



Investing in rural people

Republic of India

Meghalaya: Livelihoods and Access to Markets Project

Final project design report

Main report and appendices

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Currency equivalents

Currency Unit	=	India Rupee (INR / Rs)
US\$1.0	=	INR 62.00

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
ADC	Autonomous District Council
AFC	Agriculture Finance Corporation
AOS	Annual Outcome Survey
APD	Additional Project Director
AWPB	Annual Work Plan and Budget
BASIX	A non-government micro-finance and livelihood promotion company
BDS	Business Development Services
BDU	Basin Development Unit
BIAF	Resource NGO specialising in livestock development
BMGF	Bill and Melinda Gates Foundation
BoD	Board of Directors
BPL	Below Poverty Line
CAAA	Controller of Aid, Accounts and Audit
CEO	Chief Executive Officer
CLF	Cluster Level Federation
CRP	Community Resource Person
DAH&V	Department of Animal Husbandry and Veterinary
DC	Deputy Commissioner
DoA	Department of Agriculture
DoH	Department of Horticulture
DPC	District Project Coordinator DPM District Project Manager
DPMU	District Project Management Unit
DPT	District Project Team
EFC	Enterprise Facilitation Centre
EoI	Expression of Interest
FNGO	Facilitating NGO
GIZ	German Development Assistance
GoI	Government of India
GoM	Government of Meghalaya
GSDP	Gross State Domestic Product
HH/hh	Household
IAS	Indian Administrative Service
IBDLP	Integrated Basin Development and Livelihoods Programme
ICAR	Indian Council for Agricultural Research
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation (of the World Bank)
IDFC	Infrastructure Development Finance Company
IGA	Income Generating Activity
INR	Indian Rupee (also Rs)
INRMP	Integrated Natural Resource Management Plan
IPM	Integrated Production and Marketing
IVCS	Integrated Village Cooperative Society
KCC	Kissan Credit Card
KM	Knowledge management
KS	Knowledge Services
LAMP	Livelihoods and Access to Markets Project (formerly MIRDP)

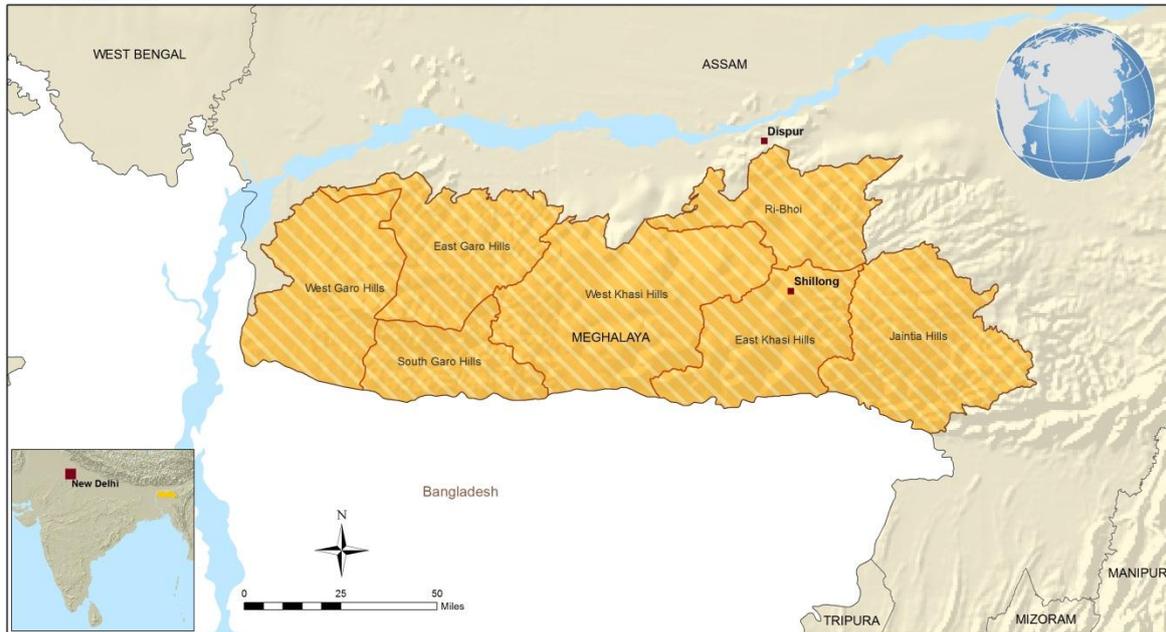
LF	Lead Farmer
LIFCOM	Livelihood Investment and Finance Company
M&E	Monitoring and Evaluation
MBDA	Meghalaya Basin Development Authority
MBMA	Meghalaya Basin Management Agency
MCAB	Meghalaya Cooperative Apex Bank
MDONER	Ministry for Development of the North East Region
MGNREGA/S	Mahatma Gandhi National Rural Employment Guarantee Act/Scheme
MIDFC	Meghalaya Infrastructure Development and Finance Corporation
MIE	Meghalaya Institute of Entrepreneurship
MIG	Meghalaya Institute of Governance
MIRDP	Meghalaya Integrated Rural Development Project (now LAMP)
MIS	Management Information System
MLIPH	Meghalaya Livelihood and Improvement Project for the Himalayas
MoU	Memorandum of Understanding
MRDS	Meghalaya Rural Development Society
MTPO	Meghalaya Trade Promotion Organisation MTR Mid-Term Review
NABARD	National Bank for Agriculture and Rural Development
NERCORMP	North East Region Community Resource Management Project for Upland Areas
NGO	Non-Government Organisation
NR	Natural Resources
NRLM	National Rural Livelihoods Mission NRM Natural Resource Management
PAC	Primary Agricultural Cooperative
PD	Project Director
PDS	Public Distribution System
PMC	Project Management Committee
PMU	Project Management Unit
RCS	Registrar of Cooperative Societies
RBI	Reserve Bank of India
RIMS	Results and Impact Monitoring System
RNGO	Resource NGO
RRTC	Rural Resource and Training Centre (Bosco Outreach Center)
SBI	State Bank of India
SCSTE	State Council for Science Technology and Environment
SFAC	Small Farmers Agribusiness Consortium
SHG	Self Help Group
SPMU	State Project Management Unit
SRI	System of Rice Intensification
TLS	The Livelihood School (of BASIX)
ToR	Terms of Reference
USD	United States Dollar
VEC	Village Employment Council
VF	Village Facilitator
VDF	Village Development Fund
WP	Working Paper

Map of the project area

India

Meghalaya Integrated Rural Development Project

Concept note



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 | 12-04-2013

Further maps are in Working Paper 1, Annex II.

Executive Summary¹

Background: the Meghalaya Livelihoods and Access to Markets Project (LAMP) will follow on from, and up-scale the recently completed Meghalaya Livelihood Improvement Project in the Himalayas (MLIPH). However it will have a rather different approach and implementation methodology, being part of the State Governments flagship Integrated Basin Development and Livelihoods Programme (IBDLP) and focusing on natural resource management, enterprise development and market access rather than on the formation of self-help groups.

Location: Meghalaya is one of eight small states in north-eastern India. The state is predominantly rural, with over half the population of 3 million engaged in agriculture. The hilly terrain and climatic extremes (it includes the location with the world's highest rainfall) limit the area available for cropping. Only just over one quarter of the land is cultivable and, with high rainfall, soils are leached out and often acidic. As a result crop yields are low, and shifting cultivation is still widely practiced. This fragile environment is vulnerable to climate change.

Poverty: the population is growing much more rapidly than for India as a whole, which is putting increased pressure on natural resources and means that the state has struggled to create livelihoods and to reduce poverty of the overwhelmingly tribal communities. Almost half of all households are classified as below-poverty-line. While the poverty head-count ratio in India as a whole declined between 2005 and 2010, it slightly increased in Meghalaya along with other states in the north-east.

Approach: the proposed project will have three thrusts: (i) support Enterprise Facilitation Centres (EFC) now being established in all blocks to promote and support a range of rural farm and non-farm investments; (ii) support clusters to produce specific products for local and external markets, along with supportive investment in natural resource management, rural finance, and in market access infrastructure; and (iii) generation and dissemination of knowledge to support rural production and enterprises.

Objectives: the goal is to improve family incomes and the quality of life in rural Meghalaya. This will be achieved via the development objective of expanded and sustainable livelihood opportunities adapted to the hill environment and to the effects of climate change.

Coverage and targeting the project will cover the entire state, with EFCs in all 39 blocks. A total of 54 clusters for development of marketable products will be established in 18 blocks, with about 75 villages (about half of all villages) in each block. About 47,400 enterprises will be supported by EFCs, while there will be around 101,250 households in 1,350 villages in the clusters. In line with the Government's policy, the project will adopt a saturation approach, covering all villages in a cluster and all households in a village. Clusters will be selected on the basis of their capacity and potential for development of marketable crops and other products. This approach will help ensure that vibrant livelihood opportunities developed through the project then spread to other villages in the same region. To ensure that the poorest and most marginalised families are included in the project activities specific targeting strategies will be adopted to reach out to different groups such as women, especially women in remote areas, youth and those below poverty line.

¹ Mission composition: Mission composition: Edward Mallorie, Mission Leader; Deep Joshi, Natural Resource Management, Production and Marketing Specialist; N Srinivasan, Rural Finance and Market Development Specialist; Richard Allen, Farming Systems Specialist; Meera Mishra (IFAD India Country Office), Gender and Project Management Specialist; Vincent Darlong (IFAD India Country Office), Poverty and Traditional Institutions Specialist; Sriram Subramanian (IFAD India Country Office), Financial Management Specialist; A.M. Alam, Economist/Financial Analyst. Nigel Brett, IFAD Country Programme Manager, and Tom Anyonge, IFAD Advisor Rural Institutions, joined the later part of the mission.

Scaling up: with the building of institutional capacities and generation of a supporting knowledge base, these clusters may be scaled up to cover the rest of the state. As a first step in this scaling-up process, provision is made in project cost tables for expansion of activities to the remaining villages in the selected 18 blocks. Including this Phase II, the project will cover a total of 2,700 villages and about 220,000 households with about 1.25 million people. However this expansion will require additional funding from the government and/or another donor.

Component 1: Natural resources and food security: access to water and cereal production are priority issues for households in the selected village clusters. In order to reach all 100,000 households and ensure food security, the project will improve access to domestic and irrigation water, and support improvements to food crop production, as well as catchment conservation and soil conservation. The project will identify and train a Village Facilitator who, along with Lead Farmers, will implement NR and food crop interventions under the aegis of existing Village Employment Councils.

Component 2: Livelihoods Support has five sub-components: (i) enterprise development; (ii) integrated production and marketing clusters; (iii) livestock development; (iv) marketing infrastructure; and (v) rural finance.

(i) Enterprise Development will support Enterprise Facilitation Centres (EFCs) in all 39 blocks. EFCs are a one-stop-shop for enterprise development where interested entrepreneurs will get access to bank, convergence and project funding, along with training and technical support.

(ii) Integrated Production and Marketing Support: at least one sub-sector (product) with potential for scaling up and commercial production will be identified for each village cluster. The project will engage service providers to prepare and implement sub-sector plans. These service providers may be private companies, resource NGOs or other agencies.

(iii) Livestock Development: establishment of 120 Livestock Development Centres (LDC), mostly focusing on pig production. Each LDC would cover about six villages.

(iv) Marketing Infrastructure: rural households face significant difficulties in bringing their products to market, stemming from poor infrastructure at rural markets, and inadequate road connectivity. The project will support development of infrastructure for about 55 primary markets, 250 km of eco-friendly village roads, 20 submersible bridges and 10 ropeways. The project will also establish a system of management of the markets to ensure equitable access for poor producers and regular maintenance.

(v) Rural Finance: the project will establish around 300 Integrated Village Cooperative Societies (IVCS) mostly located in the project village clusters. Each IVCS would have a full-time paid employee, provide savings and credit services along with other activities, such as supply of farm inputs and aggregation of production for marketing. IVCS would be directly linked to the Meghalaya Cooperative Apex Bank and could also borrow wholesale funds from other sources.

Component 3: Knowledge Services will include: (i) information for natural resources governance, including village maps derived from remote sensing; (ii) information for enterprise development, including, if feasible, a telephone support system for EFC staff and clients; (iii) technology testing and action research to generate information on new technologies and solutions to NR and enterprise problems; (iv) monitoring and evaluation of LAMP activities, outcomes and results; (v) knowledge management and lesson learning for LAMP participating households, project staff and other stakeholders; and (vi) dissemination and communications to spread information on LAMP to external stakeholders and a wider audience.

Component 4: Project Management LAMP will establish Project Management Units (PMU) at the state and district level. The State PMU will include units for project management and technical support, as well as housing the Knowledge Services Component. Project management will build on existing systems at the state and district levels and strengthen the capacity in an incremental manner.

Implementation framework: at the state level, the Planning Department of Government of Meghalaya will be the nodal agency, with the implementing agency being the Meghalaya Basin Development Authority (MBDA), a society registered under the Societies Act. A Project Management Unit will be established in the Meghalaya Basin Management Agency (MBMA), a Section 25 company that is part of MBDA. The full-time Executive Director of MBMA (an IAS Officer) will be the *ex officio* Project Director of LAMP. He will report to the Chief Executive of MBDA and to its Board of Directors (who include the key Principal Secretaries of GoM). PMU staff, including an Additional Project Director, will be recruited from the open market on a contract basis, along with some of the existing staff of MBDA. At the District Level the Deputy Commissioner will be the *ex officio* District Project Coordinator, responsible for LAMP implementation, which will help ensure convergence with other programmes in the area. In each village, implementation of the Natural Resources and Food Security will be via the Village Employment Councils (VEC), that already exist for the implementation of MGNREGS.

Technical Partner Agencies, some of which have already been engaged by MBDA, will provide specialised support for natural resources management, food crops, Enterprise Facilitation Centres, Integrated Production and Marketing clusters and Knowledge Services.

M&E system will generate management information and provide the government and IFAD with evidence of results and impact against log-frame indicators (and also for IFAD's RIMS system). This will involve activity/output, process, outcome and impact monitoring.

Financial management will be on the lines of current IFAD funded projects in India. Accounting software will be used to maintain accounting records and generate financial statements in IFAD formats. Periodic inputs from an IFAD Financial Management and Procurement Specialist will provide training and support for project financial staff. Procurement will be carried out in accordance with IFAD's Procurement Guidelines, with an internal control framework set out in the Project Implementation Manual.

Key risks at the objective level include instability in market conditions effecting general economic growth, political instability and insecurity within the state, and failure of rural people to respond livelihood opportunities. There are also risks from changing weather patterns, natural resource degradation from illegal mining, and the unwillingness of banks to provide producers with the credit they need. These risks can be mitigated by flexibility in the choice of enterprises (moving between basic foods for local markets and high value products for external sale, natural resource management planning and conservation measures, and by technology choice.

Project cost is estimated to be USD 170 million. The Project will be financed by an IFAD loan of USD 50 million, a contribution of USD 49 million from the Government, USD 25 million as credit funds from banks, USD 28 million from convergence with complementary government programmes, and USD 13 million from participating households.

Benefits: The project investment has an overall Economic Internal Rate of Return of 26% and remains viable if costs increase or benefits decrease by 25%. Farm model analysis shows significant increases in net income for participating households. A total of 191,000 households would directly benefit from the project. Wider benefits will accrue from the generation and dissemination of knowledge, and from the institution building of IVCS, VECs and producer groups.

Sustainability: clusters for natural resource management and development of marketable product value chains will be based on market forces and supported by sustainable service providers from local communities and the private sector. The process of drawing up Integrated Natural Resource Management Plans will create awareness of the issues of sustainable use of natural resources, while implementation of these plans will safeguard these resources. VECs, the key agency at the village level, are permanent statutory institutions which will continue to function after the end of the project.

Enterprises supported via the EFCs and IPM clusters will be financially viable and so sustainable. MBDA has plans to make EFCs themselves sustainable by charging fees and generating income, but their role is likely to change over time, and it is quite possible that other agencies may evolve to support enterprises. The Government emphasises that IBDLP is a programme, not a project, and it plans to continue to support enterprise development and natural resource management beyond the end of any specific project.

Logical Framework

Narrative summary	Key performance indicators	Means of verification	Risks
Goal Higher family incomes & better quality of life in rural Meghalaya	75% of households report increased income* 75% of households report increased food security* 75% of households with improved quality of life*	RIMS+ baseline and impact assessment surveys	Relative stability in general economic conditions are conducive to poverty reduction
Objective Expanded and sustainable livelihood opportunities adapted to the hill environment and to the effects of climate change	At least 50,000 households adopt new livelihood opportunities linked to markets.* 540 villages accessing services for enterprise development from government and private sector. 1,200 villages with 90,000 households implementing natural resource management plans 20,000 households report reduced time to collect domestic water*. 70% of IVCS are financially sustainable and have loan recovery rates of at least 95%.	Thematic outcome surveys Project progress reports Annual Outcome survey IVCS audits and MIS	Rural people respond to opportunities for improved livelihoods Political stability and security situation allow communities access to economic opportunities and natural resources
Outcomes			
1.1 Improved access to water and increased production of food crops	10,000 farmers report increased area of irrigated crops* 50,000 farmers report increased cereal production* 20,000 household report improved access to domestic water supply* 500 villages take actions to manage areas	Thematic studies Annual Outcome survey Project progress reports	Changes in weather patterns do not seriously affect farming. Prices do not fall to a level where local production unviable.

2. 1 Improved access enterprise development	10% of the entrepreneurs registering in the EFC start or expand an enterprise* 75% of the enterprises started continue operation beyond third year of establishment*	Thematic studies EFC MIS data	Banks come forward provide required credit to start enterprises
2.2 Expansion of clusters producing commodities for the market	15,000 farmers report increased sales* 50% increase in the total production/sales 15,000 farmers adopt improved technologies* Increased sale prices of 15%	Annual outcome surveys Thematic studies of costs & returns	Households have adequate labour for the expansion of enterprise and good returns in sub-sector
2.3 Improved livestock production	32,500 households report adoption of improved methods, increased sales, value of sales and increased number of animals	Annual Outcome survey	Vaccines are available to control infectious diseases
2.4 Improved access to rural markets	75% of markets establish a procedure for maintenance by using the revenue collected Sales in 75% of markets increase by 30%+ 20% increase in no. of people selling in markets* 30% reduction in transportation cost of crops and inputs on improved roads	Thematic studies of markets	Resources for maintenance of markets available.
2.5 Increased use of financial services by rural households	IVCS have 90,000 savers and 60,000 borrowers* Current total savings balance and value of outstanding loans. 200 IVCS have loans from banks	IVCS MIS system	Meghalaya Cooperative Apex Bank provides required finance and other support.
3. Information hub providing useful data	Number of producers benefiting from information services*	Project progress reports	Information services prove to be useful.

Narrative summary	Key performance indicators	Means of verification	Risks
Outputs			
<u>1. Natural Resources and Food Security</u>			
1.1 Capacity development & natural resource planning	1350 NRMPs prepared and approved	MIS/project progress reports	
1.2 Land, water resource and food crop development	Water-related interventions in 1000 villages Land use management plans implemented in 500 villages, and area covered. 50,000 farmers involved in food crop interventions.	MIS/project progress reports	Adequate funds are available for the implementation of activities from convergence.
<u>2. Livelihood Development</u>			
2.1 Enterprise Development	No. of entrepreneurs registering with EFCs* No. of applications submitted for loans and convergence funding* No. of entrepreneurs trained* No. of entrepreneurs receiving technical support*	EFC MIS/project progress reports	Technical support can reach scattered entrepreneurs Convergence funds available
2.2 Integrated production and marketing support	54 village clusters implement commodity-based production and marketing plans 1350 Lead Farmers trained by commodity* No. of households participating in cluster based production*	MIS/project progress reports	Viable value chain development opportunities exist
2.3 Livestock development	120 livestock clusters covering 720 villages 120 CLF and 720 VLRP trained & providing services 43,200 households trained and participating	MIS/project progress reports	Sufficient number of CLP and VRLP can be recruited and trained.

2.4 Market Development	55 improved markets built 55 markets with maintenance plans	MIS/project progress reports	Traditional leadership allows market development
2.5 Communications Infrastructure	250 kms of village roads, 20 bridges and 10 ropeways built No. of households with access to village roads built under the project*	MIS/project progress reports	Villagers and traditional leaders provide land for road construction
2.6 Rural finance	IVCS societies cover 1350 villages with 120,000 members*.	ICVS MIS system	Support from the Department of Cooperatives and quality handholding from MCAB
<u>3. Knowledge services</u>			
3.1 Lesson learning	Number of knowledge products and events generated by project	Progress reports	Useful lessons available for dissemination
3.3. Information hub	Amount of information collected, collated and	MIS/project progress reports	Relevant information is available for collection by hub

* indicators disaggregated by gender and/or gender of head of household

I. Strategic context and rationale

A. Country and rural development context

1. Economic and social development

1. Despite remarkable economic growth, poverty remains a major issue for India, with 41.8% of the population living on less than USD1.25 per day. India has 33 per cent of the world's poor people, and nutritional levels are unacceptably low, with 42.5% of children underweight. Distribution of the benefits of growth to poor rural people has been limited by: inadequate physical and social infrastructure, poor access to services, low investment, a highly stratified and hierarchical social structure, and inefficient implementation of pro-poor programmes owing to governance failures. There is now a genuine concern regarding the social and political consequences of rising inequalities.

2. Agricultural wage earners, smallholder farmers and casual workers in the non-farm sector constitute the bulk of poor rural people. Within these categories, women and tribal communities are the most deprived. In terms of gender deficit, India is ranked 113 as per Global Gender Gap Index² with overall score of 0.619. Finally, about 300 million young people aged between 13 and 35 live in rural areas, most of them being forced to migrate seasonally or permanently, without the skills and competencies required by the modern economy. Further details are in Appendix 1.

2. Policies and programmes

3. The 11th Five-Year Plan (2007-2012) aims to achieve inclusive growth in all sectors and to double agricultural growth from 2 to 4% per annum by expanding irrigation, improving water management, bridging the knowledge gap, fostering diversification, increasing food production to ensure food security, facilitating access to credit and enabling access to markets. The mid-term assessment of the plan, released in July 2010, underscores the urgency of increasing capital formation and investments in agriculture, as well as of improving access to water and good quality seed, replenishing soil nutrients, expanding agricultural research and extension, reforming land tenancy systems and facilitating agricultural marketing.

4. Among national poverty reduction initiatives, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is most relevant for this project. MGNREGS entitles 100 days' guaranteed wage labour on demand to every rural household, has an implementation architecture that calls for planning at the village level and implementation by Village Employment Councils.

5. Central Government also has a number of programmes specially targeted at tribal communities and the north-eastern state. Article 275(1) of the Constitution of India provides funds for promoting the welfare of Scheduled Tribes. The Ministry of Tribal Affairs provides funds through the "Special Area Programme Grants under Article 275(1) of the Constitution of India". Under this Special Area Programme, a 100 percent grant is provided to meet the cost of projects for tribal development undertaken by a State Government, with a focus on community welfare assets such as schools, teaching, nutritional support and drinking water.

6. The Government of India has also established the Ministry of Development of North Eastern Region (MDONER) with responsibility for the planning, execution and monitoring of developmental schemes in the North Eastern Region, especially in the sectors of power, irrigation, roads and communications. MDONER also implements the Hill Area Development Programmed in North Eastern Region, the North Eastern Development Finance Corporation Ltd. (NEDFI) and the North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC).

7. The Government of Meghalaya's flagship rural development programme is the Integrated Basin Development and Livelihood Programme (IBDLP), of which the proposed LAMP will be part. LAMP will also work alongside other important state programmes.

3. Poverty in Meghalaya

8. The proposed project, the Meghalaya Livelihoods and Access to Markets Project³ (LAMP) is located in the state of Meghalaya – one of eight small states in north-eastern India which has not benefited much from the recent development of the country. The state is predominantly rural, with minimal industry, and only limited jobs in government. Over half the population (58%) of 3 million are engaged in agriculture or farm work. The hilly terrain and climatic extremes (it includes the location with the world's highest rainfall) limit the area available for cropping. Most villages are still to be connected to a road, and many lack electricity. Only just over one quarter of the land is cultivable and, with high rainfall, soils are leached out and often acidic. As a result crop yields are low, and shifting cultivation is still widely practiced. This fragile environment is vulnerable to climate change.

9. Meghalaya has a rapidly growing population (28% between 2001 and 2011, much higher than growth of 17% over this period for India as a whole). The high rate of population growth is putting increased pressure on natural resources and means that the state has struggled to create livelihoods and to reduce poverty of the overwhelmingly tribal communities. Almost half of all households are classified as below-poverty-line (compared with 28% for India as a whole). While the poverty head-count ratio in India as a whole declined between 2005 and 2010, it slightly increased in Meghalaya along with other states in the north-east. More information on poverty is in Appendix 2.

B. Rationale

10. In rural areas, where 80% of the State's population resides, natural resources hold the key to growth and employment. The proposed project will utilise these resources to improve living standards by enabling a transition from subsistence to new livelihoods through developing market linkages and supporting services. At the same time the project will address the multi-dimensional nature of the poverty challenge through natural resource management with interventions to ensure water supplies and improving basic food security.

11. The proposed project will have three thrusts. The first is to support Enterprise Facilitation Centres that are now being established across the state to promote and support a range of rural farm and non-farm investments. The second is to support clusters for the development of specific products for markets within and outside of the state, along with supportive investment in natural resource management, rural finance, and market access infrastructure. A cluster-based approach creates the volumes and economies of scale needed to access markets. The third thrust is the generation and dissemination of knowledge to support rural production and enterprise regarding the state's natural resource base, production technologies, supporting services and markets. This will promote a change in attitudes towards livelihoods.

12. Two projects in Meghalaya supported by IFAD, the recently completed Meghalaya Livelihood Improvement Project for the Himalayas (MLIPH) and the on-going North East Region Community Resource Management Project for Upland Areas (NERCORMP), have shown that a coherent programme of interventions involving natural resource conservation and management, livelihood promotion, market linkage, financial inclusion, community engagement, skill development, and rural infrastructure can make a significant difference in family incomes and in opening up new economic opportunities. Both projects have demonstrated how communities can come together to aggregate products for sale, add value, and purchase inputs in bulk. NERCORMP has also shown how community based natural resource management can make more rational and sustainable use of natural resources, and bring real benefits to households by improving access to water and other services.

13. Experience from other IFAD projects in the region will also be valuable. This includes development of market linkage, value chains and enterprise development (in Uttarakhand, Maharashtra and Tamil Nadu), rural market infrastructure development and management (Bangladesh), and village roads in hill regions (Bhutan and Nepal). The project will leverage IFAD's well recognised competence in Knowledge Management in India.

³ Formerly named "Meghalaya Integrated Rural Development Project (MIRDP)

II. Project description

A. Project area and target group

1. Project area and number of participating households

14. The project is designed to cover the entire state, with Enterprise Facilitation Centres (EFC) in all 39 blocks (sub-districts) of the state supporting around 47,400 enterprises over the eight year project period. A total of 36 clusters for development of natural resources, food security and marketable crops will be established in 18 blocks, with about 75 villages (about half of all villages) in each block, making a total of 1,350 villages. In line with the Government's policy, the project will adopt a saturation approach, covering all villages in a cluster and all households in a village. Based on the average for the state, it is assumed there are 75 households per village, so there will be a total of 101,000 households in these clusters. Around 41,250 households will directly benefit from road and market development, while Integrated Village Cooperative Societies (IVCS) will have 120,000 members, but it is assumed that these will largely overlap with EFC and natural resource/marketable crop activities. Total outreach (net of overlap) will amount to about 191,000 households (see Table 5).

2. Targeting

15. Clusters (and blocks) will be selected on the basis of their capacity and potential for development of marketable crops and other products. EFCs will support all interested entrepreneurs in a block. This approach will help ensure that vibrant livelihood opportunities really do develop, and it could be expected that these will then spread to other villages in the same region.

16. Within the overall saturation approach specific targeting strategies will be adopted to ensure that groups that are excluded because of their remoteness, gender, poverty etc are provided the necessary support to participate in and benefit equitably from the project activities. The project target groups would include tribal communities which form nearly the total population to be covered by the project; women, particularly those in remote areas; rural youth and BPL households within selected areas. The project will adopt specific targeting strategies for each of these groups to ensure that those most vulnerable and marginalised are not left out of the project coverage.

17. In particular the Integrated Village Cooperative Societies (IVCS), as institutions for grass-roots financial inclusion, are likely to be orientated towards women, and the Natural Resource Management (NRM) planning process will involve women from all households in the village. The focus of NRM interventions on water supply will reduce a major burden for women - the time and effort needed to fetch water in the dry season. EFCs will also cater to women - over half of current EFC clients are women.

18. As the state has a predominantly tribal population (85% are from scheduled tribes), it is expected that almost all project villages will be composed of these households and that virtually all project benefits will flow to the different tribal communities. A summary of target groups is in Key File 4 and more information on the rural population, gender and targeting in Appendix 2, with checklists showing compliance with IFAD policies for targeting, gender and indigenous peoples in Appendix 12. Working Paper 2 has further details on targeting including targeting strategies.

3. Scaling up

19. With the building of institutional capacities and generation of a supporting knowledge base, these clusters may be scaled up to cover the rest of the state, funded by GoM and GoI, with possible support from other donors. As a first step in this scaling-up process, provision is made in project cost tables for expansion of activities to the remaining villages in the selected 18 blocks. Including this Phase II, the project will cover a total of 2,700 villages and about 250,000 households (including EFC

clients) with about 1.4 million people. However this expansion will require additional funding from the government and/or another donor. The scaling up framework is in Appendix 12.

B. Development objective and impact indicators

20. The goal of the project is to improve family incomes and the quality of life in rural Meghalaya. This will be achieved via the development objective of expanded and sustainable livelihood opportunities adapted to the hill environment and to the effects of climate change. Indicators of impact at the goal level are the numbers of households reporting increased income and improved food security (including indicators of reduced child malnutrition), and of improved quality of life (numbers of households with improved housing, water supply and sanitation). At the development objective level, indicators are the number of households making use of new livelihood opportunities linked to markets; the numbers of villages accessing services for enterprise development, accessing markets and implementing natural resource management plans; and the number of village cooperatives providing sustainable financial services.

C. Outcomes/Components

21. The project will have four components: (i) Natural Resources and Food Security; (ii) Livelihoods Support; (iii) Knowledge Services; and (iv) Project Management. A detailed project description is in Appendix 4.

Outcomes

22. The expected outcomes of implementation of the components are:

(i) Natural Resources and Food Security aims to meet the basic needs of communities for water and food via:

- Improved access to water (for domestic and agricultural use)
- Improved and sustainable land management
- Increased production of food crops

(ii) Livelihoods support aims to increase incomes and create employment via:

- Improved access to enterprise development services
- Expansion of clusters producing commodities for the market
- Development of livestock production
- Improved access to rural markets
- Improved access to financial services

(iii) Knowledge Services aims to support rural development efforts via:

- Information hub to support natural resource management and the growth of enterprises

Components

Component 1: Natural Resources and Food Security

23. The rural population of Meghalaya largely depend on land, water and biotic resources to support their livelihoods. However pressure on the natural resource base of the state, due to increased needs and unsustainable utilization, have resulted in decline in the availability of resources, such as water, and impoverishment of the overall ecosystem. Combined with increasing temperature and more erratic rainfall caused by climate change, ecological services such as hydrogeology functions, nutrient cycling and biodiversity are diminishing. Several government schemes exist to address the natural resource management issues, but inability of the government line departments to function in a coordinated manner calls for devising a village-based and owned delivery mechanism for last mile service delivery.

24. This component aims to provide a mechanism for villages to manage their own development, and so manage their natural resources more efficiently and sustainable, resulting in increased food production - and also laying the foundation for better livelihoods linked to markets. Specific outcomes of this component are to: (i) improve knowledge base regarding land, water and biotic resources, and

build capacity to plan the sustainable use of these resources; and (ii) improve land and water resources, along with enhancing food crop production. This component will have two subcomponents: (i) capacity development and natural resource planning; and (ii) land, water resources and food crop development. These activities will be implemented in 1,350 villages, organized in about 54 clusters, in 18 blocks out of the 39 blocks in the state.

25. Implementation of this component will make use of the experiences gained by NERCORMP, which has had a broadly similar approach for natural resource management, and the Climate Change Adaptation Programme being implemented by MBDA with support from GIZ.

26. **Capacity development and natural resource planning:** Existing Village Employment Councils (VECs) will be the focal point for implementing this component. A VEC has been established at each village to implement MGNREGS works. A Village Facilitator (VF) will be engaged for each village to support the VEC. The project will build the capacity of the VEC to prepare an Integrated Natural Resource Management Plan (INRMP) in a participatory mode, identify priority activities, manage books of accounts and activities, and to access funds via convergence with other programmes. The project will prepare guidelines and reference material for use by the VFs and VECs and fund the operating cost of the VEC (including honorarium for the VF) for a period of two years. For the first two years of implementation in each village, LAMP will provide additional support via a contracted local Facilitating NGO (FNGO) or equivalent agency, which will provide two Field Organisers (FO) for each cluster of 25 villages.

27. VECs will facilitate consultation with the traditional leaders and the community. Democratic processes and gender inclusiveness will be ensured as, under current rules, VECs are composed a man and a woman from each household in the village. At the same time, the VEC is closely linked to traditional village institutions, and the traditional village headman may also chair the VEC. Information on traditional institutions and how they will work with LAMP is in Appendix 1 and Working Paper 1.

28. The project will focus on the selected villages, but will make efforts in providing opportunity to other villages to access government funds for INRMP. Towards this goal, the project (through the Knowledge Services Component) will support knowledge creation in the form of guidelines for preparation of INRMP and for the key design and implementation features of the INRMP, and for the sources of funding and the procedures for accessing these funds.

29. Climate Change Adaptation will be an important consideration in drawing up INRMPs. LAMP will support the introduction of climate-smart approaches and technologies such as soil and water conservation, stress-tolerant crops and crop varieties, and cultivation methods.

30. **Land, Water Resources and Food Crop Development:** The project will allocate Rs400,000⁴ per village over two years (Rs200,000 per year) to implement activities identified and prioritized as a part of the INRMP. In the first year the cost of activities shall be 80% covered by project funds, with the other 20% coming from the village as a community contribution. Provision of a second instalment is subject to: (i) satisfactory utilization of the funds already released as verified through social audit and annual audit by external auditors; (ii) a 20% contribution from the village; and (iii) the ability to mobilize equal amount of funds (Rs200,000) through convergence.

31. The project will facilitate convergence through the district administration. Given that MGNREGS (the national employment creation safety net) guarantees 100 days' work per year to qualifying households (the vast majority of rural households in the state qualify), and that the majority of work done is NRM related, it should not be difficult to mobilise these additional resources. In addition the PMU will have resources to fund need-based social interventions in areas such as health and education. This would aim to bridge gaps in service provision, and act as an entry point for livelihood interventions, as well as leveraging resources from other agencies.

32. For food crop development activities the project will train two Lead Farmers in each village (selected by the VEC), and will also provide training to a power tiller operator to assist in the process

⁴ This amount is for a typical village may be adjusted pro-rata according to the number of households.

of farm mechanisation. Additional resources for food crop development will come from convergence with a number of national and state programmes.

33. Interventions in the component will include: (i) water resource development; (ii) land development; and (iii) food crop development. Ensuring security of water supplies is the major priority in many villages. In the dry season women often have to go considerable distances to fetch drinking water. Without irrigation, many villages can only grow a single crop of paddy, and the yield of valuable cash crops, such as pineapple, is reduced. Possible interventions for water supply include:

a) Small scale irrigation: potential includes pumping water from rivers and streams, groundwater wells, and diversion of water from perennial streams and springs. Irrigation works may be financed through convergence with government programmes, such as the Accelerated Irrigation Benefit Programme (AIBP), the National Food Security Mission, the State Rice Mission, and MGNREGS.

b) Spring rejuvenation via works to increase rainfall infiltration and changing the vegetative cover through plantations.

c) Rainwater harvesting/storage structures to support small scale irrigation (and spring recharge).

d) Potable water supply: village water supply systems may involve collection tanks, pipelines, public taps, washing areas, wells, hand pumps and rooftop rainwater collection. Apart from MGNREGS, these works can be supported by other schemes for village water supply.

34. The INRMP for each village will identify and map out areas of village land that have different land uses. The plan may propose some changes in land use, such as tree planting on wasteland and conversion of *jhum* land to plantation crops. The plan may also identify land development works (most of which can be taken up under MGNREGS), such as:

a) Stabilisation of steep slopes: such tree planting, drainage treatment and contour trenching.

b) Jhum stabilisation and management: *Jhum* lands with low to moderate slopes could be terraced for horticulture intercropped with vegetables and tubers.

c) Terracing: Large tracts of land have low to moderate slopes, generally with deep soils and are suitable for terracing.

d) Drainage management in the valleys: Construction/improvement of drainage in valleys to dispose excess rainwater, which could enable farmers to grow another crop after rice is harvested, and also enable them to adopt SRI (System for Rice Intensification).

e) Developing village common lands: Many villages have common land that is not used for *jhum* or any other form of cultivation. These may be taken up for forestry, forage tree plantation and grassland development.

35. In addition, villages may opt to implement Land Banks, an initiative from MLIPH to provide access to land for poor households. To complement land and water development, food crop interventions could include:

a) Increasing crop yields: current yields are low so there is huge potential. Apart from the interventions described above, there is potential to use improved crop husbandry methods and apply improved inputs. Paddy yields can be enhanced by better techniques, including adoption of SRI. Support can come via convergence with the National Food Security Mission and with the forthcoming Meghalaya State Rice Mission.

b) Diversification: there is huge scope for introduction of oilseeds and pulses to be grown after paddy and on the bunds of paddy fields.

c) Soil fertility management with better use being made of available animal manure, composting and the use of green manure. Lime is needed in acidic soils along with micronutrients.

d) Homestead development: homesteads could be better utilised to grow vegetables, fruit trees, drumstick, etc. via low cost micro-drip system.

e) Draft power, inputs and services: Most land cultivation is still done manually except in parts of the Garo Hills. As a result, the quality of field preparation, timely sowing, intensification of farming (multiple cropping) and profitability are compromised. Power tillers are being introduced, but they are not always being used effectively. Similarly, the virtual absence of places to buy farming inputs at the village level is a major constraint on modern farming. Input supply systems, including machinery rental services, need to be developed. These could include support to individuals establishing such services as a business enterprise, and village or cluster owned Farmer Service Centres. At the cluster level, IVCS may take on this activity.

Component 2: Livelihoods Support

36. Livelihood promotion has suffered from the compartmentalized implementation strategy of the line departments. These departments often provide subsidies, but generally are unable to provide support covering all aspects of the production and marketing cycle. This apart, regular livelihood support activities are geography defined and target oriented, which constrains development of the economies of scale required for reduction in cost of production and efficient marketing. Access to markets with adequate infrastructure and road access remains vital for development of livelihood activities. Financial services, and credit in particular, is necessary ingredient to successfully implement livelihood activities.

37. This component aims to: (i) support and build the capacity of the community to implement commodity-specific livelihood activities; and (ii) address issues related to access to markets and finance. There are five subcomponents: (i) Enterprise Development; (ii) Integrated Production and Marketing; (iii) Livestock Development; (iv) Access to Markets; and (iv) Rural Finance.

38. **Enterprise Development**: the project will support an Enterprise Facilitation Centre in all 39 blocks in the state. EFCs will act as one stop shops to support anyone wanting to start or expand an enterprise in the farm or non-farm sectors. As of June 2013 a total of 22 were operational and it is expected that all 39 will be functioning before the start of project implementation. These centres will be staffed by a Manager, a Field Business Advisor (FBA), an Enterprise Resource Person (ERP) and an Office Assistant. Interested entrepreneurs will visit the EFC where their capacity will be assessed along with the viability of their proposed activities (using criteria developed by MBDA). Approved applications will get access to bank, convergence and project funding, along with training and technical support. The FBA will be specifically tasked with supporting bank loan applications.

39. LAMP will provide FBAs and ERPs with specialised training and EFCs may also be supported by specialised service providers. One such service provider, The Livelihood School (TLS - part of the BASIX group), has already been appointed and are supporting eight EFCs for an 18 month period to build staff capacity, carry out value chain studies and develop approaches to support entrepreneurs.

40. EFCs have already generated considerable interest, with 21,349 people making enquiries in the first five months of 2013, when only 16 EFCs were in operation. Projections for LAMP from project year 3 onwards, are for each EFC to handle a total of 1,200 enquiries per year, of which 180 (15%) result in actual businesses being established or expanded. Support provided would include access to bank loans, grants from other government programmes supplemented by project grants (funded by GoM) along with advice, training and technical support. Training for entrepreneurs would include business management, accounting and marketing along with production technologies - with some production training being provided via convergence with other programmes.

41. Resources have been provided to support EFCs for the full eight years of the project. However it is likely that the role of EFCs will evolve considerably during this period and they may become more a business support network than shops for enterprise start-ups. However it may not be reasonable to expect them to generate significant amounts of income and be self-supporting - at least with the proposed level of staff. This issue needs to be addressed during project implementation, with sufficient flexibility in the design to allow the EFC model to evolve in response to changing needs.

42. Integrated Production and Marketing. This sub-component will be implemented in the same village clusters as Component 1, and will benefit from the natural resource management activities of this component in terms of enhanced water supply for production of cash crops, and protection of the ecosystem to ensure sustainability.

43. In the selected clusters, and with support from specialized agencies (including some Technical Partners already appointed by MBDA), the project will build the capacity of producers of key crops and products with commercial potential. Where needed the project will build a team of village level Service Providers (who may sometimes also be the Lead Entrepreneurs) with the required technical competence to address issues related to inputs (seed, fertilizer, saplings etc.), technical services (production technology, mechanisation etc.) and marketing. Household level implementation will be funded by entrepreneur contribution, bank loans and project support.

