	-114 140	73 510	136 705	459 030	
IRR			30%							
Pay-back period computation			-316 000	-509 220	-616 460	-730 600	-657 090	-520 385	-61 355	
Pay-back period: yrs									8	
Return on Investment (ROI) - with labour cost										
		WP								
Present Value gross return (10% DR, 25 yr)	Rs	3 105 546								
Present Value of all cost	Rs	1 420 147								
ROI		219%								
Return on Investment (ROI) - net of labour cost										
		WP								
Net Present Value gross return (10% DR, 25 yr)	Rs	3 105 546								
Present Value of all cost	Rs	420 556								
ROI		738%								
Household Financial sustainability of rubber										
		WoP	WP							
Farming scenario			Yr : 1	Yr : 2	Yr : 3	Yr : 4	Yr : 5	Yr : 6	Yr : 7	Yr : 8-20
Planted extent of rubber with STARR	ha		1							
Wage labour availability - WOP	md/yr	350								
labour use for planting rubber	md/yr		302	102	101	98	79	58	197	196
Labour saving from non-chena cultivation	md/yr		75	75	75	75	75	75	75	75
Wage labour availability - WP	md/yr		123	323	324	327	346	367	228	229
Wage labour income - WP	md/yr		79 950	209 950	210 600	212 550	224 900	238 550	148 200	148 850
Family income	Rs/yr		-39 750	83 030	169 010	162 110	349 760	412 955	767 280	874 368
IFAD up-front grant			76 000							
GOSL subsidy				90 853	15 175	30 352	13 620			
Total cash for the family	Rs/yr		36 250	173 883	184 185	192 462	363 380	412 955	767 280	874 368
Grants (Rs/ha)										
Project assistance (Rs)		76000								
Rubber subsidy - 2nd		90853								
Rubber subsidy - 3rd		15175								
Rubber subsidy - 4th		30352								
Rubber subsidy - 5th		13620								
Total		150000								
Working capital loan	Rs		50 000							
Years for having the loan				1	2	3	4			
Annual interest rate (%)	9%									
Loan repayment period (yrs)	4									
Interest payment (%)	Rs			(4 500.0)	(3 516.0)	(2 443.4)	(1 274.3)			
Payment of principal	Rs			(10 933.4)	(12 500.0)	(12 500.0)	(12 500.0)			
Total payment	Rs			15 433	16 016	14 943	13 774			
Net cash flow after loan repay	Rs		86 250	158 450	168 169	177 519	349 606	412 955	767 280	874 368

APPENDIX-23: Tea replanting and intercropping subproject - economic cash flows (5500 ha)

		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7	Yr: 8	Yr: 9	Yr: 10-25	Yr : 11	Yr : 12	Yr : 13	Yr : 14	Yr : 15	Yr : 16	Yr : 17	Yr : 18
Project targets	Units	Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Yr 2021	Yr 2022	Yr 2023	Yr 2024	Yr 2025	Yr 2026	Yr 2027	Yr 2028	Yr 2029	Yr 2030	Yr 2031	Yr 2032	Yr 2033
Tea	ha	675	1575	1625	1625	0	0												
Rubber	ha	205	765	1015	1015	0	0												
Intercrop combinations on extents																			
Tea mono	40%																		
Tea+PP	60%																		
Rubber group processing centres		2	2	10	17	17													
Rubber mono crop	50%																		
RB + Maize	10%																		
RB + Banana	25%																		
RB + Pine	5%																		
RB + Cocoa	10%																		
	100%																		
Economic cash flows - Tea																			
Cost flow:																			
RH Tea mono crop: Yr 1	Rs 1000	82 412	126 789	67 762	72 403	94 408	139 411	139 411	176 924	176 924	176 924	176 924	176 924	176 924	176 924	176 924	176 924	176 924	176 924
RH Tea mono crop: Yr 2	Rs 1000		192 294	295 842	158 111	168 941	220 286	325 293	325 293	412 823	412 823	412 823	412 823	412 823	412 823	412 823	412 823	412 823	412 823
RH Tea mono crop: Yr 3	Rs 1000			198 399	305 234	163 131	174 304	227 279	335 619	335 619	425 929	425 929	425 929	425 929	425 929	425 929	425 929	425 929	425 929
RH Tea mono crop: Yr 4	Rs 1000				198 399	305 234	163 131	174 304	227 279	335 619	335 619	425 929	425 929	425 929	425 929	425 929	425 929	425 929	425 929
RH Tea + Pepper inter-crop: Yr 1	Rs 1000	123 618	225 792	113 594	123 327	158 835	226 339	282 609	282 609	282 609	282 609	282 609	282 609	282 609	282 609	282 609	282 609	282 609	282 609
RH Tea + Pepper inter-crop: Yr 2	Rs 1000		288 441	526 847	265 054	287 762	370 615	528 125	528 125	659 421	659 421	659 421	659 421	659 421	659 421	659 421	659 421	659 421	659 421
RH Tea + Pepper inter-crop: Yr 3	Rs 1000			297 598	543 572	273 468	296 897	382 380	544 891	544 891	680 355	680 355	680 355	680 355	680 355	680 355	680 355	680 355	680 355
RH Tea + Pepper inter-crop: Yr 4	Rs 1000				297 598	543 572	273 468	296 897	382 380	544 891	544 891	680 355	680 355	680 355	680 355	680 355	680 355	680 355	680 355
Total cost		206 029	833 316	1 500 041	1 963 697	1 995 350	1 864 451	2 300 029	2 803 121	3 292 798	3 518 572	3 744 345	3 744 345	3 744 345	3 744 345	3 744 345	3 744 345	3 744 345	3 744 345
Gross Benefir flow																			
RH Tea mono crop: Yr 1	Rs 1000	-57 915	-57 915	-57 915	-57 915	212 355	266 409	266 409	289 575	289 575	289 575	289 575	289 575	289 575	289 575	289 575	289 575	289 575	289 575
RH Tea mono crop: Yr 2	Rs 1000		-135 135	-135 135	-135 135	-135 135	495 495	621 621	621 621	675 675	675 675	675 675	675 675	675 675	675 675	675 675	675 675	675 675	675 675
RH Tea mono crop: Yr 3	Rs 1000			-139 425	-139 425	-139 425	-139 425	511 225	641 355	641 355	697 125	697 125	697 125	697 125	697 125	697 125	697 125	697 125	697 125
RH Tea mono crop: Yr 4	Rs 1000				-139 425	-139 425	-139 425	-139 425	511 225	641 355	641 355	697 125	697 125	697 125	697 125	697 125	697 125	697 125	697 125
RH Tea + Pepper inter-crop: Yr 1	Rs 1000	-86 873	-86 873	-86 873	-86 873	426 263	615 074	776 669	919 148	919 148	919 148	430 920	430 920	430 920	430 920	430 920	430 920	430 920	430 920
RH Tea + Pepper inter-crop: Yr 2	Rs 1000		-202 703	-202 703	-202 703	-202 703	994 613	1 435 172	1 812 227	2 144 678	2 144 678	2 144 678	1 005 480	1 005 480	1 005 480	1 005 480	1 005 480	1 005 480	1 005 480
RH Tea + Pepper inter-crop: Yr 3	Rs 1000			-209 138	-209 138	-209 138	-209 138	1 026 188	1 480 733	1 869 758	2 212 763	2 212 763	2 212 763	1 037 400	1 037 400	1 037 400	1 037 400	1 037 400	1 037 400
RH Tea + Pepper inter-crop: Yr 4	Rs 1000				-209 138	-209 138	-209 138	-209 138	1 026 188	1 480 733	1 869 758	2 212 763	2 212 763	2 212 763	1 037 400	1 037 400	1 037 400	1 037 400	1 037 400
Total Gross benefit	Rs 1000	-144 788	-482 625	-831 188	-1 179 750	-396 345	1 674 465	4 288 720	7 302 070	8 662 275	9 450 075	9 360 623	8 221 425	7 046 063	5 870 700	5 870 700	5 870 700	5 870 700	5 870 700
Total incremental net benefit	Rs 1000	-350 817	-1 315 941	-2 331 229	-3 143 447	-2 391 695	-189 986	1 988 691	4 498 949	5 369 477	5 931 503	5 616 278	4 477 080	3 301 718	2 126 355	2 126 355	2 126 355	2 126 355	2 126 355
	Rs mn	-351	-1 316	-2 331	-3 143	-2 392	-190	1 989	4 499	5 369	5 932	5 616	4 477	3 302	2 126	2 126	2 126	2 126	2 126

