

DETAILED PROJECT REPORT

MIDDLE MANDA MICRO WATERSHED

EAST GARO HILLS INTEGRATED WATERSHED MANAGEMENT PROGRAMME

IWMP –III

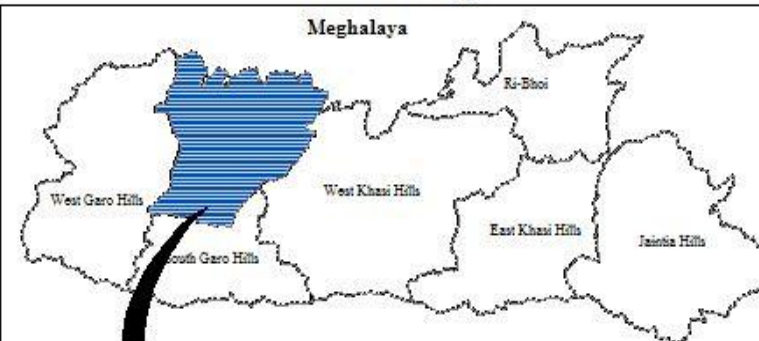
2010 – 2011

SONGSAK C.& R.D. BLOCK

EAST GARO HILLS DISTRICT

MEGHALAYA

Location Map



East Garo Hills



Middle Manda Watershed



SUMMARY

Name of the Sate	:	Meghalaya
Name of the District	:	East Garo Hills District
Name of the C&RD Block	:	Songsak
Name of the Villages	:	Pakregre Chijong Apal, Rongchek Songgitcham, Gongrang & Tarasin.
Name of the Project	:	East Garo Hills – IWMP – III
Total Geographical Area	:	1376 Ha
Total Treatment Area	:	1000 Ha
Total Project Cost	:	150 lakhs
Project Duration	:	5 Years
Project Implementing Agency	:	Simsanggre Soil & Water Conservation Division, Williamnagar.

TABLE OF CONTENTS

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CHAPTER I

INTRODUCTION AND BACKGROUND

1.1 Project Background:

The East Garo Hills IWMP- III project is located in Songsak C&RD Block, East Garo Hills District of Meghalaya. Consisting of a single micro-watershed, the project area is drained by the Manda River and its tributaries flowing in a north to south direction. The total area is 1376 Ha. with 1000 ha to be treated under the Integrated Watershed Management Programme (IWMP).

The Project area is located at a distance of about 15 km from Songsak Block Head Quarter and about 78 km from Williamnagar the District Headquarter. A total of 4(four) villages are covered under the project. These are –

1. Pakregre Chijong Apal
2. Rongchek songgitcham
3. Gongrang
4. Tarasin

1.2 Micro-watershed Information:

The micro-watershed code is 3B1B5a6h ,3CIA5a2g as codified by the North East Space Application Centre (NESAC). The total area of the micro-watershed is 1376 Ha. with 1000 hectares to be treated under the Integrated Watershed Management Programme (IWMP).

1.3 Need and Scope for Watershed Development:

The micro-watershed 3B1B5a6h, 3CIA5a2g falls under the High Priority category as per the prioritization of watersheds by the North East Space Application Centre (NESAC). Located on the slopes of the East Garo Hills Plateau the four villages have no road connectivity but under the construction. The farmers are all small and 11 households are below the poverty line, which is 4.62% of the total households. Jhum cultivation is practiced by most of the inhabitants of these villages on the slopes. Even though the area receives ample rainfall during the monsoons, there is acute shortage of water during the dry seasons and the villagers have to travel long distances for fetching water even for domestic use.

1.4 Other developmental projects/schemes running in the Project Area:

The other developmental projects/schemes undertaken in the Project Area are:-

- i. MGNREGS – Convergence sheet Enclosed

CHAPTER II

BASIC INFORMATION OF THE PROJECT AREA

2.1 Location:

The Project area is located within the area of Aking Land under Songsak C&RD Block of Williamnagar, East Garo Hills District. It is situated at a distance of about 15 km from Songsak block Head Quarter and about 78 km from Williamnagar the District Headquarter. The geographical location is between 90°41’30’’ to 90°45’00’’ Longitude and 25°39’00’’ to 25°42’00’’ Latitude. There are four villages within the Watershed which are as follows –

- 1. Pakregre Chijong Apal
- 2. Rongchek Songgitcham
- 3. Gongrang
- 4. Tarasin

Out of the 4(four) villages except Pakregre Chijong Apal there is no motorable road. However road construction works are going under MNREGS in some of the villages.

2.2 Physiography:

The physiography of the micro-watershed is highly undulating. The altitude ranges from a minimum of 279 m to a high of 440 m above mean sea level. In the lower reaches (valley lands) the slope ranges from 6 to 51%.

Table 2.1: Physiographic details

Elevation (metres)	Slope Range (%)	Order of watershed Sub/Micro-watershed	Major streams	Topography
279 m – 440 m	6% - 51%	Micro Watershed	Manda	Moderately sloping

2.3 Drainage: The major stream draining the micro-watershed is the Manda which is a 3rd order stream flowing in a north-south direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Manda.

2.4 Soil: Soil Texture is medium throughout the watershed. Soil depth are quite deep. Soils are permeable and generally acidic in nature. Owing to undulating land form and absence of good vegetation cover, the area is exposed to erosion hazards. The soil nutrient status in the area shows a general trend of low phosphorous content. Soil texture is loamy.