44. The working paper on Integrated Production and Marketing reviews a number of commercial products that are either already important or could have potential for the future. Some possible interventions are identified. These include:

a) Pineapple: the most important fruit crop, with 100,000 tons being produced on 10,000 ha. Possible LAMP interventions include improved production practices and marketing.

b) Oranges are another important fruit crop, with over 38,000 tons produced on almost 10,000 ha. Interventions could include orchard renovation or replanting, tree nurseries and a premium market for high quality fruit.

c) Ginger is an important cash crop, with 57,000 tons produced on 9,000 ha.

d) Turmeric is the other major spice crop, with about 12,000 tons being produced on 2,200 ha. IFC are currently carrying out a value chain study in the spices sector with the objective of enlisting one or more private sector spice companies to establish facilities in the state. These companies may organise and support farmers to produce the spices they require. LAMP can provide complementary support to organise production clusters.

e) Off-season vegetables: 15,000 ha of vegetables are grown, and with a cool climate, the state supplies off-season vegetables to other parts of eastern India and Bangladesh. However excessive use of chemicals for tomatoes, one of the two main vegetable crops, reduces profitability and may affect the health of farmers and consumers (and risks restrictions being imposed on the sale of such vegetables). LAMP would support the testing of improved methods of blight control. LAMP may also appoint an agency to support production and marketing interventions for vegetables which are not being produced using potentially dangerous amounts of pesticides.

f) Strawberries are an example of a successful value chain development in Meghalaya, which is now the major production hub in eastern India. There is a strong Strawberry Growers Association which could be point of entry for any interventions, such as improving the availability of high quality planting material.

45. Livestock development would focus on 120 Livestock Development Centres (LDC) located within the village clusters to be supported for Natural Resources and Food Security, together with the supportive animal breeding and feeding initiatives. Most LDC would focus on pigs and, to a lesser extent, on goats. Given the very limited potential for dairy production in the state, there is only potential for a few cattle development centres. Pig Development Centres, on the model of BAIF's successful goat clusters in other states, would focus their efforts on existing pig producers and the existing pig population – with interventions in health, feeding, housing and breeding. These interventions have been tested and found to be successful in other states in the north-east. One LDC would cover about six villages with 360 participating livestock producers. Each LDC would be supported by a technician (a Community Livestock Facilitator - CLF), with a local person, trained as a Village Livestock Resource Persons (VLRP), for each village. These VLRP would generate an income through providing basic animal health care and other support, making their services sustainable after the end of the project.

46. **Marketing Infrastructure** sub-component comprises of: (i) rural market infrastructure; (ii) communications infrastructure.

Rural Market Infrastructure: Local markets function as an important link connecting rural production centres to the consumption and distribution centres. However this chain is highly fragmented. Rural households face significant difficulties in bringing their products to market, stemming from inadequate and poorly maintained infrastructure at rural markets, and inadequate road connectivity. There has been minimal investment in market facilities, and totally inadequate expenditure on market maintenance on account of lack of systems for redeployment of revenue generated from the market. These constraints mean markets do not function properly and there are high losses within the marketing chain. The project will support development of infrastructure for about 55 primary markets (out of a total of 179 in the state), along with a system of management of the markets to ensure equitable access for poor producers and regular maintenance.

47. The agricultural marketing system in Meghalaya is distinctly different from the other states in the country. Ownership and authority for markets in Meghalaya lies with traditional leaders and the Autonomous District Councils. Markets are a source of revenue for traditional institutions, and this issue, along with others relating to land for market expansion, access to the market for farmers, and market management and maintenance, will need to be addressed through consultation with the traditional leadership when drawing up detailed plans for market improvement.

48. **Communications Infrastructure:** alongside the development of public markets, there is a need to improve communications infrastructure to: (i) ensure markets are well connected to the road network in order to move goods in and out of markets; and (ii) provide access from clusters where cash crops are produced to markets. Village roads are mostly constructed under MGNREGS and are built of earth using the limited skills and competence of the community. Most do not meet the standards for year-round and sustainable use, and require up-grading. In addition to roads, there is a need for river crossings, with low-cost “submersible bridges”. These are made of stone and concrete, with culverts for water to pass below the road except at times of flood when the bridge submerges and becomes a ford. Some villages are particularly inaccessible, being located at the bottom of steep valleys. Ropeways can be the most economic way of improving access for such villages.

49. Project budgets include funds for 250 km of roads, 20 submersible bridges and 10 ropeways. It is envisaged that most road construction would involve improving an existing earth road or farm track, but in some locations it may be necessary to construct a new road. Upgrading of roads will often be more than just adding a hard surface to an existing road. Earthwork excavations may be needed to ease steep gradients and sharp corners. Drainage is a critical factor in preventing landslips on hill roads, and many roads require both lateral and cross drainage – arguably this should be a greater priority than surfacing. In some locations, where traffic is light, LAMP may construct earth rather than surfaced roads.

50. A Village Road Construction Guideline will be prepared including eco-friendly construction methods and maintenance guidelines with responsibilities for stakeholders: the government, traditional institutions and communities. Identification of roads for improvement will take account of the number of households benefiting, and the potential for market and agriculture development.

51. **Rural Finance:** the project intends move rural households from the current dependence on government grants for developing on-farm and off-farm enterprise. This requires improved access to credit for entrepreneurs - along with adequate training to manage the proposed activity proposed. MBDA has reached agreement with banks to lend to enterprises that are being supported via IBDLP. A financial inclusion programme is to be implemented with IFC support to increase the outreach of banks. However there is still a need to provide smaller loans for enterprise start-up and income generating activities, and for household emergencies.

52. To address this issue MBDA plans to set up Integrated Village Cooperative Societies (IVCS) which will capitalise on the fact that villages in Meghalaya ethnically homogenous and socially cohesive units. IVCS would provide non-financial services along with savings, credit and other

financial services. IVCS, as grass-roots organisations, will complement the IFC financial inclusion programme which aims to increase the outreach of banks to serve larger enterprises.

53. LAMP will support the establishment of about 300 IVCS, primarily in the 54 village clusters to be covered by the Natural Resources and Food Security component. Each IVCS will cover around 5 to 6 villages and have 400 members (about 80% of all households). This scale of operation should allow an IVCS to generate enough income to cover its costs and employ a manager. Once an IVCS has reached a milestone for operational performance, GoM (through LAMP) will deposit a corpus fund to provide additional resources for lending to members. IVCS will come under the umbrella of the Meghalaya Cooperative Apex Bank, which will provide them with bulk loans for on-lending – as will other banks. Where possible IVCS build on existing institutions (viable Primary Agricultural Cooperatives, SHG Federations and SHG clusters – SHGs may become members of an IVCS).

54. The National Rural Livelihoods Mission (NRLM), a major national programme, is shortly to start operations in the state. It will establish SHGs and cluster federations with the objective of grass-roots financial inclusion (in the initial phase) and livelihood promotion (in the long run). To ensure coordination and to avoid overlap, the State Government agreed with the design mission that, at the initial phase of NRLM, LAMP and NRLM will agree to work in different blocks. Later, as NRLM covers more of the state, The Planning and Rural Development departments will agree on a plan whereby LAMP-supported IVCS will implement NRLM in LAMP "Special Dispensation Blocks". The State Government will convey to MORD (GoI) that it will implement NRLM with the LAMP processes and institutions as these are more in tune with overall development approach of the state.

55. IVCS, as a model for provision of financial services at the village level, has been successful in a number of states in India. Apart from financial services, IVCS may also aggregate products for marketing, and sell inputs to farmers.

56. LAMP will provide the following support for IVCS:

- a) Engagement of a technical partner agency with specialised expertise in the formation and capacity building of grassroots financial cooperatives. This agency will
 - i. Prepare plan to set up of IVCS, including a phased approach, and a checklist of activities for formation, launch, and handholding in initial years, of individual IVCS
 - ii. Prepare a process manual detailing the sequence of activities needed to launch an IVCS
 - iii. Provide training for: (i) facilitators to set-up IVCS; (ii) staff of IVCS; (iii) board of management of IVCS; and (iv) Cooperative Department staff.
 - iv. Prepare an operations and accounting manual for IVCS staff in their day to day work and to support the board of management.
 - v. Prepare a check list on governance practices for use by the board of IVCS
- b) Financial support for IVCS will be provided using GoM LAMP funds. This is estimated to amount to about Rs120 million and will include:
 - i. A corpus fund (that would count towards capital funds) as a multiple of the equity contribution brought in by members.
 - ii. Viability gap funding for the first 3 to 5 years when IVCS revenue is not sufficient to cover operating costs.
 - iii. A risk fund may be set up with a contribution of 1% of the incremental loans outstanding at the end of the year may be provided for the first 3 years. An additional risk fund contribution could be given as incentive for on-time loan recovery.
- c) A set of computers office equipment and furniture for each IVCS - to be provided once IVCS have been fully established.

Component 3: Knowledge Services

57. MBDA is placing considerable emphasis on information and knowledge at a major pillar of IBDLP. The Knowledge Services component of LAMP will support MBDA knowledge-related activities across the entire IBDLP and will not just be restricted to the LAMP project area and activities. The

IBDLP proposes to develop a Knowledge Hub. This hub will include on-line information services, but will go further, with IBDLP acting as a knowledge broker to provide information for enterprise development and natural resource management to stakeholders in the public sector and beyond.

58. The Knowledge Services component will support: (i) information for natural resources management and governance; (ii) information for enterprise development; (iii) technology testing and action research to generate information on new technologies and solutions to NR and enterprise problems; (iv) monitoring and evaluation of LAMP activities, outcomes and results; (v) knowledge management and lesson learning for LAMP participating households, project staff and other stakeholders; and (vi) dissemination and communications to spread information on LAMP to external stakeholders and a wider audience.

59. Information on natural resource management and governance: collection and collation of information on interventions in natural resource management will include examples of effective or useful interventions from within the State and from other locations in India and beyond. This will also include governance aspects of NRM, such as rules and regulations for resource management. Linked to this are issues concerning land tenure, transfer of land to other uses, and access to land for poor people. LAMP will also collect and store traditional knowledge and indigenous knowledge on natural resources, such as the collection and use of plants for medicinal and other uses. Apart from searching secondary sources, this may involve commissioning some studies to interview communities such as regarding their traditional knowledge on subjects such as the use of wild plants, and to gather information on traditional land tenure practices.

60. At the moment there are no large scale maps that can be used to support INRMP at project villages. LAMP will create base maps for each village using satellite data available from the North East Space Applications Centre. These maps will be used for participatory planning in the village. This will result in a much better land use plan as the alternative is to use participatory maps sketched by villagers, which usually do not give an even approximately estimate the areas involved in different types of land use. Satellite imagery can also be used to identify potential locations for specific crop- based enterprises, and for development of water resources.

61. Information on enterprise development will support the entrepreneur partners of EFCs as well as farmers participating in the Integrated Production and Marketing clusters. In addition this information will support enterprise development activities undertaken by IBDLP in other villages. Specific activities related to information on enterprise development include:

a) Support for EFC clients: to provide technical and management support to enterprises supported through EFCs is a challenge as these will not necessarily be clustered together. Apart from printed and video guidelines and manuals, it could be worth investigating if a telephone or SMS help line would be feasible and useful.

b) Information repository (on-line as far as possible) for data on markets, technologies, technical manuals, management guidelines, and information on suppliers of input and services.

c) Value chain studies: LAMP would commission external agencies to carry out 10 comprehensive value chain studies in sectors with economic potential.

d) Meghalaya Trade Promotion Organisation (MTPO) would receive some financial support from LAMP. This agency is part of MBDA and is responsible for promotion of Meghalaya products in other parts of India.

62. Technology testing and action research: opportunities to test technologies and conduct action research include:

- Soil fertility management with improved methods for collection and use of farmyard manure
- System of Rice Intensification for paddy production
- Conservation Agriculture (minimal tillage cultivation)
- Improved cultivation of potatoes and tomatoes, including control of blight
- Improved cultivation of banana including new varieties and use of tissue culture
- Improved ginger cultivation, including pre-planting treatment of seed roots.
- Pig production, including on-farm feed production and improved breeds

- Improvements to backyard poultry systems, including possible introduction of improved genetic stock that can be produced at the village level.

63. This work would be contracted out as individual sub-projects to public sector research agencies (state and ICAR) and NGOs or private sector agencies with the required technical expertise.

64. Monitoring and evaluation activities are described in the M&E section below.

65. Knowledge management and lesson learning involves the use of information from the experience of project implementation to learn lessons that will improve implementation processes and increase impact.

Internal learning would involve a series of regular meetings by project stakeholders at cluster, block, district and state levels. At these meetings, progress of project activities will be reviewed and reasons for success and failure identified. LAMP will also implement a video system to disseminate information from farmer to farmer and village to village (through participating in the Digital Green programme).

66. Dissemination and communications All components of the project have a role in dissemination of information and knowledge, both internally within the project (particularly to entrepreneurs, farmers and other villagers), and externally to citizens of the state, Government of India, IFAD, other development agencies, and wider civil society. The Knowledge Services component will support this via:

- Provision of village information kits – this is a set of project and development related information, together with storage shelves, display cabinet, notice boards etc. This would be kept in a publically accessible building in the village, such as a community hall or school.
- Production and printing of posters and leaflets.
- Translation, into the three main local languages, of technical manuals and guidelines.
- Editing and design of project publications aimed at an external audience
- Printing of communication materials
- Creation of a LAMP website (or pages on the MBDA website) with information on the project and results. Information would also be posted on other websites such as <http://asia.ifad.org/>
- Publicity and communication videos
- An annual high level knowledge sharing event aimed at sharing results and influencing policy

Component 4: Project Management

67. The LAMP will establish Project Management Units (PMU) at the state and district level. The State PMU, which will be housed in the MBDA headquarters, will include units for project management and technical support, as well as housing the Knowledge Services Component. A total of 30 staff will work on a full-time basis for LAMP at the state PMU. In addition the State PMU would be supported by MBMA staff on a part-time basis. These include the CEO of MBMA, who would be the Project Director of LAMP, a team of human resource specialists, along with further administrative support staff.

68. District PMUs would have 11 LAMP staff and will incorporate the existing district Basin Development Units. Additional staff may be posted at the District PMUs to manage other IBDLP activities that are not part of LMP. These staff would be funded by MBDA. LAMP support for DPMUs would be phased in, with seven (in the old districts) being funded in year 1, with DPMU in all 11 districts being supported from year 2 onwards. Staff recruitment at both district and state levels will be incremental, with staff being bought on board as needed.

D. Lessons learned and adherence to IFAD policies

Lessons Learned

69. **Last mile delivery:** Government line departments find it difficult to deliver project services the "last mile" to households at the village level. They lack sufficient number of field staff, and those staff they do have tend to be largely occupied in administrative and routine duties, such as making statistical returns, regulatory functions, and administration of subsidy schemes. This leaves little time

over to spend time in the field doing tasks such as organising groups and providing training and technical advice. A department-centric approach makes it difficult to provide holistic support across a numbers of different sectors and activities. Moreover the additional monitoring and reporting required by projects is difficult to complete, given the already onerous reporting requirements for their routine work.

70. **Community based organisations** can work well for collective marketing, natural resource management, and to provide savings & credit services. This both empowers the members of these organisations and changes their attitudes and mindsets towards income generation and enterprise

71. **Targeting:** focusing on the poorest villages and exclusive targeting of the poorest households within villages limits the potential for significant and visible impact and so replication. The poorest households, even with project support, have limited capacity to produce the volumes needed for aggregation and for development of new marketing opportunities. Both MLIPH and NERCORMP selected villages based on poverty indices. These villages were often in remote locations, with limited resources and development potential. Although focus on poor and remote villages can improve subsistence cropping and so food security, it is difficult to upscale livelihoods to a more commercial level at which they will have a significant impact on incomes and poverty. To do this, it may be better to first work in the better endowed villages and then allow (and assist where needed) market-led development to disseminate to other areas.

72. **Financial Service Delivery:** SHG movement in India has helped financial services reach the poorest households. This strategy has mostly helped women to seek credit for consumption related activities and for establishing nano-enterprises. SHG members were able to get out of the money lenders' debt trap resulting in improvement in family cash flow. However, this strategy has not worked in establishing enterprises requiring higher levels of investment funded by bank loans rather than subsidies from government welfare schemes. The success of enterprise promotion depends on support from formal financial institutions.

73. **Partnership with the private sector** can result in new market opportunities and a step change in production technology, productivity and farm income. Private sector companies are often better able to provide access to markets and new technologies, along with providing technical and managerial support, than project staff, NGOs or government line departments. However to be sustainable, partnerships must be profitable for both the private company and farmers – in particular farmers need to get better prices than they could on the open market while companies need a more reliable supply of farm produce in terms of volume and quality.

74. **Ownership of State Governments** is vital to the success of projects. It is important to involve them from the very beginning in project design.

75. **Focus on livestock:** Anecdotal evidence indicates that pro-poor growth is often largely linked to growth in the livestock sector. This activity has considerable potential to contribute to poverty reduction. Besides income, livestock are also an important source of employment for the rural people⁵.

76. Adherence to IFAD policies

77. **The overarching goal** of IFAD's strategic framework 2011-2015 is: *enabling poor rural people to improve their food security, raise their incomes and strengthen their resilience by building profitable farm and non-farm enterprises that are sustainable and well integrated into local, national and global value chains, and that can generate opportunities for wealth creation and employment in rural areas.* This is underpinned by four objectives: (i) a strengthened and more resilient natural resource and economic asset base for poor rural women and men; (ii) enhanced access to a range of services for poor rural women and men; (iii) strengthened capabilities (of both individual rural poor men and women and their organizations) to take advantage of new opportunities; and (iv) improved institutional and policy environments for the rural economies in which IFAD operates.

⁵ Source: Potential for Livelihood Improvement through Livestock Development in Jharkhand, ILRI 2011

78. LAMP is fully in line with this framework, focusing on profitable enterprises and value chains, as well as the resilience of the natural resource base. The project design also adheres to IFAD policies for enterprise development, climate change, poverty and targeting, indigenous peoples and gender. Regarding targeting, the project has clearly identified target groups and a targeting strategy: largely self-targeting based on responding to demand for enterprise services. The project will ensure women's participation in all project activities and strengthen their role in household decision making and livelihood management. Indigenous people (85% of the population in this state) will equally participate in, and benefit from, the project. Project design has also been informed by IFAD's climate change strategy and by its policy for rural enterprise development.

III. Project implementation

A. Approach

79. The project will be implemented by the MBDA and will form a central part of the overall IBDLP. This approach, within the state's flagship programme for rural livelihoods and poverty reduction, will ensure that implementation of LAMP has the highest possible priority and lessons learned will be disseminated at the highest level. IBDLP provides a framework for involvement of government agencies involved in all sectors, which will help gather additional resources through convergence with other state and national programmes. The Government has requested assistance from IFAD based on its experience of MLIPH and NERCORMP. LAMP will upscale core elements of these two projects: the community-led natural resource management of NERCORMP, and the livelihood development and market linkage activities of both projects.

80. Convergence with other major development programmes is another key element of project implementation. These include the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), which provides finance for labour-intensive infrastructure construction which will mesh with LAMP in terms of underpinning local employment opportunities, carrying out soil and water conservation, and creating valuable local infrastructure such as roads, pathways and water supplies. LAMP will also follow the overall strategy of IBDLP in seeking convergence with other government schemes for natural resource management and livelihood support. This will enable communities and individuals participating in LAMP to access support from these programmes, while helping these programmes meet their objectives of outreach and outcomes.

81. LAMP will be aligned with the programmes of external development agencies. The main agencies active in Meghalaya are ADB and German Development Assistance (GIZ). ADB is supporting a road programme that complements rural development efforts by improving access to markets and services. ADB will also be supporting secondary education and skill development. GIZ is supporting North East Climate Change Adaptation Programme in five north-eastern states, including Meghalaya where it is to be implemented via MBDA in 64 villages. These will act as a pilot for climate change adaptation measures in LAMP. In addition IFC is supporting a programme on financial inclusion.

82. IFAD will also link LAMP to knowledge being generated by some of its grant partners who are active with IFAD in India – these currently include: the International Livestock Research Institute (ILRI), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), World Agroforestry Centre (ICRAF), Food and Agricultural Organisation (FAO), International Rice Research Institute (IRRI), International Centre for Integrated Mountain Development (ICIMOD), and International Potato Centre (CIP). These agencies have particular expertise and knowledge in climate change, livestock and crop production in hill farming systems. Sharing will be both formal and informal (face-to-face, document sharing, grant partner meetings in the ICO, etc.).

B. Organizational framework

1. Executing Agencies

83. At the central level the Department of Economic Affairs will be the nodal agency for the project. At the state level, the Planning Department of Government of Meghalaya will be the nodal agency, with the implementing agency being the Meghalaya Basin Management Agency (MBMA), a Section 25 company that is part of the Meghalaya Basin Development Authority, a society registered under the Societies Act

2. Management and Coordination Structure

84. Two broad principles will govern the management and co-ordination structure for LAMP:

- a. Alignment to the management structure set up for the IDBLP at all levels.
- b. Dynamic and flexible. The proposed arrangement is based on current assessment of project needs and may be modified based on the requirements that may arise during implementation.

85. Management of LAMP will be aligned to existing structures as follows:

- a. The State Project Management Unit will be located in the MBMA
- b. The Executive Director of MBMA will be the *ex-officio* Project Director of LAMP
- c. At the district level the District PMUs will be located in the respective District Basin Development Units (DBDU)
- d. The Deputy Commissioner (DC) will be the *ex-officio* District Project Co-ordinator of LAMP.
- e. The existing Basin Management Development Council Chaired by the Chief Minister and the Board of the Meghalaya Basin Development Authority chaired by the Chief Secretary will review the project periodically as part of their existing review process.

86. Details of project management and implementation arrangements, including organogrammes are in Appendix 5.

3. Project Management

87. The Project Director in charge of the management of LAMP will be an IAS Officer who is the full-time Executive Director of MBMA. He will report to the Chief Executive of MBDA and to its Board of Directors (who include the key Principal Secretaries of GoM). PMU staff, including an Additional Project Director, will be recruited from the open market on a contract basis, along with some of the existing staff of MBDA. At the District Level the Deputy Commissioner will be responsible for its implementation as District Project Coordinator, which will help ensure convergence with other programmes in the district.

In each village, implementation of the Natural Resources and Food Security will be via the Village Employment Councils (VEC), that already exist for the implementation of MGNREGS.

Each VEC will employ a Village Facilitator to support the implementation of LAMP activities in the village.

88. Technical Partner Agencies, some of which have already been engaged by MBDA, will provide specialised support for Natural Resources and Food Security, Enterprise Facilitation Centres, Integrated Production and Marketing Clusters, Livestock Development, and Knowledge Services.

89. Producer Groups are expected to emerge around commodity clusters that will be the successful demonstrations. These may be loose groupings of persons interested in a specific activity to generate required economies of scale for service delivery, but some may evolve into cooperatives or producer companies. These groups will service as the focal point for delivery of technology related inputs, aggregation of inputs for reducing transaction costs, and also for aggregation of outputs for marketing.

4. Coordination

90. Coordination at the highest level will be provided the Board of the Meghalaya Basin Development Authority. This will review the progress of LAMP and ensure that its activities are coordinated with

other development efforts in the state, especially with the nine missions on the IBDLP in aquaculture, apiculture, livestock, horticulture, sericulture, forestry & plantation crops, tourism, energy and water.

91. In addition, and in accordance with existing practice, a special Project Management Committee (PMC) will be constituted to support the project. Chaired by the Principal Secretary, Planning Department, this will include Project Director of LAMP, heads of line departments at the state level, representatives from Banks (NABARD and Reserve Bank) and representatives from civil society. Additionally, one District Project Co-ordinator/ District Project Manager will participate and this will be on a rotational basis. The APD of LAMP will be the Member-Secretary. The key functions of the PMC will be to review project progress, identify and help resolve challenges/ bottlenecks impacting project performance, review the Annual Work Plan before it is submitted to MBDA Board for approval, share information and facilitate convergence. It will also ensure that the project links up with line departments.

92. At the district level coordination and convergence will be ensured by having the Deputy Commissioner for the district as District Project Coordinator. The project will be included in the District Planning and Development Coordination meetings, the monthly convergence meetings of the BDU, and in other cross-programme meetings at the district level. In addition it is proposed that LAMP review meetings will be held at the district level every two months. These arrangements will ensure that the project links up with the technical line departments in the field both in terms of obtaining technical support and getting convergence funding from other projects being implemented by these agencies.

93. At the village level LAMP NRM activities will be implemented through the VECs. These VECs also have responsibility for implementation of MGNREGS, which provides a major source of funds for local level infrastructure, soil and water conservation, and catchment improvement – all major thrusts proposed for LAMP NRM. It should therefore be easy to integrate MGNREGS works into the INRMP sponsored by LAMP.

94. In addition to these coordination efforts, LAMP staff includes a Convergence Manager in the SPMU and Convergence Officers in the DPMUs. These staff will follow-up on coordination meetings to ensure that the project obtains the maximum possible benefits from the very significant government resources available for complementary projects and programmes. .

5. Implementation Arrangements

95. The project will use a multi-pronged approach to build livelihoods and combat poverty. Most activities will be focused on villages and village clusters. Natural resource management and food security improvement will be implemented by VECs, with people in these villages also receiving financial services from IVCS. Integrated Production and Marketing activities in the same clusters will be implemented by producers and producer groups supported by service providers. IVCS will be member based cooperatives and will come under the wing of the MCAB and the Department of Cooperatives. Enterprise Facilitation Centres will be directly implemented by the project. In case of road and market infrastructure development, the project will use contractors for construction and Consulting Engineers to design and supervise construction.

96. **Natural Resources and Food Security:** the project will build a cadre of village level para-professionals with vision and ability to implement activities for sustainable natural resources management and food crop development. In each village the project will identify and train a Village Facilitator to support the VEC in drawing up INRMP, and the village in developing land and water resources and improving food crops. At the initial stage the VEC and VF will be supported by a local FNGO or similar agency, which would provide training for VF, Lead Farmers and VEC committee members, and would actively participate in preparation of the INRMP. The FNGO would advise the VEC on the selection of the VF, with the appointment confirmed by the DPMU.

97. This component would be supported by the DPMU, which would include an Agricultural Engineer in each of the district offices to supervise the planning and implementation of land and water

conservation works. Each INRMP will be presented to the DPMU for its approval, and the DPMU will visit each village to discuss the plan with the VEC and validate the proposals.

98. The State PMU will include a Natural Resources Development Manager who will provide overall direction, including the preparation of manuals and reference materials. Convergence officers in the DPMU, along with project coordination arrangements will ensure that resources from other programmes will flow to project villages.

The component will also be supported by technical service providers to: (i) strengthen and support the FNGOs in facilitation of INRMP; and (ii) agency or food crop development. The latter will implement a pilot scheme for improved paddy in a few village clusters that could then be scaled up across the project area. The steps required for implementation of this component are in Appendix 5, section 5a.

99. **Enterprise Development** will be implemented by the staff of EFCs with support from DPMUs and the SPMU. Linkages between the EFCs and IPM clusters, both supporting enterprises, will evolve during the project. EFCs will be responsible for supporting enterprise enquiries and proposals that are made at the EFC. In the 18 of 39 blocks where the Integrated Production and Marketing (IPM) sub-component is being implemented, some of these proposals may come from the villages included in IPM clusters. If these proposals are for the same sub-sectors that are being supported by the IPM component in the particular cluster, then the entrepreneur may be referred to the sub-sector technical partner agency for support. If the proposal is for another sub-sector, or from a village that is not part of the LAMP cluster, then support will flow via the EFC.

100. To build the capacity of both EFC staff and clients, LAMP may contract enterprise development agencies to support EFCs - on the pattern of the recent engagement of TLS to support eight EFCs. In order to strengthen linkages with line agencies, awareness and information workshops will be arranged with line agency staff in each district and block. EFCs will link with the Knowledge Services component to provide improved information to potential entrepreneurs to help them select viable enterprises and to support implementation through technical guidelines and other materials. EFCs would also have a database of the support available for different enterprises (including grants and subsidies) and links to banks.

101. **Integrated Production and Marketing** will be implemented in the same village clusters as Component 1, and will benefit from the natural resource management activities of this component in terms of enhanced water supply for production of cash crops, and protection of the eco-system to ensure sustainability. To select village clusters for development of commercial products via the Integrated Production and Marketing (IPM) sub-component, the following steps are recommended:

1. Selection of a number of commodities (sub-sectors) with potential for commercial production in the state. The design missions have drawn up a draft list which prioritises 10 crops. This will be further reviewed by MBDA. The aim behind having a limited number of sub-sectors is to, at least at the initial stage, focus the efforts of the project on a limited number of priority areas.
2. The best blocks for implementation of the selected sub-sectors should then be identified. The mission, with expert local assistance, has made a start on this (Working Paper 8, Annex 1).
3. The 18 blocks with the greatest potential for commercial sub-sector development should then be chosen.
4. Within each of the selected 18 blocks, three village clusters, with around 75 villages per block in total, should then be selected for LAMP participation. Both NRM and IPM interventions would take place in these villages.

102. Selection of priority sub-sectors, blocks and clusters would aim to choose sub-sectors and locations with potential for commercial production on some significant scale. Selection should take account of existing skills, availability of land, water and other natural resources, and access to inputs, support services, finance and markets. In selection of sub-sectors it is also important to consider if LAMP will be in a position to make interventions in production and/or marketing that will significantly increase returns to producers. There will be some crops that are now commercially important, but for which there are no tried and tested interventions that will reliably increase producer returns by a really significant amount. For this reason it could be worthwhile to select some crops that are not now widely

grown but have good potential. In some cases, further investigations are needed to identify useful interventions – which may even require some field testing on farms in Meghalaya.

103. Account should be taken of environmental impacts – some sub-sectors may be rejected on grounds of the risk of negative environmental impacts. Finally, in selecting blocks and clusters, some weight could be given to the existence of viable cooperatives and producer organisations, or of other organisations (SHG clusters and federations) that could become IVCS.

104. Sub-sectors and blocks (and, if possible, clusters) would be provisionally selected by MBDA prior to the start of the project. Some villages who have participated in MLIPH could be included – the community mobilisation and livelihood work will provide a good launching pad for commercial enterprises. It was agreed that no more than 30% of the villages in the selected LAMP clusters should be ex-MLIPH villages. This means up to about 400 out of 700 MLIPH villages could be included in LAMP. It was also agreed that NERCORMP villages should not be selected for LAMP as NERCORMP will continue to be implemented in these villages for the next 3 years.

105. The project will thereafter support preparation of an implementation plan for each selected commodity. This plan will include activities related to: (i) identification of Lead Farmers/Entrepreneurs; (ii) analysis of constraints; (iii) technology options; (iv) training of Lead Entrepreneurs; (v) training of other producers; (vi) support for household level implementation; (vii) interventions to address marketing constraints, if any; (viii) interventions required to address input and service provider constraints; (ix) detailed costs for each activity and funding sources; and (x) technical and financial viability of the enterprise.

106. This sub-component will be mostly implemented in the by contracted agencies – either in the role of facilitators or via a PPP. Where needed the project will build a team of village level Service Providers (who may sometimes also be the Lead Entrepreneurs) with the required technical competence to address issues related to inputs, technical services, and marketing.

107. MBDA has already appointed a number of Technical Partners to support enterprise development and these and other agencies may be engaged to support clusters as well as the individual enterprises established through EFCs. These partners would be engaged on a commodity basis, and could undertake a range of tasks including market and value chain studies, design of interventions, training of project staff and producers, formation of producer organisations, and direct mentoring of enterprises. LAMP will also seek private sector partners to help link producers with markets and improved technologies. Such private sector partnership may be particularly useful in the spice sector, where there is potential to link with markets for processed products. Support from the various sector missions of GoM will also be enlisted in implementation of the cluster based enterprise development.

108. **Livestock Development.** BAIF, a specialised resource NGO, has already been contracted by MBDA to support livestock for the IBDLP, and would be responsible for implementing LDCs to be funded by LAMP. BAIF would first undertake field investigations and meetings with local people to select suitable locations for these centres and identify the type of livestock to be developed. The Department of Animal Husbandry and Veterinary would provide support, especially regarding disease control and the supply of improved breeding stock. The process of establishing an LDC is described in Appendix 5, section 5d.

109. To provide additional expertise in pig production, BAIF will link up with ILRI's Assam office, which has implemented a number of pig development projects in the north-east, and has an excellent understanding of the key issues and opportunities for specific interventions. In addition some NGOs in Meghalaya and other north-eastern states have been working on pig development. This will be combined with BAIF's expertise in large-scale delivery of livestock development, backed up by partnership with DAH&V. To support the establishment of the LDCs, BAIF would employ a Livestock Development Officer in each of 11 districts, who would be located in the LAMP district project management office. This Officer would also support livestock enterprises belonging to EFC clients. For overall coordination and monitoring, and to ensure convergence, there would be a Livestock Specialist in the Enterprise Development Unit at the SPMU.

110. Market infrastructure: After project start-up, the PMU will commission a team to identify an initial batch of about 5 to 10 markets for development. Selection of markets would be based on the following criteria:

(a) Criteria that must be met

- Cooperative local leadership and agreement to: (i) establish a fund for market investment and maintenance into which an agreed share of market revenue will be paid; (ii) establishment of a market users' committee with defined roles and responsibilities; (iii) guaranteed access for primary producers and temporary traders; (iv) establishment of set rates of market toll, and display of these toll rates on a public notice board.
- Development is technically feasible – sufficient land is available in a viable location

(b) If a market meets both the above criteria, preference will be given to:

- Markets where local institutions and traders are prepared to contribute additional investment in developing market facilities
- Markets that have an important role in marketing key rural products, including (but not necessarily) products from clusters where the Integrated Production and Marketing sub- component is being implemented.

111. Stretches of village roads will be selected for improvement (it is likely that almost all this work will be improvement of existing roads and tracks, and there will be very little construction along entirely new alignments. Criteria for road selection will include linkage of markets selected for development and clusters where the commercial products are being developed via the Integrated Production and Marketing sub-component. Similar criteria will be used when selecting locations for low-cost bridges and ropeways. For all types of communications infrastructure account will also be taken of the activities and plans of other development programmes in order to contribute to a cohesive communications network in the state.

112. Construction of markets would be managed via the Market Management Committee, which would be strengthened through training and support from project staff. Standard designs would be adapted to the needs of individual locations. Construction of roads and bridges could follow a similar approach to the up-grading of MGNREGS funded earth roads now being carried out by the Block Development Officer, who either engages a contractor, passes the work to the VEC, or uses directly hired labour with government or hired machinery. LAMP budgets include provision to hire engineers (either a consulting firm or individuals) or other expertise to assist with design, tendering and construction supervision, as well as training and monitoring in support of works undertaken at the community level. Construction of ropeways is a highly specialised task and LAMP would take advantage of BADD experience to engage expert installers for its ropeways.

113. **Rural finance** will be implemented through the establishment of IVCS. This will involve consultations with village clusters (the VEC and traditional leaders will have a role to play here), and will be supported by a dedicated service provider with specialised knowledge of formation of grassroots financial institutions especially in the cooperative sector, and of handholding these institutions during their initial phase. Alongside this service provider, an institutional partner is needed to provide IVCS with finance and liquidity. The Meghalaya Cooperative Apex Bank (MCAB) is willing to collaborate in the process of setting up IVCS and to act as the higher level financing institution.

114. Under the Meghalaya State Cooperative Societies Act, the cooperative institutions formed in the state should affiliate themselves with the MCAB. Thus the legal framework for providing financial support in the form of loans and also guidance on operational and technical issues is already in place. In fact the entire support mechanism relating to providing viability gap funding, corpus and risk funds may be entrusted with the MCAB by GOM/LAMP. The work of monitoring the performance of IVCS and supervisory guidance of their performance would be entrusted to the apex bank, and the MIS system of MCAB would be adapted to facilitate this work. MCAB would work closely with LAMP PMU staff, who would help ensure that the rural finance programme rolls out as planned in terms outreach,

capacity building and sustainability. Each DPMU would include a Cooperatives Officer and there would be a Cooperatives Manager in the SPMU. The LAMP M&E unit would also support monitoring of IVCS, especially in terms of outcomes resulting from the delivery of financial services. The process for establishment of IVCS is described in Appendix 5, Section 5e.

115. **Knowledge services:** the Knowledge Services Unit would be located in the PMU and would be managed on a day-to-day basis by the Head of Knowledge Services. The Knowledge Services Unit will consist of the following four sections:

- a) Natural Resources and Governance Section: staffed by a Natural Resource Knowledge Manager, three Indigenous Knowledge Specialists, and a GIS operator (for village natural resource mapping and planning)
- b) Enterprise Development Section staffed by an Enterprise Knowledge Manager and up to three Enterprise Telephone Help Line Operators (if such a help line is justified)
- c) Monitoring and Evaluation Section staffed by a Planning and M&E Manager, a Data Analyst, an MIS system operator, two Project Assistants (for data entry and other work), and seven Enumerators/Field Monitoring Officers (based in field offices)
- d) Knowledge Management and Communications Section staffed by a Knowledge Management and Communications Manager

Technology testing and action research would not have any staff in the Knowledge Services Unit, but be managed by a group of PMU technical staff, under the overall guidance of the LAMP Research Committee. This Committee would consist of staff members from LAMP together with experts from local research stations and line agencies.

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

Planning

116. The Project will follow the planning process undertaken MBDA as a whole. A draft Annual Work Plan and Budget (AWPB) will be drawn up in consultation with district and block project units and with partner agencies. This would then be approved by the Board of Directors of MBDA in February, before being sent to IFAD along with the annual procurement plan for its approval. The approved AWPB would be used for reviewing performance and progress during the supervision missions.

Monitoring and evaluation

117. The Monitoring and Evaluation (M&E) system will collect data and information to measure performance and progress towards objectives, and be a learning tool to provide information for critical reflection on project strategies and operations. It would support decision-making at various levels and be a basis for results-based management. More details on M&E are in Appendix 6, with implementation arrangements in Appendix 5, Section 5e.

118. The M&E system will, as far as possible, be integrated with the overall MBDA management information system, and utilise data generated via the Entrepreneur Portal. The system will also provide data on IFAD's corporate RIMS indicators.

119. M&E would be guided by an M&E framework as set out in the Project Implementation Manual. An M&E unit would be established in the PMU to support programme monitoring by the field implementation units. In addition the M&E unit will implement a programme of outcome and impact monitoring, as well as producing consolidated reports on project progress and results.

(a) Outline of a project M&E framework

120. The M&E framework is a system to collect, analyse and report on data at three different levels of project implementation: (i) outputs; (ii) outcomes; and (iii) impact.

121. Output monitoring will measure the progress of activities and achievement of outputs against annual targets in the annual workplan (AWP) for each project component. Information on the progress of the annual workplan will be measured against indicators in the plan, such as number of

INRMP prepared, numbers of people trained, and number of markets developed. This can be linked to the financial expenditure on the concerned activities, and data may be stored and report via a computerised MIS. Data would be collected by field implementation agencies such as DPMUs, FNGOs and service providers, and other implementation units, including information from the registers and accounts kept by community organisations supported by LAMP. Wherever necessary, data will be collected disaggregated by gender, particularly those related to training and access to services.

122. Outcome monitoring measures the immediate changes coming about as a result of project interventions. In LAMP this would include:

- Reports from EFCs on numbers of bank loans and other financing facilitated for their partners, and on numbers of enterprises established or expanded.
- Reports from FNGOs/DPMUs on indicators of improved NRM (e.g. area of watershed forest conserved, area under drip irrigation, number of farmers/area adopting improved methods for paddy), and IPM (numbers of farmers taking up a commercial crop, adopting improved technology, increasing sales).
- Reports from the Market Committees in improved hat bazaars of increases in numbers of traders and volume of trade

123. As it may not be easy for implementation staff to collect such information, the M&E unit could conduct Annual Outcome Surveys (AOS), interviewing a sample of 200 to 400 farmers/households to gather data on indicators such as those listed above. An AOS may also be carried out on a thematic basis in order to focus on a specific area of project intervention, such as enterprises created as a result of EFC facilitation.

124. Related to outcome monitoring is process monitoring, which involves monitoring the processes leading to outputs and outcomes. Specific areas where progress monitoring will be useful in LAMP include: service provision by EFCs, the provision of technical services, and the functioning of community organisations. Information on these may be gathered via Participatory M&E (see section below on knowledge management and learning), as well as from the records of community organisations and service providers. Information on the effectiveness of training will be assessed via KAP (Knowledge, Attitude and Practice) surveys.

125. Impact evaluation is the process which will assess the contribution of LAMP in achieving the overall goal of the project. It will consist of baseline, mid-term and end-of-project surveys. This survey will be coordinated by the PMU M&E unit and contracted to an external agency, with specific expertise in such assessments. Information to be collected will include the impact level indicators of IFAD's Results and Impact Monitoring System (RIMS). These include mandatory 'anchor indicators' relating to household assets, food security and child malnutrition (anthropometric data of children under five years of age). ToR for this survey will be in the draft PIM.

(b) RIMS indicators

126. The Results and Impact Monitoring System of IFAD generates annual report tables on a number of first and second level results indicators that correspond to the output and outcome indicators. IFAD has produced a standard list of these indicators, but only some of these will apply to an individual project. Prior to mid-term review, the project will report on only the first level results, but after the mid-term report it reports on second level indicators. These second level indicators are used as evidence to support ratings of the effectiveness and likely sustainability of each component. The third level RIMS results are the anchor indicators used for impact assessment (see impact evaluation paragraph above).

(c) Special studies

127. The LAMP M&E unit may also carry out, or commission, a number of special studies. These could investigate topics such as: (i) agribusiness and marketing; (ii) production and productivity (cropping system studies in agriculture and horticulture crops); and (iii) environment and NRM (impact of soil and water conservation measures, flow monitoring and flood discharge in micro-watersheds).

Cost effectiveness studies will be also undertaken to assess delivery systems and implementation methodology/approaches adopted by LAMP and other agencies implementing similar activities.

Learning and knowledge management

128. Learning and knowledge management are a key element of the project and the support that it is proposed will be provided to MBDA is described above as Component 3 of the project. Information generated by the project will also be disseminated through IFAD websites, newsletters, thematic reports and at learning events. In particular important lessons will be generated by the use of Enterprise Facilitation Centres as a means of promoting enterprises.

D. Financial management, procurement and governance

Fiscal space of State of Meghalaya

129. LAMP will be almost equally funded by IFAD and the Government of Meghalaya (GoM). The State Government proposes to deploy efficient public expenditure through the budgetary allocations of different sectors. Though the risk of adequate financing to different social sector departments exist, GoM has assured that any gap in the resources will be made up by the special assistance from the Central Government.

130. The 13th Finance Commission has recommended that Meghalaya will receive 0.408% share in the Central taxes, amounting to INR 1,358 crores for 2013-14 and INR 1,602 crores for 2014-15. Meghalaya being the one of the Special Category States, has received increasingly higher additional central assistance. In addition to the share in the central tax revenue, the Government of India's (GoI) additional central assistance for plan and schemes for the year 2012-13 was INR 2,698 crore. This compares with an average annual disbursement of Government funds for LAMP of INR 38.5 crore. GoM's Government Budgetary Borrowing is on par with the Ministry of Finance ceiling of 2.80% of GSDP.