APPENDIX-25: Rubber Processing Centres - Economic cash flow (48 centres)

		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7-25
Project targets	Units	Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Yr 2021	Yr 2022
Rubber	ha	205	765	1015	1015	0	0	
Rubber group processing centres		2	2	10	17	17		
Economic cash flow - Rubber GPC								
Cost flow:								
GPC established: Yr 1	Rs 1000	12 887	28 289	28 289	28 289	28 289	28 289	28 289
GPC established: Yr 2	Rs 1000		12 887	28 289	28 289	28 289	28 289	28 289
GPC established: Yr 3	Rs 1000			64 435	141 447	141 447	141 447	141 447
GPC established: Yr 4	Rs 1000				109 540	240 460	240 460	240 460
GPC established: Yr 5	Rs 1000					109 540	240 460	240 460
Total cost	Rs 1000	12 887	41 176	121 014	307 565	548 025	678 946	678 946
Net benefits flow:								
GPC established: Yr 1	Rs 1000	-5 152	7 111	7 111	7 111	7 111	7 111	7 111
GPC established: Yr 2	Rs 1000		-5 152	7 111	7 111	7 111	7 111	7 111
GPC established: Yr 3	Rs 1000			-25 762	35 554	35 554	35 554	35 554
GPC established: Yr 4	Rs 1000				-43 795	60 441	60 441	60 441
GPC established: Yr 5	Rs 1000					-43 795	60 441	60 441
Total net benefits	Rs 1000	-5 152	1 958	-11 540	5 980	66 422	170 657	170 657
Total gross benefits	Rs 1000	7 735	43 135	109 474	313 546	614 447	849 603	849 603

APPENDIX-26: Business plans and their economic cash flow

		Yr: 1	Yr: 2	Yr: 3	Yr: 4	Yr: 5	Yr: 6	Yr: 7-25	Yr: 8	Yr: 9	Yr: 10-25	Yr : 11	Yr : 12	Yr : 13	Yr : 14	Yr : 15
Project targets	Units	Yr 2016	Yr 2017	Yr 2018	Yr 2019	Yr 2020	Yr 2021	Yr 2022	Yr 2023	Yr 2024	Yr 2025	Yr 2026	Yr 2027	Yr 2028	Yr 2029	Yr 2030
Economic cash flow - Business Plans																
Passionfruit production																
Size of the Business Plan (ha)	100															
Total production cost flow of the BP	Rs 1000		45 845	19 857	19 857	18 394	12 929	39 297	19 857	19 857	18 394	12 929	12 929	12 929	12 929	12 929
Total production net benefit flow	Rs 1000		44 888	157 500	126 000	88 200	31 500	44 888	157 500	126 000	88 200	31 500	31 500	31 500	31 500	31 500
Total production gross benefit flow	Rs 1000		-957	137 643	106 143	69 806	18 571	5 590	137 643	106 143	69 806	18 571	18 571	18 571	18 571	18 571
Orchid production BP																
Size of the Business Plan (sheds)	200															
Total production cost flow of the BP	Rs 1000		224	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Total production net benefit flow	Rs 1000		-159	46	46	82	82	165	165	165	165	165	165	165	165	165
Total production gross benefit flow	Rs 1000		65	48	48	83	83	166	166	166	166	166	166	166	166	166

APPENDIX-27: Project investment cost based on the COSTAB computation

Project Components by Year -- Totals Including Contingencies (US\$ '000)	Totals Including Contingencies						Total
	2016	2017	2018	2019	2020	2021	
A. Tea Smallholders' Development							
Strengthening Tea Societies in Production & Marketing	82	261	277	293	-	-	913
Market Driven Production Support for Tea	3 386	7 912	8 280	8 522	749	723	29 572
Income and markets diversification for Tea smallholders	2	2 142	2 541	2 192	867	-	7 743
TSHDA Districts units	1 010	780	927	951	889	677	5 232
Subtotal	4 480	11 095	12 024	11 958	2 504	1 400	43 461
B. Rubber Smallholders' Development							
Strengthening Thurusaviya Societies for Production & Marketing	19	101	151	160	-	-	431
Market Driven Production & Processing Support for Rubber	1 611	1 672	2 291	2 318	-	-	7 893
Income and markets diversification for Rubber smallholders	724	1 221	1 690	1 851	-	-	5 485
RDD Districts units	381	229	235	241	248	193	1 528
Subtotal	2 735	3 224	4 367	4 570	248	193	15 337
C. Inclusive Rural Financing							
Financing Tea Smallholders	400	400	400	400	400	-	2 000
Financing Rubber Smallholders	200	200	200	200	200	-	1 000
Awareness Creation and Credit Linkages	89	94	100	106	112	-	502
Subtotal	689	694	700	706	712	-	3 502
D. Project Management							
Project Management Unit	1 290	300	389	256	361	78	2 674
Subtotal	1 290	300	389	256	361	78	2 674
Total PROJECT COSTS	9 194	15 312	17 480	17 490	3 826	1 671	64 974

APPENDIX-28: Project investment economic cost based on the COSTAB computation (this exclude GOSL subsidy payment, IFAD capital grant to tea and rubber cultivation and GOSL contribution to staff salaries)