Table 2.2: Details of soil erosion in the project areas:

1	2	3	4	5	6	7	8	9
Sl. No.	Names of State	Names of District	Names of Projects	Cause	Types of erosion	Area affected (ha)	Run-off (mm/ year)	Average soil loss (Tonnes/ ha/ year)
1	Meghalaya	East Garo Hills	East Garo Hills IWMP-III	Water erosion:				
				a	Sheet	1006	N.A.	N.A.
				b	Rill		N.A.	N.A.
				c	Gully		N.A.	N.A.
				Sub total		1006	N.A.	N.A.
				Wind erosion		NA	NA	NA
				Total		1006	N.A.	N.A.

2.5 Climate: The area in the foothills or low lying areas and mid-slopes are hot in summer and remain warm throughout the winter. The area on the higher reaches is warm during summer and cold during winter. The average annual rainfall is 3355 mm.

Table 2.3: Agro-climatic zones of the project areas, soil types, average rainfall and major crops.

1	2	3	4	5	6	7		8	9	
Sl. No.	Name of State	Name of the Agro-climatic zone	Area (in ha)	Names of the districts	Names of the Projects	Major soil types		Average annual rainfall in mm (preceding 5 years' average)	Major crops	
						a) Type	b) Area (ha)		a) Name	b) Area (ha)
1	Meghalaya	Central Hypothermic Plateau 300-450 m	1000 Ha.	East Garo Hills	East Garo Hills IWMP –III	Loam, Clay Loam.	1376 Ha	3355 mm	Betel nut	-
									Betel leaf	-
									Oranges	-
									Paddy	227 Ha.
									Ginger	130 Ha.
									Black pepper	-
									Litchi	-
									Banana	-
									Pineapple	-
								Total		357 Ha.

2.6 Agriculture: Agriculture is the primary occupation of the people of the area. The people mostly practice jhum. The jhum plots vary from 0.5 to 1.0 Ha, and are cultivated for 2 years. The principal agricultural crops grown of the jhum fields are rice, millet, maize, ginger, yam and vegetables. Fruit crops are well suited in the lower reaches which include banana, pineapple and jackfruit. The slopes of the Middle Manda are also very suitable for betel nut, betel leaf etc. which contribute to the income of the people.

Table 2.4: Crop yield and production

Crops	Area (ha)	Average Yield (Qtl) per ha.	Total Production (Qtl.)
Paddy	227	19.36	4935
Millet			
Soyabean			
Yam			
Ginger	130	56	7280
Tapioca			
Betel nut	30	13.5	405
Betel leaf			
Black Pepper			
Oranges			
Bay Leaf			

2.7 Natural Vegetation: The tree species common to the watershed area includes – *Shorea robusta*, *Schima walichii*, *Termenalia belerica*, *Emblica officinalis*, *Bahunia variegata*, *Duabanga* spp. and *Ficus* spp. However, due to jhum cultivation the forest cover of the area has reduced considerably.

2.8 Socio-Economic Profile: Economically, the area is perhaps one of the most backward in the district. The main reason is due to the absence of road communication, primitive way of agricultural practices like jhumming and the difficult terrain of the area.

Demographic Status: The total households in the watershed project is 238 with a total population of 1291, of which 668 are male and 623 are female. The detail of the household in each of the villages in the watershed project is as follows:

1.	Pakregre Chijong Apal	-	91 Nos.
2.	Rongchek songgitcham	-	43 Nos.
3.	Gongrang	-	80 Nos.
4.	Tarasin	-	24 Nos.
	TOTAL	-	238 Nos.

Infrastructure facilities :

- 2.1.1 *Roads:* All the villages within the Project Area are not connected by road. Except road to Pakregre Chiojong Apal from Rongjeng
- 2.1.2 *School:* there are only 3 L.P Schools within the Project Area run either by the Mission or by the Government.
- 2.1.3 *Electricity :* There is no electricity connection to any of the villages.
- 2.1.4 *Health :* There is no CHC & PHC in the Project area. The nearest CHC is Rongjeng.
- 2.1.5 *Water Supply :* Ringwell & Natural stream. Drinking Water facility is not yet provided in any of the villagees. The villager are getting potable water
- 2.1.6 *Market :* There is a weekly market held once in a week at Rongjeng & Songsak. However, the main market where the people sell their produce are at Rongjeng & Songsak.

Table 2.5: Infrastructure Status.

1	2	3		4			
Name of District	Name of Project	Parameters:		Status			
East Garo Hills	East Garo Hills – IWMP- III	(i)	No. of villages connected to the main road by an all-weather road.	Pakegre Chijong Apal			
		(ii)	No. of village provided with electricity	NIL			
		(iii)	No. of households without access to drinking water	NIL, but potable drinking water is not available.			
		(iv)	No. of educational institutions: Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	(P)	(S)	(HS)	(VI)
				3 Nos.	-	-	-
		(v)	No. of village with access to Primary Health Centre	Nil			
		(vi)	No. of village with access Veterinary Dispensary	Nil			
		(vii)	No. of village with access Post Office	Nil			
		(viii)	No. of village with access Banks	Nil			
		(ix)	No. of village with access Markets/ mandis	Nil			
		(x)	No. of village with access Agro-Industries	Nil			
		(xi)	Total quantity of surplus milk	Nil			
		(xii)	No. of milk collection centres (e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	(U)	(S)	(PA)	(O)
				Nil	Nil	Nil	Nil
		(xiii)	No. of villages with access to Aganwadi Centres	2 Nos.			
		(xiv)	Any other facilities with no. of villages (please specify)	Nil			

2.9 Livestock: there are only 4(four) kinds of livestock farming being farmed in the area viz. Piggery, Poultry, Cattle Rearing, & Goattery.