Financial management arrangements

131. IFAD financing of the project will be routed through GoI. There will not be a Designated Account and all the programme expenditures reported by MBMA through Government of Meghalaya will be reimbursed. The Office of CAA&A will convert the rupee equivalent of expenditures into USD equivalent using RBI exchange rate on the date of processing and submit to IFAD using formats agreed with IFAD. Each withdrawal application requesting reimbursement should cover eligible expenditure incurred for about three months, and be above a minimum threshold amount established by IFAD.

132. GoI will pass on the IFAD loan financing to the State through the procedure of Additional Central Assistance to Special Category States. Under the procedure, 90% of the financing will be a Grant to the State and 10% as loan to the State of Meghalaya. The loan from IFAD to GoI will be 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% and shall have a maturity period of 25 years, including a grace period of five years. The repayment of the principal and interest, service charges of the financing will be borne by the Government of India including the foreign exchange risks.

133. The Planning Department of GoM will initially transfer the funds, including its counterpart funding, as per the approved LAMP Annual Work Plan & Budget to the Meghalaya Basin Management Agency as a grant. The funds received from GoM will be kept in separate project accounts at PMU and district levels. The funds received from the Government by the MBMA will not lapse at the end of the fiscal year. To establish the trail of IFAD financing, GoM should specify the share of counterpart financing, advance funding and IFAD financing in each of the transfers.

134. As GoM annual plan resources are dependent upon the central government grant transfers, there may be occasions where the funds may not be made available at the start of the programme year or the transfers may not be timely. To mitigate the risk of adverse fund flow, it is proposed that Government of Meghalaya provide a commitment during the Loan Negotiations that adequate resources for programme implementation and additional resources will be provided as and when requested by MBMA.

135. MBMA will engage qualified finance staff from the open market and will establish budgeting, accounting and internal control systems at all levels before the project starts operation. The financial accounting of the MBMA will be done through computerised accounting software, which will be customised to generate financial reports for GoM and for IFAD-specific reporting.

136. Disbursement of IFAD financing will include: (i) reimbursement of Government financed expenditure; (ii) direct payment to the vendors of services and equipments/materials; and (iii) special commitment procedure (Letter of Credit). The disbursement will be under two types: (i) Statement of Expenditure (SoE); and (ii) Documented Claim. The SoE procedure threshold will be established as per the risk rating of the project. However, in line with other IFAD projects in India, the recommended SoE threshold will be USD 50,000 equivalent for payment of eligible expenditure. Any single payment exceeding USD 50,000 will be submitted through documented procedures. The procedures for SoE and other disbursement methods will be as per the Loan Disbursement Handbook and the Letter to the Borrower. IFAD will follow the Risk Based Disbursement procedures for each of the withdrawal application submitted.

137. The categories of disbursement in Schedule 2 of the Project Financing Agreement will be kept in line with IFAD new Loan and Grants System to establish uniformity across all loan projects. IFAD financing for eligible expenditure will be indicated as a percentage. In view of the learning from the current IFAD projects, it is proposed to indicate the percentage of IFAD financing rather 100% net of taxes, government and beneficiary contribution. IFAD disbursement percentage ranges from 40% to 90% of eligible expenditure in different categories. The recommended percentages are indicated in the Working Paper on Project Costs.

138. The project will submit the financial reports and other reasonably requested reports as per the provisions of General Conditions of Agricultural Development Financing. The templates of financial reports will be included in the Project Implementation Manual.

139. Auditing: IFAD aims to increase the number of projects that it finances that will be audited by the Supreme Audit Institution (in case of India, the Comptroller & Auditor General). Discussions with the Accountant General, Meghalaya indicate that, although annual audit by the CAG cannot be ensured, during the project cycle the CAG audit will be conducted at least three times. In view of this it is recommended that the financial statements of the projects be audited by a private Chartered Accountant firm competitively selected, and following IFAD Project Audit Guidelines. A separate firm (or firms) of Chartered Accountants should be engaged as internal auditors. More details on financial management are in Appendix 7.

Procurement arrangements

140. Procurement of goods, works and consultancy services for LAMP will be carried out in accordance with IFAD Procurement Guidelines and Procurement Handbook, 2010. Procurement will follow Procurement Plans submitted by MBMA and approved by IFAD. MBMA will submit an 18-month Procurement Plan immediately after the project enters into force and submit an annual Procurement Plan in subsequent years. The information in the procurement plan will follow the requirements of IFAD, and will be prepared for goods, works and consultancy services separately. During the programme year, MBMA may modify the Procurement Plan as per the need, but modifications should be approved by IFAD.

141. If MBMA wishes to utilise the services of some or all of the technical service providers that it has already engaged (either directly or via SFAC), it will prepare a ToR describing the scope of services, costs and other conditions of the contract, along with a justification for continuing their services. After IFAD's approval, MBMA will sign a separate contract with the technical service provider. MBMA may also engage SFAC as Technical Support agency to advise and support the procurement of service providers, including preparation of bid documents, terms of references and review of performance.

142. The project design envisages some procurement will be undertaken by different implementation partners. Procurement carried out by these partners, would be undertaken in accordance with the procurement rules of the respective Implementing Partners, consistent to IFAD Procurement Guidelines and Procurement Handbook of September 2010. This aspect will be spelt out in the contractual terms with the implementing partners. To support procurement processes it is proposed that the Project will recruit a Procurement Adviser to be posted in the SPMU.

143. IFAD prior review thresholds will be established at USD 100,000 equivalent and above for goods and works and at USD 50,000 equivalent and above for consultancy services. Other risk mitigation measures include: (i) IFAD will organize a procurement training workshop for the MBMA staff within one month of the project's entry into force and during project implementation; and (ii) expanded scope of ex-post reviews by IFAD during Supervision and Implementation Support Missions to include checks for identified deliverables, procedural compliance and required documentation, among other measures. More details on procurement processes are in Appendix 8.

Governance

144. A framework for good governance will be drafted and included in the PIM. This framework aims to ensure: (i) transparency, with information in the public domain; (ii) accountability in the use of resources; and (iii) participation with the people having a voice in decisions that may affect them. The involvement of affected communities in all stages of project implementation can simultaneously improve development outcomes and reduce the scope for fraud and corruption. Key features of this framework are:

- (a) Targeting of women and disadvantaged households.
- (b) Local level participation in planning with participation from village representatives.
- (c) Community and participatory monitoring of project activities using participatory M&E and process monitoring to obtain feedback from community members.
- (d) Rotation of project group leaders and audit of project group accounts.
- (e) Audits of project accounts – both internal and external.
- (f) IFAD supervision and support, including spot checks by regular supervision missions, implementation support for financial management and procurement, and technical audits if needed.
- (g) Regular outcome surveys will provide information on how well project outputs are being delivered – both in terms of coverage and quality.
- (h) Reporting of results to MBDA, the DC, IFAD, and the ADC, with key information published on a project website.
- (i) Complaints and remedies mechanism including circulation of phone numbers of Senior Management of MBMA.

E. Supervision

145. The project would be directly supervised by IFAD. During the start-up phase of the project, IFAD will attend in the state-level start-up workshop and participate in discussions on the project approach and strategy. This is likely to involve leaders of project design missions and a financial management specialist. The latter specialist will also provide implementation support to train project financial staff. Other implementation support in the first year of the project may include assistance with setting up the M&E system and drawing up training plans for the various components of the project. It is envisaged that the first supervision mission will take place towards the end of the first year of operations. It will include specialists in natural resources, enterprise development and financial management. Once physical infrastructure works start, supervision missions may include engineers.

F. Risk identification and mitigation

146. There are a number of risks associated with the project. Key risks are identified in the logframe. These relate to external factors (overall economic growth, market/prices and climate change), and the response of rural households to opportunities for enterprise development. The risk that crop production will be adversely effected by changing weather patterns resulting from climate change, will be reduced through a number of activities and measures to mitigate the impacts of climate change - such as water conservation, water-efficient irrigation methods, and drought-tolerant crops.

147. Another risk is that low food prices will make production of basic food crops unattractive for farmers. This risk is reduced by: (i) crops do not suffer from damage by wild animals as much as in some of the other hill states; and (ii) relatively low rates of out-migration mean labour is available for farm work. However government subsidies on food prices could mean that it becomes cheaper to purchase basic food grain (rice, wheat) than to grow it. Some households already have access to subsidised grain via the PDS system, and this may be dramatically scaled up under the National Food Security Bill which would provide around 70% of the population with a portion of their foodgrains at price of 15% or less that in the open market. If this risk emerges as a real problem, then project would re-focus its activities on market-orientated products and away from basic food crops.

Table 1: Risks and Risk Mitigation

Risk mitigation	Risk before	Risk reduction Approach	Residual Risks
Goal level: Instability in general economic conditions are not conducive to economic growth	Low	If needed, re-focus on basic food crops which will always be in demand even in an adverse economic climate	Very low
Development Objective level: (i) Rural people do not respond to opportunities for improved livelihoods	Medium	Promote enterprises for which state has a comparative advantage and which are sufficiently profitable to be adopted.	Medium to low
(ii) Political instability and insecurity discourage investment in enterprise and engagement in markets	Medium	Promote and support local organisations to build coalitions in favour of stability and economic progress.	Medium to low
Integrated Natural Resources Management component level risks: (i) Changes in weather patterns seriously affect farming	Medium	(i) Technologies suitable for climate adaptation put into practice and farmers provided training on various coping mechanisms.	Medium to low
(ii) Illegal mining and logging damage natural resources, especially water supplies.	Low	(ii) Mining is in decline, but village NRM plans (& link with other villages for watershed plan) will protect environment.	Low
(iii) Prices for food crops fall to extent that local production is not viable	Medium	(iii) Re-focus on market-orientated and non-basic food enterprises.	Low
Livelihoods development component level risks: (i) Banks unwilling to provide the required credit needed to start enterprises.	High	(i) Measures to incentivise banks and provide alternative sources of loans and other enterprise finance.	Medium to low
(ii) Markets not available or production costs too high	Medium	(ii) Careful selection of sub-sectors where markets available and production costs competitive	Low
Knowledge services component level risks Information services prove not to be useful available in a format that is accessible.	High	Identify real information needs, and make information	Medium to low

148. There are also risks that natural resources, especially water supplies will be affected by coal mining and logging. However coal production is falling due to exhaustion of accessible reserves and competition from other suppliers in the Bangladesh market. There are also concerns that illegal logging is effecting watersheds. Traditional institutions are not always effective in controlling logging, but most logging takes place locations that are relatively accessible by road. People are increasingly aware of the financial value of trees, and in some places are keen to replant forests. LAMP villages will be carrying out Natural Resource Management Plans which will designate areas as protected forests, and draw up plans for sustainable timber harvesting in other places. NRM activities may also rehabilitate springs and re-plant their catchment areas.

149. There is little risk that LAMP will adopt a top-down approach in planning and implementation. The philosophy behind the basin strategy of IBDLP is that of building individual enterprises and village level NR management and financial intermediation. LAMP will promote participatory planning for

NRM, and enterprise investments will be determined by individuals and guided by market opportunities.

IV. Project costs, financing, benefits and sustainability

A. Project costs

Assumptions

- (a) Project Period: eight-year period starting in July 2014.
 (b) Contingencies: price: 5% per year (8% for staff costs), physical - zero
 (c) Exchange Rate: constant rate of INR 62.00 to USD 1.00.
 (d) Taxes and Duties: 5% on training, workshops, staff and operating costs; 15% service provider contracts and civil works; 10% on goods and equipment.

Table 2: Project Costs by Component

	INR'000 total	USD'000 total	percent of baseline
A. Natural Resources and Food Security			
1. Natural resources and food security	2,144,981	34,596	22%
B. Livelihood Support			
1. Enterprise development	3,116,793	50,271	32%
2. Integrated production and marketing	1,035,903	16,708	11%
3. Livestock development	357,102	5,760	4%
3. Access to markets	1,302,567	21,009	14%
4. Rural finance (IVCS)	823,029	13,275	9%
sub-total	6,635,394	107,002	69%
C. Knowledge Services			
1. Knowledge Services	338,600	5,453	4%
D. Project Management			
1. State Project Management Unit	131,176	2,116	1%
2. District Project Management Units	362,483	5,847	4%
sub-total	493,659	7,962	5%
Total baseline costs	9,612,126	155,034	100%
Physical contingencies			
Price contingencies	921,969	14,870	10%
Total project costs	10,534,095	169,905	110%

150. Based on current 2013 prices, total baseline project costs are estimated at USD 155.0 million (INR 9,612 million). Price contingencies add a further 10 percent, to make a total cost of USD 169.9 million (INR 10,534 million). Taxes amount to USD 6.89 million. A summary is in Table 2, with further details in Appendix 9.

B. Project Financing

151. The Project will be financed by an IFAD loan of USD 50.0 million, a contribution of USD 49.6 million from the Government of Meghalaya, USD 29.5 million from banks as loans to enterprises, USD 28.2 million from convergence with other programmes and USD 12.6 million as contributions from beneficiaries (Table 3). The ratio of IFAD funding to funding from these other sources is 1:2.4. Further details are in Appendix 9

Table 3: Financing Plan by Component

USD'000

A. Natural Resources and Food Security	Government	IFAD	Banks	Convergence	Beneficiaries	Total
1. Natural resources and Food Security	7,769	8,759		16,555	1,742	34,736
B. Livelihood Support						
1. Enterprise Development	14,433	7,688	15,158	8,980	7,643	53,902
2. Integrated production and marketing	4,455	3,756	3,919	2,613	2,613	17,355
3. Livestock development	1,255	4,720	565		113	6,653
4. Access to markets	10,739	15,002		27	572	26,340
5. Rural finance	3,063	774	9,677			13,514
sub-total	33,945	31,940	29,319	11,620	10,941	117,764
C. Knowledge Services						
1. Knowledge Services	1,804	4,762				6,566
D. Project Management						
1. State Project Management Unit	1,518	1,301				2,818
2. District Project Management Units	4,719	3,301				8,020
sub-total	6,237	4,602	-	-	-	10,839
Total project costs	49,665	50,063	29,319	28,175	12,682	169,905

152. Scaling up IVCS and NRM interventions to cover the remaining 75 villages in each of the 18 LAMP blocks, along with Integrated Production and Marketing interventions, and additional roads and markets, is calculated to have a base cost of Rs3,265 million (USD 60.6 million including contingencies). A breakdown is in Appendix 9. This will require additional funding, possibly from GoM and/or another donor. Providing good progress has been made in implementation, this scaling up could take place from year 5. Some additional staff may be needed for this in DPMUs, which are included in these projections.

C. Summary benefit and economic analysis

1. Financial analysis

153. Four household models were developed: (i) 101,250 NRM households involved in the Natural Resources and Food Security component; (ii) 20,500 IPM households involved in the sub-component for Integrated Production and Marketing; (iii) 32,400 households involved in the Livestock Development sub-component (both these are in addition to participating in the NRM activities); and (iii) 47,400 EFC enterprise households. In addition a road and markets model was developed to assess the benefits of improvements of local markets and rural roads. Analysis of these subprojects in terms of household incomes, production costs, labour inputs and net income is in Working Paper 14 with results summarised in Table 4. These show significant increases in net income.

Table 4: Results of household models

INR million

NRM	IPM		Livestock		EFC			
	WOP	WP	WOP	WP	WOP	WP		
Gross income	4304.9	5134.0	858.2	1969.6	460.8	1692.0	1110.7	8048.8
Inputs	1002.8	1123.6	537.1	803.7	140.6	353.3	681.0	5366.4
Labour	2577.0	2768.6	208.0	415.1	540.0	648.0	64.0	421.3
Net Income	725.1	1241.8	113.1	750.8	-219.8	690.7	365.7	2261.1

WOP = without project, WP=with project
 At full development stage and assuming labour requirements met fully by households themselves

2. Economic analysis

154. The principal assumptions for economic analysis include:

- A 25-year analysis period has been assumed, including an 8 year investment period.
- All agricultural inputs and outputs that are traded are valued at their border prices.
- Economic investment costs are net of taxes and price contingencies, credit, office rent.

- A standard conversion factor (SCF) of 0.85 is applied to both traded and non-traded items for adjusting financial prices but with the following variations: food crops at 85%, labour 75%, livestock products, seeds, planting materials and enterprises at 100%.
- The average financial rural wage rate is taken to be the economic value of labour.
- The analysis includes only on-farm benefits and including attributable benefits from soil and water conservation under NRM;
- Full benefits are assumed after 10 years
- No significant changes or shifts in cropping patterns are assumed;
- The analysis employs an Opportunity Cost of Capital (OCC) at 12%.

155. Calculations based on these assumptions show the overall Project EIRR to be 26%. The estimated NPV for a 12% discount rate is INR 6,652 million and the BCR of 1.33. The NPV remains positive even if the discount rate is increased to 20%, which indicates that the project investments are robust. Sensitivity analysis shows that, with a 25% increase in cost, the EIRR declines to 15%; with a 25% reduction in benefits, the EIRR is 12%; and with a two year delay in benefits the EIRR is 18%. Even under extreme case of costs increases by 25% and benefits decline by 25% over the base-case, an IRR of 6% is obtained. More information is in Appendix 10, with details are in Working Paper 14.

3. Benefits and Beneficiaries

156. **Beneficiaries:** The project will cover some 191,070 households or over one million people. Of these 101,250 households will benefit from more intensive interventions of the Natural Resources and Food Security Component and also from opportunities for Integrated Production and Marketing, and for Livestock Development. This will cover 1,350 villages falling under 18 Blocks. Integrated Village Cooperative Societies will also be focused on this area, but EFCs will cover the whole state and road and market development may also be more widely disbursed. The overlap between these interventions is summarised in Table 5 (calculations are in Working Paper 14, Appendix 29).

Table 5: Cumulative number of participating households

Interventions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
NRM* households	0	20,000	40,000	60,000	80,000	101,255	101,255	101,255
IPM total households	0	4,000	8,000	12,000	1,600	20,250	20,250	20,250
IPM (overlap with NRM)	0	-4,000	-8,000	-12,000	-1,600	-20,250	-20,250	-20,250
Livestock total households	0	3,600	11,520	27,720	32,400	32,400	32,400	32,400
Livestock (overlap with NRM)	0	-3,600	-11,520	-27,720	-32,400	-32,400	-32,400	-32,400
EFC households – total	0	1,755	5,265	12,285	19,305	26,325	33,345	47,385
EFC overlap with other sub-components	0	-421	-1,264	-2,948	-4,633	-6,318	-8,003	-11,364
IVCS households – total	0	20,000	40,000	60,000	80,000	100,000	120,000	120,000
IVCS overlap with other sub-components	0	-15,200	-30,400	-45,600	-60,800	-76,000	-91,242	-91,242
Market households – total	0	0	0	4,125	8,250	16,500	28,875	41,250
Market households overlap with other	0	0	0	-1,609	-3,218	-6,435	-11,261	-16,222
Total (net)	0	26,136	53,604	86,257	118,909	155,333	172,976	191,070

* households participating in Component 1 – Natural Resources and Food Security

157. **Benefits:** The immediate benefits from the project are increased productivity-through the introduction of in situ water conservation practices, improved farming practices including shift in cropping patterns in response to market demands, cultivation of spices and plantation crops. This will result in increased household incomes and improved food security. On an average, a household's food production will increase from 1,070 kg/year to over 1,260 kg (excluding tubers, fruits and vegetables and spices).

158. **Other benefits:** Additional benefits will come from the LAMP's capacity building interventions. First, at the end of the project, all participating villages will have the advantages of the services of their VECs, which are provided with funds for social and economic developments. Secondly, 300 IVCSs

are set up to cater to the credit requirement of the project villages. Thirdly, women will be participating in, and managing, their social and economic development and will have better access to markets and inputs. Lastly, the improvement of 55 rural markets and upgrading of rural roads will provide better access to markets, thus providing better prices to farmers who are further strengthened by the support services provided by the project.

D. Sustainability

159. Project interventions should be sustainable. The benefits for producers in clusters for natural resource management and development of marketable product value chains will be based on market forces and supported by sustainable service providers from local communities and the private sector. The process of drawing up Integrated Natural Resource Management Plans will itself create awareness of the issues of sustainable use of natural resources, while implementation of these plans will in themselves safeguard the availability of natural resources. VECs, the key implementing agency at the village level, are permanent statutory institutions which will continue to function after the end of the project.

160. Enterprises supported via the EFCs and IPM clusters will be financially viable and so sustainable. MBDA has plans to make EFCs themselves sustainable by charging fees and generating income. The role of EFCs is likely to change over time as the priority shifts from creation of new enterprises to supporting growth of business, and it is quite possible that other agencies may evolve to support these enterprises.

161. The basic infrastructure of public markets is not costly to maintain, and agreements made by LAMP with market authorities for the development of their markets will include the requirement to reserve a certain amount of income for maintenance and further improvements, along with the drawing up of an agreed maintenance plan. To ensure that the rural roads developed by LAMP provide sustainable communications, the following provisions would be made:

- Ensure roads are well constructed, with proper provision for drainage – lack of drainage is a major cause of failure of roads in hill regions.
- Consider limiting the width of village roads (but not market connecting roads) to prevent their use by heavy trucks that exceed the carrying capacity of the road
- When constructing surfaced roads, pilot concrete rather than bitumen surfaces. Concrete roads should be more durable, and given the availability of stone, do not seem to be significantly more expensive to build than bitumen roads
- Finally the Government should create a fund for village road maintenance.

162. The Government emphasises that IBDLP is a programme, not a project, and it plans to continue to support enterprise development and natural resource management beyond the end of any specific project.

Key File Table 1: Rural Poverty and Rural Sector Issues

Priority areas	Affected groups	Main issues	Actions needed
Sustainable utilisation of natural resources.	All rural people, including women	High rate of population growth putting pressure on land, water and other resources, resulting in resource degradation. This in turn effects food security with increasing reliance food bought in from outside of the state. Resources are also effected by climate change effecting water resources	Plans for sustainable natural resource management at the village level need to be drawn up and implemented - including development of water supplies, small scale irrigation, soil conservation and improved land use. There are opportunities to improve farming methods and so increase food crop production.
Generation of income from market-orientated enterprises	Rural people, especially farmers	Although most farmers are already growing crops and raising livestock for sale, production is unorganised, productivity is very low and market linkages are weak. Infrastructure in rural markets is poorly developed, and lack of roads can make it difficult to move produce from farms to the market.	Value chain approach to identify and address key constrains and opportunities for development - including input supply, production and marketing - for major commercial crops and products with future potential. Development of infrastructure for hat bazaars along with better market management. Improvement of market connecting roads and other communications infrastructure.
Promotion of enterprise	Potential entrepreneurs	Although traditional society is said to discourage individual enterprise, attitudes are now changing fast, and there is considerable interest in investing in economic	Holistic approach to providing comprehensive services for entrepreneurs including access to government programmes, bank loans and
Financial and other services at village level	Village households, men and women	With a scattered population and poor communications, access to financial services is poor. Access to loans would	In line with government policy, establish village cooperatives for grassroots financial inclusion.
Collection and dissemination of knowledge to support natural resource management and livelihoods.	Rural enterprises, community leaders, development institutions (government and non-government)	Considerable knowledge exists in the state, the rest of India and beyond on improved approaches and technologies for natural resource management, farming, enterprise development and livelihood, but this is not accessible to individuals and development agencies. Valuable traditional knowledge has not	Establishment of a state-wide knowledge hub, which will collect, collate, store and disseminate information to different groups of users in appropriate formats and channels. This may include village maps for NR planning, a telephone help line for enterprise development, videos for farmer-to-farmer lesson learning, a repository for NR, livelihood and market information, technical manuals and booklets,

Key File Table 2: Organisation Capabilities Matrix

Organisation	Strengths	Weaknesses	Opportunities	Threats
MBDA (and associated agencies)	IBDLP is the multi-sector flag-ship programme of GoM, with strong political support. EFCs have made a good start with well-motivated staff.	New agency so need to establish management structure and recruit more senior and mid-level staff.	Willing to contract and work in partnership with top level service providers. Flexible approach to implementation.	Could be seen as a threat by established government departments who fear losing their "turf".
MCAB	Established apex cooperative bank with legal remit to support IVCS. Capital available to support lending.	PACs and other primary cooperatives have not, in general, been successful in this state.	MCAB is keen to work with LAMP and is already implementing a Gol scheme to revise some PAC - which could become IVCS.	If NRLM rolls out its SHG model on a large scale there may be little space for financial cooperatives.
Banks	A number of banks are established in the state, and have considerable surplus funds available for lending.	Limited outreach of rural branches. Tend to see small rural borrowers and groups as being too risky.	EFCs facilitate loan applications and LAMP support for enterprises gives banks confidence to lend. IFC project increases bank outreach	Banks still see rural lending as a duty rather than an opportunity.
Line agencies	Established net work of offices (down to block level) and staff with technical expertise.	Little outreach to villages Technical knowledge of staff is variable.	LAMP village and producer organisations can provide a "last mile" delivery to converge with line agency	Line agencies fail to keep up to date with technical and market developments.
VEC	Established in all villages and experienced in handling funds for MGNREGS. Representative of all households, some have elected leaders.	So far role has been limited to MGNREGS. No experience of INRM	Build capacity and support VEC to undertake planning and implementation of NRM activities.	
ADC and traditional institutions	Have considerable power over land and development issues. Officially ADCs have an important role in market management.	Power is largely informal so difficult to reach agreement at anything other than a village level. ADCs actual power limited with most decisions being taken by traditional leaders	Enlist support of traditional institutions via VEC and IBDLP. IBDLP appears popular with traditional leaders.	Local level political and other divisions might undermine LAMP efforts
Technical support agencies (BAIF, IDFC, TLS, Access etc.)	Considerable expertise and proven track record in implementing many of the interventions planned in LAMP	Most have little experience of working in Meghalaya, and current staff may not speak local languages.	Depending on role, can recruit local staff to work at field level, or partner with local agencies.	Government and others in the state will need to continue to accept participation by external agencies.
Local NGOs	Local knowledge and staff who speak specific local languages	Apart from one or two exceptions, most are very small and have limited technical capacity.	Utilise small local NGOs to facilitate start-up of village INRM. Larger NGO has good capacity to deliver training.	Government may have some reservations about working with local NGOs
Private sector	Self-financing and sustainable agencies with links to markets, inputs and technology	National level agribusiness companies have very little presence in the state	Public-private partnerships to link producers with markets.	Legal status of land and requirement for local partners may limit their interest.

Key File Table 3: Complementary Donor Initiative / Partnership Potential

Donor / agency	Nature of project / programme	Project/programme coverage	Status	Complementarity / synergy potential
Asian Development Bank	North Eastern State Roads Investment Program	Six states including Meghalaya	Ongoing: approved in 2011, USD 200 million	Developing main intra-state roads connecting district towns - complements LAMP village roads.
Asian Development Bank	Supporting Human Capital Development in Meghalaya: education and skill development	State of Meghalaya	Design: USD 100 million loan	Vocational training will help develop skills needed for enterprise development by LAMP. This aspect implemented via the Meghalaya Employment Promotion Council
International Finance Company	Financial inclusion	State of Meghalaya	At start-up	Expand bank lending for small businesses - aim is to provide access to larger loans than those envisaged from IVCS, so this project
KfW & GIZ	North East Climate Change Adaptation Programme	Five states. In Meghalaya will cover 64 villages	At start-up, 7 year programme	Implemented by MBDA. Climate change adapted NR interventions will be useful

Key File Table 4: Target Group Priority Needs and Project Proposals

Typology	Poverty Level and Causes	Coping Actions	Priority Needs	Support from Other Programmes	Project Response
Tribal households with large land (>3 ha)	<ul style="list-style-type: none"> • Largely upland, rainfed horticulture crops. • Some lowland; unproductive/deteriorating soil fertility; limited or no access to irrigation. • No food insecurity as such but stagnant income and limited access to market. • Limited access to inputs and extension services. • Impacts of climate change. • Increasing production & labour cost. 	<ul style="list-style-type: none"> • Sale of horticulture crops with fluctuating prices. • Raise livestock including cattle • Small time local business with fluctuating and uncertain income. 	<ul style="list-style-type: none"> • Improved technology, irrigation and land productivity. • Access to markets, within and outside the state. • Enterprise and business management training. 	<ul style="list-style-type: none"> • Agriculture subsidy • Rice mission • Horticultural mission 	<ul style="list-style-type: none"> • Commercial crop production with market access to generate larger local economy including creating rural employment. • Membership in IVCS, VEC to access project resources. • Access to inputs including rural finance and support services • Access to capacity building training
Tribal households with small land (1-3 ha)	<ul style="list-style-type: none"> • Food insecurity of 2-3 months. • Limited lowland with deteriorating soil fertility, largely rainfed, limited inputs and non-availability of support services. • Upland and Midland with steep hills, low productivity; absence of irrigation and inadequate focus on plantation crops. • Low levels of education and inability to deal with the mainstream economy resulting in inadequate access to entitlements. • Prone to occasional borrowing 	<ul style="list-style-type: none"> • Limited horticulture crops with fluctuating prices. • Rely partly on non-farm earnings, especially seasonal migration. <ul style="list-style-type: none"> • Many rely on shifting cultivation • Social safety nets • Dependence on local money lenders and relatives • Dependent on forest NTFPs • Raise livestock (pigs, poultry) 	<ul style="list-style-type: none"> • Improved technologies, irrigation and investment to raise productivity of land and labour • Crop diversification. • Access to growing market opportunities within and outside of the state. • Roads and other connectivity 	<ul style="list-style-type: none"> • Agriculture subsidy • MGNREGS • Rice mission 	<ul style="list-style-type: none"> • Community Institution development (IVCS, VEC, etc) to access entitlements/ plan and implement activities related to NRM and livelihood. • Improve irrigation, water harvesting and agriculture intensification. • Catchment conservation • Focus on horticulture / commercial crops • Focus on livelihoods in clusters to
BPL, marginal land (<1 ha) and landless Tribal households	<ul style="list-style-type: none"> • Food insecurity of 3-7 months • Forest degradation and decreasing community reserves with resultant reduction in forest based livelihoods. • Land if any, is mostly upland, unproductive with low soil fertility. • Lack of skills and education to integrate into mainstream economy. • Continuous need for consumption smoothening loans from moneylenders/ neighbour at relatively high rates of interest. • Lack of access to safe drinking water, health, sanitation and education by large percentage of families. • Fairly high spending on health related issues. 	<ul style="list-style-type: none"> • Rely on shifting cultivation / tenant cultivation/lease land • A few poultry • Rely on collection and sale of forest produce/NTFPs and small home gardens • Agriculture/farm and mine labour • Migration of men • Rely on PDS and other safety nets. 	<ul style="list-style-type: none"> • Wage employment • Opportunities to increase income from NTFP • Income generating activities requiring no or limited cultivable land • Skill training • Land tenure security • Access to water, health and education. • Access to rural finance. • Improving PDS 	<ul style="list-style-type: none"> • MGNREGS 	<ul style="list-style-type: none"> • Community institutions (IVCS, VECs) to access project resources • NRM interventions for livelihoods • Convergence (eg MGNREGA) works for rural employment including land and water management benefits • Income generating activities • Community forestry for improved NTFPs • Skill training

Typology	Poverty Level and Causes	Coping Actions	Priority Needs	Support from Other Programmes	Project Response
Women	<ul style="list-style-type: none"> Poverty levels of Women headed households similar to that of landless and BPL. Low literacy with low awareness of their rights and entitlements. Feminization of agriculture due to migration of men. Low access to health and education facilities and decision making and organizational capacity not harnessed. Lack of access to financial resources Lack of access to safe drinking water, health and education. 	<ul style="list-style-type: none"> Rely on wage labour Increasingly rely on earnings from migration Rely on rations from PDS and other safety nets. Forest NTFPs collection and sale in local markets Rely on shifting cultivation (mainly in Garo Hills) and small home gardens. Poultry and small animals 	<ul style="list-style-type: none"> Capacity building to access entitlement Income generating activities Improving forest NTFPs Access to rural finance, health, sanitation, education and drinking water. Improving PDS functioning. 	<ul style="list-style-type: none"> MGNREGS 	<ul style="list-style-type: none"> Training and awareness generation on rights and entitlements Income generating activities and livelihood activities in clusters Access to drinking water, health, sanitation and education Access to rural finance, knowledge services and information - via EFCs.
Youth	<ul style="list-style-type: none"> High unemployment rates among youth High percentage of school drop-outs High risk of becoming involved in illegal activities and alcohol abuse Poor access to skill development facilities Poor access to knowledge and information Early marriage among young women 	<ul style="list-style-type: none"> Poorly paid casual work Depend on parents 	<ul style="list-style-type: none"> Attractive rural vocations Skill development Access to rural finance Access to knowledge and information Alternate entertainment methods 	<ul style="list-style-type: none"> MGNREGS Vocational training (ADB supported) 	<ul style="list-style-type: none"> Formation of Youth Groups / inclusion in IVCS/VECs; financial support for these groups Train/Engage them as Community Resource Persons Skill development training Training on enterprise and business

Key File Table 5: Stakeholder matrix, project actors and roles

Component		Activities	Coverage	Perennial institutions involved	Potential contractors / periodic inputs	Other potential partners in execution
Natural resources and food security		Village institution building INRMP planning Land and water resource improvement Food crop development	101,250 households in 1,350 villages, 54 clusters, 18 blocks	DPMU Deputy Commissioners Convergence with MGNREGS, State Rice Mission, line departments	FNGO (for two years) Food crop technical service providers	ICAR and CGIAR institutions such as ICRAF and IRRI
Livelihood support -	Enterprise development	Enterprise Facilitation Centres	Entire state - EFCs in all 39 blocks	EFC Banks	EFC support agencies Line agencies	
	Integrated Production and Marketing	Commercial product development on a cluster basis	20,000 households in 1,350 villages, 54 clusters, 18 blocks	Commodity-based service providers Producers groups/companies	IVCS as input supplies and marketing agencies	Private sector agri-business companies Research agencies
	Livestock Develop.	Livestock Development Centres	43,200 h'holds in 120 LDC	BAIF, supported by DAH&V	ILRI, research institutions	Private companies
	Market access	Market infrastructure development & management	55 hat bazaars	Market committees MIDFC	IDFC foundation Construction contractors	
	Communications	Road, bridge and ropeway development	250 km roads / bridges / ropeways	MIDFC	Construction contractors	
	Rural finance	IVCS formation & support	300 ICVS covering 1350 villages	IVCS boards & management MCAB	Specialised MF/cooperative service provider Other banks	
Knowledge Services	Information on NR and governance	Creation of village base maps	1,350 villages	LAMP KS GIS unit, NESAC	GIS training institutions	
		Collection and creation of NR information	State	KS unit in SPMU	Consultants collecting Other NRM projects	Biodiversity agencies GIZ CC project
	Enterprise information	MIS	EFCs & LAMP	LAMP MIS/IT unit	Software suppliers	
		Telephone help line	EFCs & LAMP	LAMP KS unit	Call centre provider	
		Information repository	LAMP & IBDLP	LAMP KS unit	Consultants	Market information providers
		Value chain studies	LAMP & IBDLP	LAMP KS unit & IPM component	Consultants	LAMP partner agencies
		MTPO support	State	MTPO	Consultants	Govt agencies
	Technology testing and action research	Technology testing and action research	State	LAMP research committee	Govt research agencies NGOs, private sector	ICAR and CGIAR institutions such as ILRI, ICRAF and
	Monitoring and evaluation	Monitoring and evaluation	LAMP activities	LAMP M&E unit DPMU	M&E support agency Consultants	Other units of IBDLP
	KM and lesson learning	KM and lesson learning	LAMP activities	LAMP KS unit Digital Green		
Communications	Communications	LAMP and IBDLP	KS unit	Communications companies		

Appendix 1: Country and rural context background

1. Country background

1. The most striking feature of India is its diversity, with a population approaching 1.2 billion composed of several ethnic groups, speaking more than 1,000 dialogues, identifying themselves in more than 5,400 castes, following six major religions, and an area of 3.28 million km² covering totally different agro-ecological zones. Poverty remains a major issue, with 41.6% of the population living on less than USD1.25 per day. In 2011 Human Development Index of the United Nations Development Programme (UNDP) ranked India 114th out of 180 United Nations member states.

2. India's economy is the fourth largest in the world. After decades of limited growth, during the last 10 years economic growth has taken off, with an average GDP growth of about 8.8 per cent from 2002/03 to 2007/08, mainly led by the service sector. In 2010/11, despite the financial crises, growth was 8.5% and it is 6.5% for 2011-12. It is expected to bounce back to 7.6%⁶ for fiscal 2012-13⁷. Inflation is a major economic challenge for the country, and has a bearing on rural poverty and growth in the rural sector. While food inflation moderated on the back of declining vegetable prices, headline inflation continues to be a matter of concern. Overall inflation in January 2012 is 9.11% and currently at 7.1% and forecast by RBI for the fiscal 2013 is at 6.5%. This can be partly attributed to tight monetary policy followed by India during 2011.

3. There is a broad consensus that the recent growth has roots in the economic reforms introduced in the early 1990s, which unleashed the enterprise of those adequately endowed with infrastructure, resources, skills, power and influence. However, distribution of the benefits of growth to poor rural people has been limited by: inadequate physical and social infrastructure; poor access to services; low investment; a highly stratified and hierarchical social structure, characterized by inequalities in assets, status and power; and ineffective, inefficient implementation of pro-poor programmes, owing to governance failures. There is now a genuine and widespread recognition that, without inclusive growth, the social and political consequences of rising inequalities could be very adverse. About one third of Indian districts are affected by civil unrest and left-wing terrorism, which represent the main national security threats.

4. Despite this growth 72% of the population live in rural areas, with over half (52% in 2009) employed in the agriculture sector which contributes 15.7% of GDP. Although production of food grains reached a total of 241.6 million tons in 2011/12, growth in output is falling behind the 1.4% per annum growth in population. Over the last decade, wheat yields have grown at a rate of 0.1% and rice at 1.3% per annum and, with the area under cultivation remaining largely constant, there are serious concerns about medium-term food security. Increasing population pressure has led to fragmentation of land holdings with the number of operational holdings increasing from about 70 million in 1970 to 121 million in 2000. Over the same period, the average size of landholdings has declined from 2.3 to 1.3 ha, and 10% of rural households are reported to be landless. Only 40% of cultivated land is under irrigation, with groundwater levels and soil fertility are rapidly depleting in the food bowl of India. Over 121 million ha are degraded: 68% by water erosion, 20% by chemical contamination and 10% by wind erosion.

5. India has 33% of the world's poor, and poverty has not fallen at the pace of economic growth. Nutritional levels are unacceptably low, with 42.5% of children underweight, one of the highest rates globally. Malnutrition is linked to half the child deaths and a quarter of cases of disease. On the Global Hunger Index of the International Food Policy Research Institute, India is ranked 66th out of 88 countries.

6. Agricultural wage earners, smallholder farmers and casual workers in the non-farm sector constitute the bulk of poor rural people. Within these categories, women and tribal communities are

⁶ India's GDP growth rate plunged to the decade's low of 5.3% in the three months to March 2012

⁷ Source: Economic Times of India 9 June 2012 Edition

the most deprived. In terms of gender deficit, India is ranked 113 by the World Economic Forum Global Gender Gap Index 2011. Finally, about 300 million young people (in India this covers ages 13 to 35) live in rural areas, most of them being forced to migrate seasonally or permanently, without the skills and competencies required by the modern economy that India is rapidly becoming.

2. National rural poverty reduction strategy

7. The 11th Five-Year Plan (2007-2012) aims to achieve inclusive growth in all sectors and to double agricultural growth from 2 to 4% per annum by expanding irrigation, improving water management, bridging the knowledge gap, fostering diversification, increasing food production to ensure food security, facilitating access to credit and enabling access to markets. The mid-term assessment of the plan, released in July 2010, underscores the urgency of increasing capital formation and investments in agriculture, as well as of improving access to water and good quality seed, replenishing soil nutrients, expanding agricultural research and extension, reforming land tenancy systems and facilitating agricultural marketing.

8. There are several important policies, strategies and acts that provide the framework for agriculture, forestry, rural development and tribal development, and which are central to IFAD's efforts in India. They include the National Agricultural Policy of 2000, the National Policy for Farmers of 2007, the National Environment Policy of 2006, the National Forest Policy of 1988, the Protection of Plant Varieties and Forest Rights Act 2006 and National Water Policy of 2001, and the Biological Diversity Act of 2002.

9. Among several rural poverty programmes, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is now considered the largest employment programme in the world. Its objective is not only to provide wage labour, but also to generate productive assets in the process, which could lead to sustainable livelihood opportunities and thus gradually reduce dependence on such a public works programme.

10. The Government, through the National Rainfed Area Authority (NRAA), has issued Common Guidelines for Watershed Development. These were followed by the 2008 Integrated Watershed Management Programme, which emphasizes capacity-building, M&E, learning and social audit. It introduces a livelihoods perspective from the very inception of the project, with a special emphasis on families without assets. It also delegates approval and oversight of watershed project implementation to the states.

11. The National Rural Livelihood Mission (NRLM), under the Ministry of Rural Development (MORD), aims to provide livelihood development opportunities to poor rural families. NRLM builds on the experience of the highly subsidized Swarnjayanti Gram Swarozgar Yojana (SGSY), under which most groups disappeared once the subsidy was received. Only 6% of the funds were used for training and capacity-building and only 23% of the self-help groups (SHGs) graduated to the micro-enterprise level, which was the objective of the SGSY. The NRLM, which was expected to roll out in 2010 with an initial allocation of US\$2 billion, emphasizes formation, training and capacity-building of SHGs and their federations; state-level flexibility to respond to emerging demands; hiring of qualified professionals and facilitators/animators at the community level; enhanced financial support; replacement of capital subsidy with interest subsidy as an incentive to repayment of loans; provision of multiple loans; establishment of dedicated skills-training institutes in each district; improved monitoring and evaluation (M&E); and facilitation of domestic and global marketing linkages.