Project Components by Year -- Base Costs Economic Costs (LKR '000)		Base Cost						
		2016	2017	2018	2019	2020	2021	Total
A. Tea Smallholders' Development								
	Strengthening Tea Societies in Production & Marketing	9 209	27 501	27 501	27 501	-	-	91 711
	Market Driven Production Support for Tea	1 134	3 771	18 919	50 169	96 090	93 930	264 014
	Income and markets diversification for Tea smallholders	250	227 956	256 773	207 286	88 218	-	780 484
	TSHDA Districts units	77 025	85 507	100 604	100 604	90 254	71 347	525 343
	Subtotal	87 619	344 735	403 797	385 560	274 563	165 278	1 661 552
B. Rubber Smallholders' Development								
	Strengthening Thurusaviya Societies for Production & Marketing	2 120	10 388	14 543	14 543	-	-	41 594
	Market Driven Production & Processing Support for Rubber	79 022	16 266	21 608	21 560	-	-	138 456
	Income and markets diversification for Rubber smallholders	75 824	122 720	160 449	167 418	-	-	526 411
	RDD Districts units	30 825	25 414	25 414	25 414	25 414	20 600	153 080
	Subtotal	187 791	174 787	222 014	228 935	25 414	20 600	859 542
C. Inclusive Rural Financing								
	Financing Tea Smallholders	-	-	-	-	-	-	-
	Financing Rubber Smallholders	-	-	-	-	-	-	-
	Aw areness Creation and Credit Linkages	9 540	9 540	9 540	9 540	9 540	-	47 700
	Subtotal	9 540	9 540	9 540	9 540	9 540	-	47 700
D. Project Management								
	Project Management Unit	150 058	33 342	40 338	26 982	35 006	7 651	293 379
	Subtotal	150 058	33 342	40 338	26 982	35 006	7 651	293 379
Total BASELINE COSTS		435 008	562 405	675 690	651 018	344 523	193 529	2 862 173
	Physical Contingencies	-	-	-	-	-	-	-
	Price Contingencies							
	Inflation							
	Local	-	-	-	-	-	-	-
	Foreign	-	-	-	-	-	-	-
	Subtotal Inflation	-	-	-	-	-	-	-
	Devaluation	-	-	-	-	-	-	-
	Subtotal Price Contingencies	-	-	-	-	-	-	-
Total PROJECT COSTS		435 008	562 405	675 690	651 018	344 523	193 529	2 862 173
	Taxes	-	-	-	-	-	-	-
	Foreign Exchange	29 131	-	-	-	-	-	29 131
	Cash flow to the economic analysis (exclude GOSL regular salaries & recurrent cost)	362 092	430 512	527 374	502 703	208 159	94 407	
	Recurrent cost	33 990	61 673	69 498	69 498	58 582	36 205	

Appendix 11: Draft Project Implementation Manual

Table of Contents
Currency Equivalent
Weights and Measures
Financial Year
Abbreviations and Acronyms

SECTION A: STAAR project description

Chapter 1: Introduction and background (one Page)

Describe the purpose and objectives of Project Implementation Manual (PIM), mention who are going to use this PIM, indicate the advantages of using PIM, list documents referred in developing the PIM and also include the project team which worked on the document and date of preparation. Write a paragraph acknowledging the support and cooperation received from senior staff and IFAD CPM. Please state that PIM is a dynamic document and it should be updated as and when required by the PMU staff.

Chapter 2: STARR Project Summary (about 6-10 pages)

Briefly describe the background to the project (refer Project Design Report), outline key factors for the success of the project such critical staff, fund flow, procurement, community participation etc, Describe the project area, target groups and project goal and objectives. Describe the project components, their phasing and financing plan; outline the risks and mitigation measures; describe the environmental impact of the project. Indicate expected project outputs and outcomes. Describe the exit strategy of the project. Include a matrix to show selection criteria for project interventions with columns: type of intervention, facilities offered, targeting criteria, role of community, PMU and local community in the selection and identification of target activities and beneficiaries etc. Attach Project Log-frame at the end of this Chapter for clarity.

Chapter 3: Project Cost Estimates

Insert Tables showing the project cost estimates by components and year.
Insert key summary cost tables as reference.
Add commentary notes on unit costs used and scope for flexibility during implementation.
Ensure cost estimates contain both physical and financial units.

Chapter 4: Project Organization and Management

Briefly describe coordination arrangements, composition of project steering committee, and its roles and functions, frequency of meetings etc., organisational structure of the PMU, staff structure and their duties and responsibilities, organisational structure of district cells – functional and administrative responsibilities of project-recruited staff attached to district cells. Responsibilities of TSHDA/RDD staff who have been assigned STAAR responsibilities.

Arrangements for implementation of project interventions, agencies responsible for the implementation of various project components and subcomponents, etc.
Develop and provide a matrix with following columns: project intervention, coverage, implementation responsibility, procurement, timeline and schedule of implementation etc.

Briefly indicate PMU and project recruited staff in district cells responsibilities or TORs and recruitment of staff and procedures for recruitment. Provide an outline of duties and responsibilities of individual staff and also indicate the need for gender balance in staff structure etc.

Chapter 5: Procurement Procedures

Describe general conditions of procurement and methods of procurement regulations;
Describe the procurement procedures in detail and as applicable to STARR.

Describe approval procedures and appropriate authorities, review mechanisms: prior and ex-post review, review of pre-qualification bidders or tenders, describe the procurement committees and thresholds for approvals at different level. Prepare a 18-month procurement plan and attach it at the end of the chapter.

Use templates used by the Government or in its absence, follow the template provided by IFAD.

Chapter 6: Finance Management (to be extracted from LTB)

Provide a brief introduction regarding purpose of this section.

One or two paragraphs on project costs and financing arrangements.

Describe in brief the flow of fund mechanism.

Describe type of accounts: designated account, project account, district cell account etc., its operations and accountability.

Describe the disbursement procedures, withdrawals and Withdrawal Applications (WA) (details of the attachments to WA).

Include checklist for compiling a withdrawal application.

Describe audit procedures and arrangements in place for conducting effective audit for each year and also describe arrangement for internal audit and its procedures.

Identify annual audit statements and indicate how these statements are prepared and forwarded to IFAD and other entities.

Indicate how project completion report will be carried out.

Indicate a list of registers and records to be maintained at PMU office and district cells such as contract records, individual contract monitoring form etc., and inventory register. Indicate about accounting software to be used in both PMU and district cells.

Summary details are provided in Appendix-7

SECTION B: Tea Smallholders' Development

Chapter 7: Strengthening tea societies in production and marketing

This chapter will describe policy and regulatory framework for the tea smallholder societies, operational procedures for registration and conducting workshops for wider dissemination of facilities and protocol arrangement.