Table 2.6: Existing livestock population

Type of Animal	Population
Piggery	135
Poultry	1518
Cattle Rearing	383
Goattery	20
Total	2056

2.10 Land ownership: There are primarily 1(one) types of land holding system, namely Aking Land.

Table 2.7: Land Holding:

1	2	3	4	5	6		
Name of District	Name of the Project	Types of Farmer	No. of households	No. of BPL households	Land holding (ha)		
					Irrigated	Rainfed	Total
East Garo Hills	East Garo Hills – IWMP-III	(i) Large	Nil	Nil	Nil	Nil	Nil
		(ii) Small	227 Nos.	Nil	Nil	227 Ha.	227 Ha.
		(iii) Marginal	Nil	Nil	Nil	Nil	Nil
		(iv) Landless	11 Nos.	11 Nos.	Nil	Nil	Nil
		Sub - Total					

Table 2.5: Common Property Resources in the Project Area

1	2	3	4				5			
Name of District	Name of the Projects	CPR Particulars	Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
			Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)
East Garo Hills	East Garo Hills – IWMP-III	(i) Wasteland/ degraded land	-	-	-	334	-	-	-	230
		(ii) Pastures	-	-	-	39	-	-	-	-
		(iii) Private Agriculture land	227 ha	-	-	-	90	-	-	-
		(iv) Village woodlot	-	-	-	-	-	-	-	-
		(v) Forest	-	-	-	115	-	-	-	225
		(vi) Village Ponds/ Tanks	-	-	-	10	-	-	-	-
		(vii) Community Buildings	-	-	-	15	-	-	-	-
		(viii) Weekly Markets	-	-	-	-	-	-	-	-
		(ix) Permanent Markets	-	-	-	-	-	-	-	-
		(x) Temples/ Places of worship	-	-	-	3	-	-	-	-
		(xi) Others (Pl. specify) Jhum Land	-	-	-	633	-	-	-	455
		Total				1376				1000

2.11 Land use and land cover : As per the land use land cover map generated by NESAC, Meghalaya from Satellite Image taken during 2005 – 2006 (LISS – III, Image) the Watershed area has been broadly classified into the following land uses.

a) Built-up Area	=	28	Ha
b) Water bodies-River/Stream-Perennial	=	-	Ha
c) Agricultural land-crop land-kharif crop	=	227	Ha
d) Tree clad Area-close	=	115	Ha
e) Tree clad Area-open	=	967	Ha
f) Wastelands-barren Rocky/Stony waste	=	<u>39</u>	<u>Ha</u>
Total	=	1376	Ha

2.12 Problems of the Area : The primary problems of the area is jhumming. Majority of the population depends on Jhum Cultivation for their livelihood. Vast tracks of abandoned Jhum areas are converted to Broomstick cultivation areas which has further degraded the capability of the land. Mention may also be made here that the land use categorized as Tree-clad Area-open in the land used land cover map generated using Satellite Images of 2005 – 2006 are actually Broom-stick cultivation areas. In other words, unscientific method of cultivation has not only reduced the Jhum cycle, low crop yield but had adversely affected the ecological balance within the area. Road communication is another infrastructural problems that the area is facing where large volume crops like pineapple, jackfruits etc do not find their way into the market which has resulted in poor socio-economic status of the people. However, to control or to overcome the said problems an innovative approach has been formulated and documented in the Action Plan or the Treatment Plan the Detailed Project Report. The method of identification of the problems is through the Participatory Rural Appraisal Exercises conducted in all the villages within the Watershed.

CHAPTER III

PROJECT PLANNING & INSTITUTION BUILDING

3.1 Scientific Planning

- i) Base Line Survey: To establish a benchmark for assessing the impact of any intervention (pre-project & post project) a baseline survey is essential. The baseline survey included household census & socio-economic survey by using structured and semi –structured questionnaires, bio-physical survey to identify and assess the status of natural resources in the project area.
- ii) Participatory Rural Appraisal: To further obtain information on the project area, the people, resources, various PRA techniques like resource mapping, social mapping, seasonal calendars, matrix ranking, Venn diagrams were used.
- iii) GIS & Remote Sensing: To facilitate the process of prioritization and planning Geographic Information System was use. The land use and land cover (LULC) maps were prepared by the North Eastern Space Application Centre (NESAC) using the LISS III images (2006). The activities were located on the field by using GPS and accordingly transferred to the maps on GIS platform.

Table 3.1: Details of Scientific Planning and Inputs in IWMP projects:

1	2	2
Sl.No.	Scientific criteria/ inputs used	No. of projects in which scientific criteria were used
A.	Planning	
	Cluster approach	Yes,
	Whether technical back-stopping for the project has been arranged? If yes, mention the name of the Institute.	Yes, (i) NESAC, Nongsder (ii) SNLA GIS Lab, Shillong
	Baseline survey	Yes
	Hydro-geological survey	No
	Contour mapping	No
	Participatory Net Planning (PNP)	No