3. Central Assistance to Tribal Communities⁸

12. Article 275(1) of the Constitution of India guarantees grant from the consolidated fund of India each year for promoting the welfare of Scheduled Tribes and in pursuance of this Constitutional obligation, the Ministry of Tribal Affairs provides fund through the "Special Area Programme Grants under Article 275(1) of the Constitution of India". Under this Special Area Programme, a 100% grant

⁸ Source: Annual Report 2011-12, Ministry of Tribal Affairs, GoI, New Delhi

is provided to meet the cost of such project for tribal development, undertaken by a State Government, for (i) raising the level of administration of Scheduled Areas, and (ii) for welfare of the tribal people to bring them at par with the rest of the State. The grants are provided to the States on the basis of the percentage of ST population in the State. Focus of the programme should be on generation of community welfare assets like schools, skilled teaching, nutritional support, drinking water, etc.; Innovative grants strictly are meant for innovative schemes - in terms of final output/outcome or methods of delivery

13. Funds for tribal development are approved by Gol based on submission of proposals by the GoJ and these funds should be used in accordance with the procedures laid down by Ministry of Tribal Affairs, Gol. This apart, there are no other strings attached to these funds. However the project will provide facilities for expediting the process of preparing such proposals for submission to Gol in time. Track record of funds flow from Gol to GoJ on tribal development indicates that the government has been receiving these funds regularly and on time.

4. Programme for the North-East

14. The Government of India has also established the Ministry of Development of North Eastern Region (MDONER) with responsibility for the planning, execution and monitoring of developmental schemes in the North Eastern Region, especially in the sectors of power, irrigation, roads and communications. MDONER also implements the Hill Area Development Programmed in North Eastern Region, the North Eastern Development Finance Corporation Ltd. (NEDFI) and the North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC).

5. Meghalaya State Government Policies and Programmes

15. In 2010 the Government of Meghalaya has, with funding from Gol, adopted an integrated river basin approach with the Integrated Basin Development and Livelihood Promotion Programme (IBLDP) as its flagship programme for sustainable livelihoods. This aims to combine a holistic approach to rural livelihood development (with an emphasis on market-orientated enterprises) integrated with natural resource management and climate change adaptation. IBDLP is structured into missions for value chains in Agriculture, Horticulture, Forest & Plantation Crops, Aquaculture, Livestock, Sericulture & Weaving, Apiculture, Energy, Water & Tourism which are in turn supported by 11 cross cutting support measures. LAMP would be at the core of this programme.

16. Another important programme of the Government of Meghalaya that has relevance for LAMP is the State Rice Mission which is being planned for implementation from 2014-15 to 2019-20. The aim is to double rice production and so achieve self-sufficiency at a total cost of INR 465 crore. Further details on the Rice Mission are in Working Papers 3 and 4.

6. Traditional institutions

17. Meghalaya is one of the four tribal majority states of North Eastern Region, the others being Arunachal Pradesh, Mizoram and Nagaland. The three major tribal groups of Meghalaya, viz. the Khasis, Jaintias and Garos have traditional self-governing institutions and traditional system of governance. During the British period, some of these institutions were re-modelled but by and large remain as such. After Independence, these traditional institutions came under the purview of Autonomous District Councils (ADC) constituted under the Sixth Schedule of the Constitution of India. Today, all the three tribal communities have their own separate Autonomous District Councils⁹.

18. The traditional institutions in Meghalaya, as in most other tribal communities in NE India, are socio-political, cultural and economic institutions in functions. Such institutions are deeply rooted in the society and are still responsible for the day-to-day administration of the people. They run the administration in a democratic manner and in accordance to the general will of the people based on

⁹ The ADC in Meghalaya, initially one for Khasi-Jaintia Hills and one for Garo Hills, started functioning since 1952. The United Khasi-Jaintia ADC was bifurcated in 1964 as Khasi Hills ADC (KHADC) and Jaintia Hills ADC (JHADC).

traditions, customs, culture and usages of the land. The traditional Chiefs, though occupy the highest hierarchy in the ladder of administration, cannot go against the popular will of their people. In many cases, such Chiefs are either selected or elected by the people in order to supervise the administration and not to oppress or suppress them. The people retain the highest authority in matters of decision making although they are assisted and guided by the various traditional councils at different levels of administration. These councils play a very important role in the community administration and decision making process.

19. Traditional institutions at village level are first point of contact for entry into the village. Both NERCORMP and MLIPH have always actively engaged with these institutions during project implementation in respective villages. NERCORMP usually had “social agreement” prior to starting the project in the villages. Social agreement entails close interactions and engagement with the village heads/chiefs as heads of traditional institutions together with members of village councils. This ensures social acceptance by all members of the village for the project, after which all members of the village communities freely and actively participate in the project processes. In several instance, in quite several instances, village head or one of the members of the village council also became President of the CBO such as NaRMG in NERCORMP.

20. Traditional institutions at village level such as Dorbar Shnong headed by Rangbah Shnong in Khasi Hills and Nokmas in Garo Hills, particularly in rural context remain powerful institutions. No one or agency can begin to initiate in the villages without taking into confidence the traditional institutions in the village. They are in fact become the first point of contact for entry into the village. Both NERCORMP and MLIPH have always actively engaged with these institutions during project implementation in respective villages. NERCORMP usually had “social agreement” prior to starting the project in the villages. Social agreement entails close interactions and engagement with the village heads/chiefs as heads of traditional institutions together with members of village councils. This ensures social acceptance by all members of the village for the project, after which all members of the village communities freely and actively participate in the project processes. In several instance, in quite several instances, village head or one of the members of the village council also became President of the CBO such as NaRMG in NERCORMP. More information on traditional institutions is in Working Paper 1.

7. Land tenure arrangements

21. Land tenure in Meghalaya is based around a traditional system of communal ownership and traditional institutions¹⁰. Within this system, there are significant variations between the eastern and western parts of the state, with further variations in tenurial arrangements within the same district and often from village to village. Given that the enterprise and natural resource development for the project rests heavily on primary sector activities, some exploration of the issue of access to land is needed.

22. The issue of land tenure is also important in view of the emerging trend of privatization of community owned lands, especially in the Garo Hills where A'khing lands are being settled in favor of influential and mostly non-resident elites, who exploit loosely defined clauses in the existing legal statutes to their benefit. This is also true to some extent in the Khasi and Jaintia Hills. Concentration of land in the hands of a smaller number of people could mean that land-based opportunities are denied to many other people. Security of land tenure is an important tool for strengthening traditional social and representative institutions, especially at the village level.

23. Two factors are common in land tenure systems in parts of the State. One is that, where tenure is insecure, the incentive to invest in livelihood activities is greatly diminished. The second is that, in many areas, there are strong indications that, given appropriate interventions, many of the tenure anomalies can be mitigated. Indeed the traditional mindset of the rural communities are

¹⁰ “Understanding land ownership and management systems of the Khasi, Jaintia, and Garo Societies of Meghalaya” by Amba Jamir & Dr. Kyrham Nongkynrih. IFAD funded study 2003; “Rural poverty in Meghalaya: its nature, dimensions, and possible options” by N.C. Saxena. IFAD funded study 2002.

transforming fast (see Annex 1 of Working Paper 1). Based on experiences of MLIPH and NERCORMP, some of the key issues and priorities of rural people of Meghalaya are centred on building and augmenting their social, human, physical, financial and natural assets. The priority issues and opportunities are:

- Strengthening and building the capacity of peoples' organisations including traditional institutions.
- Augmenting skill deficits to take up diversified livelihoods and entrepreneurs particularly among literate young people and women.
- Social sector development: access to health, education, drinking water, and sanitation.
- Augmenting rural numerical and financial literacy to groups and CBOs including access to financial services.
- Natural resource management particularly activities to promote community forestry management, biodiversity conservation, water management, rainwater harvesting, prevention of soil erosion and enhancing land productivity.
- Resource centres cum one-stop-shops for all agri-horti and other land-base/farm based inputs and services including livestock and fishery, etc. as well as market linkages.
- Access to new farming technologies and rejuvenation of existing horticultural crops.
- Rural infrastructures (inter-village all-weather roads, electricity, storage godowns).
- Market access and market development.
- Enhancing access to social entitlements and convergence with other government schemes.
- Women and youth empowerment and awareness education
- Learning to build partnerships including with government / non-government agencies and private sectors.
- Access to quality knowledge and timely information.

24. More information on land tenure is in Working Paper

Appendix 2: Poverty, targeting and gender

1. Overview

The picturesque landscapes, lush forests and rich biodiversity of Meghalaya camouflage pervasive rural poverty and deprivation. A household survey conducted by the State Government in 2002 found that 48.9% of the households in Meghalaya live Below Poverty Line (BPL) as against the all India average of 27.8% in 2004-2005¹¹. However, unlike other states of India, this deprivation does not affect women disproportionately largely because approx 85% of the nearly 3 million population of Meghalaya belong to three dominant tribes- Khasis, Jaintias and Garos - who follow matrilineal traditions. Only 13-14% of the state's population is non-tribal. In terms of Human Development Index (HDI), Meghalaya rates amongst the lowest in the country, placed 26th out of 35 states and Union territories, but in terms of Gender Development Index (GDI) it is among the top in India.¹² Whereas there are comparatively fewer gender based differences in the state, there is a relatively bigger gap between the urban and rural population with a disproportionately higher level of rural poverty.

Close to 80% of the state's population lives in the rural areas, relying heavily on agriculture and allied services for its living, largely using traditional practices. For example, in the Garo hills more than 50% of the population continue to depend on subsistence shifting cultivation. According to the Planning Commission there has hardly been any decline in rural poverty in Meghalaya in the last two decades. In fact, recent figures of Planning Commission, Govt of India showed that poverty in Meghalaya has increased from 16.1% in 2004-2005 to 17.1% in 2009-2010¹³. In terms of population, the state has the second highest decadal growth rate in the country, which further exacerbates the poverty situation.

2. Poverty in Meghalaya

Whereas the proportion of poor people in India has fallen over the last five year, there has been a slight increase in Meghalaya. With the rapid increase in population, this means there has been a significant increase in the absolute number of poor people.

The BPL census, conducted by the Department of Rural Development in 2002, classified 48.7% of rural households as being "Below Poverty Line" (BPL) households. This compares with 52.5% for India as a whole.

Table 3: Population below the poverty line

	Meghalaya			India		
	rural	urban	Total	Rural	urban	Total
Percent below PL 2004-5 ²	14.0	24.7	16.1	42.0	25.5	37.2
Percent below PL 2009-10 ²	15.3	24.1	17.1	33.8	20.9	29.8
Change	1.3	-0.6	1.0	-8.2	-4.6	-7.4

¹ for 2009-10, ²calculated as per the Tendulkar method Source: Planning Commission

A key factor in holding back poverty reduction in Meghalaya has been the high rate of population growth. The increase between 2001 and 2011 (Table 4) has been 10 percentage points higher than India as a whole, with the rate of increase in rural population being more than double (27% compared to 12%).

The Meghalaya Development Report 2008-2009¹⁴ identified the following broad reasons for the prevalence of poverty in Meghalaya:

¹¹ Meghalaya State Development Report 2008-2009. Planning Department, Govt. of Meghalaya, Shillong (2009)

¹² Meghalaya Human Development Report 2008.

¹³ Poverty Estimates for NER for 2004-2005 & 2009-2010 (on Tendulkar Methodology) based on the Press Note of Planning Commission on Poverty Estimates 2009-2010 (dated 19th March 2012).

(i) The operational land holding in Meghalaya is pre-dominantly small and marginal farmers with an average area of less than 2 ha. Stagnation of agricultural production, soil erosion and lack of new economic opportunities are deterrent factors that cause rural poor farmer in the state to languish in poverty.

(ii) Rural areas in Meghalaya are characterized by limited opportunities, low level of skill development, poor infrastructure, etc. There are also wide rural-urban disparities in terms of level of human development opportunities as viewed from access to amenities and other social services.

(iii) Like most states in NE India, some of the major factors contributing to persistent poverty in Meghalaya appears to be ignorance, inadequate core infrastructure, inadequate market openings, over dependence on agriculture, lack of skills, etc., which makes them apprehensive to face the challenges that emerge in the new economy.

Environmental factors play a major role - with the hilly terrain and high rainfall resulting in (i) isolated communities which are cohesive while at the same time being reluctant to embrace new ideas and enterprise; and (ii) leached out infertile soils which lend themselves to shifting agriculture - a labour-intensive and low input/output method of farming - which become even more unproductive as population pressure has reduced the length of the fallow period. The high rate of population growth (which may be linked to the traditional society) means that economic growth results in relative small improvements in per caput income, and there is more pressure on available jobs, land and other resources - but with their own culture, people are less prepared to migrate to find work in other parts of India. More details and data on poverty are in Working Paper 2.

3. Gender issues

Compared with the patriarchal societies that are usual in most of India, Meghalaya represents a contrast with its three dominant communities (Khasi, Jaintia and Garo) being matrilineal and matrifocal society where descent and inheritance are traced through the women. The women have the right over their children and over property. Due to this, women in Meghalaya are considered to be better placed and to have more autonomy than their counterparts in the rest of the country. Evidence of the better position of women includes:

- Sex ratio of 986 compared with only 940 for India as whole
- Literacy for women have improved dramatically from 50.4% (2001) to 71.8% (2011)¹⁵
- Comparison of the GDI and HDI shows that gender imbalance was among the lowest in Meghalaya (0.005) as compared to the national average (0.015).
- A study of socio-economic inclusion, shows that in, East Khasi Hills and West Garo Hills, women are in a better position than the men. In the East Garo Hills, with a few exceptions, women are better off in general. In the other areas they are more or less at par with men¹⁶.

Despite this, there are some issues needing attention:

- From being the number 1 in the country in terms of HDI-GDI rating in 1996, Meghalaya slipped to 6th position in 2006¹⁷.
- In Maternal and Infant Mortality rates the state is lagging behind its neighbours in the North East, and even national average is still lower than Meghalaya (2009 data). This is largely due to poor access to health information and services, malnutrition and general lack of awareness.
- Women have very limited involvement in decision making at the community level.

¹⁴ Meghalaya State Development Report 2008-2009. Planning Department, Govt of Meghalaya, Shillong (2009)

¹⁵ <http://www.census2011.co.in/census/state/meghalaya.html>

¹⁶ S.K. Mishra. Analysis of Gender Disparity in Meghalaya by Various Types of Composite Indices. 2007, NEHU.

<http://ssm.com/abstract=994669>

¹⁷ <http://wcd.nic.in/publication/GDIGEReport/Part2.pdf>

The matrilineal system also tends to lull them into a comfort zone. So, even though their situation is much better than in other states, this may change over a period of time if those bottlenecks are not removed which prevent them from realizing their full potential.

Women-headed households In the past two decades, while the proportion of women-headed households has increased in the country, there has been a notable decline in Meghalaya - despite the state having the highest rate of divorce and separation, almost four and a half times the national average. There is relatively little domestic violence, the fact that there is little stigma attached to separation and divorce, and property belongs to the women.

Women in the workforce Relative to the rest of India, more women participate in the workforce, but this is falling, possibly because male earnings have increased, meaning there is less pressure on women to find work as a survival strategy. Male and female participation in the agricultural workforce is roughly equal but, unlike "mainland" India, women are also found selling produce in the market place. The same is true for women's participation in household decisions and control over income - women in Meghalaya are well ahead of their counterparts on the mainland.

In terms of production of farm products, women have (compared to men) a larger role on pigs, backyard poultry, vegetable and maize production. Men do most of the work for ginger, turmeric, NTFPs and broiler chickens, with tasks being evenly divided in pineapples and oranges. Further details are in Working Paper 2.

4. Targeting

4.1 Target groups

Tribal Households with Large Land (< 3 ha): Approximately 2.8% of rural tribal population are households owning over 3 ha. Currently this land is often under-utilized due to low productivity and lack of investment and other technical support, and many of these households remain poor. Commercialization of such available land with identified and viable commercial crops would trigger the rural economy, thus generating opportunities for rural employment.

Tribal Households with Small Land (1-3 ha): Nearly 11.9% of rural ST population are under this category. Most of these households remain poor due to unproductive land coupled with lack of input/financial/technical support, as also lack of access to market. Targeting these households with appropriate support would go a long way in improving rural economy in the state.

Tribal Household with Marginal Land (> 1 ha): Over 80% rural ST households in Meghalaya are under this category, and the bulk of rural poor people would be from this category. Appropriate targeting of this category would significantly contribute to improving the rural poverty scenario.

Landless: Approximately 5.0% of rural ST households are reported to be landless in Meghalaya, highest being in Jaintia Hills with 12% landless households. Skill development for non-land-based rural livelihoods would be special focus for this category.

Below Poverty Line Households: In 2002, about 49% of the households in the state were Below Poverty Line (BPL) families. The BPLs would be from among marginal lands holding and landless who together constitute approx. 85% of the state's population.

Women Headed Households: According to sample study done by Pala (2013), about 11.4% of ST households in rural Meghalaya are headed by women. Various causes attributed are early death of spouse, desertion by spouse, divorce, long migration of spouse

to other place, unwed mother, etc. Many of the rural women-headed households are highly vulnerable and distressed as observed during field visits in Jaintia Hills.

Tribal Women: In spite being a matrilineal and matri-focal society, the rural women are in many ways disadvantaged in Meghalaya. As women play crucial role in household well-being and economy, women would be considered as a priority target. Educated/literate women would be targeted to become entrepreneurs.

Youth: More than 65% of the population of the state¹⁸ is below the age of 30. The rural youth who would be the target groups are often considered as less fortunate cousins of urban youth. However, even in rural areas, there are different categories of youth. The project may not target the “Student youth” but there are many other categories of youth that the project may consider targeting. These are: (a) Youth at risk – substance abuse, human trafficking, working in hazardous occupations, bonded labour; (b) Youth in violent conflicts; (c) Youth Drop-outs from formal education mainstreams; (d) Youth affected by HIV/AIDS and TB; (e) Youth in institutional cares, orphanages, correctional homes and prisons; and (f) Differently-abled youth. The project would aim at youth empowerment and development through skill development and capacity building towards making them entrepreneurs for sustainable livelihood and productive living.

4.2 Targeting strategy

Overall targeting strategy would be in line with the project strategy. As directed by the Country Programme Evaluation, a “saturation approach” (along the lines of geographic targeting) would be adopted within the village, whereby all households in a village would be included. All households would be members of IVCS and/or VECs to access project interventions. Households with land would be encouraged to undertake commercial crop production having market access; landless, BPL and others would be supported with income generating activities together with skill development, inputs and knowledge supports. Special focus would be on social and economic empowerment of rural women, linking them through IVCS and VECs and improving their participation in community decision making processes. Youth development would focus on empowerment, capacity building, skill development and entrepreneurship attainment.

In addition to a “self-targeting” approach for the EFC component, whereby only those “entrepreneurial” members or the community who are interested in such services would participate, the project will also take measures to provide outreach in remote areas and encourage men and women in these areas to avail of the EFC facilities. Differential strategies would be adopted for each of the sub groups such as youth, women in remote areas, remotely located tribal groups and others as per need. For example, to ensure women’s active participation in decision making at the community level, the project will work with VECs as opposed to traditional village level organizations which tend to exclude women. Based on the learning from MLIPH, the project will largely adopt an equitable approach towards men and women in planning activities but certain activities will be undertaken to meet women’s specific needs. The project will prioritise access to water- for irrigation and drinking- the latter, primarily to help reduce women’s drudgery. EFCs will, if necessary, organize field based orientations for women in far flung areas to motivate them on enterprise development. For more details please see Working Paper 2. In all cases, financial inclusion would be the common strategy for all categories of the target groups. Further information on targeting is in Working Paper 2.

5. Gender mainstreaming in LAMP

LAMP would ensure gender- equitable participation in, and benefit from, planned activities via gender mainstreaming will be done at two levels:

- Systemic mainstreaming of gender

¹⁸ Draft Meghalaya State Youth Policy 2012, Department of Youth and Sports, Govt of Meghalaya, Shillong, megsports.gov.in/documents/Draft_State_Youth_Policy_2012.pdf accessed on 21.6.2013

- Programmatic mainstreaming of gender

5.1 Systemic mainstreaming of Gender

This requires modification of systems and tools to reflect gender sensitive approaches. This would include the following:

- Adopt gender-balanced and gender sensitive HR/recruitment rules and procedures:
- Establish gender-balanced project management teams:
- Ensure that the project adopts at all levels, the principles and practices of a Gender in/and Development (GID/ GAD)
- Establish gender-inclusive M&E system: - including monitoring of gender issues and gender disaggregation of data,

5.2 Programmatic mainstreaming of gender

The project will adopt an equitable approach in service provision. However, specific activities will be undertaken, where needed, to ensure that the needs of women and the poor are addressed. These would include:

- Develop and implement a drudgery reduction plan: this would aim to ensure that challenges posed due to difficult terrain and poor infrastructure which disproportionately affect women are addressed through the project through investment of own resources or through convergence. A prime example of this is access to potable water.
- Outreach activities: remoteness may create hurdles for women in far flung areas to optimally utilising services and assets created through the project, so the project will make provisions for outreach services where needed. Where connectivity exists the project will develop a system of providing need based information through the use of cell phones.
- Social development initiatives: there are many social development aspects in the state that require attention. Primarily among these is the issue of health. Health also provides an entry point for the project to develop a rapport with the communities. The project will not directly invest in health services but help communities access health services through convergence with the Health Department. Additionally, the project team will periodically review relevant social indicators for the state to identify other priorities and address these through convergence.
- Sensitization and training programmes: In addition to including a module on gender in all key training programmes of the project, specific trainings will be organised as required to address gender specific issues. These may include:
 - Sensitization of VECs and IVCS members
 - Staff orientation at all levels on gender and poverty focussed approaches
 - Orientation of EFC staff to provide customised information/ services to women
 - Sensitization of partners/NGOs on issues of gender equality and women empowerment
 - Capacity building trainings for women to enable them to participate in local decision making processes and promote leadership.
 - Awareness programmes on health, especially women's health issues.
 - Others

5.3 Developing gender strategy in LAMP

The Project would develop a Gender Strategy and Action Plan based on the principles and strategies of IFAD's Gender Equality and Women Empowerment Policy 2012 to guide planning, implementation, monitoring and evaluation of the project. As issues of social development intertwine intimately with gender concerns in the state, there will be a full time staff reporting to the Project Director who will be responsible for ensuring that gender and social development issues are mainstreamed in the responses at various levels. The strategy will have gender check list in all components/subcomponents or activities of the project. Further information on a proposed approach to gender issues for LAMP are in Working Paper 2.

Appendix 3: Country performance and lessons learned

A. Active Country Programme

Project Name and brief description	Approval Date	Total Project Cost USD'000	Effective Date	IFAD	
				Loan & Grant Amount USD'000	% Disbursed
Orissa Tribal Empowerment and Livelihoods Programme	23 Apr 2002	91,154	15 Jul 2003	19,996	98
Livelihoods Improvement Project in the Himalayas	18 Dec 2003	84,286	01 Oct 2004	39,920	84
Tejaswini Rural Women's Empowerment Programme	13 Dec 2005	208,687	23 Jul 2007	39,448	54
Post-Tsunami Sustainable Livelihoods Programme for the Coastal Communities of Tamil Nadu	19 Apr 2005	68,591	09 Jul 2007	14,958	86
Women's Empowerment and Livelihoods Programme in the Mid-Gangetic Plains	14 Dec 2006	52,472	04 Dec 2009	30,169	10
Mitigating Poverty in Western Rajasthan Project	24 Apr 2008	62,335	11 Dec 2008	30,361	21
Convergence of Agricultural Interventions in Maharashtra's Distressed Districts Programme	30 Apr 2009	118,645	04 Dec 2009	40,101	9
North-Eastern Region Community – Phase II	17 Dec 2009	38,200	12 Jul 2010	20,000	39
Integrated Livelihoods Support Project 2011	13 Dec	258,789	01 Feb 2012	89,910	nil
Jharkhand Tribal Empowerment and Livelihoods Project	21 Sept 2012	115,500		51,000	nil

B. IFAD Loan Disbursement in India 2006-2012 (SDR)

Project	2006	2007	2008	2009	2010	2011	2012
	SDR	SDR	SDR	SDR	SDR	SDR	SDR
JCTDP 506	1 351 518	808 401	3 452 493	2 098 143	861 841	3 528 204	
NMF 538	9 999 347		550 654				
OTELP 585	515 417	1 559 658	719 566	955 811		4 068 951	3 161 918
OTELP 585 DFID Grant (GBP)		2 910 828	2 029 815	1 910 149		436 165	
LIPH 624	1 346 811	1 374 973	2 349 016	2 330 714	4 130 016	4 390 664	3 381 260
PT Tamil 662		651 670	63 754	346 842	744 048	2 583 601	1 075 537
PT Tamil 691							
Tejaswini 682		1 936 876		1 407 825	2 443 289	3 349 371	4 508 708
WELP 710					1 267 283	179 973	576 574
C-AIM 779					1 359 545	314 407	338 077
MPOWER 748				1 260 160	149 725	794 023	741 526
NER 794						1 559 452	2 558 211
ILSP							
JTELP							
India Total	13 213 093	9 242 404	9 165 297	10 309 642	10 955 748	21 204 811	16 341 811

C. Key Country Programme Achievements

- The India Country Programme was rated 5 (satisfactory) by the 2011 CPE;
- In 2012 only one IOE Evaluation took place (for the National Microfinance Project), and it was rated 5 (satisfactory);
- India continues to be the largest List C contributor (USD 30 million for IFAD 9);
- India continues to be one of the largest contributors to the IFAD 9 outreach target (current number of active beneficiaries is 7.5 million);
- Portfolio performance has improved. In 2010 there were 5 problem projects. In 2012 there were only 2 problem projects.
- COM undertook a reputational analysis of selected countries in 2012. India achieved the highest score of all countries surveyed (74% of 1200 persons surveyed were familiar with IFAD, and 81% trusted IFAD);
- Scaling-up is happening across the programme. For example in the north-east, the World Bank is scaling-up IFAD's NERCORMP. In Orissa, the State Government is scaling-up IFAD's OTELP. In Uttarakhand and Jharkhand, the State Governments are scaling up IFAD projects.
- IFAD has a high profile KM strategy in India with regular 6 monthly newsletters, flag ship publications, and internet based platforms. In recognition of IFAD's achievements, the Ministry of Finance requested IFAD to set up a Government KM/innovation website;
- IFAD is being requested to assist Government in a number of policy initiatives. For example, the Ministry of Tribal Affairs has asked IFAD for technical assistance in the design and implementation of the national Tribal Sub Plan.
- Innovation: IFAD continues to finance innovations in India, and currently has 8 agricultural research grants, and two new grants under development (both focusing on innovation). IFAD is financing a national innovation workshop to support scaling-up of promising technology at the State level.

D. Selected Results 2012

Project	Actual hhs reached 2012	Number of SHGs	Active SHG members	Active Borrowers	Active Savers	Value of Savings INR'000	Persons trained*
NERCORMP	21,212	1 319	18 840		18 840		1007
JTDP	36,648	1 462	16 519	12 390	12 390	22 940	2301
OTELP	126,180	4 372	50 165	30 492	46 644	100 702	9777
ULIPH	42,979	3 559	36 973	14 455	36 973	75 700	29308
MLIPH	24,000	1 939	20 534	15 398	20 534	12 871	17103
Tejeswini MH	837,859	65 258	797 541	697 973	797 541	1 794 000	
Tejeswini MP	165,048	12 419	165 048	102 035	165 048	130 170	38984
PTSLP	129,889	5 229	80 214	47 505	80 214	541 400	
WELP MGP	67,060	5 806	67 060			10 699	
MPOWER	39,653	4 527	39 653		39 653	17 857	2106
CAIM	5,705	390	5 705				1034
Total	1,496,233	106 280	1 298 252	920 248	1 217 837	2 706 339 411	101620

* in crops, livestock and fish

E. Lessons learned

Some of the key lessons learned by IFAD in India include the following:

- Ownership of State Governments is vital to the success of projects and their commitment should be ascertained right from the start. In this regard, IFAD is committed to follow the Project Readiness Checklist, issued by Ministry of Finance, which is expected to mitigate this issue. It is important to involve them from the very beginning in project design. State Governments are often defaulting in ensuring timely transfer of financial resources, designating qualified Project Directors and ensuring their continuity on the job.
- Poverty can be effectively reduced through an empowerment process which, in turn,
- requires investment on people's institutions and on intangible assets.
- Each intervention should avail of an adequate implementation period that will make available sufficient time for the establishment and strengthening of strong and sustainable grassroots institutions.
- •The selection of qualified resource non-governmental organizations (RNGOs) and facilitating non-governmental organizations (FNGOs) is critical. The process of selection needs to be completed on a timely basis and without political interferences. IFAD has been requested to participate as observer in the selection process to ensure its fairness.
- Developing livelihood opportunities for smallholder farmers and tribal communities in rainfed and marginal areas requires widening partnerships combining the competencies and resources of government, civil societies and peoples organizations, and corporate private sector.
- India allocates very large resources through state and centrally sponsored schemes to agriculture and rural development. Ensuring convergence with such efforts can multiply the impact of project interventions.
- Undertaking fewer, focused projects with larger average loan size can contribute to lowering transaction and administrative costs for both the Government and IFAD and allow greater attention to be paid to implementation support, learning and impact achievement.
- Loans and grants need to be designed to strategically link up to develop maximum synergy and impact.

Appendix 4: Detailed project description

Component 1: Natural Resources and Food Security

1. The rural population of Meghalaya largely depend on land, water and biotic resources to support their livelihoods. However pressure on the natural resource base of the state, due to increased needs and unsustainable utilization, have resulted in decline in the availability of resources, such as water, and impoverishment of the overall ecosystem. Combined with increasing temperature and more erratic rainfall caused by climate change, ecological services, such as hydrogeology functions, nutrient cycling and biodiversity are diminishing. Several government schemes exist to address the natural resource management issues, but inability of the government line departments to function in a coordinated manner calls for devising a village-based and owned delivery mechanism for last mile service delivery.

2. This component aims to provide a mechanism for villages to take responsibility for the management of their own development, and so manage their natural resources more efficiently and sustainable, resulting in increased food production - and also laying the foundation for better livelihoods linked to markets. Specific outcomes of this component are to: (i) improve knowledge base of the land, water and biotic resources of the villages and build capacity to undertake planning for sustainable use of these resources; and (ii) sustainably develop land and water resources, along with enhancing food crop production. This component will have two subcomponents: (i) capacity development and natural resource planning; and (ii) land, water resources and food crop development. These activities will be implemented in 1,350 villages, organized as about 54 clusters, in 18 blocks out of the 39 blocks in the state.

3. Implementation of this component will make use of the experiences gained by NERCORMP, which has had a broadly similar approach for natural resource management, and the Climate Change Adaptation Programme being implemented by MBDA with support from GIZ.

4. **Capacity development and natural resource planning:** Existing Village Employment Councils (VECs) will be the focal point for implementing this component. A VEC has been established at each village to implement MGNREGS works. The project, in consultation with the VEC, will engage a Village Facilitator (VF) for each village to support the VEC. The project will build the capacity of the VEC to prepare an Integrated Natural Resource Management Plan (INRMP) in a participatory mode, identify priority activities, manage books of accounts and activities, and to access funds via convergence with other programmes¹⁹. The project will prepare guidelines and reference material for use by the VFs and VECs and fund the operating cost of the VEC (including honorarium for the VF) for a period of four years. For the first two years of implementation in each village, LAMP will provide additional support via a contracted local Facilitating NGO (FNGO) or equivalent agency, which will provide two Field Organisers (FO) for each cluster of 25 villages. The FNGO would advise the VEC on the selection of the VF and Lead Farmers, and the appointment of the VF would be confirmed by the DPMU. These agencies need to have good local knowledge and to employ local staff. To support these agencies, the project would hire two or three larger technical service providers, who could be from outside of the state (but preferably not from outside of the region). The draft Project Implementation Manual would include terms of reference and criteria for selection of these agencies.

5. VECs will facilitate consultation with the traditional leaders and the community. Democratic processes and gender inclusiveness will be ensured as, under current rules, VECs are composed a man and a woman from each household in the village. Increasingly VEC executive committees (which must also include women) are elected (rules state that the chairman and secretary should be elected). At the same time, the VEC is closely linked to traditional village institutions, such as

¹⁹ Should a few VECs still lack the required capacity, the project will have the flexibility to implement the component via other village level organisations, such as groups similar to the Natural Resource Management Groups of NERCORMP.

the durba, and the traditional village headman may also chair the VEC. Information on traditional institutions is in Working Paper 1. To ensure clarity of the participation of the VEC in implementation of LAMP, the project will sign a Social Agreement with the VEC (to be signed by at least 80% of households in the village) setting out the role of the VEC in LAMP and the support to be provided by the project. This Social Agreement will be based on those already in use for the implementation of MGNREGS

6. The INRMP, after approval by the entire VEC, will be submitted to the District Project Management Unit for approval. The VECs will have two bank accounts; one for receiving Operating Funds (OF) for covering cost of engagement of the VF and other operating costs and the other for a Village Development Fund (VDF) for implementing land and water resource development activities.

7. The project will focus on the selected villages, but will make efforts in providing opportunity to other villages to access government funds for INRMP. Towards this goal, the project (through the Knowledge Services Component) will support knowledge creation in the form of guidelines for preparation of INRMP and for the key design and implementation features of the INRMP, and for the sources of funding and the procedures for accessing these funds. This knowledge will be disseminated through a series of workshops at the district level.

8. Climate Change Adaptation will be an important consideration in drawing up INRMPs. LAMP will support the introduction of climate-smart approaches and technologies such as soil and water conservation, stress-tolerant crops and crop varieties, and cultivation methods. In doing this it will take up ideas and approaches piloted by the KfW/GIZ supported North East Climate Change Adaptation Programme which will shortly be implemented in 64 villages in the state through MBDA.

9. **Land, Water Resources and Food Crop Development:** The project will allocate Rs400,000 per village over two years (Rs200,000 per year) to implement activities identified and prioritized as a part of the INRMP. This amount may be adjusted according to the size of the village (such as being pro-rata with the number of households in the village). In the first year the cost of activities shall be 80% covered by project funds, with another 20% coming from the village as a labour contribution. Provision of a second instalment is subject to: (i) satisfactory utilization of the funds already released as verified through social audit and annual audit by external auditors; (ii) a 20% contribution from the village; and (iii) the ability to mobilize equal amount of funds (Rs200,000) through convergence.

10. In the event that the requirement of VEC exceeds allocation under VDF, the remaining funds will have to be sourced through convergence. The project will facilitate convergence through the district administration. Given that MGNREGS (the national employment creation safety net) guarantees 100 days work per year to qualifying households (the vast majority of rural households in the state qualify), and that the majority of work done is NRM related, it should not be difficult to mobilise these additional resources. In addition the PMU will have resources to fund need-based social interventions in areas such as health and education. This would aim to bridge gaps in service provision, and act as an entry point for livelihood interventions, as well as leveraging resources from other agencies.

11. The project will also train two Lead Farmers in each village for implementing activities improving cereal and other subsistence crop cultivation, and will provide training to a power tiller operator to assist in the process of farm mechanisation. Additional resources for food crop development will come from convergence with a number of national and state programmes.

12. Interventions in the component will include: (i) water resource development; (ii) land development; and (iii) food crop development. Ensuring security of water supplies is the major priority in many villages. In the dry season women often have to go considerable distances to fetch drinking water. Without irrigation, many villages can only grow a single crop of paddy, and the yield of valuable cash crops, such as pineapple, is reduced. Possible interventions for water supply include:

- a) Small scale irrigation: potential includes pumping water from rivers and streams, groundwater in the small alluvial tracts around the Assam border and seepage water in the valleys, diversion weirs across small perennial streams, and diversion of water from perennial springs by constructing a small stilling basin. Irrigation works could be financed through convergence with government programmes, such as the Accelerated Irrigation Benefit Programme (AIBP), the National Food Security Mission, the State Rice Mission, and MGNREGS.
- b) Spring rejuvenation with treatment of the recharge area by constructing staggered contour trenches, digging staggered pits, and other techniques of impounding rainwater and changing the vegetative cover through plantations.
- c) Rainwater harvesting/storage structures with earthen or cement-concrete embankments could be constructed at suitable sites to support small scale irrigation (and spring recharge). It must be noted, however, that the most suitable sites for such structures are in narrow valleys where construction may not be feasible as valuable paddy land may get submerged. In some locations where there is a particular scarcity of potable water, roof-top rainwater harvesting systems may be built.
- d) Potable water supply: a village water supply system may involve a concrete tank to collect spring water, with a pipeline down to a village where there are one or more public taps / washing areas. This may be linked to spring rejuvenation and catchment conservation work. In some locations, tubewells with hand pumps, or open wells can be used for water supply. Apart from MGNREGS, these works can be supported by other government schemes for village water supply.

The INRMP for each village will identify and map out areas of village land that have different land uses. The plan may propose some changes in land use, such as tree planting on wasteland and conversion of *jhum* land to plantation crops. The plan may also identify land development works, such as:

- a) Stabilisation of steep slopes: such tree planting, drainage treatment and contour trenching would be taken up. In some cases the slopes might be part of the *jhum* fields, in which case horticulture and plantation crops would be an option. This activity can be taken up under MGNREGS.
- b) *Jhum* stabilisation and management: *Jhum* lands with low to moderate slopes could be terraced for tree horticulture of species suited to the agro-climatic conditions, intercropped with vegetables and tubers. Pineapple with hedge rows or contour trenches is another option. Higher slopes could be used for raising plantation crops, with intercropping of spices. This activity can be taken up under MGNREGS.
- c) Terracing: Large tracts of land have low to moderate slopes, generally with deep soils and are suitable for terracing. Once terracing is done the fields can be used for cultivation of field crops, vegetables, spice crops, tubers and horticulture. This activity can be taken up under MGNREGS.
- d) Drainage management in the valleys: Construction/improvement of drainage in the valleys for safe disposal of excess rainwater runoff would enable farmers to grow another crop after rice is harvested and also enable them to adopt SRI. This can be taken up under MGNREGS.
- e) Developing village common lands: Many villages have common land that is not used for *jhum* or any other form of cultivation. These may be taken up for forestry, forage tree plantation and grassland development. Common lands could also be developed as an enterprise, with the village forming a producer company that develops the land for a plantation crops, possibility in partnership with the private sector.

In addition, villages may opt to implement Land Banks, an initiative from MLIPH to provide access to land for poor households. To complement land and water development, food crop interventions could include:

a) Increasing crop yields: current yields are low so there is huge potential. Apart from the interventions described above (which can increase both yields and crop area), there is potential to use improved crop husbandry methods and apply improved inputs. Paddy yields can be enhanced by better nursery techniques, seed treatment, use of HYVs, and SRI. Support can come via convergence with the National Food Security Mission and with the forthcoming Meghalaya State Rice Mission.

b) Diversification: there is huge scope for introduction of oilseeds and pulses to be grown after paddy. Crops, such as sesame and soybeans could be cultivated on paddy field bunds. Tuber crops, such as sweet potato, elephant foot yam, colocasia (taro) and cassava can be taken up on a larger scale, including as inter-crops in plantations.

c) Soil fertility management: at present there is surprisingly little use of compost and farmyard manure, with almost no use being made of pig manure. Apart from encouraging greater use of what manure is available, and improving the quality of manure through better composting (including vermicompost), the use of green manure. Soil tests may indicate the need for chemical amendments, such as use of lime in acidic soils and micronutrients. Ideas for improved soil fertility management are in the Agricultural Working Paper.

d) Homestead development: Homesteads and *bari-bagans* could be better utilised to grow vegetables, fruit trees, drumstick, etc. by provisioning low cost micro-drip system. These comprise of elevated water drums with a network of drip irrigation pipes. The homesteads could thus serve as nutrition gardens besides being sources of cash income.

e) Draft power, inputs and services: Most land cultivation is still done manually except in parts of the Garo Hills. As a result, the quality of field preparation, timely sowing, intensification of farming (multiple cropping) and profitability are compromised. Power tillers are being introduced, but they are not always being used effectively. Similarly, the virtual absence of places to buy farming inputs at the village level is a major constraint on modern farming. Input supply systems, including machinery rental services, need to be developed. These could include support to individuals establishing such services as a business enterprise, and village or cluster owned Farmer Service Centres. At the cluster level, IVCS may take on this activity. Subsidies for the purchase of power tillers are available from a number of government programmes, and are included in the forthcoming State Rice Mission.

13. This component would be supported by the LAMP DPMU, which would include an Agricultural Engineer in each of the district offices to supervise the planning and implementation of land and water conservation works. The State PMU will include an NRM manager who will provide overall direction, including the preparation of manuals and reference materials. Convergence officers in the DPMU and a Convergence Manager in the SPMU, along with project coordination arrangements will ensure that resources from other programmes will flow to project villages.

14. Further details on this component are in Working Paper 4, with some additional information on climate change in Working Paper 5, and on Agriculture in Working Paper 3.

Component 2: Livelihoods Support

15. Livelihood promotion has suffered from the compartmentalized implementation strategy of the line departments. The line departments often provide subsidies for implementing livelihood activities, but generally are unable to provide support covering all aspects of the production and marketing cycle. This apart, regular livelihood support activities are geography defined and target oriented and, as a result, constrained in development of the economies of scale required for reduction in cost of production and enhancing efficiency of marketing. A cluster-based approach creates the volumes and economies of scale needed to access markets. Access to markets with

adequate infrastructure and road access remains vital for development of livelihood activities. Financial services in general, and credit in particular, will be a necessary ingredient to successfully implement livelihood related activities.

16. This component aims to: (i) support and build the capacity of the community to implement commodity-specific livelihood activities; and (ii) address issues related to access to markets and finance. There are four subcomponents: (i) Enterprise Development; (ii) Integrated Production and Marketing; (iii) Livestock Development; (iv) Market Infrastructure; and (v) Rural Finance.

17. **Support for Enterprise Development:** The project will support an Enterprise Facilitation Centre in all 39 blocks in the state. EFCs will act as one stop shops to support anyone wanting to start or expand an enterprise in the farm or non-farm sectors. As of June 2013 a total of 22 were operational and it is expected that all 39 will be functioning before the start of project implementation. These centres will be staffed by a Manager, a Field Business Advisor (FBA), an Enterprise Resource Person (ERP), and an Office Assistant. Interested entrepreneurs will visit the EFC where their capacity will be assessed along with the viability of their proposed activities. Approved applications will get access to bank, convergence and project funding, along with training and technical support. The FBA will be specifically tasked with supporting bank loan applications.

18. LAMP will provide EFC staff with specialised training and EFCs will also be supported by specialised service providers. One such service provider, The Livelihood School (TLS - part of the BASIX group) is already supporting eight EFCs for an 18 month period to build staff capacity, carry out value chain studies and develop approaches to support entrepreneurs.