1. Objective and purpose of the component and three sub-components
2. Factors responsible for success
3. Role and responsibilities of tea societies
4. Selection and identification of service providers
5. Selection and identification of tea societies for capacity building and strengthening
6. Support facilities to be provided by STARR
7. Arrangements for implementation and phasing
8. Marketing and linkages with other institutions and agencies
9. Key indicators for monitoring
10. Procedures for performance evaluation of the functioning of tea societies

Chapter 8: Market driven Production Support

Objective and purpose of the sub-component, factors responsible for the successful operation of the production support facilities should be highlighted.

The production support component would support the Government's on-going effort to enhance tea production by supplementing the grants provided by the Government to smallholders whose tea plantations are more than 20 years old as well as those who have vacant patches on their tea lands and require infilling.

Under introduction, the national policy on production support should be incorporate, implementation arrangements for the implementation of the facility and roles to be played by MPI, the line Ministry, TRI and private sector should be incorporated;

Description of proposed facilities, general guidelines for extending the production facilities, approaches to introduction of innovative, labour-saving technologies and procedures for impact of these technologies should be included in the PIM.

Indicators for monitoring and outcome assessment.

Chapter 9: Income and market diversification for Tea Smallholders

Purpose and objective of this subcomponent should be highlighted, type and category of staff, whose skills are to be improved, should be indicated. Factors responsible for successful training and capacity building identified. Types of training courses, areas for training, duration of training and number of participants should be indicated; training institutes and trainers training should be included; Training calendar for staff training and training of community should be prepared and included in the PIM.

Under this sub-component, the Project would support a range of players improve their level of technical knowledge and expertise regarding tea. The Tea Research Institute would be the main resource to develop the training modules and training courses to link research with dissemination.

Strengthening of existing extension training approach for greater outreach to smallholders, training in land preparation, soil conservation, fertilization, eco-restoration, organic production and sustainable natural resource management in collaboration with the private sector and TRI;

Involvement of institutions such as Department of Animal Production & Health and Department of Export Agriculture for intercropping and institutions such as Industrial Development Board for non-farming activities.

Identification of young men and women to train them as para extension workers; selection and upgrading the skills of existing tea pruners, training of TSHDA's extension agents and engaging the services of BDOs and animators.

Description of facilities provided under STARR and criteria for providing these support and facilities.
Indicators for monitoring and outcome assessment

Chapter 10: Implementation Arrangements

Purpose and objective of this component
Organisational structure of TSHDA
Roles and responsibilities of the district/regional TSHDA staff
Facilities and support provided by STARR
TORs for Tea Inspectors, CDOs, BDOs and Animators,
TOR for Service Providers and procedures for engaging their services and duration of service
Arrangements for implementation including coordination mechanism
Arrangements for M&E

SECTION C: Rubber Smallholders' Development

Chapter 11: Strengthening rubber societies including processing and market sensitivity

This chapter will describe policy and regulatory framework for the Rubber smallholder societies, operational procedures for registration and conducting workshop for wider dissemination of facilities,

1. Objective and purpose of the sub-component
2. Factors responsible for success of the sub-component
3. Role and responsibilities of Rubber societies
4. Selection and identification of service providers for promoting the societies
5. Capacity building and strengthening of rubber societies
6. Support facilities to be provided by STARR
7. Arrangements for implementation and phasing
8. Marketing and linkages with other institutions and agencies
9. Key indicators for monitoring and outcome assessment
10. Procedures for performance evaluation of the functioning of rubber societies

Chapter 12: Market driven rubber production support

Objective and purpose of the sub-component; factors affecting the successful operation of the production support facilities should be highlighted.

The production support sub-component supports the Government's on-going effort to expand rubber production by supplementing the grants provided by the Government to smallholders' rubber plantations.

Under introduction, the national policy on production support should be incorporated, identify roles to be played by the line Ministry, research institutes and private sector and incorporate them to the section.

Description of proposed facilities, land survey and procedures for land allocations, general guidelines for extending the production facilities, approaches to introduction of innovative, labour-saving technologies and facilities for inter-cropping highlighted.

Indicators for monitoring and impact assessment

Chapter 13: Income and markets diversification for Rubber smallholders

Purpose and objective of this sub-component should be highlighted, types and categories of staff, whose skills are to be improved, should be indicated. Factors responsible for successful training and capacity building identified. Types of training courses, areas for training, duration of training and number of participants should be indicated, training institutes and trainers training should be included. Training calendar for staff training and training of community should be prepared and included.

The RII is the main resource to develop training modules and training courses to link research with dissemination to help rubber smallholders diversify their income sources through profitable farming. Services of institutions such as Department of Animal Production & Health and Department of Export Agriculture for intercropping and institutions such as Industrial Development Board for non-farming activities. Steps to strengthen the existing or introducing new marketing channels for either latex (if competitive) or processed sheet rubber through the facilitation of mutually beneficial business relationships between rubber smallholders and the private sector need to be elaborated.

Strengthening of existing extension training approach for greater outreach to smallholders;
Training in land preparation, soil conservation, fertilization, eco-restoration and sustainable natural resource management and rubber processing in collaboration with the private sector and RRI;

Identification of young men and women to train them as para extension workers; selection and upgrading the skills of latex tapers, training of RDD's extension officers.

Procedures of performance evaluation of Rubber Group Processing Centres (RGPC) – administration, finance management, MIS including M&E arrangements.

Description of facilities provided under STARR and criteria for providing these support and facilities;
Indicators for monitoring and impact assessment.

Chapter 14: Implementation Arrangements

Purpose and objective of this sub-component

Organisational structure of RDD

Roles and responsibilities of the district RDD staff

Facilities and support provided by STARR

TORs for RDOs, CDOs, BDOs and animators

TOR for Service Providers and procedures for engaging their services and duration of service

Arrangements for implementation including coordination mechanism

Arrangements for M&E

SECTION D: Inclusive Rural Financing

Chapter 15: Implementation arrangements and credit provision

Mobilizing and sensitizing potential farmer beneficiaries for individual credit financing for IGAs - by CDOs and BDOs.

Mobilizing groups of farmers for production as groups, ex. intercrops such as maize, passion fruits and develop Business Plans (BP) – by BDOs with the assistance of the Business Linkage Coordinator in PMU where necessary.

Training need assessment for beneficiary entrepreneurs (soft training and skills training), methodology of procuring service providers and responsibilities,

Provision of training – sequence, timing etc.

Sensitization of branch credit officers in two banks about STARR credit requirements,

Programmes for borrower-bank linkages – credit clinics.

Steps to monitor implementation of the conditions/clauses outlined in the MoU with partner banks

Credit provision – tea and rubber-related credit, intercrops, other IGAs and group rubber processing centres – credit limits and collateral requirements, loan conditions including interest rates and re-payment period.

A template for is attached for easy reference

Chapter 16: Management Information System

Purpose of MIS and approach to the development of MIS for the project

Project M&E framework: (i) first level output monitoring; (ii) second level outcome monitoring and (iii) third level impact evaluation,

Indicators for output monitoring,

Indicators for outcome monitoring,

Indicators for impact evaluation,

Impact assessment indicators and anchor indicators – which have also been included at the impact level of STARR Log-frame.