1	2	2
	Remote sensing data-especially soil/ crop/ run-off cover	Yes
	Ridge to Valley treatment	Yes
	Online IT connectivity between	
	(1) Project and DRDA cell/ZP	Yes
	(2) DRDA and SLNA	Yes
	(3) SLNA and DoLR	Yes
	Availability of GIS layers	
	1. Cadastral map	No
	2. Village boundaries	No
	3. Drainage	Yes
	4. Soil (Soil nutrient status)	Yes
	5. Land use	Yes
	6. Ground water status	No
	7. Watershed boundaries	Yes
	8. Activity	Yes
	Crop simulation models [#]	No
	Integrated coupled analyzer/ near infrared visible spectroscopy/ medium spectroscopy for high speed soil nutrient analysis.	No
	Normalized difference vegetation index (NDVI) [#]	Yes
	Weather Stations	No
B.	Inputs	
	1. Bio-pesticides	No
	2. Organic manures	Yes
	3. Vermi-compost	Yes
	4. Bio-fertilizer	Yes
	5. Water saving devices	Yes
	6. Mechanized tools/ implements	No
	7. Bio-fencing	Yes
	8. Nutrient budgeting	Yes
	9. Automatic water level recorders & sediment samplers	No
	Any other (please specify)	-

3.2 Project Implementing Agency:

The PIA is the Soil & Water Conservation Territorial Division, Williamnagar, East Garo Hills District of Meghalaya. The Project Manager will be the Divisional Soil and Water Conservation Officer and will be assisted by an Asst. Soil & Water Conservation Officer along with WDT members in which expertise is drawn from the relevant fields for achieving smooth and successful implementation of the project.

1	2	3	
Names of Districts	Names of projects	Details of PIA	
East Garo Hills	East Garo Hills – IWMP-III	(i) Type of organization#	Government
		(ii) Name of organization	Simsanggre Soil & Water Conservation (T) Division, Williamnagar.
		(iii) Designation & Address	Divisional Soil & Water Conservation Officer, Simsanggre Division, Williamnagar.
		(iv) Telephone	03658-220228
		(v) Fax	-Do-
		(vi) E-mail	dswcosimsanggre@gmail.com

3.3 Institution Building

i) Watershed Committee (WC)

The Watershed Committee of the East Garo Hills IWMP –III was constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Nokma/Council). The East Garo Hills IWMP –III Watershed Committee has been registered under the Society Registration Act 1860.

Table 3.2: Details of Watershed Committees (WC):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Names of the Districts	Names of projects	Names of WCs	Date of Registration as a Society (dd/mm/yyyy)	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educational qualification	Function/s assigned#
East Garo Hills	East Garo Hills – IWMP-III	East Garo Hills IWMP-III Watershed Committee		President	1M	-	ST									CI-VII	A to I
				Secretary		-	ST										-Do-
				Member	11M	-	ST										-Do-
				Member	4F	-	ST										-Do-

- A. PNP and PRA

C. Maintenance of Accounts

E. Supervision of construction activities

G. Verification & Measurement

I. Social Audit
- B. Planning

D. Signing of cheques and making payments

F. Cost Estimation

H. Record of labour employed

J. Any other (please specify).

ii) Self Help Group

Awareness programmes were organized in the villages to inform and sensitize the people on the essence of organizing themselves in to homogenous groups for uplifting their livelihood especially for the women and the landless. Discussions were held at length with the WDT on the scope and procedure of group formation, availing credit, grading of the groups and so on.

Table 3.3: Details of Self Help Groups (SHGs) in the project areas:

1	2	3				4				5			6		
Names of the Districts	Names of projects	Total no. of registered SHGs				No. of members				No. of SC/ST in each category			No. of BPL in each category		
		With only Men	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
East Garo Hills	East Garo Hills IWMP-III	-	-	-	Nil	(i) Landless									
						(ii) SF									
						(iii) MF									
						(iv) LF									

iii) User Group

To manage the assets created and ensure their sustainability User Groups will be formed. The people have been sensitized on the importance of ensuring that the assets created are sustainably used and the essentiality of having User Groups for maintenance and operation of their assets.

Table 3.4: User Group Details

1	2	3				4				5			6		
Names of Districts	Names of Projects	Total no. of Ugs				No. of members				No. of SC/ST in each category			No. of BPL in each category		
		Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
East Garo Hills	East Garo Hills – IWMP-III	15	-	-	15	(i)Landless									
						(ii) SF									
						(iii) MF									
						(iv) LF									
Total		Nil	Nil	Nil	Nil				Nil			Nil			Nil

CHAPTER IV **PROJECT ACTIVITIES**

4.1 Preparatory Phase:

i) Entry Point Activities (EPA)

(Financial – Rs. in lakh)										
1	2	3	4	5	6	7	8	9	10	11
Sl. No.	State	District	Names of Project	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Meghalaya	East Garo Hills	East Garo Hills IWMP-III	6.00 Lakhs	Construction of Ringwell Construction of Link road Playground Improvement Construction of Culvert School Building Repairing Construction of Community Hall (Katcha).	1.9 0.85 0.50 2.00 0.45 0.30	6.00	-	Improvement in Basic Amenities	Improvement in Basic Amenities

ii) Other activities of Preparatory Phase:

1	2	3	4	5	6	7	8	9	10	11	12	13
District	Name of Projects	Initiation of village level institution	Capacity building	IEC activities	Baseline survey	Hydro-geological survey	Identifying technical support agencies	Resource agreements	Preparation of DPR	Evaluation of DPR	Any other (please specify)	Cost incurred (Rs. In lakh)
East Garo Hills	East Garo Hills – IWMP -III	1 No. W/C		-	Participatory Rural Appraisals	N.A	Done	Done	Done	Done	Institution & Capacity Building, DPR.	3.0