19. EFCs have already generated considerable interest, with 21,349 people making enquiries in the first five months of 2013. Projections for LAMP from project year 3 onwards, are for each EFC to handle a total of 1,200 enquiries per year, of which 180 (15%) result in actual businesses being established or expanded. Support provided would include access to bank loans, grants from other government programmes supplemented by project grants (funded by GoM) along with advice, training and technical support. Training for entrepreneurs would include business management, accounting and marketing along with production technologies - with some production training being provided via convergence with other programmes.

20. Resources have been provided to support EFCs for the full eight years of the project. However it is likely that the role of EFCs will evolve considerably during this period and they may become more a business support network than shops for enterprise start-ups. However it may not be reasonable to expect them to generate significant amounts of income and be self-supporting - at least with the proposed level of staff. This issue needs to be addressed during project implementation, with sufficient flexibility in the design to allow the EFC model to evolve in response to changing needs. More information on EFCs is in Working Paper 7.

21. **Integrated Production and Marketing.** This sub-component will be implemented in the same village clusters as Component 1, and will benefit from the natural resource management activities of this component in terms of enhanced water supply for production of cash crops, and protection of the eco-system to ensure sustainability. The PMU will select priority sub-sectors, blocks and along with village clusters with potential for commercial production of these sub-sectors on a significant scale. Selection would take account of existing skills, availability of land, water and other natural resources, and access to inputs, support services, finance and markets. In selection of sub-sectors it is also important to consider if LAMP will be in a position to make interventions in production and/or marketing that will significantly increase returns to producers.

22. The project will then support preparation of an implementation plan for each selected commodity. This plan will include activities related to: (i) identification of production and marketing constraints; (ii) identification of interventions to overcome these constraints; (iii) selection and training of Lead Entrepreneurs; (iv) training of other producers; (v) support for implementation of production plans; (vi) interventions to address marketing constraints, if any; (vii) interventions

required to address input and service provider constraints; (viii) detailed costs for each activity and funding sources; and (ix) technical and financial viability of the enterprise.

23. The project will engage specialized agencies to support clusters in preparation of plans and to handhold the community and project staff with periodic implementation support. Where needed the project will build a team of village level Service Providers (who may sometimes also be the Lead Entrepreneurs) with the required technical competence to address issues related to inputs (seed, fertilizer, saplings, piglets, etc), technical services (production technology, disease prevention, etc.) and marketing. Household level implementation will be funded by entrepreneur contribution, bank loans and project support.

24. MBDA has already appointed a number of Technical Partners to support enterprise development and these and other agencies may be engaged to support clusters as well as the individual enterprises established through EFCs. These partners would be engaged on a commodity basis, and could undertake a range of tasks including market and value chain studies, design of interventions, training of project staff and producers, formation of producer organisations, and direct mentoring of enterprises. LAMP will also seek private sector partners to help link producers with markets and improved technologies. Such private sector partnership may be particularly useful in the spice sector, where there is potential to link with markets for processed products. Support from the various sector missions of GoM will also be enlisted in implementation of the cluster based enterprise development.

25. Working Paper 8 on Integrated Production and Marketing reviews a number of commercial products that are either already important or could have potential for the future. Some possible interventions are identified. Amongst the products reviewed were:

a) Pineapple: the most important fruit crop, with 100,000 tons being produced on 10,000 ha.

Possible LAMP interventions include:

- Increase yield by better production practices including fertiliser and irrigation
- Improve fruit quality by growing larger fruit
- Propagation via tissue culture to improve quality of planting material
- Time crop harvests to coincide with peak prices in urban markets
- Grade fruit according to size and package to improve producer prices.
- Utilise sub-standard fruit for processing
- Aggregation at the village level through producer organisations and sales direct to wholesalers in main markets.

b) Oranges are another important fruit crop, with over 38,000 tons produced on almost 10,000 ha.

Interventions could include:

- Replant orchards with grafted trees of improved varieties (early/late season to suit market demand).
- If disease is a problem, then ensure new stock is disease free.
- Renovate existing orchards through pruning and fertilisation
- More widely spaced trees would improve fruit size and quality
- Establish fruit tree nurseries to produce improved (grafted) planting material
- Develop a premium market for high quality fruit.

c) Ginger is an important cash crop, with 57,000 tons produced on 9,000 ha. Crop yields are well below potential. IFC are currently carrying out a value chain study in the spices sector with the objective of enlisting one or more private sector spice companies to establish facilities in the state. These companies may organise and support farmers to produce the spices they require. LAMP can provide complementary support to organise production clusters and increase the volume and efficiency of production.

d) Turmeric is the other major spice crop, with about 12,000 tons being produced on 2,200 ha. The proposed strategy for turmeric is the same as that for ginger - see above. In fact, given

the greater interest in processing of turmeric, there may be a better chance of a partnership with a private sector spice company. Specific interventions could include

- Lakadong is a unique turmeric variety that can be cultivated only in Jaintia Hills. A secure chain of custody needs to be developed for Lakadong to achieve such value. If this can be achieved, institutional buyers would be keen to buy turmeric.
- Geographical Indication (GI) for Lakadong turmeric is a possibility, which should be explored to help improve returns to farmers and protect producers from possible imitations.
- Collective organization for production and marketing could improve the economics for inputs and marketing.
- Improved inter-cropping could produce higher returns to farmers
- Improved varieties could counter pest resistance and give higher returns
- There is a retail market for turmeric in the NE region and this can be tapped by providing a quality product.

e) Off-season vegetables: 15,000 ha of vegetables are grown. With a cool climate the state supplies off-season vegetables to other parts of eastern India and Bangladesh. However excessive use of chemicals for tomatoes, one of the two main vegetable crops, reduces profitability and may affect the health of farmers and consumers (and risks restrictions being imposed on the sale of such vegetables). LAMP would support the testing of improved methods of blight control. This could be carried out by either a research agency, an NGO or a private sector agency. At the same time LAMP may appoint an agency to support production and marketing interventions for vegetables which are not being produced using potentially dangerous amounts of pesticides.

f) Strawberries are an example of a successful value chain development in Meghalaya, which is now the major production hub in eastern India. There is a strong Strawberry Growers Association which could be point of entry for any interventions, acting as the executing agency for LAMP. Specific areas where LAMP could support producers are:

- Technical support to identify technology and market opportunities and build capacity
- Production of planting material - currently the major production constraint
- Marketing support to expand markets including improvements to preservation of strawberries in the market chain, as well as development of new market outlets including direct sales to supermarkets and other retail outlets.

26. The process for selection of sub-sector crops/products and village clusters is described in the main report as part of Implementation Arrangements in section III Organisational Framework. Village clusters will be selected on their potential for production of specific marketable crops, and all these villages will implement component 1 (Natural Resources and Food Security). However it is anticipated that only 20% of households (a total of 20,250) in these clusters will actually become involved in Integrated Production and Marketing initiatives for commercial production and marketing. More information on this sub-component, including some potential products, is in Working Paper 8.

27. **Livestock development** would focus on 120 Livestock Development Centres (LDC) located within the 54 village clusters to be supported for Natural Resources and Food Security, together with the supportive animal breeding and feeding initiatives. Most LDC would focus on pigs and, to a lesser extent, on goats. Given the very limited potential for dairy production in the state (Meghalaya does not have a tradition of milk consumption), cattle development centres do not seem to have much potential (apart from at one or two locations near Shillong or Tura). Pig Development Centres, on the model of BAIF's successful goat clusters in other states, would focus their efforts on existing pig producers and the existing pig population – with interventions in health, feeding, housing and breeding. These interventions have been tested and found to be successful in other states in the north-east, including in a small project in Nagaland implemented by ILRI with funds from IFAD.

28. Each LDC would cover about six villages with 360 participating livestock producers. Each LDC would be supported by a technician (a Community Livestock Facilitator - CLF), with a Village Livestock Resource Persons (VLRP) – also called “field guides” or “paravets” for each village. The CLF would monitor the work of VLRPs, conducting monthly review meetings with these workers, and visiting the operational area to meet pig farmers. They will be trained in social mobilization, project management and implementation, documentation, livestock management practices (feeding, health care and breeding). If needed the CLF will be equipped with a motorcycle. The VLRP would be work in their home villages and would be the backbone of the programme, working at the grassroots level to be a bridge between farmers and the CLF. They would generate an income from the provision of health care and from other services, such as supply of feeds. The budget for each centre for a three year period covers:

- Community Livestock Facilitator – salary, allowance and transport of Rs20,000/month, initial and refresher training, equipment
- Village Livestock Resource Persons (x 6), allowance (Rs2,500 per month), initial and refresher training, equipment
- Livestock producers – training (for 360), exposure visits (for 18)
- Feed development (feed supplements, plants for feed production)
- Critical health inputs (vaccine, deworming etc.)

29. Pig breed improvement has been budgeted separately, with 600 boars (male breeding pigs) plus feed for one year and health inputs. This amounts to one boar per village, but the requirement for improved breeds may be more concentrated in some centres than other. In any case, breed improvement may only be warranted after feeding has improved and disease controlled. These boars would primarily come from government pig breeding farms but, if demand for improved breeds of pigs exceeds the capacity of these farms, progressive farmers could establish block level units to produce improved breeding stock, these being supported via EFCs.

30. Goat Development Centres will follow a similar pattern to those for pigs, but will include improved bucks. Any cattle LDCs would follow the existing BAIF model focused on a trained technician providing artificial insemination and paravet services. VLRPs for at pig, goat and cattle LDCs could also provide vaccination services for backyard poultry. Commercial poultry units for broiler and egg production would be supported via EFCs. The Knowledge Services component would catalogue indigenous livestock breeds and practices (such as use of wild plants to control disease), generate technical guidelines for livestock producers, and carry out action research into feeding and backyard poultry. More information on livestock is in Working Paper 6.

31. **Market infrastructure:** the two major activities of this sub-component are: (i) rural market infrastructure development (along with improvements in market management; and (ii) communications infrastructure.

32. **Rural Market Infrastructure:** The marketing system forms an integral and interlinking part of the general exchange systems of every market in the state, but the entire market chain is highly fragmented and the system is different for all three regions (Khasi Hills, Garo Hills and Jaintia Hills). These local markets function as an important link connecting rural production centres to the consumption and distribution centres in the State. They constitute themselves a system of supply and distribution as both wholesale and retail. These markets also facilitate formation of prices that are accepted by the distribution chain.

33. Rural households face significant difficulties in bringing their products to market, stemming from inadequate and poorly maintained infrastructure at rural markets for sorting, grading, weighing and selling; and inadequate road connectivity. There has been minimal investment in market facilities, and totally inadequate expenditure on market maintenance on account of lack of systems for redeployment of revenue generated from the market. These constraints mean markets do not function properly and there are high losses within the marketing chain. The project will support development of infrastructure for about 55 primary markets (out of a total of 179 in the state). The project will also establish a system of management of the markets to ensure equitable access for poor producers and regular maintenance.

34. The agricultural marketing system in Meghalaya is distinctly different from the other states in the country. Ownership and authority for markets in Meghalaya lies with traditional leaders and the Autonomous District Councils. Markets are a source of revenue for traditional institutions, and this issue, along with others relating to land for market expansion, access to the market for farmers, and market management and maintenance, will need to be addressed through consultation with the traditional leadership when drawing up detailed plans for market improvement. Working Paper 9 has more information on issues relating to marketing and access to markets.

35. **Communications infrastructure:** alongside the development of public markets, there is a need to improve communications infrastructure to: (i) ensure markets are well connected to the road network in order to move goods in and out of markets; and (ii) provide access from clusters where cash crops are produced to markets. A total of over 13,000 km of village roads have been constructed under MGNREGS, but these are built of earth using the limited skills and competence of the community. As a result most of these village roads do not meet the farm road standards and some of them will require gradient correction as well as provision of sub-base and drainage. In addition to roads, there is a need for river crossings. The MLIPH and NERCORMP projects have successfully built “submersible bridges”. These are made of stone and concrete, with culverts for water to pass below the road except at times of flood when the bridge submerses and becomes a ford. Some villages are particularly inaccessible, being located at the bottom of steep valleys with no easy access for roads. Ropeways can be the most economic way of improving access for such villages.

36. Project budgets include funds for 250 km of roads, 20 submersible bridges and 10 ropeways. Details of costing and specification are in Working Paper 9, Annex 6. It is envisaged that most road construction would involve improving an existing road or farm track – in particular upgrading the earth roads constructed by MGNREGS. However in some locations it may be necessary to construct a new road. Upgrading of roads will often be more than adding a hard surface to an existing road. Earthwork excavations may be needed to ease steep gradients and sharp corners. Drainage is a critical factor in preventing landslips on hill roads, and many roads require both lateral and cross drainage – arguably this should be a greater priority than surfacing. In some locations, where traffic is light, LAMP may construct earth rather than surfaced roads.

37. **Maintenance and sustainability:** the basic infrastructure of public markets is not costly to maintain, and agreements made by LAMP with market authorities for the development of their markets will include the requirement to reserve a certain amount of income for maintenance and further improvements, along with the drawing up of an agreed maintenance plan. MGNREGS resources can be used repair road earthworks, but there is currently no provision for maintenance of bitumen surfaces of village roads. To ensure that LAMP roads provide sustainable communications, the following provisions would be made:

- Ensure roads are well constructed, with proper provision for drainage.
- Consider limiting the width of village roads to prevent damage by heavy trucks
- Pilot the use of more durable concrete rather than bitumen for road surfaces
- The Government should create a fund for village road maintenance.

38. **Rural Finance:** Under normal circumstances, finance for enterprise development (both on-farm and off-farm) should rest largely on the credit flow from banks. Banks have the ability to mobilize savings and provide loans at reasonable and market determined rates of interest. However, experience indicates that the banks have been reluctant in financing rural households on account of their bad experience with various government led interventions.

39. To address this issue MBDA plans to set up Integrated Village Cooperative Societies (IVCS) which will capitalise on the fact that villages in Meghalaya ethnically homogenous and socially cohesive units, with strong natural bonding within village communities. Indeed many villages already have informal village funds, utilised to provide villagers with loans to cover health emergencies and other urgent needs. IVCS would provide non-financial services along with savings, credit and other financial services. IVCS, as grass-roots organisations, will complement

the IFC financial inclusion programme which aims to increase the outreach of banks to serve larger enterprises.

40. LAMP will support the establishment of about 300 IVCS, primarily in the 54 village clusters to be covered by the Natural Resources and Food Security component. Each IVCS will cover around 5 to 6 villages and have 400 members (about 80% of all households). This scale of operation should allow an IVCS to generate enough income to cover its costs and employ a manager. The IVCS will collect savings from its members and, once it has reached a milestone for operational performance, GoM (through LAMP/IBDLP) will deposit a corpus fund to provide additional resources for lending to members. IVCS will come under the umbrella of the Meghalaya Cooperative Apex Bank, which will provide them with bulk loans for on-ending – as will other banks. Where possible IVCS build on existing institutions (viable Primary Agricultural Cooperatives, SHG Federations and SHG clusters – SHGs may themselves become members of an IVCS).

41. The National Rural Livelihoods Mission (NRLM), a major national programme, is shortly to start operations in the state. It will establish SHGs and cluster federations with the objective of grass- roots financial inclusion (in the initial phase) and livelihood promotion (in the long run). To ensure coordination and to avoid overlap, the State Government agreed with the design mission that:

a) At the initial phase of NRLM, LAMP and NRLM will agree to work in different blocks. As the block selection by LAMP will depend on potential for the value chain based clusters and enterprise creation it would be easy to keep them distinct from NRLM which primarily focuses on the poorest districts/ blocks.

b) Later, as NRLM covers more of the state, The Planning and Rural Development departments will agree on a plan whereby LAMP-supported IVCS will implement NRLM in LAMP "Special Dispensation Blocks". The State Government will convey to MORD (GoI) that it will implement NRLM with the LAMP processes and institutions as these are more in tune with overall development approach of the state.

42. IVCS, as a model for provision of financial services at the village level, has been successful in a number of states in India – such as Kerala, Tamil Nadu and Gujarat. Apart from financial services, IVCS may also aggregate products for marketing, and sell inputs to farmers.

43. LAMP will provide the following support for IVCS:

a) Engagement of a technical partner agency with specialised expertise in the formation and capacity building of grassroots financial cooperatives. This agency will:

- i. Prepare plan to set up of IVCS, including a phased approach, and a checklist of activities for formation, launch, and handholding in initial years, of individual IVCS
- ii. Prepare a process manual detailing the sequence of activities leading to launch of the IVCS, with estimated time schedule
- iii. Design training courses along with training material for: (i) facilitators to set-up IVCS; (ii) staff of IVCS; (iii) board of management of IVCS; and (iv) Cooperative Department staff.
- iv. Conduct these training courses in collaboration with the MCAB and Registrar of Cooperative Societies
- v. Prepare an operations and accounting manual for IVCS staff in their day to day work and to support the board of management.
- vi. Prepare a check list on governance practices and board tasks for use by the board of management of IVCS

b) Financial support for IVCS will be provided using GoM LAMP funds. This is estimated to amount to about Rs120 million and will include:

- i. A corpus fund (that would count towards capital funds) as a multiple of the equity contribution brought in by members.
- ii. Viability gap funding for the first 3 to 5 years when IVCS revenue is not sufficient to cover operating costs.

iii. A risk fund may be set up with a contribution of 1% of the incremental loans outstanding at the end of the year may be provided for the first 3 years. An additional risk fund contribution could be given as incentive for on-time loan recovery, with an amount equivalent to 5% of the outstanding loans at the end of three years.

c) A set of computers office equipment and furniture for each IVCS - to be provided once IVCS have been fully established.

44. Total membership of ICVS will amount to about 120,000 (300 ICVS x 400 members), of which 75% (90,000) will be active as savers and 50% (60,000) active as borrowers. More information on the rural finance is in Working Paper 10.

Component 3: Knowledge Services

45. MBDA is placing considerable emphasis on information and knowledge at a major pillar of IBDLP. The Knowledge Services component of LAMP will support MBDA knowledge-related activities across the entire IBDLP and will not just be restricted to the LAMP project area and activities. The IBDLP proposes to develop a Knowledge Hub. This hub will include on-line information services, but will go further, with IBDLP acting as a knowledge broker to provide information for enterprise development and natural resource management to stakeholders in the public sector and beyond.

46. The Knowledge Services component will support: (i) information for natural resources management and governance; (ii) information for enterprise development; (iii) technology testing and action research to generate information on new technologies and solutions to NR and enterprise problems; (iv) monitoring and evaluation of LAMP activities, outcomes and results; (v) knowledge management and lesson learning for LAMP participating households, project staff and other stakeholders; and (vi) dissemination and communications to spread information on LAMP to external stakeholders and a wider audience.

47. Information on natural resource management and governance: collection and collation of information on interventions in natural resource management will include examples of effective or useful interventions from within the State and from other locations in India and beyond. This will also include governance aspects of NRM, such as rules and regulations for resource management. Linked to this are issues concerning land tenure, transfer of land to other uses, and access to land for poor people. LAMP will also collect and store traditional knowledge and indigenous knowledge on natural resources, such as the collection and use of plants for medicinal and other uses. Apart from searching secondary sources, this may involve commissioning some studies to interview communities such as regarding their traditional knowledge on subjects such as the use of wild plants, and to gather information on traditional land tenure practices.

48. At the moment there are no large scale maps that can be used to support INRMP at project villages. LAMP will create base maps for each village using satellite data available from the North East Space Applications Centre. These maps will be used for participatory planning in the village. This will result in a much better land use plan as the alternative is to use participatory maps sketched by villagers, which usually do not give an even approximate estimate the areas involved in different types of land use. Satellite imagery can also be used to identify potential locations for specific crop-based enterprises, and for development of water resources.

49. Information on enterprise development will support the entrepreneur partners of EFCs as well as farmers participating in the Integrated Production and Marketing clusters. In addition this information will support enterprise development activities undertaken by IBDLP in other villages. Specific activities related to information on enterprise development include:

a) Support for EFC clients: to provide technical and management support to enterprises supported through EFCs is a challenge as these will not necessarily be clustered together. Apart from the supply of printed and video guidelines and manuals, it could be worth investigating if a telephone or SMS help line would be feasible and useful.

- b) Information repository (on-line as far as possible) for data on markets, technologies, technical manuals, management guidelines, and information on suppliers of input and services.
- c) Value chain studies: LAMP would commission external agencies to carry out 10 comprehensive value chain studies in sectors with economic potential.
- d) Meghalaya Trade Promotion Organisation (MTPO) would receive some financial support from LAMP. This agency is part of MBDA and is responsible for promotion of Meghalaya products in other parts of India.

50. Technology testing and action research: opportunities to test technologies and conduct action research include:

- Soil fertility management with improved methods for collection and use of farmyard manure
- System of Rice Intensification for paddy production
- Conservation Agriculture (minimal tillage cultivation)
- Improved cultivation of potatoes and tomatoes, including control of blight
- Improved cultivation of banana including new varieties and use of tissue culture
- Improved cultivation of pineapple, including use of drip irrigation
- Improved ginger cultivation, including pre-planting treatment of seed roots.
- Potential for bio-energy crops as an additional cash crop for farmers
- Pig production, including on-farm feed production and improved breeds
- Improvements to backyard poultry systems, including possible introduction of improved genetic stock that can be produced at the village level.

51. This work would be contracted out as individual sub-projects to public sector research agencies (state and ICAR) and NGOs or private sector agencies with the required technical expertise. In general research would take place under real-life conditions on the fields of cooperating farmers.

52. Monitoring and evaluation activities are described in the M&E section below.

53. Knowledge management and lesson learning involves the use of information from the experience of project implementation to learn lessons that will improve implementation processes and increase impact. As a tool for internal learning by project stakeholders (staff of the various implementing agencies, and participating farmers and villagers) it involves a series of regular meetings at cluster, block, district and state levels. At these meetings, progress of project activities will be reviewed and reasons for success and failure identified. Participatory tools such as “most significant change”, and “participatory monitoring and evaluation” may be used at these meetings.

54. LAMP will also implement a video system to disseminate information from farmer to farmer and village to village. It is proposed that LAMP participate in the Digital Green programme that is now being implemented in seven states in India with support from BMGF and other donors (see www.digital-green.org). Another approach in sharing knowledge are "Learning Routes" - a continuous process of in-the-field training that seeks to broaden and diversify the markets of rural technical services, placing special value on the best experiences and knowledge of institutions, associations, communities and rural families. Each Route is organized thematically around experiences, case studies and best practices on innovative rural and local development.

55. Dissemination and communications All components of the project have a role in dissemination of information and knowledge, both internally within the project (particularly to entrepreneurs, farmers and other villagers), and externally to citizens of the state, Government of India, IFAD, other development agencies, and wider civil society. The Knowledge Services component will support this via:

- Provision of village information kits – this is a set of project and development related information that will be useful at the village level, together with storage shelves, display cabinet, notice boards etc. This would be kept in a publically accessible building in the village, such as a community hall or school. A notice board would provide details of the

- LAMP development plan for the village, and show the progress of the plan to date (the board would be designed in such a way that it can be regularly up-dated).
- Production and printing of posters and leaflets.
- Translation, into the three main local languages, of technical manuals and guidelines, along with their printing
- Editing and design of project publications aimed at an external audience
- Printing of communication materials
- Creation of a LAMP website (or a LAMP section of the MBDA website) with information on the project and the results obtained. Information about LAMP would also be posted on other websites such as <http://asia.ifad.org/>
- Publicity and communication videos
- An annual high level knowledge sharing event aimed at sharing results and influencing policy

163. More information on the Knowledge Services Component is in Working Paper 11.

Component 4: Project Management

164. The LAMP will establish Project Management Units (PMU) at the state and district level. The State PMU, which will be housed in the MBDA headquarters, will include units for project management and technical support, as well as the Knowledge Services Component. A total of 30 staff will work on a full-time basis for LAMP at the state PMU. These would include

- Additional Project Director
- Head of Enterprise Development
 - Horticultural/agricultural Specialist
 - Livestock Specialist
 - Marketing Specialist
 - EFC Coordinator
 - Project Assistant
- Natural Resource Development Manager
 - Project Assistant
- Gender and Social Mobilisation Manager
 - Project Assistant
- Manager Cooperatives
 - Project Assistant
- Training Specialist
- Administration Manager
 - Administration Officer
- Office Assistants (5)
- Driver (5)
- Procurement Manager
- Finance and Accounts Manager
 - Accounts Officer
- Accounts Assistant

165. This list excludes the 24 staff in the Knowledge Services Component (some of whom would be field-based). In addition the State PMU would be supported by MBMA staff on a part-time basis. These include the CEO of MBMA, who would be the Project Director of LAMP, a team of human resource specialists, along with further administrative support staff.

166. District PMUs will incorporate the existing district Basin Development Units. LAMP support for these DPMUs would be phased in, with seven (in the old districts) being funded in year 1, with DPMU in all 11 districts being supported from year 2 onwards. Staff recruitment at both district and state levels will be incremental, with staff being bought on board as needed. DPMUs will have the following 11 LAMP staff:

- District Project Manager
- Gender / Social Development Officer.
- Agricultural Engineer
- Cooperatives Officer
- Convergence Officer
- Monitoring Assistant
- Accounts Officer
- Accounts Assistant
- Office Assistant (2)
- Driver

167. Additional staff may be posted at the District PMUs to manage other IBDLP activities that are not part of LMP. These staff would be funded by MBDA. . LAMP support for these BDUs would be phased in, with seven (in the old districts) being funded in year 1, with all 11 districts being supported from year 2 onwards.

168. Staff recruitment at all levels will be incremental, with staff being bought on board as needed. LAMP budgets also include provision for training of PMU staff, audit costs, vehicles, office furniture and equipment, computers and short-term consultants for ad-hoc assignments, as well as vehicle and office operating costs.

Appendix 5: Institutional aspects and implementation arrangements

1. Introduction

1. This appendix describes the agencies that will be directly responsible for project implementation. Project management and coordination arrangements are then described, with organograms of the management structure. The final section outlines proposed capacity building.

2. Implementing Agencies

2. At the central level the Department of Economic Affairs will be the nodal agency for the project and the Department of the North Eastern Region will review implementation progress. At the state level, the Planning Department of Government of Meghalaya will be the nodal agency, with the implementing agency being the Meghalaya Basin Management Agency (MBMA), a Section 25 (not-for-profit) company that is part of MBDA.

3. The Meghalaya Cooperative Apex Bank Ltd. is the public sector bank responsible for financing of cooperatives, will work with LAMP to support the establishment of IVCS.

4. Technical support partners. MBDA has already recruited a number of agencies to support the IBDLP. Most of these agencies will be useful in providing support to implement various components of LAMP. These include the following:

(a) IDFC Foundation (a foundation of an infrastructure finance company): carrying out studies and drawing up plans for rural market development (initial study completed).

(b) SFAC (Small Farmers Agribusiness Consortium of GoI) is procuring other organizations with expertise in value chain development etc. So far the following agencies are working with MBDA under the aegis of SFAC:

- Appropriate Technology India (ATI, an NGO) value chain development of spices, silk and oranges. A value chain study of ginger, turmeric and oranges has been completed. ATI has a brand for marketing organically produced honey, spices and other produce.
- Arete Consultants Limited (software consultants) is working on development of MBDA website and Meghalaya Entrepreneur Development Portal, and could continue to support IT services and the MIS system for LAMP.
- The Livelihood School (of BASIX) is providing comprehensive support to eight EFCs, and could provide this type of support in LAMP.
- Mutual PR (public relations company) is working on publications and a development communication road map, and could support the communications work of LAMP Knowledge Services component.
- Access Development Services (an NGO) is to work on thematic Farmers Producer Organizations, but it also has capabilities for enterprise development (EFC support) and commodity value chains (IPM sub-component).

(c) AFC (a consulting agency of GoI) is working on the honey value chain in partnership with a specialised apiculture company. Apiculture is a potential sub-sector for LAMP IPM support.

(d) BAIF (a large NGO): livestock sector support – a study has been carried out and BAIF is drawing up proposals for support to be funded by LAMP.

(e) NABCONS (part of NABARD, the National Bank for Agriculture and Rural Development) is supporting the water sector, and could provide support (production of guidelines and standard designs, staff training, technical back-up) for soil and water development works in LAMP.

5. Technical support agencies will be required for a number of other functions in LAMP. The overall requirement (including for functions where agencies have already been recruited by MBDA

for the IBDLP) is shown in the table below. Detailed terms of reference and selection criteria will be included in the draft PIM.

Requirement for Technical Support Agencies in LAMP

Component	Service required	Level/coverage	No. of agency	Specific tasks
IVCS	Development of Cooperatives	State, for four years	1	Advice & training on cooperatives; also handholding in the initial years
Natural resources and food security	Food crop development	State, work in 2 clusters, for 3 years	1	Pilot improved paddy production, train project
	Facilitation and support for NRM planning and implementation	All 54 clusters – each agency covers one block. For 2	6 to 18	Support VEC and VF for NRM – especially INRMP and initial implementation. Train VF, VEC and lead farmers
	Support NRM cluster agencies (RNGO)	All agencies working for NRM support	2-3	Support for FNGO (or other NR cluster agency) – staff training, advice, monitoring
IPM (value chains)	Production & marketing of commercial products	All 54 clusters – each agency covers 5-6 clusters. For 4	10	Cluster-specific value chain studies. Cluster facilitators, improved production, value addition, market linkage, material for
Livestock Development	Establish and operate Livestock	For 120 LDC, each for 3 years, phased over a six	1	Identify and disseminate improved methods for pig & goat (& also cattle) production in
EFC	Enterprise development support	All 39 EFC, each covers 13 EFC. For 4 years	3	EFC staff training and mentoring, identification of client needs.
Knowledge Services	Enterprise portal/MIS	State – cover all IBDLP activities. For 8	1	Systems analysis, software development, training, technical backup
	Telephone support	State – cover all IBDLP activities For 6.5 years	1	Need identification, system specification, equipment procurement, staffing & operation
	M&E support	State – cover all IBDLP activities For 4 years	1	Staff training, mentoring and back-up. Or could provide total M&E services over 8 years.
	KM and communications support	State – cover all IBDLP activities For 4 years	1	Design and production of documents and videos, organisation of communication events, public relations

6. Further information on the capabilities of potential technical support agencies is in Working Paper 12 on Institutional Capabilities and Capacity Building.

7. In addition LAMP will work closely with a number of GoM departments and agencies - such as the technical line departments responsible for agriculture, livestock etc., research agencies and other departments responsible for development programmes (such as Rural Development and Soil and Water Conservation). The North Eastern Space Applications Centre of Gol will provide village maps generated from remote sensing. LAMP will also contract public and private sector agencies and NGOs to provide services such as studies and training.

3. Management and Co-ordination

(a) Overall approach

8. Overarching principles: two broad principles will govern the management and co-ordination structure for LAMP:

- a. Alignment to the management structure set up for the IDBLP at all levels.
- b. Dynamic and flexible. The proposed arrangement is based on current assessment of project needs and may be modified based on the requirements that may arise during implementation.

9. Alignment to the existing structures: this will be manifested in the following ways:

- a. The State Project Management Unit will be located in the MBMA

- b. The Executive Director of MBMA will be the ex-officio Project Director of LAMP
- c. At the district level the District PMUs will be located in the respective District Basin Development Units (DBDU)
- d. The Deputy Commissioner (DC) will be the ex-officio District Project Co-ordinator of LAMP. e. The existing Basin Management Development Council Chaired by the Chief Minister and the Board of the Meghalaya Basin Development Authority chaired by the Chief Secretary will review the project periodically as part of their existing review process.

10. Staffing: Hiring of staff will be in a phased manner, starting with those who are essential for setting up the programme and subsequently bringing in technical staff as the implementation rolls out. In some instances, such as hiring of Accounts Assistant at the DPMU level, this would be done after assessing the volume of work which cannot be predicted at the start up stage. Staff positions proposed for the project will be filled up through existing staff hired under MBDA/ MBMA as well as from the market. Additionally some staff could be seconded to the project.

11. DPMUs: Setting up of DPMUs will be in a phased manner too. At the initial stage DPMUs will be set up in 7 of the older districts , namely, West Jaintia Hills, Ribhoi, East Khasi Hills, West Khasi Hills, East Garo Jhills, West Garo Hills and South Garo Hills. At the end of the second year, based on a needs assessment, DPMUs will be set up in the remaining four districts of East Jaintia, South West Khasi, South West Garo and North Garo districts, as appropriate. The DPMUs would be integrated with the existing Basin Development Units of MBDA.

12. Reporting: At the district level, technical staff will have dual line of reporting - one to the District Project Manager and the other to the concerned Technical Focal point in the SPMU.

13. Project review: LAMP will be reviewed at the highest level by the Board of MBDA (chaired by the Chief Secretary and with Principal Secretaries as members), with oversight from the Meghalaya Basin Development Council, chaired by the Chief Minister. In addition project progress and outcomes will be reviewed by in twice-yearly Tripartite Project Reviews, which are organized by DEA and IFAD and attended by Project Directors of all IFAD-supported projects in India.

(b) Broad structures and roles of project management

14. **State Project Management Unit (SPMU)**: At the state level, the SPMU will be housed within the MBMA. It will be headed by the Executive Director of MBMA who will be *ex officio* Project Director of LAMP. S/he will be a government appointee, preferably an IAS officer, and will be assisted by a full time Assistant Project Director (APD) and a full team of staff for ensuring smooth implementation of LAMP. The ED/PD may cover more programmes than LAMP under MBMA, however it is likely that LAMP would form the major part of their duties. The APD will be a full time dedicated staff member of the SPMU. He or she will be procured from the open market and will be responsible for the day to day management of LAMP and ensuring convergence with other government programmes. The SPMU will broadly have three teams which will work in close co-ordination with each other:

a) **Project Management Team (PMT)**: this will consist of seven Managers (Administration; Finance & Accounts; Procurement; Co-operatives; Enterprise Development; NRM; and Gender/ Social Mobilisation) along with specialised and supporting staff. Their key responsibility will be to: (a) prepare and implement action plans (b) support DPMUs in their day to day functioning (c) co-ordinate and liaise with line departments of the government for convergence (d) ensure quality of implementation (e) procure services/ good as required; and (e) project accounting. The additional function of human resources (HR) will be managed by an HR team now being recruited for MBDA.

b) **Knowledge Services Team (KST)** will come under the overall charge of a Director/Head of Knowledge Services, and consist of teams for natural resource knowledge, enterprise knowledge, monitoring and evaluation, and lesson learning and communications. Their key responsibilities would be to (a) collate and analyse information from the field and prepare reports, information briefs etc. (b) identify needs for and prepare knowledge products for

different audiences (c) facilitate knowledge sharing within and outside the project with key stakeholders (d) develop and manage a knowledge website.

15. **District Project Management Unit (DPMU):** The Deputy Commissioner of the district will be the *ex officio* District Project Co-ordinator (DPC) of LAMP. The project, while not adding significantly to his/her workload will work under his/her overall guidance at the district level and will benefit from his/her capacity as the DC whereby s/he chairs the District Co-ordination Committee and has access to line departments and other stakeholders. The DPMU will take over the role of the current Basin Development Units which are responsible for implementation of the IBDLP at the district level.

16. A full time District Project Manager (DPM), reporting to the DPC will be hired from the market and will be responsible for the day to day management of the project activities at the district level and below. The DPM will be supported by a team of one Agriculture Engineer, three officers (Convergence, Co-operatives and Gender & Social Development), and Accounts and Monitoring Assistants. Professional staff will have dual line reporting: for the day to day matters they will report to the DPM. However, for the technical matters they will report to, and work in close co-ordination with the technical experts in the SPMU. The team will provide handholding support as well as be responsible for supervision and monitoring of the EFCs, the Village Facilitators (who would be hired via the VECs) and the Managers of the IVCS. They will help resolve bottlenecks, liaise with the line departments at the district level as well as with the technical experts and concerned project managers at the state level to facilitate convergence and provide support to the entrepreneurs. The DPMU will also act as a liaison between the community level organizations (VEC, EFCs, IVCS) and the SPMU to ensure smooth flow of information and technical support. As required, additional staff may be attached to the DPMU to implement IBDLP activities that are not being supported by LAMP. These staff would be funded by MBDA independently of LAMP.

17. **Enterprise Facilitation Centres (EFCs)-** The EFC located in each block is the cutting edge institution which will directly engage with the communities and provide them with necessary guidance, advice and services for enterprise development. Overall the project will set up and support EFCs across the entire state (all 39 blocks). The EFCs will be responsible for the implementation of the enterprise development activities of the LAMP project at the block/ village level. Each EFC will have four staff- a Manager (in-charge of the EFC), a Field Business Advisor (FBA), an Enterprise Resource Persons (ERP) and an office assistant.

18. EFC staff will work closely with the DPMU and key professionals in SPMU. They will be responsible for interacting with communities, motivating and educating them, helping them identify their needs/ requirements, co-ordinating responses to their queries (through DPMU/ SPMU), providing them tools/ information, supporting them to develop business plans, organizing trainings if needed and mobilizing support from line departments (with help from DPMU staff). The FBA will be primarily responsible for facilitating bank loans/ access to finance for the entrepreneurs and help them with the preparation of their business plans.

19. **Village Employment Council (VEC):** The VECs are existing village level bodies that are currently responsible for co-ordinating MNREGS planning and implementation at the village level. The VEC will be engaged by the project to serve as the platform for developing village plans for natural resource management and co-ordinating its implementation. For this, the project will hire, through the VEC, a Village Facilitator who will be placed within the VEC, reporting to the VEC Chairperson and working in close co-ordination with the DPMU. The project will provide training and support to build the capacity of VECs to implement LAMP. Should a few VECs still lack the required capacity, the project will have the flexibility to implement the component via other village level organisations, such as groups similar to the Natural Resource Management Groups of NERCORMP.

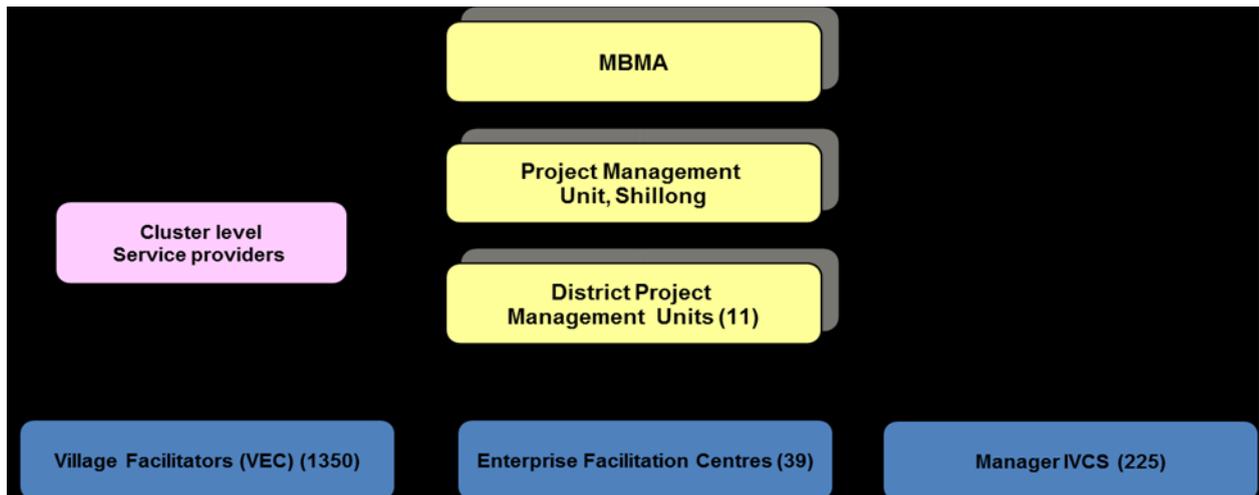
20. The project will work with 1350 VECs. To support the VEC and Village Facilitator in the first two years of implementation, LAMP will hire a number of local level service providers who will provide about two staff for each cluster of around 25 villages. These agencies will report to the DPMU and provide a channel for detailed monitoring of village level performance by DPMU staff.

Similarly the Service Providers for Integrated Production and Marketing (value chain development) will provide a channel for reporting and supervision by the DPMU of village-level initiatives activities for commercial crops, as will BAIF, the service provider for Livestock Development.