Specific studies required and their cost estimates

Reporting and communication: annual reports, RIMS survey reports

Attachments: RIMS indicators for STARR;

Chapter 17: Guidelines for preparing Annual Work Plan and Budget

Purpose and objective of this section,

General introduction on the preparation of AWPB,

Review of formats used by ongoing project,

All annual plans can be prepared based on the concept of result-oriented approach. This can be effectively done using both Cost Tables and Project Log-frame. The result-oriented AWPB will typically have the following elements:

- Objective and expected result of component
- Indicators for monitoring and RIMS
- Quarterly targets for implementation (physical)
- Appraisal Target (physical)
- AWPB Target (physical)
- Unit cost for the proposed activity
- Achievements by Appraisal estimates and Annual Plan estimates
- Budget estimates by Appraisal and Annual plan
- Financing rule
- Budget Category
- Procurement Methods etc.

Key Tools for the preparation of AWPB are: project Log-frame, detailed costable, AWPB template, financing plan, financing rules in the procurement methods, Finance Agreement, last project progress report.

KEY ANNEXES

1. Project Log-frame, updated (Chapter 2)
2. Criteria for selection and identification of project interventions Matrix (Chapter 2)
3. Costables by components showing financing rules (Chapter 3)
4. TOR for PMU staff (Chapter 4)
5. District cells Organisation Charts (Chapter 4)
6. Procurement Plan (Chapter 5)
7. Sample form for Record of Contracts (Chapter 6)
8. Sample form for tracking individual contracts (Chapter 6)
9. Staff and community training programme/Calendar (Chapter 9)
10. Template for BP (Chapter 15)
11. Indicators for output, outcome and impact monitors (Chapter 16)
12. RIMS Indicators (Chapter 16)
13. Template for AWPB (Chapter 17)

Appendix 12: Compliance with IFAD Policies

A. Overview

1. IFAD's Strategic Framework provides the overall goal and objectives of the Fund and its key policy guidelines provide the parameters of project design and implementation. The Country Strategic Opportunities Programme (COSOP) for Sri Lanka (2015-2020) identified two strategic objectives for the country (i) Smallholders benefit from sustainable productivity enhancement in a more resilient livelihood system and (ii) Poor rural women and men are effectively connected to markets. These objectives form the fundamental building block of the STARR project. The design of the current project also capitalized on the presence of the guidance tools relevant for the current project such as targeting, gender, natural resource management, private sector, enterprise development, rural finance, climate change and the environment. IFAD's poverty targeting and gender sensitive design and implementation guidelines which were updated in January 2013 were also completed for the Project and are provided at the end of this appendix as Annex 1 and Annex 2. An Environmental and Social Review Note was prepared to assess the environmental and social impact of the project and determine its environmental classification, and a brief summary is provided in section G of this appendix.

B. Strategic Framework (2011-2015)

2. IFAD's Strategic Framework (2011-2015) reiterates its unique mandate of improving rural food security and nutrition and enabling rural poor to overcome poverty. The Framework identifies eight principles of engagement, and the Project would adhere to those relevant for the current investment. In particular, the Project would empower poor rural people by (i) strengthening their organizations, capacities and skills, (ii) enabling them to enhance their production and links with markets for the production and sale of tea and rubber as well as other intercrops such as pepper, maize, dairy etc. The Project would strengthen the existing marketing arrangements between smallholders and tea and rubber processors, as well as for niche products such as organic tea, mushrooms, passion fruit, etc.

C. Targeting and Gender Mainstreaming

3. The Project activities, implementation arrangements and M&E system have been designed in compliance with the IFAD Targeting Policy as well as the IFAD policy on gender equality and women's empowerment (2012). Detailed discussions were held with men and women farmers during the Project design to ensure that the Project components and activities addressed their critical production and marketing constraints. The Project would make special provision for targeting the most vulnerable men and women and will specify specific targets for participation of women, the poor and the youth and provision of assets, technical training and access to financial services for them. The target group for the Project has been clearly defined and the selection of the Project area is in keeping with poverty criteria and targets smallholders who would otherwise not be able to participate in the programme for replantation of tea and expansion in the area under rubber. The participation of women would also be carefully monitored throughout the implementation process. Gender disaggregated data would be included in the log-frame, in each component and in the targeting strategy. The appendix on poverty targeting and gender outlines the Project approach to these two important aspects.

D. Private-sector strategy - Deepening IFAD's engagement with the private sector (2011)

4. IFAD outlined its strategy for private-sector development and partnership in April 2005 and further refined it in 2011.³⁹ IFAD intends to deepen its engagement with the range of private sector providers with the aim of creating markets for its target groups; improving their access to inputs, services, knowledge and technology; and increasing income-generating or job-creating opportunities for its target populations. This strategy recognizes that in most developing countries, the private sector is now responsible for a majority of employment and income-generating opportunities, and has become the driving force for poverty reduction. IFAD has an essential part to play in equipping the rural poor to interact more equitably with new market forces and in making market

³⁹ Private-Sector Strategy. Deepening IFAD's engagement with the private sector. IFAD. February 2012.

relationships work for them. The main focus is on encouraging private sector linkages with rural enterprises, building linkages for the rural private sector with markets and encouraging private sector investment in increasing investment and job opportunities which will benefit the poor. Rural market economies are fuelled by the economic relationships that exist among small rural producers and with other actors in private-sector markets

5. The Project is in full accord with this strategy and places strong emphasis on further developing and strengthening the linkages of smallholder tea and rubber growers with licensed tea and rubber collectors, processors, undertake collective activities to reduce transactions cost, enhance bargaining power and enable them to produce better quality of tea and rubber to secure a higher price for their produce. Private sector players have a business interest in strengthening their relations with small producers especially given that there is strong competition for both tea and rubber and many of the tea processors are working below capacity. There is need to facilitate partnerships with the private sector tea and rubber processors in a manner which is to the mutual benefit of both the smallholder tea and rubber growers and processors. This relationship would be further strengthened where speciality products such as organic tea, speciality teas or a high quality production can guarantee a premium. A few private sector leaders catering to a niche market in Europe, US and Japan are playing a lead role in the use of eco-restoration methods and are keen to enlist a wider range of smallholders into contractual arrangements and train them to produce organically.

6. In the introduction of alternate livelihood opportunities or supplementary sources of income such as such as livestock, dairy, mushroom cultivation, high value horticulture and vegetable products, the Project would follow an approach which works from the market backwards to ensure that there is a demand for these products and that market links are established with private firms prior to initiation of these activities to ensure adequate inputs are supplied and the produce is marketed. The Project would promote these activities in a manner which ensures a certain minimum volume of produce to attract the private sector.