4.2 Watershed Works Phase:

4.2.1 Activities related to surface water resources in the project areas:

1	2	3	4	5	6			7											
Sl. No	Name of States	Name of Districts	Name of Projects	Type of structures	Pre Project			Proposed Project											
					No	Area irrigated (ha)	Storage capacity	Augmentation/ repair of existing structures				Construction of new structures				Total target			
								No	Area to be treated (ha)	Storage capacity	Estimated cost (in lakhs)	No	Area to be treated (ha)	Storage capacity (per unit)	Estimated cost (in lakhs)	No	Area to be treated (ha)	Storage capacity (m ³)	Estimated cost
1.	Meghalaya	East Garo Hills	East Garo Hills IWMP-III	(i) Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(ii) Pond	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(iii) Lake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(iv) Check Dam	1	13 Ha.	-	1 No.	13 ha.	-	1.0	14	192 ha.	-	17.9505	15	205 ha.	-	18.9697
				(v) Percolation Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(vi) Channel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(vii) Any others (please specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

8											9	10
Achievement due to project (To Achieve)												
Augmentation/ repair of existing structures				Construction of new structures				Total achievement			Change in storage capacity (col 8-6)	Change in irrigated area (ha) Col. (8-6)
No	Area irrigated (ha)	Storage capacity	Expenditure incurred (in lakhs)	No	Area irrigated (ha)	Storage capacity	Expenditure incurred (in lakhs)	Area irrigated (ha)	Storage capacity	Estimated incurred		-
					N	I	L					

4.2.2 Activities related to recharging ground water resources in the project areas:

1	2	3	4	5	6		7								8								9					
S. No.	Names of States	Names of Districts	Names of projects	Type of structures	Pre-project		Proposed target								Achievement due to project								Change in irrigated area (Col. 8-6) (ha)					
					No.	Area irrigated (ha)	Augmentation/ repair of existing recharging structures			Construction of new recharging structures			Total target		Augmentation/ repair of existing recharging structures			Construction of new recharging structures			Total achievement							
							No.	Area to be irrigated (ha)	Estimated cost	No.	Area to be irrigated (ha)	Estimated cost	Area to be irrigated (ha)	Estimated cost	No.	Area irrigated (ha)	Expenditure incurred	No.	Area irrigated (ha)	Expenditure incurred	Area irrigated (ha)	Expenditure incurred						
1	Meghalaya	East Garo Hills	East Garo Hills IWMP-III	(i)Open wells		Nil		Nil			Nil			Nil			Nil			Nil								
				(ii)Bore wells																								
				(iii)Any others (Pl. specify)																								
				Total for the project																								

4.2.3 Activities executed by User Groups in the Project Areas.

	2	3						
Names of Districts	Names of Projects	Major activities of the UGs –Targets				No. of UGs involved	Estimated Cost	Amount of WDF to be collected (Rs.)
		Structure/ activity proposed						
		Sl. No.	Type	No.#	Treatment (ha)			
East Garo Hills	East Garo Hills – IWMP-III	1	Check Dam	14 Nos.	205 Ha.	4 Nos.	18.9697	0.94848

4.2.4 Activities executed by User Groups in the Project Areas:

4									
Major activities of the UGs – Achievements									
Structure/ activity				No. of UGs involved	Expenditure incurred (Rs.)	No. of mandays			Amount of WDF collected (Rs.)
Sl. No.	Type	No.#	Treated Area (ha.)			SC	ST	F	
1.	Check Dam	14 Nos.	205 Ha.	4 Nos.	18.9697		11381	1138	0.94848

4.2.5 Activities related to livelihoods by Self Help Groups (SHGs) in the project areas:

1	2	3		
Names of the Districts	Names of projects	Major activities of the SHGs		
		Name of activity	No. of SHGs involved	Average annual income from activity per SHG
East Garo Hills	East Garo Hills – IWMP-III	1. Tailoring		
		2. Basket Making		
		3. Stabilized Mud Block		
		4. Piggery Farming		
		5. Vermi Composting		
		6. Fruit Processing		
		7. Canes & Handicraft		

4.2.6 Activities related to livelihoods by Self Help Groups (SHGs) in the project areas:

4	5				6	7	8			9	10
No. of SHGs given training	Total assistance received by the SHG (Amount in Rs.)				Total annual Income generated (Rs.)	Total annual Savings (Rs.)	No. of SHGs Graded as			Total Amount of loan sanctioned by the bank(s)	No. of SHGs federated
	Loan from revolving fund	Training	Material	Others (pl. specify)			I	II	III		

4.2.7 Other activities of watershed works phase:

1	2	3		4		5		6		7		8		9		10		11		12		13
District	Names of projects	Ridge area treatment		Drainage line treatment		Nursery raising		Land development		Improvement Existing Paddy field		Agro Horti – (Citrus)		Preliminary & 1 st year Plantation Area		Improvement existing degraded Forest		Non-conventional energy		Any other (please specify)		Total cost incurred (Rs. In lakhs)
		(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	
EGH	East Garo Hills IWMP- III			205 Ha.	18.9697	Arecanut 138000 Rubber 57150	8.28 14.2875	37 Ha	7.4	90 Ha	3.87	120 Ha	2.4	138 Ha	10.4328	260 Ha	9.36			Livelihood, Production System	15.0 19.5	109.5

4.2.8 Details of engineering structures in watershed works:

1	2	3	4			5			6	7				8								
District	Project	Name of structures	Type of treatment			Type of land			Executing agency	Target				Achievement								
			(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	No. of units (No./ cum./ rmt)	Estimated cost (Rs. in lakh)				Expected month & year of completion (mm/yyyy)	No. of units (No./ cu.m./ rmt)	Expenditure incurred (Rs. in lakh)				Status of completion	Actual month & year of completion (mm/yyyy)
											M	W	O	T			M	W	O	T		
East Garo Hills	East Garo Hills IWMP- III	Staggered trenching																				
		Loose boulder Contour bund	R	-	-	Private	-	-	Beneficiary								-	-	-	-	-	-
		Graded bunding																				
		Bench terracing			62	62				62 ha.	12.40	2013-14										
		Earthen checks dams																				
		Masonry stop dams		15			15			15 nos.	18.205	-do-										
		Gully plug																				
		Gabion structures		1		1				1 no.	0.75	-do-										
		Underground dykes																				
		Field bunds																				
		Any others (pl. specify)																				

Contd.