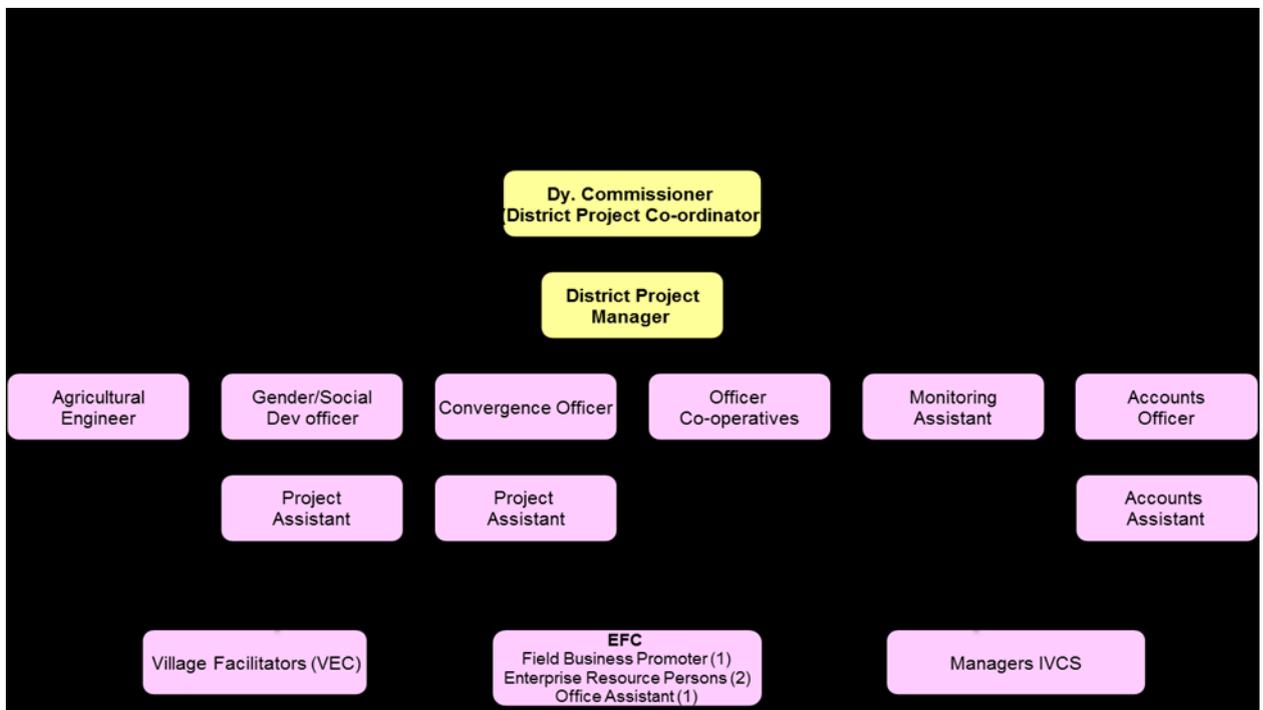
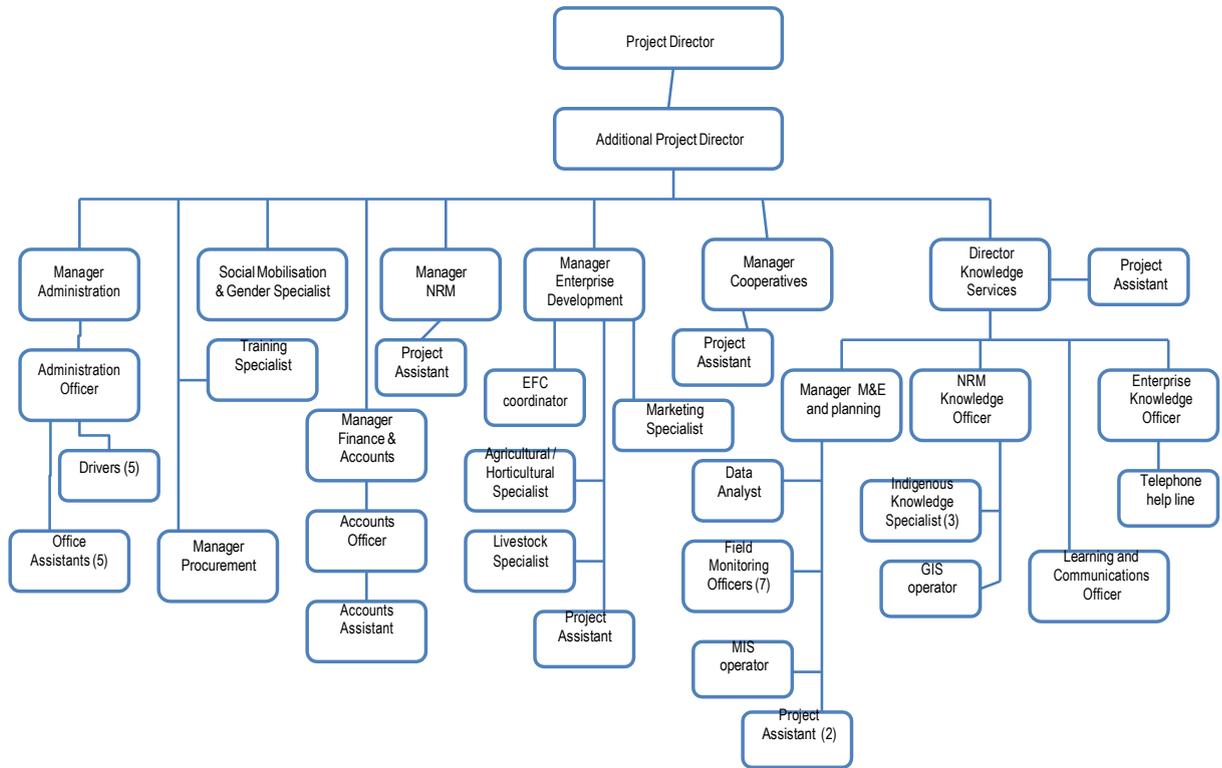
21. **Integrated Village Co-operative Society (IVCS):** about 300 IVCS will be set up under the project, each at the level of a cluster of villages, based on the business potential of that area. It will include individuals as well as groups (formal or informal) as its member and would cover a large part of the villages. Its key function would be to provide access to financial services to the communities, in addition to other support such as aggregation of crops/ products, linking to service providers etc.

22. The IVCS establishment would be carried out with support from a dedicated service provider with adequate knowledge of formation of grassroots financial institutions, especially in the cooperative sector, and handholding these institutions during their initial phase. Each IVCS will have a full time Manager employed by IVCS and responsible for managing the day-to-day operations and accounting functions. S/he will work in close co-ordination with the Officer Co- operatives at the DPMU level as well as with the service provider.

Project Management Structure



Proposed Management Structure of State PMU for LAMP



(c) Project coordination and convergence

23. Coordination at the highest level will be provided the Board of the Meghalaya Basin Development Authority. This will review the progress of LAMP and ensure that its activities are coordinated with other development efforts in the state, especially with the nine missions on the IBDLP in aquaculture, apiculture, livestock, horticulture, sericulture, forestry & plantation crops, tourism, energy and water.

24. In addition, and in accordance with existing practice, a special Project Management Committee (PMC) will be constituted to support the project. Chaired by the Principal Secretary, Planning Department, this will include Project Director of LAMP, heads of line departments at the state level, representatives from Banks (NABARD and Reserve Bank) and representatives from civil society. Additionally, one District Project Co-ordinator/ District Project Manager will participate and this will be on a rotational basis. The APD of LAMP will be the Member-Secretary. The key functions of the PMC will be to review project progress, identify and help resolve challenges/ bottlenecks impacting project performance, review the Annual Action Plans before it is submitted to MBDA Board for approval, share information and facilitate convergence.

25. At the district level coordination and convergence will be ensured by having the Deputy Commissioner for the district as District Project Coordinator. The project will be included in the regular District Development Coordination meetings and in other cross-programme meetings at the district level. These arrangements will ensure that the project links up with the technical line departments in the field both in terms of obtaining technical support and getting convergence funding from other projects being implemented by these agencies.

26. At the village level LAMP NRM activities will be implemented through the VECs. These VECs also have responsibility for implementation of MGNREGS, which provides a major source of funds for local level infrastructure, soil and water conservation, and catchment improvement – all major thrusts proposed for LAMP NRM. It should therefore be easy to integrate MGNREGS works into the INRMP sponsored by LAMP.

27. In addition to these coordination efforts, the LAMP APD has specific responsibility for convergence at the state level and there will be Convergence Officers in each DPMU. These staff will follow-up on coordination meetings to ensure that the project obtains the maximum possible benefits from the very significant government resources available for complementary projects and programmes.

4. Capacity building

(a) Lessons from IFAD projects

28. Lessons regarding training and capacity building from the experience from IFAD projects in India and elsewhere in Asia²⁰ include:

- Results of mass training programmes, covering many thousands of rural people, has been generally disappointing. Reach ambitious numerical targets requires a huge effort and becomes the focus of project management, and quality is sacrificed.
- Post-training follow-up is a key factor in adoption of technologies and skills learned in training courses.
- Top quality training is well worth the extra cost - this may involve hands-on practical learning, good trainers (including farmers who have done what they are now teaching), and training from top institutions.
- Capacity building and skill development can take place through a number of routes, and does not always need to involve formal training courses. Farmers can adopt messages from group meetings, take advice from input suppliers, and learn through mass media, as

²⁰ in particular see Bangladesh: Evaluation of Training Provided by Projects, E Mallorie and N Sarder, IFAD Case Study, 2011

well as day-to-day contact with project staff. Above all farmers learn from seeing what other farmers are doing.

(b) Approach to capacity building

29. An important conclusion to be drawn from these lessons is the need for flexibility in project design. Too often project management think that by following a detailed cost table line-by-line, they will achieve the objectives of the project. Training courses are provided because they are in the cost table, not because they are really needed. The approach for LAMP will be to provide lump sums for broad capacity building activities in each component, suggest possible training topics and methods, but let project management draw up detailed plans of what they actually want to do each year as part of the AWPB process. Training will be planned, coordinated and monitored by a Training Specialist in the SPMU.

30. To calculate the quantum of resources likely to be needed for capacity building, and to illustrate the type of training that might be done, detailed cost tables have been drawn up for this stage of project design. However they will be omitted from the final design document. Avoiding this detailed specification of training in the project cost tables will also avoid problems, that have occurred in some projects, of unit rates, for things such as training allowances, being fixed at the wrong level, or indeed, the whole cost of a course being inadequate to provide the training needed.

31. This training is summarised in a table in Working Paper 12 on Institutional Capabilities and Capacity Building, which also includes information on how training will be organised and what outcomes are expected. In addition, capacity will be built for farmers and rural producers in the following ways:

- Day-to-day contact with project staff - including local NRM facilitators (FNGO), and technical service providers for food crops, livestock and commercial products
- Day-to-day contact and mentoring from village facilitators and lead farmers
- Contact with VECs, IVCS and producer groups
- Reading technical manuals, leaflets and other printed material
- Viewing of videos produced for farmer-to-farmer knowledge sharing
- Participation in knowledge sharing and review meetings at the village and district levels (participatory M&E)
- Utilisation of telephone help-line and mobile-phone based information systems

32. Additional capacity building will be provided for project staff via:

- Contact with other staff, especially PMU technical advisors.
- Contact with other agencies, especially GoM line departments
- Contact with agencies in other states and countries - this may be partly facilitated by IFAD, and include contact with IFAD supported grant projects.
- Technical manuals and other materials
- Telephone help-line for EFC staff.

33. It should be remembered that there are other capacity development initiatives in the state. In particular GoM will soon start to implement Supporting Human Capital Development in Meghalaya - a project for vocational training and secondary education - to be supported by ADB.

5. Implementation arrangements

(a) Natural Resources and Food Security

34. Implementation of Component 1 would involve the following steps:

- Listing and delineation of village clusters. Selection of clusters for this component would be on the basis of their potential for improved production and marketing of commercial products and is described as part of Component 2.

- Mobilising and organising of all households in the selected village via the VEC and recruiting and training a Village Facilitator to work with the VEC to implement this component of LAMP in the village.
- Preparing an Integrated Natural Resource Management Plan (IMRMP) for each village through participation of the community, with support from an FNGO (or similar agency), and taking into account present ownership and usage practices and availability of resources from government programmes such as MGNREGS, RKVY, etc. through convergence.
- Implementing the IMRMP including land and water resource development with stabilisation of fragile areas; ensuring year-round availability of water for domestic use, irrigation development; and abandoned *jhum* and *bun* rehabilitation.
- Food security improvement: technologies to increase the yields and area of food crops via the training of lead farmers and dissemination of improved methods. This would involve the VEC and VF, and would be supported by a Technical Service Provider for Food Crops (such as a research institute or RNGO). This agency would work intensively in four clusters to pilot interventions and would train LAMP and cluster level field staff to disseminate technologies across all LAMP villages.

35. In the SPMU a Natural Resources Development Manager will provide overall guidance and support for the component, and Agricultural Engineers at each DPMU will provide technical support for soil and water conservation works.

(b) Enterprise Facilitation Centres

36. It is expected that all 39 EFCs will be established and operational by the time LAMP starts. Implementation of this sub-component will therefore focus on improving the capacity of EFC staff through training courses and via mentoring from contracted Enterprise Support Agencies (of which one, TLS, is already supporting eight EFCs). An initial task for implementation of this sub-component will be a Training Needs Assessment for EFC staff – involving the Enterprise Development Manager, SPMU Training Specialist, MBMA Human Resources Manager and TLS.

37. LAMP will aim to improve the effectiveness of EFCs and, in particular, provide entrepreneurs with the support that they need. To do this EFC Field Business Advisors will facilitate access to finance (loans and grants), while ERPs (enterprise resource persons, will link entrepreneurs to sources of technical advice, input suppliers and market outlets. The ERPs will have close links with the Knowledge Services Component, the Livestock Development sub-component, and with government line departments. EFCs will be monitored and supported by the Enterprise Officers in the DPMUs, and convergence with line departments will be facilitated by the Convergence Officers in the DPMUs. The sub-component will be guided and supervised by an Enterprise Development Manager in the SPMU who will have an EFC Coordinator with specific responsibilities to manage information generated by EFCs via the on-line Enterprise Development Portal.

(c) Integrated Production and Marketing

38. Selection of priority sub-sectors and village clusters for implementation will be completed prior to the implementation of LAMP (see Main Report, Section III B.5). Sub-sector development for the selected marketable crops and other products will be facilitated by contracted agencies. At the start of LAMP it will be useful to carry out a number of sub-sector / value chain or market studies for specific sub-sectors. These studies would be contracted to external agencies and terms of reference will be in the draft Project Implementation Manual. For some sub-sectors (such as spices, potatoes, strawberries, tea), even before these studies are completed, companies may be approached to discuss potential Private Public Partnerships (PPP).

39. This sub-component will be mostly implemented in the by contracted agencies – either in the role of facilitators or via a PPP. Overall guidance supervision will be provided by the Enterprise Development Manager in the SPMU who be supported by a technical specialist in agriculture and horticulture (primarily the latter expertise will be needed) and a marketing specialist.

(d) Livestock Development

40. The livestock sector would be supported via EFCs and through the implementation of Livestock Development Centres (LDC) each covering clusters of around six villages. BAIF, a specialised resource NGO, has already been contracted by MBDA to support livestock for the IBDLP, and would be responsible for implementing LDCs. BAIF would first undertake field investigations and meetings with local people to select suitable locations for these centres and identify the type of livestock to be developed.

41. Work in each cluster would start with visits to the selected villages to list all the households in the village together with household composition, main occupation, area of land farmed, and numbers of each type of livestock. This information may already be available from an Integrated Natural Resource Management Plan and need not be duplicated. At a village (VEC) meeting the opportunities offered by LAMP for livestock development would be explained (with help from the Village Facilitators), which could be supported by a video showing how similar livestock development initiatives have worked.

42. Households interested in participating in livestock development will then be identified, and a Village Livestock Resource Person selected. Implementation will then proceed with training of VLRP (and also Community Livestock Facilitators supporting each LDC). Each VLRP would have a programme of regular visits to all livestock households in the village passing on technical information on improved production methods and providing preventative health care. Livestock keepers would also be provided with practical training on production methods and some would go on exposure visits to locations where improved production methods are being practiced. There would also be support for feed production in the village.

43. To support the establishment of the LDCs, BAIF would employ a Livestock Development Officer in each of 11 districts, who would be located in the LAMP district project management office. This Officer would also support livestock enterprises belonging to EFC clients. For overall coordination and monitoring, and to ensure convergence, there would be a Livestock Specialist in the Enterprise Development Unit at the SPMU.

44. BAIF has built its reputation on the success of its cattle breeding centres, which has now extended to goat development clusters, natural resource management and tree crops. BAIF has not yet done much work with pigs, which will be a focal animal in Meghalaya. To provide this expertise, BAIF will link up with ILRI's Assam office, which has implemented a number of pig development projects in the north-east, and has an excellent understanding of the key issues and opportunities for specific interventions. In addition some NGOs in Meghalaya and other north-eastern states have been working on pig development. This will be combined with BAIF's expertise in large-scale delivery of livestock development, backed up by partnership with DAH&V. To help develop an approach for pig development that works, only a small number of Pig Development Centres will be established in the first two years of the project. Faster initial progress may be made with goats and cattle development centres.

(e) Rural finance

45. LAMP will support the establishment of IVCS for grass-roots financial inclusion. These will primarily be established in the NRM village clusters, but some may be in other locations – especially if they are existing institutions that wish to convert to ICVS (such as PACS and SHG CLF). The process for establishment of IVCS will be as follows:

- a) Identify village clusters with potential for forming IVCS – based on population, economic activities, access to markets and availability of formal financial services from other institutions
- b) Select persons from amongst the staff of MBMA, MCAB and Department of Cooperatives to act as facilitators and mobilisers for formation of IVCS. About 40 facilitators might be required by the third year of the project when 300 IVCS would require support and handholding. In case the three agencies do not have the required number of staff, hiring of

persons from market to support internally identified staff will be necessary. The facilitators will be trained in mobilization of members and formation of IVCs, and also in handholding of IVCS in the initial stages (they will be supported by the technical service provider).

- c) Convene village wise meetings to explain the concept, advantages, rights and duties of becoming members
- d) The members should discuss whether all or any of the following activities are of interest to them as part of IVCS' role: Savings services, loans, agency for insurance and pensions, supply of inputs for local economic activities, aggregation of produce of members for marketing
- e) Ascertain willingness to become members, contribute to equity and avail services from the IVCS
- f) Once willingness of a large proportion of households (about 60% of the eventual membership) is clear, convene a meeting providing a map of the IVCS and the detailed plan for its formation
- g) In particular stress the fact that other villages will be part of the IVCS; the IVCS will work more like a federation, each village will have its management, supervisory and monitoring role, that representatives of each village will be part of the board of the IVCS which will formally deal with government, banks, employ the paid staff and draw up periodic accounts.
- h) Get the bye-laws adopted in a common meeting of willing households in each village.
- i) If possible get the bye-laws approved in a meeting of maximum number of households in all villages – if this is not feasible, then representatives from each village should meet to adopt the bye-laws for the IVCS
- j) Once the byelaw adoption is complete, move for registration of the Society before the RCS
- k) Collection of equity should begin, after byelaw adoption/registration.

LAMP activities for promotion of IVCS will be initially supported by a specialised cooperative development agency. A potential agency has been identified and is in contact with MBDA. A Cooperatives Manager will coordinate support at the SPMU level, with Cooperatives Officers in each DPMU. The MCAB and the Department of Cooperatives will also provide support.

(g) Market infrastructure

Construction of markets would be managed via the Market Management Committee, which would be strengthened through training and support from project staff. Standard designs would be adapted to the needs of individual locations. Construction work would be tendered by the market committee, under the supervision of district PMU staff, and bids would need to be approved by the PMU. The process to selection of markets for development is described in the Main Report, Section III B.5.

Construction of roads and bridges: construction of MGNREGS funded earth roads has been undertaken by VECs, and a similar approach could be used for any earth roads to be built by LAMP. Upgrading of MGNREGS roads with bitumen surfaces is now being done via the Deputy Commissioner in each district, with a district level convergence committee (including PWD) to ensure these works do not overlap with other schemes. Approved road projects are then implemented by Block Development Officers and their Assistant Engineers. The Block Development Officer (BDO) either engages a contractor, passes the work to the VEC, or uses directly hired labour with government or hired machinery. The Meghalaya Infrastructure Development and Finance Corporation is being established within the MBDA and will support construction work carried out by LAMP. In addition LAMP budgets include provision to hire engineers (either a consulting firm or individuals) or other expertise to assist with design, tendering and construction supervision, as well as training and monitoring in support of works undertaken at the community level.

Construction of ropeways is a highly specialised task and the Border Areas Development Department (BADD) uses an expert from Uttarakhand who is based in Delhi. LAMP would take advantage of BADD experience to engage similar expertise for its ropeways.

(h) Knowledge services

The Knowledge Services Unit would be located in the PMU and would be managed on a day-to-day basis by the Head of Knowledge Services - who in turn would be answerable to the Assistant Project Director (and through him/her) to the Project Director. The Head of Knowledge Services would be supported by a Project Assistant. The Knowledge Services Unit will consist of the following four sections:

- e) Natural Resources and Governance Section: staffed by a Natural Resource Knowledge Manager, three Indigenous Knowledge Specialists, and a GIS operator (for village natural resource mapping and planning)
- f) Enterprise Development Section staffed by an Enterprise Knowledge Manager and up to three Enterprise Telephone Help Line Operators (if such a help line is justified)
- g) Monitoring and Evaluation Section staffed by a Planning and M&E Manager, a Data Analyst, an MIS system operator, two Project Assistants (for data entry and other work), and seven Enumerators/Field Monitoring Officers (based in field offices)
- h) Knowledge Management and Communications Section staffed by a Knowledge Management and Communications Manager

Technology testing and action research would not have any staff in the Knowledge Services Unit, but be managed by a group of PMU technical staff, under the overall guidance of the LAMP Research Committee. This Committee would consist of staff members from LAMP together with experts from local research stations and line agencies.

Technical service providers would be contracted to provide specialised support for Knowledge Services. This would include support for:

- Drawing up an overall knowledge management strategy and action plan
- Village maps created using remote sensing – NESAC has agreed to supply these
- Gathering of bio-environmental data – this could be done by a local research institute
- Value chain and market surveys
- Assessment of the requirement and justification for a telephone support unit
- Preparation of technical and other manuals for use in enterprise development
- Meghalaya Trade Promotion Organisation
- Support agency for M&E (providing training and technical back-stopping)
- Baseline and impact surveys for M&E
- Videos for farmer-to-farmer knowledge sharing – training and technical backstopping from Digital Green
- Communications support agency – MBDA has already contracted an external communications and public relations agency.

Terms of reference for these service providers will be included in the draft Project Implementation Manual.

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

Planning

1. The Project will follow the planning process undertaken MBDA as a whole. A draft Annual Work Plan and Budget will be drawn up in consultation with district and block project units and with partner agencies. A participatory process will be followed, with plans and priorities from VECs, producer groups, EFCs and market committees being built into district and project level plans. The M&E system and knowledge management processes will help to build grassroots feedback into future plans.

2. Once it has been drafted by the PMU, the overall annual plan would then be approved by the Board of Directors of MBDA in February, before being sent to IFAD along with the annual procurement plan for its approval. The approved AWPB would be used for reviewing performance and progress during the supervision missions.

2. Monitoring and evaluation

3. The Monitoring and Evaluation system will collect data and information to measure performance and progress towards objectives, and be a learning tool to provide information for critical reflection on project strategies and operations. It would support decision-making at various levels and be a basis for results-based management. It will enable the project to report to GoM and IFAD on its progress, results and impact.

4. The M&E system will, as far as possible, be integrated with the overall MBDA management information system, and utilise data generated via the Entrepreneur Portal. The system will also provide data on IFAD's corporate RIMS indicators.

5. M&E would be guided by an M&E matrix (an expanded version of the project logframe with details on exactly what information is to be collected and how) as set out in the M&E plan in the Project Implementation Manual. An M&E unit would be established in the PMU (as part of the Knowledge Services component) to support progress monitoring by the field implementation units. In addition the M&E unit will implement a programme of outcome and impact monitoring, as well as producing consolidated reports on project progress and results.

(a) Outline of a project M&E framework

6. The M&E framework is a system to collect, analyse and report on data at three different levels of project implementation: (i) outputs; (ii) outcomes; and (iii) impact.

7. Output monitoring will measure the progress of activities and achievement of outputs against annual targets in the annual workplan (AWP) for each project component. Information on the progress of the annual workplan will be measures against indicators in the plan, such as number of INRMP prepared, numbers of people trained, and number of markets developed. This can be linked to the financial expenditure on the concerned activities, and data may be stored and report via a computerised MIS. Data would be collected by field implementation agencies such as DPMUs, FNGOs and service providers, and other implementation units, including information from the registers and accounts kept by community organisations supported by LAMP. Wherever necessary, data will be disaggregated by gender, particularly those related to training and access to services.

8. Although outcome monitoring would appear to be a straightforward process, the experience of recent IFAD in India and elsewhere have highlighted the need to pay attention to the detail of how data is collected and reported. It is not unknown for different project offices (such as DPMUs) to use different standards for reporting - for example some may report activities in terms of villages covered and others report in terms of numbers of farmers. Overlapping components can mean households participate in more than one activity with the risk of double counting when calculating the number of households reached by project services. These problems can be overcome by training of staff responsible for progress reporting to use a common reporting format and carefully defining how participating households will be counted.

9. Outcome monitoring measures the immediate changes coming about as a result of project interventions. In LAMP this would include:

- Reports from EFCs on numbers of bank loans and other financing facilitated for their partners, and on numbers of enterprises established or expanded.
- Reports from FNGO/District Offices on indicators of improved NRM (e.g. area of watershed forest conserved, area under drip irrigation, number of farmers/area adopting improved methods for paddy), and IPM (numbers of farmers taking up a commercial crop, adopting improved technology, increasing sales).
- Reports from the Market Committees in improved markets of increases in numbers of traders and volume of trade

10. As it may not be easy for implementation staff to collect information such as adoption of improved methods or increases in sales, the M&E unit could conduct Annual Outcome Surveys (AOS), interviewing a sample of 200 to 400 farmers/households to gather data on indicators such as those listed above. An AOS may also be carried out on a thematic basis in order to focus on a specific area of project intervention, such as enterprises created as a result of EFC facilitation.

11. Related to outcome monitoring is process monitoring, which involves monitoring the processes leading to outputs and outcomes. Specific areas where progress monitoring will be useful in LAMP include: service provision by EFCs, the provision of technical services, and the functioning of community organisations. Information on these may be gathered via Participatory M&E (see section below on knowledge management and learning), as well as from the records of community organisations and service providers. In addition, the Project can undertake specific studies related to food security, women's empowerment, market access and outreach of producer groups, value chain development, and functionality of infrastructure and benefit assessment of project services for disadvantaged groups such women and poor households.

12. It may also be useful to carry out longitudinal process study with a panel sample of some villages and households being repeatedly visited over the project period to track changes and gather feedback. A range of data gathering tools could be used: focus groups discussions, key informants and case studies.

13. Information on the effectiveness of training will be assessed via KAP (Knowledge, Attitude and Practice) surveys carried out each year.

14. Impact evaluation is the process which will assess the contribution of LAMP in achieving the overall goal of the project - better family income and improved quality of life in rural Meghalaya. It will consist of baseline, mid-term and end-of-project surveys, and compare project participating households with a control group to enable observed changes to be attributed to project interventions. . This survey will be coordinated by the SPMU M&E unit and contracted to an external agency, with specific expertise in such assessments. ToR for this survey will be in the draft PIM.

(b) RIMS indicators

15. The Results and Impact Monitoring System of IFAD generates annual report tables on a number of first and second level results indicators that correspond to the output and outcome indicators. IFAD has produced a standard list of these indicators, but only some of these will apply to an individual project. Prior to mid-term review, the project will report on only the first level results, but after the mid-term report it reports on second level indicators. These second level indicators are used as evidence to support ratings of the effectiveness and likely sustainability of each component. The third level RIMS results are the anchor indicators used for impact assessment. The anchor indicators relate to household assets, food security and child malnutrition (anthropometric data of children under five years of age). As part of the design process for LAMP, a

baseline survey of 900 sample households was undertaken using the standard RIMS methodology. A summary of the baseline household characteristics is provided in the table below. Changes in these indicators will be measured through a similar survey at completion.

Baseline data on RIMS indicators

Gender of household head		Types of animals owned	
Male headed households	79%	Households owning pigs	56%
Women headed households	21%	Households owning cattle	36%
		Households owning goats	16%
		Households owning chickens	74%
Child malnutrition		Sources of drinking water	
Weight for age of children under 5	18.9% of girls	Total households with safe source of water	71%
	19.7% of boys	Piped into households	6.6%
Height for age of children under 5	53% of girls	Piped into yard	2.8%
	48.4% of boys	Public tap	38.3%
Weight for height of children under 5	8% of girls	Tubewell	0.6%
	12.8% of boys	Protected dug well	6.3%
		Protected spring	16.3%
Literacy rate		Unprotected dug well	7.7%
Women's literacy rate (age 15-24)	87%	Unprotected spring	7.1%
Men's literacy rate (age 15-24)	84%	Pond, river or stream	14.1%
Flooring material in the household		Type of household sanitation	
Carpet	0.1%	Total households with safe sanitation	50%
Cement	8.8%	Flush toilet	0.2%
Ceramic	9%	Pour/flush latrine	14.7%
Vinyl	0.4%	Improved pit latrine	35%
Polished wood	3.8%	Open pit latrine/traditional latrine	21.4%
Palm/Bamboo	29%	No facility/bush/field	27.8%
Wood planks	26.3%		
Dung	8.5%	Asset Ownership	
Earth/sand	14.2%	Access to electricity	51% of hh
		Ownership of a radio	20% of hh
Cultivation		Ownership of a TV	26% of hh
Households cultivating farmland	74%	Ownership of a bicycle	13% of hh
Households not cultivating farmland	26%		
Households cultivating with power tillers	4%	Ownership of a motorcycle	6% of hh
Households cultivating with animals	15%	Ownership of a vehicle	4% of hh
Households cultivating with hand tools	81%		
Type of fuel used for cooking			
Firewood/straw	98%		
Electricity	2%		

(c) Special studies

16. The LAMP M&E unit may also carry out, or commission, a number of special studies. These could investigate topics such as: (i) agribusiness and marketing; (ii) production and productivity (cropping system studies in agriculture and horticulture crops); and (iii) environment and NRM (impact of soil and water conservation measures, flow monitoring and flood discharge in micro- watersheds). Cost effectiveness studies will be also undertaken to assess delivery systems and implementation methodology/approaches adopted by LAMP and other agencies implementing similar activities.

(d) Monitoring of results for women

17. It will be important to clearly identify the extent to which the project has reached women and the degree to which they have benefited from project activities and outputs. This involves gender disaggregation of data on project activities and outputs to see if

women have fully participated in group membership, group leadership, training and enterprise support. Further gender disaggregation is needed to see if women have benefited in terms of outcomes - such as increasing production - or impacts - increased income and assets. As some indicators are better measured on a household basis, these need to be disaggregated by gender of the household head. Special studies may also be undertaken on measures to reduce women's drudgery (especially provision of domestic water supply) and on other issues regarding women's welfare and empowerment (for example access to health services, and household decision making). Further details on gender-related monitoring are in Working Paper 2 on Poverty, Gender and Targeting.

(e) Implementation of M&E

18. Monitoring and evaluation will be implemented by an M&E unit which would be part of the Knowledge Services component and located in the SPMU. This unit will be staffed by:

- Planning and M&E Manager
- Data Analyst
- Project Assistants (2)
- Driver
- Enumerators (7) – based in field offices

19. The Planning and M&E Manager would report to the Head of Knowledge Services and would also be responsible for coordinating project planning - such as consolidation of the AWPB. The Data Analyst will be responsible for data analysis and basic report writing. The two Project Assistants will assist with computer data entry. However use of tablet computers or mobile phones for field data collection could eliminate the need to data entry, as data will be entered directly into tablets/phones rather than using a paper questionnaire and uploaded directly into a survey database. The seven enumerators (or Field Monitoring Officers) will be responsible for most field data collection, and will be based in district offices and equipped with motorcycles and data-enabled mobile phones. There is also provision to hire additional expertise on a short term basis.

20. In addition the staff of District PMUs includes a Monitoring Assistant. These staff will be responsible for managing and coordinating monitoring of activities and outputs, and for working with field NGOs and service providers on reporting of their activities

21. Technical assistance from an M&E support agency will build capacity of the unit, provide support for data interpretation, and enable the M&E unit to carry out high quality work. Capacity building in M&E for project staff will be undertaken through structured orientation training programme, refresher training, and information sharing. In addition IFAD will facilitate linkages with other agencies and support the use of the IFAD M&E tool kit.

Learning and knowledge management

22. Learning and knowledge management are a key element of the project and the support that it is proposed will be provided to MBDA is described above as Component 3 (Knowledge Services). This includes knowledge management and lesson learning as a tool for internal learning by project stakeholders (staff of the various implementing agencies, and participating farmers and villagers). This will involve a series of regular meetings at cluster, block, district and state levels. At these meetings, progress of project activities will be reviewed and reasons for success and failure identified. Participatory tools such as "most significant change", "story telling" and "participatory monitoring and evaluation" (PME) may be used at these meetings.

23. LAMP will also implement a video system to disseminate information from farmer to farmer and village to village. It is proposed that LAMP participate in the Digital Green programme that is now being implemented in seven states in India with support from BMGF and other donors

24. Another approach in sharing knowledge are "Learning Routes" - a continuous process of in-the-field training that seeks to broaden and diversify the markets of rural technical services, placing special value on the best experiences and knowledge of institutions, associations, communities

andrural families. Each Route is organized thematically around experiences, case studies and best practices on innovative rural and local development.

25. Another aspect of knowledge management is dissemination and communication of knowledge and lessons to internal and external stakeholders. The Knowledge Services component will support this via:

- Provision of village information kits – a set of project and development related information
- Production and printing of posters and leaflets.
- Translation, into the three main local languages, of key documents, along with their printing
- Editing and design of project publications aimed at an external audience
- Printing of communication materials
- Creation of a LAMP website (or a LAMP section of the MBDA website) with information on the project and the results obtained.
- Publicity and communication videos
- An annual high level knowledge sharing event aimed at sharing results and influencing policy

Appendix 7: Financial management and disbursement arrangements

1. An assessment of financial management (FM) and procurement capacity of the Implementing Agencies (IAs) for the Meghalaya Livelihood and Market Access Programme (LAMP) was conducted during the Formulation Mission. The following is a summary of these findings.
2. A Public Expenditure and Financial Accountability Public Financial Management Performance Assessment Report for India was conducted by National Institute of Public Finance and Policy in 2010 on the request of the World Bank. The objective of this PFM performance report is to assess the current status of the PFM system in India at the central government level. The coverage of the assessment was limited to the Central Government level and the State Governments were not covered. The State Governments were mandated with substantial functional responsibilities involving both social and economic sectors. The study was a diagnostic assessment of the 28 high level indicators of the PEFA Performance Measurement Framework. The six critical dimensions of PFM performance assessment provided by the PEFA framework are credibility of the budget, comprehensiveness and transparency, policy-based budgeting, predictability and control in budget execution, accounting, recording and reporting, and external scrutiny and audit.
3. The major findings of the study on each of these dimensions are:
 - The higher expenditure out-turn as against the budget estimates, largely in revenue expenditure rather than capital expenditure, certainly adversely affects budget credibility, as it indicates poor planning and implementation of expenditures and non-regard for the sanctity of the budget estimates.
 - India has achieved a reasonably high level of fiscal transparency and the comprehensiveness of the fiscal information publicly available has improved in recent years. After the adoption of Fiscal Responsibility and Budget Management Act (FRBM), the government started presenting fiscal policy strategy documents and projected major fiscal indicators in the medium term.
 - A multi-year perspective in expenditure planning and budgeting has been lacking in India.
 - Recording and Management of Cash Balances, Debt and Guarantees by the government of India have improved significantly. India has also been able to comply with both IMF's Special Data Dissemination Standard (SDDS) and World Bank's Quarterly External Debt Statistics (QEDS).
 - Aggregate fiscal discipline, an elaborate expenditure control mechanism exists in India; debt strategy and debt management practices are reasonably well developed; Parliamentary control over budgetary practice and expenditure control is established following the Constitutional provisions.
 - Internal audit is conducted in a routine manner, and the results of this in improving the financial management system are insignificant.
 - The Constitution of India has provided the Comptroller and Auditor General of India (CAG) as a highly independent statutory authority. The Constitution prescribes exhaustive safeguards for the independent functioning of CAG. The range of audit performed by the CAG includes regularity (financial) audit, regularity (compliance) audit, IT audit and performance audit. The audit assists Parliament in exercising financial control over the executive to ensure that funds approved have been utilized with due regard to economy and efficiency.

Fiscal space of State of Meghalaya

4. Following the adoption of the Millennium Development Goals, the issue of use of fiscal space, in other words all methods of locating usable resources in order to finance public goods and services, has arisen once more, and is all the more acute.

The narrow fiscal space encompasses government revenues (tax and non-government revenue) and internal financial resources²¹.

5. The key feature of Meghalaya's public finance regime is its over dependence on central government's transfers. The State's Own Resources contribute only about 20% of total expenditure. Meghalaya has to depend mostly on Central assistance to meet its expenditure commitments. In addition to augmenting its own resources and the generous assistance from the Central Government, the revenue receipts relative to its expenditures, is still inadequate. Therefore, the State has been experiencing high negative Balance from Current Revenues (BCR) which impinges into the State's Plan Resources necessitating the need to meet the Plan size of the State through higher open market borrowing²².

6. The table below indicates the Non-Plan Expenditure (for approved plans and schemes) and their percentage to Gross State Domestic Product over the past five years.

Description	2007-08	2008-09	2009-10	2010-11	2011-12
Non-Plan expenditure (in crores)	1544	1685	2152	2561	2604
Non-Plan expenditure as a % to GSDP	15.86	14.50	16.94	18.18	16.38
Social Sector Expenditure as a % to public expenditure	38.88	37.38	37.94	42.56	41.39

Source: Data tables from the Planning Commission of India.

7. From the table above, it is seen that the social sector expenditure as a percentage to the public expenditure in Meghalaya is increasing over the years.

8. The 13th Finance Commission has recommended that Meghalaya will receive 0.408% share in the Central taxes and for the period 2013-14 this will be INR 1358 crores and for 2014-15 it will be INR 1602 crores. Meghalaya, being the one of the Special Category States, has received increasingly higher additional central assistance. In addition to the share in the central tax revenue, the Government of India's additional central assistance for plan and schemes for the year 2012-13 was INR 2698.45 crores. Government of Meghalaya's Government Budgetary Borrowing is on par with the Ministry of Finance ceiling of 2.80% of GSDP.

9. The financing of LAMP is almost equally divided between IFAD and the Government of Meghalaya. The State Government proposes to deploy efficient public expenditure through the budgetary allocations of different sectors. Though the risk of adequate financing to different social sector departments exist, Government of Meghalaya has assured that any gap in the resources will be made up by the special assistance from the Central government.

Project Implementation Agency

10. LAMP will be implemented by Meghalaya Basin Management Agency (MBMA). MBMA is a Section 25 company under the Indian Companies Act. The Government of Meghalaya has established this new entity, not only to implement the IFAD financed project, but also to implement the umbrella Basin Development Programme in other parts of the State. Currently, MBMA has staff on assignments from other sister organizations under IBDLP. Government of Meghalaya is in the process of engagement of staff both for LAMP and for other areas of the Basin Programme. Terms of reference for LAMP staff will be in the draft Project Implementation Manual.

²¹ Paper commissioned by Poverty Group of the United Nations Development Programme's Bureau for Development policy, May 2006

²² Budget Speech of 2013-14 by the Finance Minister, Government of Meghalaya.

Implementation arrangements

11. IFAD financing of the project will be routed through the Government of India. As communicated by the Department of Economic Affairs, Ministry of Finance, Government of India, there will not be a Designated Account and all the programme expenditures reported by MBMA through Government of Meghalaya will be reimbursed. The Office of CAA&A will convert the rupee equivalent of expenditures into USD equivalent using RBI exchange rate on the date of processing and submit to IFAD on the formats agreed with the latter. The minimum withdrawal thresholds will be established by IFAD and communicated to the Borrower. Each withdrawal application requesting reimbursement should cover eligible expenditure incurred for about three months. In order to improve the disbursement efficiency, each WA should, ideally cover at least 25% of the annual work plan & budget for the programme year.
12. The Government of India will pass on the IFAD financing to the State through the procedure of Additional Central Assistance to Special Category States. Under the procedure, 90% of the financing will be a Grant to the State and 10% as loan to the State of Meghalaya. The loan from IFAD to Gol will be 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% and shall have a maturity period of 25 years, including a grace period of five years. The repayment of the principal and interest, service charges of the financing will be borne by the Government of India including the foreign exchange risks.
13. The Government of Meghalaya Planning Department will initially transfer the funds, including its counterpart funding, as per the approved LAMP Annual Work Plan & Budget to the Meghalaya Basin Management Agency as a grant. The funds received from the Government of Meghalaya will be kept in separate project accounts at PMU and District levels in a bank acceptable to IFAD. The operation of the project accounts will be as per the applicable rules and regulations of MBMA. The funds received from the Government by the MBMA will not lapse at the end of the fiscal year. To establish the trail of IFAD financing, the Government of Meghalaya should specify the share of counterpart financing, advance funding and IFAD financing in each of the transfers. MBMA will also ensure that only eligible expenditure is funded out of the Programme Accounts.
14. As Government of Meghalaya annual plan resources are dependent upon the central government grant transfers, there may be occasions where the funds may not be made available at the start of the programme year or the transfers may not be timely. To mitigate the risk of adverse fund flow, it is proposed that Government of Meghalaya provide a commitment during the Loan Negotiations that adequate resources for programme implementation and additional resources will be provided as and when requested by MBMA.
15. MBMA will engage qualified finance staff from the open market and will establish budgeting, accounting and internal control systems at all levels before the project starts operation. The financial accounting of the MBMA will be done through computerised accounting software (like Tally) which will be customised to generate financial reports for the Government of Meghalaya and for IFAD specific reporting.
16. **Disbursement** The disbursement of IFAD financing will include: (i) reimbursement of Government financed expenditure; (ii) direct payment to the vendors of services and equipments/materials; and (iii) special commitment procedure (Letter of Credit). The disbursement will be under two types: (i) Statement of Expenditure; and (ii) Documented Claim. Under the Statement of Expenditure disbursement, the copies of documents evidencing approval and payment will be retained at the PMU level and only the breakup of expenditure for each category of financing to be submitted. The SoE procedure threshold will be established as per the risk rating of the project. However, in line with other IFAD projects in India, the recommended SoE threshold will be USD 50,000 equivalent for payment of eligible expenditure. Any single payment exceeding USD 50,000 will be submitted through documented procedures. The procedures for SoE and other disbursement methods will be as per the Loan Disbursement Handbook and the Letter to the Borrower. IFAD will follow the Risk Based Disbursement procedures for each of the withdrawal application submitted.

17. The categories of disbursement in Schedule 2 of the Project Financing Agreement will be kept in line with IFAD new Loan and Grants System to establish uniformity across all loan projects. The categories proposed are Works, Vehicles, Equipment and materials, Training, Consultancy, Goods, services and inputs, Grants and subsidies, Salaries and allowances, Operating costs. Each of the component expenditure according to the disbursement accounts in COSTAB will be grouped together in the Categories. IFAD financing for eligible expenditure will be indicated as a percentage. In view of the learning from the current IFAD projects, it is proposed to indicate the percentage of IFAD financing rather 100% net of taxes, government and beneficiary contribution. IFAD disbursement percentage ranges from 40% to 90% of eligible expenditure in different categories. The recommended percentages are indicated in the Working Paper on Project Costs.

18. The project will submit the financial reports and other reasonably requested reports as per the provisions of General Conditions of Agricultural Development Financing. The templates of financial reports will be included in the Project Implementation Manual.

19. **Auditing** IFAD aims to increase the number of projects that it finances that will be audited by the Supreme Audit Institution (in case of India the Comptroller & Auditor General - CAG). During the formulation, a meeting was set up with the Accountant General, Meghalaya to explore the possibility of the office of CAG undertaking the audit of LAMP. However, due to a heavy work load, the timeline for submission of audit reports to IFAD may not be ensured. In case of multi-State and larger projects, on the request of the donor and Ministry of Finance, CAG may audit the project. During the discussion, it was understood that, although an annual audit by CAG cannot be ensured, during the project cycle a CAG audit will be conducted at least three times. In view of this it is recommended that the annual financial statements of the projects be audited by a private Chartered Accountant firm. This independent auditor will also review and follow up on the recommendations/remedial measures prescribed by the previous CAG audit.