7. Many of the corporate sector players involved with the processing of tea and rubber also offer a range of services to the smallholder growers to attain their loyalty, secure their supply lines as well as address their agenda of corporate social responsibility to provide a range of financial, social and welfare services to the smallholders. These include advances and loans, employment opportunities, some investment in community development and various type of extension training services. The Project would build on this agenda by trying to facilitate closer relationship between the Tea and Rubber Societies and the private sector to assess other opportunities for collaboration such as arranging value chain financing, joint investment in community infrastructure, sponsoring of scholarships and vocational training for the youth.

E. Environment and Natural Resources Management Strategy (2011)

8. IFAD's new ENRM strategy approved in May 2011⁴⁰ is at the core of delivering IFAD's poverty reduction and sustainable agriculture mandate because of its target group's reliance on the environment and natural resources for their livelihoods. The goal of the ENRM policy is "to enable poor rural people to escape from and remain out of poverty through more-productive and resilient livelihoods and ecosystems." The purpose is "to integrate the sustainable management of natural assets across the activities of IFAD and its partners. In addition, the strategy highlights the need to maximize the positive environmental impact of value chains, assess the downside risks and build on its comparative advantage of working through community-based approaches. IFAD recognizes that poor rural people face a series of interconnected natural resource management challenges. They are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded. This is also true in Sri Lanka where smallholder tea producers are impacted by the dry season when yields of tea drop and plants are subject to high mortality rates.

9. The movement towards organic production, bio-foods and RFA, UTZ and GlobalGap certification is gaining ground in Sri Lanka. Some private sector companies have received certification under the most stringent standards for export to Europe, Japan and the US for adhering to standards of sustainable, fair trade and organic production. Other companies have adopted the principles of the Rainforest Alliance and adhere to sustainable natural resource management and fair trade practices. The Project would capitalise upon the growing commitment of the private sector to source their produce from smallholders which adhere to the principles of sustainable resource

⁴⁰ IFAD's Environment and Natural Resource Management Policy: Resilient livelihoods through the sustainable use of natural assets. May 2011.

management. To better prepare the farmers to meet this demand in the future, the Project would provide an opportunity to provide farmers knowledge and awareness about Good Agricultural Practices, organic production, soil conservation methods, improving soil health and fertility, eco-restoration of soils, awareness of the principles of the rainforest alliance which promote sustainable natural resource management. An awareness raising and training module would be developed by the Project and implemented in partnership with interested private sector partners. The staff of the TSHDA, RDD, Forest Department would also be introduced to some of these more sustainable practices and modern advances in plant technology. The corporate level agreement between IFAD and Unilever would be capitalised upon to build on the partnership as well as arrangements with other leading companies such as Bio-foods, Finlays, etc.

F. Rural Finance Policy (2009) Decision Tools (2010) and Technical Note (2011)

10. The project design carefully reviewed the previous IFAD experience with rural finance components and the decision of whether to provide for a specific financial services component and if not how to address this constraint in keeping with the *IFAD Rural Finance Policy and the IFAD Decision Tools for Rural Finance*. The design team reviewed IFAD's six guiding principles outlined in its rural finance interventions namely: (i) support access to a variety of financial services; (ii) promote a wide range of financial institutions, models and delivery channels; (iii) support demand-driven and innovative approaches; (iv) encourage – in collaboration with private sector partners – market-based approaches that strengthen rural financial markets, avoid distortions in the financial sector and leverage IFAD's resources; (v) develop and support long-term strategies focusing on sustainability and poverty outreach; and (vi) participate in policy dialogues that promote an enabling environment for rural finance.

11. Smallholders need a range of financial services which includes remittance services, transfer of payments, savings, insurance and loan products. Most smallholders have bank accounts because of a variety of reasons; namely, large remittances from abroad, manner in which their payments from tea and rubber factories are received, government salaries, payment of social safety net payments, etc. The rate of financial inclusion in the country is 69% which is among the highest in Asia. Sri Lanka has an annual inflow of remittances valued at about USD 7 billion mainly from the large workforce employed outside. There is a large range of government and commercial banks which have gradually increased their rural outreach and the products available to tea and rubber producers, livestock producers, dairy producers, skilled individuals and small entrepreneurs, etc. Government and commercial banks are also mandated by the Government to provide credit for a range of activities. There is a large volume of funds which banks have for rural lending. However, these do not always reach the poor smallholders because of collateral and surety requirements, cumbersome loan procedures and aversion to risks inherent in the agriculture sector. For quick loans, rural households try and access the informal money lenders and pawnbrokers at rates of interest which can vary between 4% and 10% per month. Thus despite the availability of a range of services, rural smallholders are unable to avail of these lines of credit. There is need for the project to adopt an approach which would enable smallholder access to financial services, especially loans, available with the formal sector.

12. The commercial and government banks do not necessarily need a line of credit for providing financial services to smallholders but a mechanism which can reduce their risk of lending. This review led to the decision that the Project would not provide a line of credit as has been provided in previous projects but would simply facilitate access to financial of the smallholders to available financing for production, harvesting and marketing of gree tea leaf and to a lesser extent also for rubber products. The Project would take advantage of already existing facilities for tea (Bank of Ceylon and People's Bank) and rubber processing (Bank of Ceylon) that are offered by the banks, but with scope for more traction using the benefits of a project context and staff and promotional facilities offered at the local level. This approach is fully consistent with IFAD's finance policy and also addresses the needs of the smallholders.

G. IFAD Climate Change Strategy (2010) and IFAD's Social, Environmental and Climate Assessment Procedures (2014)

13. IFAD's climate change strategy (May 2010) recognizes that the speed and intensity of climate change are outpacing the ability of poor rural people and societies to cope. IFAD recognizes that climate-related risks, and potential opportunities, can be addressed more systematically within its Projects and policy advice. The goal of this strategy is to maximize IFAD's impact on rural poverty in

the context of climate change. The growing periods of drought and the frequency in its recurrence in Sri Lanka could be one manifestation of climate change. The tea sector is in particular vulnerable to climate change because of the impact on yields and plant health. IFAD has committed to playing a proactive role in the UN Zero Carbon Initiative. By helping smallholders increase the area under rubber and protecting the forest lands from the slash and burn agriculture which was previously practiced, the Project would contribute to this important objective.

14. The project design assessed the environmental impacts of the project components (i.e. project activities, locations and magnitude of components) against the “IFAD’s Social, Environmental and Climate Assessment Procedures (2014)” as well as the National Environmental Policy and Country guidelines on environmental management of Sri Lanka. The following are the main findings of the assessment: (i) the proposed project activities (i.e. replanting of tea, cultivation of rubber, intercropping, private plant nurseries, organic and environmental compliant tea, access roads and rubber group processing centres, market linkages and product diversification, sustainable commercial business activities, strengthening tea and rubber societies) will bring many positive environmental impacts and socio-economic benefits to the communities with no or minimal negative environmental and social impacts; and (ii) components or subcomponents in the Project will have no potentially severe environmental impacts, such as road development in ecologically sensitive areas, deforestation, loss of natural habitats and biodiversity, groundwater-based development, significant increased use of agrochemicals, risk of destruction and pollution, conversion and loss of physical cultural resources and project components which may result in significant adverse social impacts to local communities.