4.2.9 Details of engineering structures in watershed works.

9																	
Outcomes																	
Reduction in run off (cu.m)	Area treated# (ha)	Water level (m)		Production (quintal)		Income (Rs.in lakh)		Mandays generated					No. of beneficiaries				
		Pre-project	Post project	Pre-project	Post project	Pre-project	Post project	SC	ST	Others (Men)	Women	Total	SC	ST	Others	Women	Total
				15	30	0.15	0.30		23773		2378	23773		238			238

4.2.10 Details of activities connected with vegetative cover in watershed works:

1	2	3	4			5			6	7				8			
District	Project	Name of structure/ work	Type of treatment			Type of land			Executing agency	Target				Achievement			
			(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	Area (ha)	No. of plants	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/ yyyy)	Area (ha)	No. of plants	Expendi- ture incurred (Rs. in lakh)	Actual month & year of completion (mm/ yyyy)
East Garo Hills	East Garo Hills IWMP- III	Afforestation															
		Regeneration				✓				260		9.36	3 yrs.	-	-	-	-
		Agro-forestry					✓							-	-	-	-
		Fuel wood															
		Fodder															
		Agro-Horticulture				✓				120		2.40	3 yrs.	-	-	-	-
		Pasture dev.															
		Nursery raising	Arecanut				✓			23		8.28	3 yrs.				
		Nusery Raising	Rubber				✓			127		14.2875	3 yrs.	-	-	-	-

in case two or more activities are executed over same area, the figures in area treated should be accounted only once and should reflect only the actual watershed area treated.

4.2.11 Details of vegetative structures in watershed works: Phase – II (contd.):

9														
Outcomes														
Reduction in run off (cu.m)	Production (quintal)		Income (Rs.in lakh)		Mandays generated					No. of beneficiaries				
	Pre-project	Post project	Pre-project	Post project	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
						9360		936	9360					
											238			238
						2400		240	2400					
		92 qtl.		18.40		8280		828	8280					
		1905 qtl.		228.60		14287		1429	14287					

4.2.12 Details of allied / other activities:

1	2	3	4			5	6		7	
District	Project	Name of activity@	Type of land			Executing agency	Target		Achievement	
			(i) Private	(ii) Community	(iii) Others (landless)	(i) UG (ii)SHG (iii) Others (pl. specify)	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/yyyy)	Expenditure incurred (Rs. in lakh)	Actual month & year of completion (mm/yyyy)
East Garo Hills	East Garo Hills IWMP-III	Tailoring	✓		25 Units		2.0	March 2014		
		Carpentry/ Agri-implements/ Basket making etc – 110 nos.			30 Units		1.5	-do-		
		Bee keeping	✓		20 Units		2.0	-do-		
		Backyard poultry								
		Stabilized Mud Block		✓	20 Units		6.0	-do-		
		Piggery Farming		✓	20 Units		6.0	-do-		
		Piggery	✓		25 Units		2.0			
		Vermi-Composting	✓		16 units		2.0			
		Kitchen gardening	✓		220 Units		5.5	-do-		
		Rice Mill		✓	3 units		1.5	-do-		
		Others (Rural godown,								
		Cableway taxiing								
		Weaving/Handloom			20 units		6.0	-do-		

* from column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, total no. of Projects; from column no. 5, activity-wise totals, from column no. 6, type-wise totals, from coulmn no. 7, agency-wise totals, from column no. 8, total estimated cost, from column no. 9, total expenditure incurred, structure-wise no. of completed works, from column no. 10, item-wise totals, for the entire country may be indicated at the end of the table

@The activities given in this column are merely indicative and States are free to choose any other activity suited to the project area.

4.2.13 Details of allied / other activities:

8											
Outcomes											
Income (Rs.)		Mandays generated					No. of beneficiaries				
Pre-project	Post project	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
			48700		23200	48700		238			238

4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5	6				7						
Names of the Districts	Names of projects	Name(s) of the villages	CPR particulars	Activity proposed	Target				Achievement						
					Target area under the activity (ha)	Estimated expenditure (Rs.)	Expected no. of beneficia-ries	Estimated contri-bution to WDF (Rs.)	Area treated under the activity (ha)	Expenditure incurred (Rs.)	Actual no. of beneficiaries	No. of mandays			WDF collected (Rs.)
												SC	ST	F	
East Garo Hills	East Garo Hills IWMP - III	(i) Pakregre Chijong Apal (ii) Rongchek Songgitcham (iii) Gongrang (iv) Tarasin													

CHAPTER - V
PROJECT PHASING & BUDGETING

ACTION PLAN OF MIDDLE MANDA WATERSHED UNDER IWMP - III, SIMSANGGRE SOIL & WATER CONSERVATION DIVISION, WILLIAMNAGAR.

Name of District : East Garo Hills

No. of Villages - 4 Nos.

Name of C & R.D. Block : SONGSAK

Project Area - 1000 Ha.