20. The audit of the project will follow the current IFAD Project Audit Guidelines. The auditor will be selected through a Quality and Cost Based Selection method of procurement with a weightage of 70:30 for quality and cost. As identified in the risk analysis, there are not many quality private audit firms in the State of Meghalaya. Hence the advertisement for engagement of a private audit firm should also be open to 2-3 neighbouring states. In addition to the external audit, qualified chartered accountant firms will also be engaged as Internal Auditors. The internal auditor could be engaged for each district. The selected internal auditor will audit the financial records on quarterly basis and submit the observations and recommendations for improvement directly to the CEO, MBMA & the Project Director. The internal audit report for the second quarter onwards should indicate the compliance of the previous quarterly audit recommendations. The CA firms engaged for internal audit should not be engaged for external audit unless at least one year has elapsed from the completion of their internal audit assignment.

21. 18. MBMA, being a Section 25 company, has to follow the auditing standards and disclosure of financial information mandated by the Companies Act. The financial statements will have two parts, one for the entire State operations and the other only for IFAD financed activities. Suggested templates for reporting LAMP activities are included in the Project Implementation Manual.

Fiduciary Risks and Risk Mitigation

Risk	Risk Rating	Risk Mitigation measures incorporated into Project design	Risk after Mitigation (Residual risk)
Entity Level There are multiple layers of entities at different levels (MBDA, MBMA and different Missions at the apex level and DBDU at district level.	High	Clear roles and responsibilities to be included in the Programme Framework and policy, oversight and implementation responsibilities to be spelt out.	Medium
Project Level As the MBMA is a newly established entity, financial management procedures, internal control systems have to be designed.	High	The standard operational procedures; financial management and procurement manuals for externally financed projects/program have been developed and adopted by the Meghalaya Basin Management Agency and incorporated into the Programme Implementation Manual. The PIM should be approved by IFAD	Medium
Budgeting Lack of a comprehensive budget formulation and less than satisfactory execution	Substantial	An annual work plan and budget will be prepared by each district implementation units and the financial budgets will be linked to physical outputs. This will provide a consolidated projection for each programme year and all sources of funding to undertake the activities will be indicated. MBMA will consolidate the annual plans and submit to IFAD for comments. The approved annual work plan will also be used as a management tool to identify the bottlenecks in implementation. The quarterly financial statements of the implementing units will be used for variance analysis and corrective measures.	Low
Staffing The project management may lack sufficient financial management capacity to perform the necessary FM functions.	High	MBMA will recruit qualified finance staff with clear terms of reference. The draft ToRs will be provided during Appraisal Mission. Accounting software with clear chart of accounts and budgetary control will be deployed at all implementation units. The engaged staff will be exposed to the best practices and the procedures of externally aided projects through orientation to other IFAD projects in the country. IFAD will also provide capacity building and support during start-up and later.	Low
Fund Flow GoM may not provide timely and adequate advance funding to the project.	High	Government of Meghalaya during the Loan Negotiations to provide a commitment that timely funding will be provided and the funds will be released from the Government directly to MBMA. In addition, GoM will provide about Rs.10 crores as Operational Reserve Fund to MBMA to mitigate delays in release.	Medium
Audit Capacity of the available private audit firms in the State may not be adequate to provide satisfactory assurance to IFAD.	High	The private audit firms will be engaged through QCBS method and the advertisement should be open to firms in 2-3 neighbouring States. The audit will be conducted as per the provisions of IFAD Project Audit Guidelines. The observations/recommendations of the CAG audit (whenever conducted) and corrective action taken should be informed to IFAD.	Medium

Appendix 8: Procurement

1. In India, there is no law exclusively governing public procurement of goods by the departments and ministries at the Central level or at the State level. Rules and directives in this regard are provided in the General Financial Rules (GFR). A number of important instructions, issued by the Central Vigilance Commission (CVC), supplement these regulations. No central authority exists that is exclusively responsible for defining procurement policies, overseeing compliance and grievance redressal systems. A limited control and oversight functions are exercised by the Comptroller and Auditor General and the Central Vigilance Commission. A Public Procurement Bill, 2012 has been introduced in Parliament, but is yet to be passed by both the Houses of the Parliament

2. As per the rules and procedures on procurement stipulated in the GFR, Departments have been delegated full powers to make their own arrangements for procurement of goods, and each of Department has issued office orders to define the process. Government departments lack any dedicated staff with procurement skills. In the absence of required procurement expertise, a Department can procure goods through the Central Purchase Organization, Directorate General of Supplies and Disposals (DGS&D). Tenders for contracts above a threshold size are issued and are reported by the respective departments. While the advertisements for procurement for goods, works and services are published, the data on actual procurement and the award of the contracts by the Departments are not publicly available.

3. A complaint mechanism to address protests/grievance redressal currently does not exist. The contract provisions provide for dispute resolution through mutual consultation for the contracts awarded. In case the mutual consultation is not successful, the affected party (usually the contract winner) can initiate arbitration under Indian Arbitration and Conciliation Act, 1996 to settle the disputes and/or differences. The option for complaint/protest available to the unsuccessful bidders is usually to approach the judiciary. However, considering the backlog of cases at the lower level civil courts and higher judiciary, the costs/time delays are not proportional to the value of the contract. Hence, protests/complaints are taken to the judiciary only in cases of large contracts.

4. While the procurement of goods and works have been generally done by Government departments over the years, the procurement of consultancy services are new to government departments. As the consultancy services are knowledge-based, the Government departments find it extremely difficult to precisely prepare the terms of reference, deliverables, monitoring formats and contract management.

5. The performance audit on implementation of the National Rural Health Mission (NRHM) was conducted by the Comptroller & Auditor General during April-December 2008 in the Ministry of Health & Family Welfare, State Health Societies (SHS) and District Health Societies (DHS)²³. The audit has highlighted some of the deficiencies in Meghalaya related to health sector procurement.

- SHSs had no documented written procedures and practices on procurement. In the absence of a uniform and well documented procurement policy, the system of procurement was quite often ad-hoc and there was no uniformity in the procedures followed by the various procurement wings under SHS/DHS.
- Separate non-standard bid documents were adopted by the SHSs and the DHSs in Meghalaya. Also important provisions relating to 'liquidated damages', 'pre-qualification norms', 'force majeure', 'packaging', 'performance security', 'warranty period', 'imposition of penalty for delay in supply and installation of equipment', 'remaining life' and 'bid security' etc. had been left out.

6. Performance ratings of IFAD Projects in India identify significant weaknesses in the project compliances of procurement performance primarily associated with non-compliances and

²³ Performance Audit Report 8 of 2009-10 (Chapter 7), CAG

weaknesses in the preparation of bid documentation, technical specifications, evaluation of bids, contract management and performance assessments. These weaknesses are further aggravated due to lack of adequate qualified and trained procurement staff in the project management units and weakness in procurement record keeping.

Procurement of Technical service providers under IBDLP

7. Initially the Meghalaya Basin Development Authority (MBDA) used the support of Meghalaya Rural Development Society (the PMU for the IFAD financed MLIPH) to organise some of the engagement of consultancy services for the Integrated Basin Development and Livelihood Programme (IBDLP). Later Meghalaya Basin Development Authority has signed a Framework Agreement with Small Farmers' Agribusiness Consortium (an agency of the Ministry of Agriculture, Government of India) to facilitate the engagement of service providers for different sectors. Under the Framework Agreement, based on the request of MBDA, SFAC administers the contracts for a management fee of 2% of the value of the contracts.

Procurement arrangements under LAMP

8. Procurement of goods, works and consultancy services for LAMP will be carried out in accordance with IFAD Procurement Guidelines and Procurement Handbook, 2010. During the project year, the procurement will be as per the Procurement Plan submitted by MBMA and approved by IFAD. MBMA will submit an 18-month Procurement Plan immediately after the project enters into force and in the subsequent years submit an annual Procurement Plan. The procurement plan prepared by MBMA will have the following minimum requirements: (i) a brief description of the procurement; (ii) estimated cost; (iii) procurement method which will be used; (iv) pre- or post-qualification requirements; (v) IFAD prior review requirements; and (vi) the time frame in which the procurement will be carried out. The Procurement Plan will be prepared for goods, works and consultancy services separately. During the programme year, MBMA may modify the Procurement Plan as per the need and all modifications to the Procurement Plan should also be approved by IFAD.

9. In case Meghalaya Basin Management Agency (MBMA) wishes to utilise the services of some or all of the technical service providers already engaged (either directly or via SFAC) for IBDLP, it will prepare a terms of reference with scope of services, deliverables, estimated costs, monitoring formats and other conditions of the contract, along with a justification for continuing their services. After IFAD's approval, MBMA will sign a separate contract with the technical service provider and administer the contract.

10. MBMA may also engage SFAC as Technical Support agency for LAMP to advise and support the procurement of services providers. This technical advisory support may include support in the preparation of bid documents, terms of references and the review on contract performance. This will enable and enhance MBMA staff capacities through on the job training ensuring the quality of the identification, selection and management of various service providers.

11. The project design envisages some of the procurement will be undertaken by different implementation partners. The Procurement under the Project which would be carried out by the Implementing Partners, would be undertaken in accordance with the procurement rules of the respective Implementing Partners consistent to IFAD Procurement Guidelines and Procurement Handbook of September 2010. This aspect will be spelt out in the contractual terms with the implementing partners.

12. The project design considerations envisage a lack of quality technical service providers within the state. The deployment of quality service providers is crucial to achieving the goals and objectives of the programme. It is proposed that LAMP will recruit a Procurement Manager to be posted in the PMU of MBMA. The Procurement Manager should have at least 3 years' experience of handling procurement and conversant with the guidelines, rules and processes of any of the IFIs or externally assisted programmes. In case SFAC is engaged as a Technical Support Agency, the Procurement Manager will work closely with it.

13. The Natural Resource Management component of the programme envisages implementation of the activities by the Village Employment Councils (VEC). Currently VECs implement the MGNREGS activities and are handling government funds. Any implementation of NRM activity by the VECs up to the value of about USD 5000 will follow procurement under community participation. The procurement will be for materials, tools, cement, etc. The programme will devise simplified procedures for the communities to undertake direct contracting or local shopping.

14. The project will also prepare and include formats for internal control frameworks for procurement processes, records maintenance, and contract management in the Project Implementation Manual (PIM).

Procurement thresholds

15. Procurement will be the responsibility of MBMA. To achieve a balance between a very low threshold, which entails too much paperwork and approval processes, and a very high threshold which may lead to inefficiencies and non-transparent public procurement, the following thresholds for adopting procurement selection methods are recommended:

Procurement of goods

16. National Competitive Bidding (NCB) may be adopted for contracts valued above USD 20,000 equivalent and up to USD 200,000 equivalent. The bidding will be announced in two newspapers with wider circulation and also in a free access project website or Government website. NCB could be done either with pre-qualification of bidders or post-qualification. NCB for goods will be done on a single envelope basis only.

17. National Shopping may be adopted for contracts valued above USD 5,000 equivalent and up to USD 20,000. For national shopping written quotations through letter, fax, email from the known sources of suppliers will be obtained and evaluated. Guidelines for the national shopping will be included in the PIM to maintain transparency.

18. Direct contracting may be adopted for contracts/purchase orders valued less than USD 5,000 equivalent. Direct contracting would be necessary for goods with one source of supply, proprietary items, very small equipments, office consumables.

Procurement of works

19. National Competitive Bidding may be adopted for contracts for construction of markets, roads, ropeways, etc., valued above USD 50,000 equivalent and up to USD 1,000,000 equivalent. The bidding will be announced in two newspapers with wider circulation and also in a free access project website or Government website. NCB could be done either with pre-qualification of bidders or post-qualification. NCB for will be done on a single envelope basis only.

20. National Shopping may be adopted for contracts valued below USD 50,000. Under National Shopping, bids may be invited either from the contractors registered with the PWD in the districts or other local bodies. The request for submitting the quotations/bids should be sent to all the known contractors without limiting the number to 3 contractors.

21. Direct Contracting for works will be upto the value of USD 3000. Direct contracting for works will be done only for the small construction undertaken by the communities as a gap filling activities under IFAD financing.

22. Government of Meghalaya also has the option of using its existing departmental facilities for works under Force Account procedure. If this is adopted, only the costs of labour, materials and rental of special equipments will be charged to IFAD financing.

Procurement of Consultancy and Service providers

23. Procurement of contracts of consultancy services, and service providers with the estimated cost of USD 20,000 equivalent and above may be done using either one of the following selection methods:

- i) Quality and Cost based Selection (QCBS)
- ii) Quality based selection (QBS)
- iii) Fixed budget selection (FBS) iv) Least Cost Selection (LCS)

The processes required to be adopted for each of the above procurement methods are detailed in the IFAD Procurement Handbook.

24. Procurement of contracts of consultancy services and service providers with the estimated cost below USD 20,000 equivalent may be done using either one of the following selection methods:

- i) Selection based on Consultants' Qualification
- ii) Single Source Selection

Procurement of Staff

25. All staff positions, with the exception of existing government staff seconded to the Project on deputation, will be filled through open advertisement and on competitive basis. The shortlisting and final selection of positions at Manager level and above will require IFAD's no-objection.

Procurement Prior Review thresholds

26. IFAD prior review thresholds will be established at USD 100,000 equivalent and above for goods and works and at USD 50,000 equivalent and above for consultancy services. IFAD requires the following for the procurement prior review::

Procurement of goods and civil works:

- (i) Prequalification documents and shortlist when prequalification is undertaken;
- (ii) Bid Documents for goods and works;
- (iii) Evaluation Reports and Recommendations for Award; and
- (iv) Draft contracts and contract amendments.

Procurement of consultancy services and other services:

- (i) Prequalification documents and shortlist when prequalification is undertaken;
- (ii) Request for Proposal (RFP);
- (iii) Technical Evaluation Report;
- (iv) Combined (technical and financial) evaluation report and the recommendation for award; and
- (v) Contracts and contract amendments.

27. All direct contracts for goods and civil works and single source selection for service providers shall be undertaken in accordance with the provisions of IFAD Procurement Guidelines for direct contracting and single source selection and subject to IFAD prior review. All direct contracts and single source selection will be incorporated in the relevant Procurement Plan with the justification for waiving the competition.

Extension of contracts

28. If any contracts procured through competitive selection methods, but below IFAD prior review thresholds, are extended for an additional period, and if the extension of contract has resulted in increase of 20% or more of the original contract price, the extension has to be prior reviewed by IFAD. If any contracts procured through post-review procurement are extended for an additional period, and if the increased contract price falls within the prior-review threshold, IFAD's prior review has to be obtained before extension of the contract.

Eligible procurement

29. All procurement of goods, works and consultancy services will be as per the approved Procurement Plan and the AWPB. Any procurement which has been either (i) not for eligible expenditure for project implementation; or (ii) not as per the approved Procurement Plan, will not be eligible for IFAD financing.

Anti-corruption and prevention of fraud in Procurement

30. MBMA will put in place a strong framework for preventing corrupt and fraudulent practices in the procurement in LAMP. All bid documents and request for proposals will include provisions of IFAD's anti-corruption policy. As per Section 7.05 of the General Conditions of Agricultural Development Financing, 2009 all bidding documents and contracts for procurement of goods, works and services financed by IFAD Financing include provisions requiring bidders, suppliers, contractors, sub-contractors and consultants to:

- (i) allow full inspection by IFAD of all bid documentation and related records;
- (ii) maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and
- (iii) cooperate with agents or representatives of the Fund carrying out an audit or investigation.

31. All complaints or protests received during the bid submission period and after award of the contract should be promptly intimated to IFAD along with the details of the proposed action for the grievance redressal. IFAD may cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the MBMA or beneficiaries of the loan were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of that contract, without the Government of Meghalaya having taken timely and appropriate action satisfactory to IFAD to remedy the situation.

32. Other risk mitigation measures include: (i) IFAD to organize a procurement training workshop for the MBMA staff within one month of the project's entry into force and during project implementation; and (ii) an expanded scope of ex-post reviews by IFAD during Supervision Missions and Implementation Support Missions to include checks for identified deliverables, procedural compliance, and appropriate and required documentation, among other measures.

Appendix 9: Project cost and financing

A. MAIN ASSUMPTIONS

1. 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 enterprises financing, risk fund and corpus fund. For staff salaries and allowances, 8% price contingencies have been assumed. Foreign inflation rate has been assumed at 2%. All unit costs are estimated in Indian Rupees (INR).

2. Exchange Rates

2. The initial exchange rate for the analysis has been set at Indian Rupees (INR) 62²⁴ to one USD, the rate prevailing at the time of data collection (June 2013). Exchange rates during implementation phase and the foreign exchange rates forecasts for the Project costs estimates, and conversions from current INR values into USD are calculated using current exchange rate (INR/USD). Both foreign and local inflation rates are compounded at mid-year.

3. Taxes and Duties

3. Taxes and duties have been estimated using the prevailing prices in June 2013. All items, which contained implicit duties and taxes, have accordingly accounted for, while nationally purchased items are subject to national and local taxes of different types. Consulting services, surveys and studies are contracted or sourced out and contracted entities are responsible of their national tax liabilities, and a flat rate of 10% has been assumed. A tax rate of 10% has been assumed for goods and equipment, 5% for all office operations costs, service providers' contracts at 15%, civil works at 15%, training and workshops at 5%.

4. Project Life

4. The Project life is 8 years starting in fiscal 2014/15 and expected to be completed in fiscal 2021/2022. Cost estimates for the project period have accordingly been calculated.

5. Unit costs

5. Unit costs together with physical units have been identified for most items and these are input in domestic currency unit, namely Indian Rupees, INR. In certain instances a lump sum allocations have been computed so as to give flexibility in procurement or for the implementation of such activity/task. All NRM interventions are lumped together and are shown under village development fund and social development fund. 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"*.

6. Financiers

6. The Project will be financed by: (i) IFAD, (ii) Government of Meghalaya, (iii) Banks, (iv) Beneficiaries and (v) convergence. The convergence funds will be pooled from all on-going government sponsored schemes. These are in particular MGNEGS, National Food Security Mission, RKVY the State Rice Mission, and the Horticulture Mission for the North East and Himalayan States (HMNEHS).

²⁴ At present the exchange rates are volatile due to various factors. It is likely that the situation may continue for some more time, probably till the time of India's General Election, which is due in April 2014. Applicable exchange rates can be reviewed at the time of final design mission.

B. PROJECT COSTS

1. Total Project Costs

7. Total Project Costs is estimated at USD 169.9 million. This is inclusive of all contingencies of USD 14.9 million, beneficiary contribution of USD 12.6 million equivalent primarily in the form of labour and materials, institutional credit USD 29.3 million, convergence USD 28.2 million, and USD 49.6 million as counterpart funding from the government. See Table 1 below.

Table 1: Summary of project costs

	INR million	USD million
Total Project Costs including contingencies and taxes	10,534.1	169.9
- IFAD loan amount	3103.9	50.0
- GoM contribution including taxes	3079.2	49.6
- Beneficiaries contribution	786.3	12.6
- Banks	1817.8	29.3
- Convergence	1746.9	28.2

2. Project Costs by Project Component

8. Project costs are organized into four major components: (i) Natural Resources and Food Security (22% of total base costs); (ii) Livelihoods Support (69% of total baseline costs); (iii) Knowledge Services (4% of baseline costs); and (iv) Project Management (5% of estimated baseline costs). Project baseline costs together with contingencies are summarised in Table 2.

Table 2: Project cost by component

India			
Meghalaya: LAMP Appraisal Mission			
Components	Project Cost	Summary	% Total Base Costs
Total	(INR '000)	(US\$ '000)	Total
A. Natural Resources & Food Security			
1. Integrated NRM	2,144,981	34,596	22
Subtotal Natural Resources & Food Security	2,144,981	34,596	22
B. Livelihood support			
1. Integrated village cooperatives	823,029	13,275	9
2. Enterprises development	3,116,793	50,271	32
3. Integrated production & marketing	1,035,903	16,708	11
4. Livestock Development	357,102	5,760	4
5. Access to markets	1,302,567	21,009	14
Subtotal Livelihood support	6,635,394	107,022	69
C. Knowledge Services			
1. Knowledge services	338,092	5,453	4
Subtotal Knowledge Services	338,092	5,453	4
D. Project Management			
1. Project Management Unit, Shillong	131,176	2,116	1
2. District Project Management Units	362,483	5,847	4
Subtotal Project Management	493,659	7,962	5
Total BASELINE COSTS	9,612,126	155,034	100
Physical Contingencies	-	-	-
Price Contingencies	921,969	14,870	10
Total PROJECT COSTS	10,534,095	169,905	110

3. Project Costs by Expenditure Accounts

9. Total investment costs are estimated at USD 146.69 million and these accounts for about 86.3% of the total project costs and the balance, USD 23.21 million are recurrent costs. Credit and Guarantee funds account for about 35.9%, followed by works 13.5%, civil works (and other works under convergence 9.7%), Grant and subsidies at 12.4%, training 5%, Goods, services and inputs account for 5% and other investment expenditures are very minor cumulatively accounting for about 1.7% of the total project costs. The recurrent costs are incremental salary and allowances

accounting for 11.8% and office operating costs account for 1.9%.

4. Project Costs by Disbursement Accounts

10. Disbursement accounts, derived from the expenditure accounts described above, provide the basis for determining the financing plan for the Project. The disbursement accounts have been organised into following categories as presented in Table 3 below.

Table 3: Project disbursement categories

Disbursement / Expenditure category	Total Project Expenditure Amount (000 USD)	IFAD Financing rule (%) a/	IFAD Financing (000 USD)
Works	22,944	55%	12,619
Convergence	16,555	0%	0
Vehicles	486	75%	364
Equipment and materials	2,407	75%	1,142
Training	8,545	90%	7,686
Consultancy	3,846	85%	3,269
Goods, services and inputs	9,859	85%	8,380
Credit / Guarantee funds	60,867	0%	0
Grants and subsidies	21,185	50%	7,706
Salaries and allowances	19,972	40%	7,989
Operating costs	3,239	50%	908
Total	169,905		50,063

a/ percentage to eligible expenditures only;

5. Project Costs by Procurement Accounts

11. 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 costs accounts by default. All three costab accounts are maintained in identical format in order to get results without any errors.

6. Costs of scaling up

12. Scaling up IVCS and NRM interventions to cover the remaining 75 villages in each of the 18 LAMP blocks, along with Integrated Production and Marketing Interventions and additional roads and markets, is calculated to have a base cost of Rs326.5 crore (USD 60.6 million including contingencies). This will require additional funding, possibly from GoM and/or another donor and has not been included in LAMP costs. Providing good progress has been made in implementation, this scaling up could take place from year 5. Some additional staff may be needed for this in DPMUs, which are included in these projections. An estimate of phase II costs is in Table 4

Table 4: Estimate of costs for a Phase 2

Phase II costs	Rs'000	USD'000
<u>Natural resources & food security</u>	1,042,004	16,807
<u>Livelihood support</u>		
Integrated production and marketing	467,464	7,540
Livestock Development	266,510	4,299
Access to markets	1,270,810	20,497
Rural finance	180,150	2,906
sub-total	2,184,934	35,241
<u>Project Management</u>		
District PMU	38,350	619
<u>Grand total</u>	3,265,288	52,666
+ 15% contingencies	3,755,081	60,566

C. PROJECT FINANCING

1. Financing plan

13. The proposed financiers for the Project are IFAD, the Government of Meghalaya. Banks, beneficiaries and the funds from convergence programme. IFAD will finance about USD 50 million about 30% of total project costs, the government counterpart funding will be about USD 49.7 million including taxes, financing institutions will provide about USD 29.3 million, the beneficiaries USD 12.6 million, mostly in the form of labour, and the funds from convergence programmes will be about USD 28.2 million. The financing plan is summarised in Table 5.

Table 5: Financing plan

India
 Meghalaya: LAMP Appraisal Missio

(US\$ '000)

Disbursement Accounts by Financiers	Govt		IFAD		Banks		Convergence		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
1. Works	10,325	45.0	12,619	55.0	-	-	-	-	-	-	22,944	13.5	3,442
2. Works/Convergence	-	-	-	-	-	-	16,555	100.0	-	-	16,555	9.7	-
3. Vehicle	121	25.0	364	75.0	-	-	-	-	-	-	486	0.3	121
4. Equipment & materials	1,264	52.5	1,142	47.5	-	-	-	-	-	-	2,407	1.4	241
5. Training	859	10.1	7,686	89.9	-	-	-	-	-	-	8,545	5.0	427
6. Consultancy	577	15.0	3,269	85.0	-	-	-	-	-	-	3,846	2.3	577
7. Goods, services and inputs	1,479	15.0	8,380	85.0	-	-	-	-	-	-	9,859	5.8	1,479
8. Credit, Guarantee funds	9,699	15.9	-	-	29,319	48.2	11,593	19.0	10,256	16.8	60,867	35.8	-
9. Grant & subsidies	11,625	54.9	7,706	36.4	-	-	-	-	1,855	8.8	21,185	12.5	-
10. Salaries & allowances	11,983	60.0	7,989	40.0	-	-	-	-	-	-	19,972	11.8	531
11. Operating costs	1,732	53.5	908	28.0	-	-	27	0.8	572	17.7	3,239	1.9	69
Total PROJECT COSTS	49,665	29.2	50,063	29.5	29,319	17.3	28,175	16.6	12,682	7.5	169,905	100.0	6,887

14. Based on data from the State Plans and other information including institutional credit, the following sources of funds will be the main sources of convergence investments: MGNREGS, State Rice Mission, RKVY, National Food Security Mission and HMNEHS. No account has been taken of possible convergence from ADB funded programmes in the state for road development and skill development, the IFC financial inclusion project and the GIZ project for climate change adaptation. Nevertheless convergence and bank loans are expected to contribute over one third of the overall project resources, with the ratio of IFAD to other funding (GoM, banks and convergence) is 1:2.4.

2. Disbursement Procedures

15. Disbursement for each payment for eligible expenditure costing in excess of USD 50 000 require detailed documentation. Disbursements for each payment for eligible expenditure costing less than USD 50 000 equivalent will be made against statements of expenditure (SOEs). All services contracts exceeding USD 50,000 require prior review. The PMU will retain the relevant

documents and make them available for inspection and review by IFAD supervision missions and the auditors. Requests for replenishment will be made by PMU through the Ministry of Finance (MoF) for processing. The PMU will compile and consolidate, on a timely basis, eligible project expenditures for all project activities and consolidate and process, on a timely basis, withdrawal applications for all eligible project expenditures and submit those withdrawal applications to IFAD through MoF for reimbursement or replenishment of the Designated Account. Withdrawals from the Loan account will be made in amounts no less than 20-30% of the authorised allocation or its equivalent, or such other amount as IFAD may designate from time to time.

3. Procurement Procedures

16. Following procurement arrangements are expected under the project: (i) local shopping, (ii) local competitive bidding, (iii) direct contracting, and (iv) procurement by community participation. Procurement of goods and services financed by the IFAD loan will be made in accordance with IFAD procurement regulations. Any procurement decision for award of contract for procurement of goods and works costing USD 100,000 equivalent or more and for consultancy services costing USD 50,000 equivalent or more will require prior review by IFAD. Whenever possible, items will be bulked into sizeable bid packages to make procurement more cost-effective.

Table 6: Procurement arrangements

Procurement Arrangements (US\$ '000)	Procurement Method							Total
	Local Competitive Bidding	Local Shopping	Direct Contracting	Community Participation in Procurement	Other	N.B.F.		
A. Works	22,944 (12,619)	-	-	-	-	-	-	22,944 (12,619)
B. Works/Convergence	-	-	-	-	-	16,555	-	16,555
C. Vehicles	486 (364)	-	-	-	-	-	-	486 (364)
D. Equipment & materials	(1,142)	1,523	-	-	-	884	(1,142)	2,407
E. Training	(7,686)	8,545	-	-	-	-	-	8,545
F. Consultancy	(3,269)	3,846	-	-	-	-	(7,686)	3,846
G. Goods, services & inputs	(8,380)	9,859	-	-	-	-	(3,269)	9,859
H. Grant & subsidies	-	-	-	16,702	565	3,919	-	21,185
I. Credit, Guarantee funds J.	(7,480)	(226)	-	(7,706)	-	-	-	60,867
Salaries and allowances K.	-	-	19,972	-	-	-	-	19,972
Operating costs	1,815	-	574	-	850	3,239	(908)	(7,989)
Total	23,430 (12,983)	25,588 (21,385)	19,972 (7,989)	17,276 (7,480)	39,442 (226)	44,197	-	169,905 (50,063)

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

17. The PMU or the Lead Programme Agency may procure the vehicles, motorcycles, and computers and also TA and Service Providers. The procurement of all other goods, civil works and services financed by the IFAD financing will be the responsibility of the respective implementing agencies. Materials, labour and inputs will be procured through respective community organisation using the procurement by community participation. Inputs used by project groups for production purposes will be purchased by the group using grant funds from the project.

3. Designated Account, Accounts and Audit

18. **Designated Account:** There will be no Designated Account for LAMP. The MoF, Gol is responsible for foreign exchange risks and repayment of the loan to IFAD.

19. **Accounts:** The project will set up accounting and internal control systems. The PMU and district PMUs will maintain financial records and accounts in accordance with acceptable system and consistence with IFAD guidelines. The project accounts will reflect all financial transactions during the project period, both of the IFAD loan and government financing by project component and separately by standard expenditure categories. The LAMP project accounts will be maintained separately from any routine budget account or other externally funded project account. The PMU will consolidate the project accounts and submit annual financial statements of project expenditures for each fiscal year to IFAD no later than four months after the close of each fiscal year.

20. **Audit:** The PMU will appoint an independent external auditor acceptable to IFAD to audit the LAMP project accounts, including the IFAD and government contribution to the project in accordance with International Standards on Auditing. The audited accounts and financial statements, in a format agreed with IFAD at Loan Negotiations and including separate opinions on the SOEs, project accounts, all other accounts relating to the project will be submitted to IFAD no later than six months after the close of each government fiscal year, until closing of the loan, i.e. 30th September each year. The Audit Report will be in a Long Form Audit and will contain a separate management letter, which will include a report on the efficiency of the flow of funds procedures and internal controls. The reply by the PMU to the management letter will be submitted to IFAD within one month of the receipt of the audited accounts.

4. Flow of Funds

21. On request from the PMU, GoM and in accordance with the approved project AWPBs, MoF will advance the IFAD loan funds quarterly in advance from the Designated Account to the following INR project accounts held in a commercial bank approved by IFAD: the Project Account operated by the PMU, Shillong under the authorisation of the GoM. Funds from the project accounts finance the activities included in approved AWPB, executed under contracts between implementing agency district PMUs and all other eligible parties and other agencies. The respective executing agencies and the district PMUs will open their Project Accounts. Each assisted Village Employment Council, Producer Groups will have their own bank accounts and so also the respective IVCS, where required. The funds flow from the PMU to the respective accounts directly as follows: to the district PMUs to meet their operating costs, and to the service providers and other implementing agencies to meet their operating expenditure. All financial assistance to the VECs and producer groups or cluster groups or IVCS will flow directly to their accounts held by them.

Table 6: Indicative Schedule 2 for IFAD Financing Agreement

Disbursement / Expenditure category	Financing rule (% of total eligible expenditures)	Total Financing Amount (000 USD)
Works,	55%	10,499
Vehicles	75%	303
Equipment and materials	75%	950
Training	90%	6,635
Consultancy	85%	2,720
Goods, services & inputs	85%	6,972
Grants and subsidies	50%	6,411
Salaries and allowances	40%	6,647
Operating costs	50%	755
Unallocated		7,116
Total		50,063

Appendix 10: Economic and financial analysis

A. Financial Analysis

1. Assumptions

- With training, technology support and better input services, the farmers are capable of undertaking improved farming practices and thereby enhancing production at farm level.
- Average size of landholding in Meghalaya is 1.3 ha but the average operational area per household is only 0.7 ha. Landholdings are generally scattered in several tiny parcels. Nearly 80% of households own property rights over their land.
- General crop mix is as follows: food crops 60%, tubers and fruit crop 10% each, spices 5%, vegetables 5%, and plantations on the remaining 9% of land. On an average, a household cultivates about 54% of landholding (0.7 ha) during main season. Only about 24% households have access to some kind of irrigation source.
- Most basic land cultivation is still done by hand. Although many households own cattle, only in Garo Hills and, to a lesser extent in Ri-Bhoi, do they use them for cultivation.
- A household may have some 0.06 ha under plantation and orchards. Reviving existing orchards appears to be more profitable and generate immediate returns than planting new orchards.
- Average size of arable land per village is 52 ha with 75 households and all of whom own some piece and a parcel of land for cultivation. Only about 78% of households cultivate land.²⁵
- Over half of households produce for own consumption and for sale, 22% are landless, the rest produce both for own consumption and markets. Households survive by augmenting their farm incomes from livestock, non-farm activities, wage employment and other sources.
- Farm gate prices are nearly 15% lower than those of the nearby market prices. In case of off-season vegetables, the farm gate prices amount to no more than 60%²⁶.
- Marketed products are predominantly horticultural, root crops, spices, fruits and plantation crops. These tend to be perishable so post-harvest losses are estimated at more than 20%.
- On an average, cost of transport from farm gate to the nearest market is estimated at Rs 0.1/kg/km normal season and is higher during rainy season, say Rs 0.125/kg/km.
- Average distance between farm-gate and a wholesale market is 10 km.
- About 74% of households own livestock, in particular pigs. Livestock productivity is usually low due to lack of vet services and drugs, lack of feed and generally poor standards of husbandry.
- Productivity increases under NRM development and IPM interventions are assumed at conservative levels ranging between 15% and 35% over the existing levels, and these increases are achieved due to in-situ soil and moisture conservation practices and improved agronomic practices.

2. Household Models

1. Using budgets for a range of different crops and income generating activities, three household models were prepared using FARMOD software to broadly illustrate the LAMP's expected impact on the incomes, and labour use of households adopting and/or adapting both on-farm and non-farm technology options. Details are in Working Paper 14. The models are:

²⁵ IFAD/MLIPH Annual Outcome Survey 2013

²⁶ Mission assessment during market surveys

NRM household model: the model has been assumed based on an area of 0.7 ha per household primarily with rainfed paddy (0.04 ha) maize (0.07 ha) peas (0.05 ha) mustard (0.05 ha) sweet potato (0.1 ha), vegetables (0.1 ha).

IPM household models: It has been assumed that IPM households participating in LAMP will have three different models (i) NRM model as described above, (ii) IPM crop model and (iii) IPM activity model. The IPM crop model has ginger (0.2 ha), turmeric (0.2 ha), pineapple (0.1 ha), citrus, oranges (0.1 ha), off-season vegetables (0.05 ha), chilli (0.05 ha) all with limited irrigation facilities. The IPM activity model is honey production and tejpatta trading. The IPM households are a sub-set of NRM households.

Livestock households: In addition to cultivating a meagre landholding of 0.70 ha, some 30 to 32% of NRM households also tend livestock - predominantly of pigs and poultry, but also cattle and goats. Each model household pig unit rears three pigs, and each goat unit include 8 does and one buck.

EFC²⁷ household models: The EFC households have three categories of activities: (i) small enterprises such as processing, marketing or large-scale production; (ii) farm-based enterprises similar to that of the IPM farm model; or (iii) IGA. The EFC households do not participate in NRM or IPM activities.

Table 1: Results of household models

Model	Gross Income (INR)	Input Cost (INR)	Labour (INR)	FIRR (%)	NPV (INR)
NRM household	50,707	7,306	27,325	93	29,044
IPM farm household	159,200	41,708	40,425	74	294,388
IPM activity household	50,480	39,840	2500	7	26,148
Piggery household	25,000	1250	18,000	25	26,340
Goatery household	110,000	42,825		84	357,881
EFC small enterprise	202,300	155,000		35	192,544
EFC farm-based enterprise	103,430	30,370	13,935	37	141,609
EFC IGA household	34,125	9,399	12,675	29	48,416

3. Sub-project Models

2. The following sub-project models were developed using financial prices: (i) NRM households; (ii) IPM households; (iii) livestock households; and (iv) EFC enterprises. In addition road and market models were also developed to assess the benefits of improvements of local markets and rural roads.

a) **NRM subproject:** About 101,250 households participate in phased manner over a five year period. Benefits accrue to the households on the year following the completion of the NRM interventions. There are no increases in cropping intensity but productivity increases are achieved due to the use of quality seeds, adoption of proper management practices etc. Average land holding has been assumed at 0.7 ha per household.

b) **IPM subproject:** In all some 20,250 households, out of 101,250 NRM households, participate under IPM interventions. These households may have larger landholdings than the average landholding size of 0.7 ha. In addition to farming, these households undertake non-farm enterprises such as honey production or trading.

c) **Livestock subproject:** This subproject includes 32,400 households with pigs or goats. These households are all NRM households and they undertake these activities in addition to farming. The piggery units are provided in 100 village clusters and that of goats in 20 clusters. Each cluster will have some 360 households.

²⁷ According to the data compiled by the existing EFCs, some 6,000 households have been short-listed for availing the EFC facilities and these cover paddy cultivation (0.4%), apiculture (1.5%), fisheries (14.7%), rubber planting (18.1%), areca plantation (12.8%), piggery (39.5%), non-silk enterprises (3.2%), water related development (0.2%), hotels and restaurants (0.4%) etc.

d) **EFC subprojects:** In all 47,400 households are covered over the project implementation. Of total 47,400 households, some 11400 households are from NRM villages. Of total EFC households, 35% households go for small enterprises such as processing, marketing, or large-scale production; 50% households opt for farm-based enterprises and the remaining 15% households take up IGA activities.

3. **Benefits from Markets and rural roads:** Improvement of rural roads result in reduction of transport costs to the rural households. It is assumed that annual benefits is about INR 1,500/km/year: assuming that 75 households each transport a ton of agricultural and other commodities per year in a road stretch of 10 km and reduction in transport cost at INR 0.2.km/kg/household.

4. It is assumed that 10 to 15 villages benefit from improvement of one market and thus 750 households are benefitted and of which some 60% household access market facilities and 30% households (50% of access households) realise enhanced price for their product. This is estimated at about 500 kg/year and INR 500/year/household. The results of analysis of these major four subprojects in terms of incomes, production costs, labour input, etc are summarised in Table 2 below.

Table 2: Results of Sub-project models

	NRM		IPM		Livestock		EFC	
	WOP	WP	WOP	WP	WOP	WP	WOP	WP
Gross income	4304.9	5134.0	858.2	1969.6	460.8	1692.0	1110.7	8048.8
Inputs	1002.8	1123.6	537.1	803.7	140.6	353.3	681.0	5366.4
Labour	2577.0	2768.6	208.0	415.1	540.0	648.0	64.0	421.3
Net Income	725.1	1241.8	113.1	750.8	-219.8	690.7	365.7	2261.1

WOP = without project, WP=with project
 At full development stage and assuming labour requirements met fully by households themselves

Table 3: Household cereal production and labour inputs

Households	Food production: Kg / hh a/		Labour inputs/hh b/	
	WOP	WP	WOP	WP
All households	1,070	1,260	143	170

a/ Food production excludes tuber, fruits, vegetables, spices. b/ includes labour-days for all interventions under the project.

B. Economic analysis

1. Assumptions

- A twenty five-year analysis period, including an 8 year project investment period.
- All agricultural inputs and outputs that are traded are valued at their border prices as of June 2013. These have been adjusted to allow for transport and marketing costs to give an economic export parity value at the farm gate.
- Economic investment costs are net of taxes and price contingencies, credit, office rent etc..
- A standard conversion factor (SCF) of 0.85 is applied to both traded and non-traded items for adjusting financial prices but with the following variations: food crops at 85%, labour 75%, livestock products, seeds and seedling and all planting materials and enterprises at 100%.
- The average financial rural wage rate is taken to be the best estimate of the economic value of labour²⁸. The financial price of labour (INR 250) reflects seasonal variation in employment opportunities in the State;

²⁸ From the year 2011-12 data, four trends stand out: first, poverty is falling sharply, second, rural wages are rising sharply, third farmers are shifting from cereals to superior foods and fourth, the MGNREGA has not been the key driver of higher wages in rural area, Source, Rising Rural Wages, Times of India, 7 July 2013 .

- The analysis includes only on-farm benefits and including attributable benefits from soil and water conservation under NRM;
- All costs and benefits are relating to investments made on targeted project area households and the resultants benefits;
- Time required for full development has been assumed to be 10 years;
- The analysis employs an Opportunity Cost of Capital (OCC) at 12%.

2. Costs - Benefits Streams and Analysis

5. **Production benefits** are based on the production models. It is assumed that about 101,250 households in receipt of NRM and improved agriculture practices achieve productivity increases ranging from 15 to 25% due to enhanced soil and water conservation practices and better agricultural practices. Under integrated production and marketing some 20,500 households benefit from support such as irrigation, vegetable and spice cultivation, livestock interventions and also non-farm activities. Under enterprise development some 47,400 households benefit mostly in the form of enhanced price margins. Benefits estimated from the improvement of rural roads and markets are very conservative.

6. Environmentally-related aspects of the project are its integrated natural resources management including watershed development to agricultural development, a focus on community-based village development and the encouragement of alternative income generating opportunities for the poor. These will yield substantial environmental benefits that have not been quantified in the economic analysis.

7. **Project Performance Indicators:** Cost-benefit analysis yields an overall EIRR of 26%. The estimated NPV for a 12% discount rate is INR 6,652 million and the BCR of 1.33. A positive NPV under the current Opportunity Cost of Capital (OCC) of 12% and even at a 20% discounted rate indicates that the project investments are robust. Calculations are in Working Paper 14.

Table 4: Sensitivity analysis

Scenario	Internal Rates of Return of Net Streams				
	Base Case	Cost Increases by		Benefits down by	
		20%	25%	20%	25%
Net incremental benefits stream for a 25 year period used.	26	17	15	15	12

8. If all benefits are delayed by two years (in effect, if the project's production activities take longer to become established) then the IRR declines to 18%. Even under extreme case of costs increases by 25% and benefits decline by 25% over the base-case, an IRR of 6% is obtained.