15. When consider the “IFAD’s Social, Environmental and Climate Assessment Procedures (2014)” the most of the project activities falls within the environmental impact type (nature of components): “Agricultural intensification and/or expansion of cropping area in “non-sensitive areas, small and micro enterprise development projects, natural resources-based value chain development, projects involving operations that might have minor adverse impacts on physical cultural resources and construction or rehabilitation of rural roads in “non-sensitive areas”.

16. Based on the above facts (i.e. nature of components) when considering the “IFAD’s Social, Environmental and Climate Assessment Procedures (2014)”, the Project falls under the *Category B where the impacts can be readily remedied by appropriate preventive actions and/or mitigation measures*. Satisfactory incorporation of mitigation measures identified in the ESMP fulfills the Environmental and Social Impact Assessment (ESIA) requirement for the Project. Further environmental analysis will be undertaken in the course of project implementation. The environmental impacts caused by the project activities can be successfully mitigated by adopting suggested mitigation measures in the ESMP.

ANNEX 1: IFAD'S TARGETING POLICY - CHECKLIST FOR DESIGN

	DESIGN
1. Does the main target group - those expected to benefit most- correspond to IFAD's target group as defined by the Targeting Policy (poorer households and food insecure)?	Yes. The main target group's sole livelihoods are confined to either tea or seasonal crops and daily wage labour. The target group of the Project would be 23,430 smallholder tea producers whose yields of tea are low mainly because of the age of the plants. The average area of the smallholders under tea is 0.33 hectares. It is expected that rubber would be cultivated by about 3,330 smallholders under the project on one hectare area. The identified districts, as elucidated in the socio economic study, have not only high levels of poverty incidence but also record immediate need to redress poor tea production due to low yielding crops and high opportunities for rubber production for encroachers. Food insecurity is not an issue in the operational project areas. However inadequate sources of livelihoods supplemented with low incomes are an issue.
2. Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods - with attention to gender and youth differences? (matrix on target group characteristics completed?)	Target groups have been identified and described according to their socio economic characteristics. As women play a major role in tea, there is a heavy emphasis on recognising and acknowledging their roles and contribution in the tea and rubber sector. Detailed discussions were held with them during the Project design and design completion to ensure that the Project components and activities were consistent with their needs and constraints. The COSOP has the matrix on target groups and it was recommended not to duplicate it.
3. Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups? What is the evidence? (matrix on analysis of project components and activities by principal beneficiary groups completed?)	Tea is a traditional crop in the areas identified and is the sole income source for most of the beneficiary households. Rubber is a new crop that is being promoted in encroached areas, has high returns and is environmentally friendly. Lands are being granted for use by the government to the people to grow rubber and intermediate crops in order to expand their livelihood sources as well as rubber.
4. Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy, involving some or all of the following measures and methods:	
4.1 Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentrations of poor people	The targeted districts have been selected based on their production of tea, potential for rubber and poverty incidence. All districts identified (and in the case of rubber, the GN divisions) have high incidence of poverty and low economic opportunities. Divisional Secretary Divisions have also been identified based on both poverty and agronomic feasibility of developing tea. Rubber cultivation depends on the land availability.
4.2 Direct targeting - when services or resources are to be channelled to specific individuals or households	The project will have a special focus on poor and women headed households who have less than an hectare of tea land and with no additional substantial source of income. They will be provided with all services of the project. Livelihood options would be provided to those households who would suffer the most in the re-planting programme i.e. the poor and vulnerable households including women headed households. Grama Niladhari and Samurdhi officer of the villages will assist the project to select the beneficiaries.
4.3 Self targeting – when goods and services respond to the priority needs, resource endowments and livelihood strategies of target groups	The types of activities that have been selected are expected to encourage only the small, poor and vulnerable household.
4.4 Empowering measures - including information and communication, focused capacity- and confidence-building measures, organisational support, in order to empower and encourage the more active participation and inclusion in planning and decision making of people who traditionally have less voice and power	(i) Recognising the importance of the role of the tea and rubber societies and the need to strengthen them for organizing smallholders; (ii) Identification of specific targets, with the help of the societies, for women and poor households to ensure their inclusion; (iii) a credit linkages through workshops etc effectively mobilise state banks own resources and their existing products for lending to smallholders; (iv) backward linkages with the market to understand market demands and build buy-back and contract farming arrangements especially for products with a niche market -

	examples are organic tea, passion fruits etc; (v) allocation of land use rights to encroachers in the tea lands and to 30% women in the rubber lands
4.5 Enabling measures –to strengthen stakeholders’ and partners’ attitude and commitment to poverty targeting, gender equality and women’s empowerment, including policy dialogue, awareness-raising and capacity-building	Poverty and gender issues will specifically be highlighted. The project will ensure the inclusion of women and men farmers as participants to ensure that the women and men farmers have space to voice their views and opinions. The capacity building process of the tea and rubber societies will address the need of this aspects and also the societies will get involved in targeting to facilitate this process.
4.6 Attention to procedural measures - that could militate against participation by the intended target groups	There are no procedural constraints or undue burden on poor communities that will limit or hinder their participation in project activities. The risk of elite capture of benefits through the societies and targeting of project services will be monitored on a regular basis. The smallholders would be provided support in obtaining land certificates from the local authorities to confirm their use rights. The risk of lack of capital to invest in the tea and rubber lands is being addressed through providing supplementary financing as well as changing the manner in which the payments are structured. Intercropping arrangements are proposed to assist smallholders earn supplementary incomes during the time that the tea and rubber plantations reach maturity.
4.7 Operational measures - appropriate project/programme management arrangements, staffing, selection of implementation partners and service providers	The model of project management which is being proposed for the STARR project is based on utilising the considerable public sector workforce and extension staff that exists at the district and village level. Where required, the extension staff would be supported by use of technical assistance, implementation support and recruitment of field facilitators. The Project would engage a few individuals on a competitive basis for areas in which Government staff generally have limited experience such as developing a monitoring and evaluation system, developing an extension training strategy linking research with extension and models for engagement with the private sector and financial institutions.
5. Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at mid-term review? Does the M&E framework allow for the collection/analysis of sex-disaggregated data and are there gender-sensitive indicators against which to monitor/evaluate outputs, outcomes and impacts?	Collection of gender disaggregated indicators is a key requirement of the log-frame and all targets have been established with gender targets indicated separately. Progress reporting and evaluation formats would be designed to capture sex-disaggregated data at all levels and to record progress. Project staff responsible for data collection and monitoring would be trained in understanding and applying gender analysis and mainstreaming principles. The style of formats etc have been suggested.