Sl. No	Activities	I st Year				Co-ordinates	II nd Year				Co-ordinates	III rd Year				IV th Year				V th Year				Total			
		C.S.		S.S.			C.S.		S.S.			C.S.		S.S.		C.S.		S.S.		C.S.		S.S.		C.S.		S.S.	
		Phy	Fin	Phy	Fin		Phy	Fin	Phy	Fin		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23	24	25	26	27	28	29	30
I	MANAGEMENT COST:																										
A.	Administrative cost:																										
i.	Honourarium of WDT Members @ Rs. 8000/ month – 1 no.							0.96					0.96				0.96							0	2.88	0	0
ii.	Hon ^{rm} of Watershed Volunteers @ Rs. 2500/- month – 3 nos.												0.9				0.9							0	1.8	0	0
iii.	Hon ^{rm} WCO's @ Rs.1000/month x 36 months												0.36				0.36							0	0.72	0	0
iv.	Hon ^{rm} WCM @ Rs.200 x 22 Nos. members/ month for 38 months						16	0.384				16	0.384			16	0.384							48	1.152	0	0
v	Hon ^{rm} Office assistance @Rs.5000/month x 36												1.8											0	1.8	0	0
vi	Hon ^{rm} Chartered Accountant							0.2					0.2				0.2							0	0.6	0	0
vii	TA/DA of Field Asstt. @ 5000/ month.												0.6				0.6							0	1.2	0	0
viii	Hiring charges of office building @ 1500/-							0.18					0.18				0.18							0	0.54	0	0

ix.	Hiring charges of vehicle @ 5000/month.						0.2					0.5			0.2							0	0.9	0	0
x	Office expenses, POL, Stationeries, printing of SHG's books, pamphlets, tea, snacks etc, cost of camera.						1.076					1.616			0.716							0	3.41	0	0
	Total of A:						16	3				16	7.5		16	4.5						48	15	0	0
	PREPARATORY PHASE :																					0	0	0	0
	B. Entry Point Activities:																					0	0	0	0
i.	Construction of R.C.C. Culvert.	4	2																			4	2	0	0
ii.	Construction of Ringwell	3	1.3	1	0.6																	3	1.3	1	0.6
III	Community Hall construction (Kutcha).	1	0.3																			1	0.3	0	0
IV	School building repairing	1	0.45																			1	0.45	0	0
V	Play ground improvement	1	0.5																			1	0.5	0	0
VI	Construction of Link Road.	2	0.85																			2	0.85	0	0
	Total of B:	12	5.4	1	0.6																	12	5.4	1	0.6
C	Institution & Capacity building																					0	0	0	0
i.	Administrative Expenses		0.35		0.15																	0	0.35	0	0.15
ii.	Awareness Campaign & Capacity building								1	0.5												0	0	1	0.5
iii.	Exposure visits – off. Campus	1	0.3				1	0.3				1	0.3			1	0.3					4	1.2	0	0
iv.	Capacity building of SHG's/ UG's.								5	1												0	0	5	1
v.	Capacity building of WC Members.	2	0.3						4	0.6		4	0.6			4	0.6					10	1.5	4	0.6
vi	Capacity of WDT/WV	3	0.4				4	0.6				4	0.6			4	0.6					15	2.2	0	0
	Total of C:	6	1.35		0.15		5	0.9	10	2.1		9	1.5		9	1.5						29	5.25	10	2.25
D.	Detailed Project Report:																					0	0	0	0
i.	Cost of Resources Inventories works		0.2																			0	0.2	0	0
ii.	Cost of PRA Exercises		0.5																			0	0.5	0	0
iii.	Cost of Land use Survey works		0.15		0.15																	0	0.15	0	0.15

iv.	Cost of formulating		0.5																			0	0.5	0	0	
	Total of D:		1.35		0.15																	0	1.35	0	0.15	
E.	Monitoring & Evaluation:																					0	0	0	0	
i.	Cost of Honorarium to evaluator.							0.3					0.75			0.45						0	1.5	0	0	
ii.	Cost of printing report etc.							0.45					0.75			0.3						0	1.5	0	0	
	Total of E:							0.75					1.5			0.75						0	3	0	0	
	Total of I (A to E)	18	8.1	1.3	0.9	0	21	4.65	10	2.1	0	25	10.5	0	25	6.75	0	0	0	0	0	0	89	30	11.3	3
II	PROJECT COST/WATERSHED WORKS PHASE :																					0	0	0	0	
A.	Arable Land Treatment:																					0	0	0	0	
i	Pakregre Chijong Apal																					0	0	0	0	
	1) Bench terrace @Rs.20000/- per ha.						3 ha	0.6				11 ha	2.2		3 ha	0.6						17 ha	3.4	0	0	
	2) Improvement existing Paddy field @Rs.4300/- per ha.						5 ha	0.215				30 ha	1.29		5 ha	0.215						40 ha	1.72	0	0	
	3) Agro Horticulture (Citrus) Preliminary 1st year @Rs.2000/- per ha.						10 ha	0.2				20 ha	0.4		10 ha	0.2						40 ha	0.8	0	0	
	Rongcheck Songgitcham																					0	0	0	0	
ii	1) Bench terrace @Rs.20000/- per ha.						1 ha	0.2				5 ha	1		1 ha	0.2						7 ha	1.4	0	0	
	2) Improvement existing Paddy field @Rs.4300/- per ha.						5 ha	0.215				5 ha	0.215		5 ha	0.215						15 ha	0.65	0	0	
	3) Agro Horticulture (Citrus) Preliminary 1st year @Rs.2000/- per ha.						5 ha	0.1				15 ha	0.3		5 ha	0.1						25 ha	0.5	0	0	