C. Benefits and Beneficiaries

9. **Beneficiaries:** The project will cover some 191,070 households. Of these 101,255 households will benefit from more intensive interventions of the Natural Resources and Food Security Component and also from opportunities for Integrated Production and Marketing, and for Livestock Development. This will cover 1,350 villages falling under 18 Blocks. Integrated Village Cooperative Societies will also be focused on this area, but EFCs will cover the whole state and road and market development may also be more widely disbursed. The overlap between these interventions is calculated in Appendix 29 and summarised in Table 11, resulting in an estimated 191,070 households being reached by one or more LAMP intervention. With an average household size of 5.6 persons, there will be just over one million people in the 191,070 households.

Table 11: Cumulative number of participating households

Interventions	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
NRM* households	0	20,000	40,000	60,000	80,000	101,255	101,255	101,255
IPM total households	0	4,000	8,000	12,000	1,600	20,250	20,250	20,250
IPM (overlap with NRM)	0	-4,000	-8,000	-12,000	-1,600	-20,250	-20,250	-20,250
Livestock total households	0	3,600	11,520	27,720	32,400	32,400	32,400	32,400
Livestock (overlap with NRM)	0	-3,600	-11,520	-27,720	-32,400	-32,400	-32,400	-32,400
EFC households – total	0	1,755	5,265	12,285	19,305	26,325	33,345	47,385
EFC overlap with other sub-components	0	-421	-1,264	-2,948	-4,633	-6,318	-8,003	-11,364
IVCS households – total	0	20,000	40,000	60,000	80,000	100,000	120,000	120,000
IVCS overlap with other sub-components	0	-15,200	-30,400	-45,600	-60,800	-76,000	-91,242	-91,242
Market households – total	0	0	0	4,125	8,250	16,500	28,875	41,250
Market households overlap with other	0	0	0	-1,609	-3,218	-6,435	-11,261	-16,222
Total (net)	0	26,136	53,604	86,257	118,909	155,333	172,976	191,070

* households participating in Component 1 – Natural Resources and Food Security

10. **Benefits:** The immediate benefits from the project are increased productivity-through the introduction of in situ water conservation practices, improved farming practices including shift in cropping patterns in response to market demands, cultivation of spices and plantation crops. This will result in increased household incomes and improved food security. On an average, a household's food production will increase from 1,070 kg/year to over 1,260 kg (excluding tubers, fruits and vegetables and spices).

11. **Other benefits:** Additional benefits will come from the LAMP's capacity building interventions. First, at the end of the project, all participating villages will have the advantages of the services of their VECs, which are provided with funds for social and economic developments. Secondly, 300 IVCSs are set up to cater to the credit requirement of the project villages. Thirdly, women will be participating in, and managing, their social and economic development and will have better access to markets and inputs. Lastly, the improvement of 55 rural markets and upgrading of rural roads will provide better access to markets, thus providing better prices to farmers who are further strengthened by the support services provided by the project.

Appendix 11: Draft project implementation manual

The PIM will contain, in addition to relevant material from these annexes and from the project design working papers, the following information:

- Terms of reference for project staff and consultants
- Terms of reference for NGOs and other service providers
- Guidelines for value chain analysis
- Guidelines for use of LAMP grants and financial support
- Guidelines for market education and extension
- Guidelines for project M&E
- Terms of reference for baseline and impact survey
- Annual RIMS reporting table
- Annual Work plan and Budget for project year 1
- Procurement Plan for first 18 months
- Procurement Guidelines
- Fiduciary Aspects Capacity Assessment Tool
- Terms of reference for audits
- Good governance framework

Appendix 12: Compliance with IFAD policies

A. IFAD's KEY FEATURES OF GENDER-SENSITIVE DESIGN AND IMPLEMENTATION (updated January 2013)

Check list issues	Design
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.	Yes, the project design uses gender disaggregated data. Refer to WP 2 for more details.
2. The project design report articulates – or the project implements actions with aim to: <ul style="list-style-type: none"> • Expand women's economic empowerment through access to and control over productive and household assets; • Strengthen women's decision-making role in the household and community, and their representation in membership and leadership of local institutions; • Achieve a reduced workload and an equitable workload balance between women and men. 	<p>Yes. Being a matrilineal society women do have significant control over HH assets. The project will ensure that women participate in activities that aim to create new assets.</p> <p>Yes. As women have less decision making roles in the traditional setups the project proposes to engage with VECs which are more democratic village level institutions and give greater space for women's participation in decision making at the community level.</p> <p>Being a matrilineal society, women play a key role in decisions within the HH level.</p> <p>Yes. Refer to WP 2.</p>
3. The project design report includes one paragraph in the targeting section that explains what the project will deliver from a gender perspective.	Yes.
4. The project design report describes the key elements for operationalizing the gender strategy, with respect to the relevant project components.	Yes. Refer to WP 2. It must be noted that Meghalaya is placed among the top states in the country in terms of the Gender Development Indices and Gender differences in the state are among the lowest in the country.
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:	
5.1 Allocating adequate human and financial resources to implement the gender strategy	Yes. A gender and social development focal person will be appointed at the level of the state and each district PMUs. Budget is allocated for specific activities. Additionally budget will be mobilized through convergence.
5.2 Ensuring and supporting women's active participation in project-related decision-making bodies and committees	Yes through the VECs, IVCS and other decision making bodies at the village, and through their participation in district and state level bodies.
5.3 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	Yes. Refer to the section 10.2 (a) in WP 2.
5.4 Ensuring direct project/programme outreach to women (for example through appropriate numbers and qualification of field staff), especially where women's mobility is limited	Yes. Refer to 10.2 (b) of WP 2.
5.5 Identifying opportunities to support strategic partnerships with government and others development organizations for networking and policy dialogue	Yes. The project is strategically co-located at the state and district level with the Basin Programme, which enables them to build strategic partnerships with other stakeholders. At the district level, the project will be managed by the Deputy Commissioner (DC) who is the Chief Administrator of the district. S/he chairs a number of committees to which the project will have access. At the state level the Governing Board of Project Management Committee and the Board of the MBDA will provide platforms for engaging with other government departments and stakeholders.
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.	Yes. Refer to Section 10.2 (a) of the WP which explains how this will be done.

B. CHECKLIST FOR COMPLIANCE WITH IFAD TARGETING POLICY

	Key policy principals	Degree of compliance	Comments and observations
1	Focus on rural people who are living in poverty and experiencing food insecurity, and who are able to take advantage of the opportunities to be offered (“the productive	Fully	The project follows a saturation model, covering all households in village clusters, but care will be taken to include poorer households and women.
2	Expand outreach to proactively include those who have fewer assets and opportunities, in particular extremely poor people as referred to in MDG 1;	Fully	In addition to the IVCS and village level NRM plans this will be done through outreach of EFC services in the difficult to reach areas.
3	Include marginalized groups, such as minorities and indigenous peoples, and address their specific needs;	Fully	A large majority of the state’s population consists of indigenous people and the project is designed to address their needs.
4	Address gender differences and have a special focus on women within all identified target groups – for reasons of equity, effectiveness and impact – with particular attention to women heads of household, who are often especially disadvantaged;	Fully	Meghalaya is a matrilineal society and the situation of women within households is strong. The state has the lowest gender difference in India, but women are allowed less active roles in traditional community level decision making bodies. The project will address this by working via democratic village level organisations such as the VEC to enable women’s participation in decision making. The project will also address the drudgeries faced by women through specific activities (eg. Access to water)
5	Recognize that relative wealth or poverty can change rapidly due to external shocks and that this vulnerability needs to be addressed;	Fully	The project will set up systems for promoting entrepreneurship which will empower communities to find solutions to the challenges they face. Additionally through convergence and Integrated Village Co-operatives they would be provided with access to additional resources and services.
6	Clearly identify at the programme or project design stage who the intended target groups are and why, and consistently apply these categories, during implementation, in monitoring and evaluation (internal and external) of targeting performance. There will be cases when better-off people may need to be included – because of economic and market interdependencies, to avoid conflict, or to engage them as leaders and innovators. In such cases, the rationale and justification should be provided, and risks of excessive benefit capture carefully	Fully	As the project follows a saturation model it covers both the poorest and the less poor. Rationale and justification provided for the same in the WP 9.
7	Identify and work with like-minded partners at local, country, regional and international levels to develop a shared understanding of both the dynamics of rural poverty in different contexts and successful targeted approaches;	Fully	The project will include a number of technical partners such as BAIF, Access Development Services, ATI and TLS who have similar targeting objectives.

8	Pilot and share learning on successful approaches to targeting hard-to-reach groups; and	Fully	The project is embedded in the larger Basin Development Programme of the state and the project teams will be co-located with the state and district level offices of this programme for sharing of learning. It is expected that there will be concurrent scaling up of successful approaches.
9	Build innovative and complementary partnerships with actors that can reach target groups that IFAD cannot reach with the instruments at its disposal.	Fully	There will be a wide range of partnerships with government, private and civil society organisations both downstream and upstream.

C. CHECKLIST FOR INDIGENOUS PEOPLES IN PROJECT DESIGN AND IMPLEMENTATION

	SCORE (1-6)	Issues
1. The project design report is in line with IFAD Policy on Engagement with Indigenous Peoples and takes into account the socio economic and cultural specificities of the indigenous peoples' communities living in the project area. It provides baseline information on their demographic, social, cultural, and political characteristics; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources they manage or depend upon.	6	The design report has coherently addressed all issues in relevant section of the document. The design mission has also engaged local resource persons to provide information of most of these issues. Refer to WP on Poverty and Gender and WP on Population, Land and Traditional Institutions for details.
2. The project design report includes disaggregated data by indigenous group and geographical location	6	Refer to Project file; also working papers on Gender and Poverty, and Population, Land & Tribal Institutions.
3. The project design report identifies, interventions which respond to the needs and priorities as expressed by the targeted indigenous peoples' communities and which build on their knowledge, cultural systems, and institutions.	6	Refer to Section on implementation mechanism and focus on promotion of Integrated Village Cooperative Society (IVSC) covering 5-6 villages and Village Employment Council (VEC) at village level.
4. The design document describes – and the project/programme implements – operational measures to ensure IPs equitable participation in, and benefit from, project activities. These will generally include:		
4.1. Ensuring that representatives of the indigenous peoples' communities, partners of the project, are present at all stages of the project cycle and that a consultation plan leading to their Free, Prior and Informed Consent is embedded in the project design and the consultation and participation process is documented	6	VEC is the grassroots level planning and executing body and also responsible for community-based procurement; it is village-level decision-making body, having representatives from every household in the village by adult male and female from every household. IVSC, composed of representatives from 5-6 clusters of villages, would be a cooperative and financing body for the VECs and others to ensure greater financial inclusion of the rural poor.
4.2. Ensuring that project/programme activities are co-created and co-managed by the indigenous peoples communities	6	Integrated natural resources management plans are co-created and co-managed by the respective VECs that will include all the households in a given village.
4.3 Ensuring the service-providers and extension workers used by the project (public or private) have the capacity and are trained to reach out to indigenous peoples.	6	All Service providers are either NGOs or international institutions who have already been working in the respective areas under the overall supervision of MBDA. So these organisations already have adequate experience of working with local tribal communities. The project will also promote village level Service Providers and Lead Entrepreneurs from among the beneficiaries who would be resource persons and extension service providers at community level.
4.4 Ensuring that the project design report includes measures to strengthen a) the social, legal and technical capacity of the government institutions to address IPs issues in the project area; b) IPs' institutions and organizations in the project area	5	These issues are incorporated in relevant section of the design document.
4.5 Ensuring that information disclosure on the project is in accordance with prevailing IPs' customs and traditions and printed material is written in the IPs language	5	The three major IPs or tribal groups in the programme areas are the Khasis, Jaintias and Garos. While the Khasis and Jaintias use the same language as their medium of instruction and communication, the Garos use different language called Garo. English is also

	SCORE (1-6)	Issues
		fairly used in the state particularly in the government official communication. Besides English, all printed materials will be in local language, i.e. Khasi (in Khasi & Jaintia Hills) and Garo (in Garo Hills).
<i>5. M&E mechanisms are participatory and adapted to capture indigenous peoples' perceptions and perspectives. M&E systems include specific indicators to measure the well-being, poverty and sustainability in a way that is relevant to indigenous peoples.</i>	6	All the issues have been addressed in the design document; also refer WP on Monitoring & Evaluation
AVERAGE SCORE	5.5	

D. ENVIRONMENTAL AND SOCIAL REVIEW NOTE (ESRN)

1. Brief description of the project

In rural areas, where 80% of the Meghalaya State's population resides, natural resources hold the key to growth and employment. The proposed project will utilise these resources to improve living standards by enabling a transition from subsistence to new livelihoods through developing market linkages and supporting services. At the same time the project will address the multi-dimensional nature of the poverty challenge through natural resource management with interventions to ensure water supplies and improving basic food security.

The proposed project will have three thrusts. The first is to support Enterprise Facilitation Centres that are now being established across the state to promote and support a range of rural farm and non-farm investments. The second is to support the development of specific products for markets within and outside of the state, along with supportive investment in natural resource management and market access infrastructure. A cluster-based approach creates the volumes and economies of scale needed to access markets. The third thrust is the generation and dissemination of knowledge to support rural production and enterprise regarding the state's natural resource base, production technologies, supporting services and markets. This will promote a change in attitudes towards livelihoods.

The goal of the project is to improve family incomes and the quality of life in rural Meghalaya. This will be achieved via the development objective of expanded and sustainable livelihood opportunities adapted to the hill environment and to the effects of climate change.

Component 1: Access to water and cereal production remain the two major issues for rural households. In order to ensure inclusiveness of the programme, along with food security, the project will improve access to water for domestic and irrigation use, and support improvements to food crop production. The project will identify and train Lead Farmers and implement water related interventions under the aegis of a capable village level organization. The project will allocate INR 400,000 per village over two years to implement activities related to water and cereal crops. In the first year the cost of activities shall be 100% covered by project funds. Provision of a second instalment is subject to satisfactory utilization of the funds already released, and the ability to mobilize equal amount of funds through convergence. The menu of options for activities under this sub-component will include but not be restricted to: (i) protect and develop drinking water sources; (ii) small scale irrigation facilities; (iii) land husbandry measures; (iv) forestry activities including jhum land management; (v) improved techniques of paddy, and other cereal cultivation; (vi) introduction of oilseeds and pulses as cash crops; (vii) introduction of tuber crops; and (viii) establishment of farmer service centres. In addition there will be a small fund for need-based social sector interventions as an entry point activity.

Component 2: This component has four sub-components: (i) enterprise development; (ii) integrated production and marketing clusters; (iii) market infrastructure; and (iv) access to rural finance. **Enterprise Development:** The project will support Enterprise Facilitation Centres (EFCs) in all blocks. EFCs will generate demand from the entire block for various farm and non-farm activities via a

publicity and awareness campaign, and visits to potential villages. Interested entrepreneurs will then visit the EFC where their capacity will be assessed along with the viability of the proposed activities. Approved applications will get access to bank, convergence and project funding, along with training and technical support. **Integrated Production and Marketing Support:** at least one commodity (sub-sector) with potential for scaling up will be identified for each cluster. This analysis take account of markets, existing skills, natural resources, and access to inputs, support services, and finance. Commodity and cluster selection will be undertaken by a multidisciplinary team of experts. **Market Infrastructure:** rural households face significant difficulties in bringing their products to market, stemming from inadequate and poorly maintained infrastructure at rural markets, and inadequate road connectivity. These result in lower producer prices and high losses within the marketing chain. The project will support development of infrastructure for about 55 primary markets and 275 km of eco-friendly village roads. **Access to Rural Finance:** If needed, MIRDP could support various instruments to ensure the flow of credit to entrepreneurs, including: (i) infrastructure support for ultra-small branches; (ii) mobile banking facilities; (iii) banking correspondents and use of traditional village councils as banking correspondents; (iv) interest rate subvention to incentivize credit discipline (ie. bonuses for quick repayment); (v) back-ended incentives to entrepreneurs to reduce risks related to market failure; and (vi) a default guarantee mechanism.

2. Major site characteristics

Geographic Location: The Indian Himalayan region is more than 2 800 km long and 220 to 300 km wide. It has a total geographical area of 461,000 sq. km (18% of the total area) and is inhabited by almost 45 million people. Longitudinally, it can be further sub-divided in eastern and Western parts. The Eastern_Himalayas extending 800 km east of Nepal is mostly in political India, a gap being formed by Bhutan. It covers the states of Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and part of Assam. Longitudinally, it can be further sub-divided in eastern and Western parts. The Eastern Himalayas extending 800 km east of Nepal, is mostly in political India, a gap being formed by Bhutan. It covers the states of Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and part of Assam. Meghalaya, with an area of 22,429 sq. km, became a separate state in 1972, and before that it was part of Assam. It shares 423 kms border with Bangladesh in the south and the west, and is surrounded by Assam on the north-eastern side.

Topography: Meghalaya is located in a detached block of the Indian Peninsula beyond the Ganges-Brahmaputra plain. It extends 240 km east-west with an average elevation of 1,830m. Its southern flank presents a steep slope scoured by the highest rainfall in the world (10,800 mm). In the north are fragmented outliers of the Mikir and Rangma hills. Topographically, the entire State is a plateau except for narrow strips in the northern, western and southern parts. The elevation ranges between 150 meters (m) to 1950 m. The plateau forms a watershed between the Surma valley of Bangladesh and Brahmaputra valley in the north.

Climate: The western part of Meghalaya is warmer with mean temperatures between 12 degrees Celsius (C) to 33 degrees C. The central upland is relatively cooler with a minimum temperature of 2 degrees C. The average annual rainfall varies from 4,000 millimetres (mm) to 11,400 mm. Cherrapunjee and Mawsynram are known to be the areas having the highest rainfall in the world.

Biology: The North Eastern Region (NER) is one of the two areas in the Indian Subcontinent classified as an ecological 'hot spot' denoting the ecosystems with rich biodiversity and prevalence of rare and/or endangered species of plants and animals. The states of Meghalaya, Assam, and Manipur represent a large section of this rich resource with several forest types ranging from tropical rain forest, moist deciduous forests, grasslands, to sub-alpine forests. The NE region is also one of the most biologically diverse areas of the World. Though the area lies in sub-tropical latitudes, the dramatic change in elevation coupled with heavy rainfall has resulted in the existence of a number of unique biomes distributed over a variety of topographical and climatic zones. This situation has acted both as a bridge, facilitating the influx of many taxa, and as a barrier, promoting endemism in areas. Many genera of continuous and discontinuous distribution that are found over large parts of the Indo-Malayan sub-continent are also found in this region (e.g. *Dipterocarps spp.*, *Artocarpus spp.*, *Anthecephalus spp.*, *calamus spp.*, *Meloncana spp.*, *Bambusa spp.* etc.).

In Meghalaya, as many as 115 plant species from 67 families are threatened with extinction. Manipur is home to 27 genera of plants including the famous Sirroy Lilly, 34 species of mammals and 36 species of birds. The two hill districts of Assam are also rich in both flora and fauna which are also threatened. NEER is also home to a wide diversity of close relatives of common food crops including rice, brinjal, yams, ginger, turmeric, chilies, cotton, jute, sugarcane, amaranth, mandarin oranges and other citrus fruits. The genetic variability of tropical, sub-tropical and temperate fruits, and of many other crops and plants including ornamental, medicinal and aromatic plants, canes, bamboos etc. is also large in the region. Apart from their contribution to the possible production of improved varieties of food crops for future generations of mankind, many may also represent untapped opportunities for commercial exploitation.

Sacred Groves: A unique feature of the NEER is the prevalence of rich traditional institutions for maintaining region's biodiversity. "Sacred Groves" which are climax vegetation areas were until recently protected by socio-religious sanctions. A study commissioned by the NEC (Tiwari et al, 1995) has come up with the following findings: Sacred groves (Sgs) are uniquely evolved biodiversity conservation institutions in the State of Meghalaya. These groves have already earned the state the designation of one of the 'hotspots' of global biodiversity and warrant an urgent conservation strategy. One of the major concerns which has been raised by the past studies is that traditionally held religious belief alone which was central to the conservation of the SGs in the past is no longer sufficient to protect them as the taboo is fast eroding due to changing socio-religious transformations. This is amply evident from the fact that out of 70 documented SGs, only seven are found to have optimum crown cover of around 100%. Therefore, there is an urgent need for planning socio-culturally acceptable external interventions focusing on effecting suitable changes in existing institutional structures and reorientation of tribal value systems and cultural ethos towards conservation, protection, and management of endangered plants and animals. The efforts should be oriented towards creating packages of incentive structures, developing alternative forest resources, and removing dis-incentives from the prevailing socioeconomic systems.

3. Issues in natural resource management

The project area of Meghalaya is endowed with abundant forest resources with 69.4% being covered by forests and woodlands. Forest is the largest land use pattern in the project districts. They occupy 74% of the total geographical area of the project districts in Meghalaya. Bi-annual surveys by Forest Survey of India indicate that loss of forests is continuing throughout Meghalaya. The forests of Meghalaya have been reduced as a result of tremendous pressure from shifting cultivation practices.

Farming systems in Meghalaya are subsistence-oriented, crop-livestock-forest integrated. Livestock provide draught power, manure, and contribute to family nutrition and household cash income. In Meghalaya, the common forms of livestock are pigs and cattle, and 80% of the cattle depend on forests for their feed.

The project areas contain a wide range of NTFPs registered by the Department of Environment and Forests. Non-Timber Forest Products (NTFPs) include all goods of biological origin from forest, grassland or any land under similar use, excluding timber. Examples of NTFPs in these Himalayan States include grasses and leaves; fuel wood; bamboo, canes and ringal; nuts, fruits, tubers and berries; barks; plant fibres; medicinal and aromatic products; resins. NTFPs play a major role in the livelihoods of the rural poor. A large proportion of the population is dependent on them for income and employment as well as for meeting their daily needs of goods. The needs that are served by NTFPs include food and nutrition, medicines, spices, fibres, dyes, edible oils, incense, fuel, fodder, brooms, bio-fertilizer, building materials, agricultural implements, and a variety of other products.

4. Policy, legal and institutional framework

The Government of India (GOI) recognises the need to pursue development policies and strategies that are environmentally friendly, so as to ensure sustainable development. The environment policy is articulated in the "National Conservation Strategy and Policy Statement on Environment and Sustainable Development" prepared and issued by the Ministry of Environment and Forests in 1992. The strategy defines the priorities for conservation of natural resources, namely: (i) regeneration and rehabilitation of habitats and threatened species; (ii) securing the participation of civil society; and (iii) ensuring the benefits of biological resources to local communities. India is a signatory to International

Agreements and Conventions on Biological Diversity and Desertification. The principal legislations regulating the use of environment and natural resources in India are:

- (i) The Panchayats Act to Scheduled Areas; which deals with the socio-economic development of Tribal communities;
- (ii) The Forest Conservation Act (last amended in 1991); which controls the delineation of forest areas for non-forest uses;
- (iii) The Wildlife Protection Act (last amended in 1991); which provides guidelines for the management of wildlife and protected areas by both the central government and the states in the respective areas under their jurisdiction; and
- (iv) The Environment Act (amended in 1993); which deals exclusively with environmental issues and regulations throughout the country. The Central Government's Environmental Assessment Policy states that all policies, programmes, and projects, including formal land-use activities, which may have a significant impact on the environment, must be subjected to an Environmental Impact Assessment (EIA).

In addition to these national laws, each state has its own legislation. Major constraints to the implementation of the laws include ineffective enforcement, low penalties and level of public participation, and inadequate institutional capacity and human resource development. The various line ministries/departments create a further problem through overlapping responsibilities thus hampering the enforcement of the relevant policies and acts.

National Environmental Assessment Guidelines: Central government has prescribed requirements for EIA before certain activities are taken up. These are summarised in the Table below. These prescriptions are intended to assess the environmental implications of projects in terms of their location, suitability of technology, efficiency in resource utilisation and recycling etc. Of particular relevance to natural resources are deforestation and loss of flora and fauna including gene pool reserves, and land degradation.

Table 1: Summary of Different Activity Specific Requirements Prescribed by the Central Government for EIA

Environment	Policy Area	Legislation/Executive procedures	Projects and activities requiring mandatory assessment
	Atmosphere, land and water	- Pollution control acts - Directives on EIA	1) River valley projects 2) Thermal power 3) Industrial projects 4) Transportation sector 5) Coastal area management
	Biomass, Biodiversity	- Forest (Conservation), 1980	All activities involving diversion of forest land to non-forest purpose

IFAD EA Administrative Procedures: As for all IFAD initiated projects, the project design has been subject to IFAD's own internal EA process. This ESRN comprises the first step in this process.

Conservation and Biodiversity: India participates in many international agreements and programmes concerned with aspects of nature conservation and sustainable development. These range from legal instruments such as the Convention on Biological Diversity, which place obligations on those nations which become contracting parties, to scientific programmes such as the UNESCO Man and the Biosphere Programme, a global programme of international scientific cooperation. Examples of agreements and programmes with which India is collaborating include:

- (i) *Convention on International Trade in Endangered Species (CITES)*. Since India became a party to CITES on 18th October 1976 it has provided data annually to the CITES secretariat on the trade of endangered species through its CITES Management Authority.
- (ii) *World Heritage Convention*. India ratified the World Heritage Convention in 1977 and since then five natural sites have been inscribed as areas of 'outstanding universal value'. These

sites are: Kaziranga National Park; Keoladeo National Park; Manas National Park; Sundarbans National Park; Nanda Devi National Park.

(iii) *Convention on Biological Diversity*. India signed the Convention on Biological Diversity on 5th June 1992, ratified it on 18th February 1994 and brought it into force on 19th May 1994. This convention will provide a framework for the sustainable management and conservation of India's natural resources.

(iv) *Ramsar (Wetlands) Convention*. India has been a contracted party to the Ramsar Convention since 1st February 1982. India has now six sites covering some 192,973 hectares of important wetlands. These sites are; Chilka Lake; Keoladeo National Park; Wular Lake; Harike Lake; Loktak Lake; Sambhar Lake.

5. Potential social and environmental impacts and risks

Potential social and environmental impacts and risks of the MIRDP are summarised in the table below

Project Components Activities	Social/Environmental Impacts	Risks	Risk mitigation
<u>Livelihood support</u> : Formation of producer groups for aggregation of production; Support for micro-enterprise development.	Minimal adverse social or environmental impacts	Possibilities of some households left out. Over-exploitation of soil and water resources; over-grazing; excessive use of chemical fertilisers; use of harmful chemicals.	Project will use an inclusive approach to minimise any negative impacts. Development plans will be based of resources potential; over-grazing will be avoided through community-awareness, training.
<u>NRM</u> : Natural resource management plans at local level, incorporating crops, livestock, forestry, and watershed improvement.	No adverse social or environmental impacts;	Chances of conflicts between user groups within watersheds; use of harmful chemicals associated with agricultural intensification. Intensification of agriculture by some farmers following improved land/water management could lead to conflict with others who practice free grazing of cattle/livestock during this season. Increased human activity in forests could lead to trampling of saplings. Demand for NTFPs/MAPs could lead to overharvesting.	All sites for development within watersheds selected based on community consultation and technical feasibility and facilitated by NGOs; during crop demonstrations use of chemicals explained and oversight by NGOs. Improved natural resource management should lead to reduced forest degradation. Terrace risers, bunds, contour hedgerow plantations, will all promote green cover. Sustainable harvesting of NTFPs are a viable alternative to unsustainable forest exploitation.
<u>Infrastructure</u> : village roads and markets	Minimal adverse social or environmental impacts due to small number of roads/markets being funded.	Erosion during construction and implementation.	Guidelines for environmentally sensitive design and construction. Close monitoring during construction to ensure green construction methods.

6. Environmental category

A review of experience under existing IFAD projects in Meghalaya, with similar interventions, indicates that MIRDP is not likely to have any adverse environment impacts on the project area and instead will have beneficial impacts through the development of an environmentally sensitive approach including

integrated natural resource management plans to optimize sustainable use of natural resources. However, it is by requirement classified as **Category B** as it will operate in fragile areas.

7. Components requiring environmental and social assessment (ESA)

There is no need for further information for completing the ESA. However for drafting of the Project Implementation Manual (PIM) the Appraisal Mission may need to articulate more specific details that would require further information gathering. There are no components that would require an ESA

8. Recommended features of project design and implementation to improve NRM and mitigate environmental concerns

Integrated Natural Resource Management: The rural population of Meghalaya largely depend on land, water and biotic resources to support their livelihoods. However pressure on the natural resource base of the state, due to increased needs and unsustainable utilization, have resulted in decline in the availability of resources such as water and impoverishment of the overall ecosystem. The primary objective of this component will be to provide a mechanism for village level decision making and to strengthen the capacity of villages to take responsibility for the management of their own development. Specific objectives of this component are to: (i) improve knowledge base of the land, water and biotic resources of the villages and build capacity to undertake planning for sustainable use of these resources; and (ii) build capable village institutions to promote self-reliance and to access government support to implement planned activities. This component will have two subcomponents: (i) awareness building and capacity development; and (ii) land and water resources development. Implementation of this component will make use of the experiences gained by NERCORMP, which has had a broadly similar approach for natural resource management, and the Climate Change Adaptation Programme being implemented by MBDA with support from GIZ.

The project will allocate funds for integrated natural resource management plans (INRMP) in projects villages. The INRMP for each village will cover activities related to: (i) protection and development of drinking water sources and water supply pipes; (ii) roof top water harvesting; (iii) construction of water harvesting structures and seepage tanks near existing tube wells to recharge groundwater; (iv) in-situ rainwater harvesting systems, such as contour trenches, field bunds, etc; (v) farm ponds of varying sizes; (vi) large diameter irrigation wells and seepage tanks in lowlands; (vii) land husbandry activities such as land levelling, terracing, gully plugging, small check dams, lowland drainage systems; (viii) forestry related activities such as jhum land management, afforestation, grazing land management, etc.; (ix) lift and diversion-based irrigation systems to utilize water from rivers and streams. (x) introduction of improved techniques of paddy, maize and millet cultivation, including introduction of short and medium duration varieties, better seeds, seed treatment, transplanting, line sowing, etc. (xi) cultivation of crops such as wheat, maize and millets to enhance nutrition security of the households; (xii) introduction of oilseeds and pulses as cash crops; (xiii) introduction of tuber crops; and (xiv) establishment of farmer service centres.

Climate Change Adaptation: This will be an important consideration in drawing up INRMPs. MIRDP will support the introduction of climate-smart approaches and technologies such as soil and water conservation, stress-tolerant crops and crop varieties, and cultivation methods. In addition the PMU will have resources to fund need-based social interventions in areas such as health and education. This would aim to bridge gaps in service provision, and act as an entry point for livelihood interventions, as well as leveraging resources from other agencies.

Village Road Construction: Village road construction will mitigate twin constraints of distance and isolation for the remote communities. A Village Road Construction Guideline will be prepared, approved and implemented with appropriate design features, eco-friendly construction methods and maintenance guidelines with roles and responsibility of each of the stakeholders comprising the government, traditional institutions and the communities. Village road construction will follow the identification of stretches for expansion / improvement, with the number of households benefiting from such expansion and the potential for agriculture development being the most important criteria to be used during the prioritization exercise. Detailed survey and design of the identified stretch of village

road will be carried out prior to execution. This will include design of structures, provision of sub-base, drains, bio-engineering and monsoon restoration works.

9. Monitoring aspects

The monitoring indicators would need to be articulated once the project activities are finalized. However, in addition to the Results Information Management System (RIMS) indicators, more appropriate set of indicators may be chosen based on the activities selected. Environment auditing has been incorporated in the M&E framework.

E. SCALING UP FRAMEWORK

The scaling-up framework has been dis-aggregated to focus on two explicit opportunities for scaling- up: (i) Enterprise Facilitation Centres (EFC) and Integrated Production and Marketing (IPM) clusters; and (ii) Integrated Natural Resource Management (INRM). However, it should be noted that this has sometimes resulted in repetition of text due to the fact that there is often a complementary link between NRM and enterprise development. For example water resources developed via INRM will irrigate commercial crops.

	Component 1	Component 2
Main interventions to be scaled up	Village-level Integrated Natural Resource Management (INRM).	Enterprise development via Enterprise Facilitation Centres (EFC) and Integrated Production and Marketing (IPM) clusters
Whose idea?	INRM done by NERCORMP and other IFAD projects in this and other states.	EFCs are innovations of MBDA. SSEC have been done by IFAD projects in this state and elsewhere, and by Dept of Horticulture in the State.
Piloting/testing/evaluation	Positive evaluation results available for IWRM (re. NERCORMP was very positively evaluated in the India CPE 2011). Results show improved environmental quality combined with poverty reduction benefits.	EFCs are now being pilot tested. Importantly, data from EFCs suggest that they attract relatively poor clients - 63% have non-farm occupations - of which 72% give "labourer" as their occupation 57% of clients are women. Positive evaluation results available for IPM. Reports from the strawberry cluster in Meghalaya also tell of people moving from earning Rs600/week from labour to 10 times as much from strawberries.
Vision / Target Scale	State government supporting sustainable management of natural resources and adaptation to effects of climate change across the state	State government placing emphasis on dissemination of an "enterprise culture" to all households in the state, while protecting natural resources from effects of climate change.
Drivers		
Champions	Government: Chief Minister (recently elected), Chief Secretary, Principal Secretary Planning and other senior government officers. Civil society: Facilitating and Resource NGOs and CBOs that have achieved INRM success in NERCORMP.	Government: Chief Minister (recently elected), Chief Secretary, Principal Secretary Planning and other senior government officers. Staff within Horticultural Development who have successfully supported clusters in Meghalaya. Civil society: Facilitating and Resource NGOs and CBOs. Leaders and member of existing successful clusters in Meghalaya

External catalysts and local drivers	Opportunities to take advantage of unique hill environment and location of state for off-season vegetables, fruit, plantation crops,	Opportunities to take advantage of unique hill environment and location of state for off-season vegetables, fruit, plantation crops,
	Component 1	Component 2
	and for tourism. High rate of population growth and growing levels of youth unemployment. Increasing pressure on natural resources, especially shortage of water. Climate change effects on local resource base requires more resilient ecosystems, and sustainable management of resources.	and for tourism. High rate of population growth and growing levels of youth unemployment. Increasing local demands for food.
Incentives	Economic incentives: the comparative advantage of the state is the quality of the natural resource base. Economic development needs to happen without jeopardizing natural capital. Political incentives: political leaders need to deliver a growing local economy which does not compromise the resource base. Social incentives: a young and better educated population want to be able to voice their own opinions. If they are to be involved in farming, this should generate a good income.	Economic incentives: with more education and exposure to the modern world, people want higher incomes and a better standard of living Political incentives: political leaders need to deliver a growing local economy that is not left behind by other states. Social incentives: a young and better educated population want to be able to voice their own opinions. If they are to be involved in farming, this should generate a good income.
Spaces		
Policy, legal and regulatory space	Government policies will allow space for LAMP. A number of state and national programmes have resources that LAMP will be able to use - such as for small irrigation works and investment in livestock farming.	Government policies will allow space for LAMP. A number of state and national programmes have resources that LAMP will be able to use - such as for small irrigation works and investment in livestock farming. Although regulations for marketing restricts development of new marketing channels, these rules only apply to a few products and, even so, are not being enforced.
Financial and fiscal space	LAMP will be part of the Integrated Basin Development and Livelihoods Programme, which is getting significant resources from both state and national governments. The government is prepared to provide funds to at least match IFAD resources, and has not placed any specific limit on its contributions.	LAMP will be part of the Integrated Basin Development and Livelihoods Programme, which is getting significant resources from both state and national governments. The government is prepared to provide funds to at least match IFAD resources, and has not placed any specific limit on its contributions.
Political space	The Integrated Basin Development and Livelihoods Programme (IBDLP) is the state's flagship livelihood and poverty reduction programme, which aims to converge all sector based programmes into 11 "missions" in support of the basin programme.	The Integrated Basin Development and Livelihoods Programme (IBDLP) is the state's flagship livelihood and poverty reduction programme, which aims to converge all sector based programmes into 11 "missions" in support of the basin programme.

Institutional / organisation space	The Meghalaya Basin Development Authority (MBDA) has been established to take over-arching control of implementation of IBDLP. Within MBDA a number of other institutions have been established such as the Meghalaya Basin Management Agency, the Meghalaya Institute of Entrepreneurship, and the Meghalaya Trade Promotion Organisation.	The Meghalaya Basin Development Authority (MBDA) has been established to take over-arching control of implementation of IBDLP. Within MBDA a number of other institutions have been established such as the Meghalaya Basin Management Agency, the Meghalaya Institute of Entrepreneurship, and the Meghalaya Trade Promotion Organisation.
Natural Resource / environmental space	IBDLP has a strong NR and environmental element, with a climate change adaptation programme and water resource development mission. Biodiversity conservation is also	IBDLP has a strong NR and environmental element, with a climate change adaptation programme and water resource development mission. Biodiversity conservation is also
	Component 1	Component 2
	Seen as important not only for sustainability of NR but in order to foster tourism.	Seen as important not only for sustainability of NR but in order to foster tourism.
Cultural space	Experience in NERCORMP indicate no cultural obstacles. Traditional institutions play a major role in governance in the state, and are in charge of government at the local level. Traditional systems also control land tenure, and lack of formal land title is a disincentive to individual investment in land resources. LAMP will work closely with traditional institutions for INRM.	Emerging experience with EFCs and clusters in Meghalaya under IBDLP indicate no major cultural obstacles. Traditional institutions play a major role in governance in the state, and are in charge of government at the local level. Traditional systems also control land tenure, and lack of formal land title is a disincentive to individual investment in land resources. LAMP will work closely with traditional to improve the management of public markets.
Partnerships	A knowledge sharing partnership with NERCORMP will ensure learning is shared. GIZ is a partner in IBDLP for a climate change adaptation project, and lessons from this will be incorporated into LAMP INRM.	ADB is funding road development and a new secondary school and skill training project, both of which will further improve market potential for production clusters. IBDLP has appointed 12 implementation partners from the private/NGO sector to provide technical and management expertise. These include top national agencies such as BAIF, BASIX, Access, and NABARD who can bring considerable capabilities and experience in support of LAMP.
Knowledge/ learning space	MBDA is establishing a knowledge hub to support enterprise, livelihoods and natural resource management. Resources are being invested in developing databases and internet platforms. LAMP will support this, and utilise KM tools as a means of supporting enterprise and livelihoods.	MBDA is establishing a knowledge hub to support enterprise, livelihoods and natural resource management. Resources are being invested in developing databases and internet platforms. LAMP will support this, and utilise KM tools as a means of supporting enterprise and livelihoods.

Implementing space	LAMP will have a PMU within the MBDA or one of its institutions, such as MBMA. The PMU will have staff at the district level with monitoring and finance functions, and will link with other MBDA units for coordination at the district level with other government programmes. At the block level the LAMP PMU will have implementation units for its project components and activities in the field.	LAMP will have a PMU within the MBDA or one of its institutions, such as MBMA. The PMU will have staff at the district level with monitoring and finance functions, and will link with other MBDA units for coordination at the district level with other government programmes. At the block level the LAMP PMU will have implementation units for its project components and activities in the field.
Pathways		
Time horizon	Phase 1: Development and piloting: 2014 to 2022 - LAMP - 1350 villages Phase 2: Scaling up government programmes plus another donor: 2018 to 2022 onwards, another 1350 villages Phase 3: Full saturation of the state: total of 5,600 villages (including phases 1 and 2), 2023 onwards Learning: continuous	EFC: cover all state from phase 1 IPM Phase 1: Development and piloting: 2014 to 2022 - LAMP - 1350 villages Phase 2: Scaling up - government programmes plus another donor: 2018 to 2022 onwards, another 1350 villages Phase 3: Full saturation of the state: total of 5,600 villages (including phases 1 and 2), 2023 onwards Learning: continuous
Dimensions	(i) Outreach: Phase 1, LAMP participating households = 100,000, scaling up = 400,000 (ii) Horizontal: LAMP to cover entire state	(i) Outreach: Phase 1 LAMP participating households = 67000, phase 2: 87,000, phase 3: = 160,000
	Component 1	Component 2
	(iii) Vertical: Possible replication to other states for knowledge dissemination (iv) Functional: activities to be refined and developed based on learning	(ii) Horizontal: LAMP to cover entire state (iii) Vertical: Possible replication to other states for knowledge dissemination (iv) Functional: activities to be refined and developed based on learning
Scaling up milestones	Appropriate milestones to be identified	Appropriate milestones to be identified
Role of drivers and spaces	Policy, institutional, fiscal and political spaces all show the priority being given to IFAD's support for IBDLP through LAMP. Local level drivers show that rural people will be receptive to the proposed interventions.	Policy, institutional, fiscal and political spaces all show the priority being given to IFAD's support for IBDLP through LAMP. Local level drivers show that rural people will be
IFAD's role	The government has selected IFAD to be its key external partner for its flagship livelihood and natural resource programme. The government is looking to IFAD to contribute its experience and expertise to the programme this being of greater importance than financial resources. In particular IFAD's approaches and abilities are being sought in the area of knowledge and lesson learning.	The government has selected IFAD to be its key external partner for its flagship livelihood and natural resource programme. The government is looking to IFAD to contribute its experience and expertise to the programme this being of greater importance than financial resources. In particular IFAD's approaches and abilities are being sought in the area of knowledge and lesson learning.

Impact of scaling up processes	The programme will result in improved livelihoods and living standards for all rural people in the state, and the testing of a number of innovations could generate results in other states and other countries.	The programme will result in improved livelihoods and living standards for all rural people in the state, and the testing of a number of innovations could generate results in other states and other countries.
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Appendix 13: Contents of the Project Life File

Project concept note: GoM for DEA

Project concept note - IFAD for OSC

Inception mission Aide Memoire

Inception mission Report

Formulation mission Aide Memoire

Detailed Design Report and Annexes

Appraisal mission Aide Memoire

Final Design Report and Annexes

Working paper 1: Population, Land and Traditional Institutions

Working Paper 2: Poverty, Gender and Targeting

Working paper 3: Agriculture

Working paper 4: Natural Resource Management

Working paper 5: Climate change

Working paper 6: Livestock

Working paper 7: Enterprise Development

Working paper 8: Integrated Production and Marketing

Working paper 9: Marketing and Access to markets

Working paper 10: Rural Finance

Working paper 11: Knowledge Services

Working paper 12: Institutional Capability and Capacity Building

Working paper 13: Project costs and financing

Working paper 14: Financial and Economic Analysis

Gender Issues in Rural Meghalaya – Veronica Pala

Draft Project Implementation Manual