ANNEX 2: IFAD’S KEY FEATURES OF GENDER-SENSITIVE DESIGN AND IMPLEMENTATION

Gender checklist	Design
<p>1. The project design report contains – and project implementation is based on - gender-disaggregated poverty data and an analysis of gender differences in the activities or sectors concerned, as well as an analysis of each project activity from the gender perspective to address any unintentional barriers to women’s participation.</p>	<p>The design reports contains in detail sex disaggregated data supplemented with critical gender analysis of the poverty situation which is then co related to the designed activities. The project has been designed keeping in mind the important role women play in the agricultural sector especially in tea and rubber and in recognising their contribution and acknowledging their roles. Fixed targets for each sub component have been identified for women (and youth in some). This is to ensure that the design has a results based framework for operation where gender is concerned.</p>
<p>2. The project design report articulates – or the project implements – actions with aim to:</p> <ul style="list-style-type: none"> • Expand women’s economic empowerment through access to and control over productive and household assets; 	<p>The project has designed activities to expand women’s economic empowerment like access to training, tapping commercial loans that are specially designed for women, strengthening market linkages for women entrepreneurs, supplementary livelihood options, processing units and livelihood trainings. Fixed targets have been set.</p>
<ul style="list-style-type: none"> • Strengthen women’s decision-making role in the household and community, and their representation in membership and leadership of local institutions; 	<p>Project activities have been designed to allow for greater participation of women in the tea and rubber societies. Priority for project funding for societies will be given to those societies that have been able to include women as members and as office bearers. Fixed targets have been set for the societies.</p>
<ul style="list-style-type: none"> • Achieve a reduced workload and an equitable workload balance between women and men. 	<p>Activities like collective voluntary community work (shramadan) on women managed and poor households have been designed for eligibility of funding for societies. Eco restoration will be implemented in poor women managed households who are not able to afford the preliminary loss of livelihoods. An additional subsidy has been allocated for the poor and vulnerable households, which women also can access, for the initial capital investment in the tea and rubber components.</p>
<p>3. The project design report includes one paragraph in the targeting section that explains what the project will deliver from a gender perspective.</p>	<p>The gender focus would be on furthering women’s agency by recognizing and acknowledging her role and contribution in the tea and rubber sector. Women will be encouraged to become key decision makers in the societies and land use titles will be sought to be made in the name of women. Women managed households will be a key target group in the project to build up their asset base and capacity.</p>
<p>4. The project design report describes the key elements for operationalizing the gender strategy, with respect to the relevant project components.</p>	<p>The project design has given in detail the elements for the gender strategy and has made budgetary allocations for the same. Risk management strategies have been identified in case of non-implementation of the gender strategy.</p>
<p>5. The design document describes - and the project implements - operational measures to ensure gender-equitable participation in, and benefit from, project activities. These will generally include:</p>	
<p>5.1 <i>Allocating adequate human and financial resources to implement the gender strategy</i></p>	<p>A senior Gender Consultant will be recruited for initial 3 years to streamline the activities from a gender point of view. Financial resources and resource allocations have been made to implement the strategy.</p>
<p>5.2 <i>Ensuring and supporting women’s active participation in project-related activities, decision-making bodies and committees, including setting specific targets for participation</i></p>	<p>Fixed targets for each sub component have been identified for women (and youth in some). This is to ensure that the design has a results based framework for operation where gender is concerned. Women will be encouraged to become key decision makers in the societies and land use titles will be sought to be made in the name of women. Livelihood</p>

	<p>support will be provided to women who have viable plans. Women input nurseries for tea are being targeted along with their participation in the trainings and other project services.</p>
<p>5.3 <i>Ensuring that project/programme management arrangements (composition of the project management unit/programme coordination unit, project terms of reference for staff and implementing partners, etc.) reflect attention to gender equality and women's empowerment concerns</i></p>	<p>Overall the Project Manager, under the guidance of the Gender Consultant, is responsible for implementing the gender strategy. Recruitment procedures, terms of reference and performance appraisals have been included as aspects for the gender strategy. The design has adequately listed out conditions for procurement of gender responsive service providers.</p>
<p>5.4 <i>Ensuring direct project/programme outreach to women (for example through appropriate numbers and qualification of field staff), especially where women's mobility is limited</i></p>	<p>Fixed targets for each sub component have been identified for women. This is to ensure that the design has a results based framework for operation where gender is concerned. The Field Animators at the village level will be supported by experienced Community Development Officer at each district level to ensure that women are encouraged to take active role in the project and to see that the targets are met with.</p>
<p>5.5 <i>Identifying opportunities to support strategic partnerships with government and others development organizations for networking and policy dialogue</i></p>	<p>There are opportunities designed for strategic partnership with government, private sector and other development organizations for increasing networking and policy dialogue. Poverty and gender issues will specifically be highlighted. The project will ensure the inclusion of women and men farmers as participants to ensure that the women and men farmers have space to voice their views and opinions.</p>
<p>6. The project's logical framework, M&E, MIS and learning systems specify in design – and project M&E unit collects, analyses and interprets sex- and age-disaggregated performance and impact data, including specific indicators on gender equality and women's empowerment.</p>	<p>The gender strategy includes a separate strategy for gender mainstreaming. This includes monitoring sex disaggregated data, annual project reporting systematically on gender gaps and gender-related project successes. The logical framework has indicators to monitor and evaluate gender-disaggregated performance and impact. The PMU to ensure establishing the MIS system with sex-disaggregated data collection and gender based analysis.</p>

Appendix 13: Contents of the Project Life File

1. Aide Memoire
2. List of People Met

XXXXX DELETED

1. In order to cater to the requirements of the Financing Agreement (FA) and make proper assessment of project performance, resource allocation and resource utilisation, project authorities would establish an appropriate system of accounting and internal control prior to receipt of initial deposit in to the Designated Account (DA). Project Management Unit (PMU) would maintain appropriate accounting records in line with the International Public Sector Standards (IPSAS) and IFAD's requirements. To facilitate this purpose Project would acquire and install a suitable accounting software package in the system of accounting prior to receipt of second installment of the initial deposit (Authorized Allocation) from IFAD. The accounting system of the Project would reveal all financial transactions carried out during the project period utilizing IFAD funds and government counterpart funds separately under each component by specified expenditure categories. It would be the responsibility of the PMU to consolidate all accounts of District Project Management Cells (DPMCs) and prepare a consolidated account for the Project at the end of each financial year and submit to the Auditor General for auditing. A copy of the same set of accounts would be forwarded to IFAD not later than four months after closing of the relevant financial year. Disbursement procedure and project specific financial management procedures would be outlined in the Letter to Borrower (LTB) agreed between the Ministry of Finance and Planning on behalf of the Government of Sri Lanka (GoSL) and IFAD. This would specify IFAD procedure applicable to the project, including mode of payment for disbursement, withdrawal procedures, auditing requirements, opening of accounts and thresholds for procurement and Statement of Expenditure (SOE) procedure. Detailed accounting procedure of IFAD is explained in the "Financing Administration Manual" which is available in IFAD Website.