iii.	Gongrang																							0	0	0	0
	1) Bench terrace @Rs.20000/- per ha.						1 ha	0.2				8 ha	1.6				1 ha	0.2						10 ha	2	0	0
	2) Improvement existing Paddy field @Rs.4300/- per ha.						7 ha	0.301				16 ha	0.688				7 ha	0.301						30 ha	1.29	0	0
	3) Agro Horticulture (Citrus) Preliminary 1st year @Rs.2000/- per ha.						10 ha	0.2				20 ha	0.4				10 ha	0.2						40 ha	0.8	0	0
iv.	Tarasin																							0	0	0	0
	1) Bench terrace @Rs.20000/- per ha.						1 ha	0.2				1 ha	0.2				1 ha	0.2						3 ha	0.6	0	0
	2) Improvement existing Paddy field @Rs.4300/- per ha.						1 ha	0.043				3 ha	0.129				1 ha	0.043						5 ha	0.215	0	0
	3) Agro Horticulture (Citrus) Preliminary 1st year @Rs.2000/- per ha.						2 ha	0.04				11 ha	0.22				2 ha	0.04						15 ha	0.3	0	0
	Total of A :						51 ha	2.514				145 ha	8.642				51 ha	2.514						247 ha.	13.67	0	0
B.	Non- Arable Land Treatment:																										
i	Pakregre Chijong Apal																										
	1) Creation of Rubber Nursery(polybag) @Rs.25 each.						1350 nos.	0.3375				10350 nos.	2.5875				1350 nos.	0.3375							3.2625		
							3 ha					23 ha					3 ha							29 ha	0		
	2) Creation of Arecanut Nursery @Rs.6 each plant.						3 ha	1.08				4 ha	1.44											7 ha	2.52		
	3) Preliminary 1 st yr. planting Arecanut @ Rs.7560/- per ha.											18	1.3608				24 ha	1.8144						18 ha	3.1752		
	4) Improvement existing degraded Forest. Preliminary 1st year. @Rs. 2600/- per ha.						25 ha.	0.65				72	1.872											97 ha.	2.522		
	5) Improvemnt of Degraded Forest 2nd year Maintenance @Rs.1000/- per ha.										(M)					(M)								0.97			
												0.25						0.72									

C	Drainage Line Treatment:																											
	Pakregre Chijongapal																											
	(a) Boulder Sausage									N25°41'53.5 E090°43'47.2	1 no	0.75													1 no	0.75		
											15 ha														15 ha			
	(b) C.C. Dam									N25°41'42.8 E090°43'30.4	1 no	1.4525													1 no	1.4525		
											12 ha														12 ha			
	(d) C.C.Dam repairing																											
	(e) Run of Disposal Channel.															1 no	0.0192								1 no	0.0192		
																0.5 ha									0.5 ha			
	Rongckeck Songcitcham																											
	(a) Boulder Sausage																											
	(b) C.C. Dam					N25°40'16.4 E090°41'47.7	1 no	0.848		N25°41'27.8 E090°42'21.8, N25°41'28.3 E090°42'21.8, N25°40'18.4 E090°41'54.1, N25°40'25.3 E090°42'15.1 & N25°40'13.0 E090°42'45.4	5 nos	6.1														6.948		
							14 ha				50 ha														64 ha.	0		
	(c) C.C.Dam repairing																									0		
	(d) Run of Disposal Channel.																									0		

	Gongrang																												0		
	(a) Boulder Sausage																												0		
	(b) C.C. Dam										N25°40'25.9 E090°41'02.3, N25°41'36.4 E090°41'18.5, N25°41'36.4 E090°41'36.4 N25°40'45.1 E090°41'19.9 & N25°40'22.7 E090°40'59.5	5 nos	6.5																6.5		
												60 ha															60 ha.	0			
	(c) C.C.Dam repairing										N25°41'06.8 E090°42'41.2	1 no	1															1			
												13 ha															13 ha.	0			
	(d) Run of Disposal Channel.																											0			
	Tarasin																											0			
	(a) Boulder Sausage																											0			
	(b) C.C. Dam										N25°40'12.6 E090°41'09.6 & N25°40'12.5 E090°41'09.7	2 nos	2.3															2.3			
												40.5 ha															40.5 ha	0			
	(c) Foot Bridge																											0			
	(d) C.C.Dam repairing																											0			
	(e) Run of Disposal Channel.																											0			
	Total of C :						14 ha	0.848				190.5 ha.	18.1025			.05 ha.	0.0192									205 ha	18.9697				
	Total of A + B + C						11.25						52.5				11.25									1000 ha.	75				

D	Livelihood Activities for landless persons:																													
i	Pakregre Chijong Apal																													
	Tailoring @ Rs. 8,000/- unit						1 unit	0.08				3 units	0.24			2 units	0.16								6 units	0.48				
	Carpentry/ Agri- Implements/ Hollow Block Making/Blacksmithy etc @ Rs. 5000/-						1 unit	0.05				4 units	0.2			3 units	0.15								8 units	0.4				
	Vermi Composting/Weaving @Rs. 12500/- unit											2 units	0.25			2 units	0.25								4 units	0.5				
	Piggery & Poultry @Rs. 8000/- unit						1 unit	0.08				2 units	0.16			3 units	0.24								6 units	0.48				
	Apiculture @ Rs. 8000/ unit						1 unit	0.08				2 units	0.16			5 units	0.4								8 units	0.64				
	Kitchen Gardening @ Rs. 2500/- unit						4 units	0.1				6 units	0.15			8 units	0.2	62 units	1.55						18 units	0.45	62 units	1.55		
ii	Rongcheck Songgitcham																													
	Tailoring @ Rs. 8,000/-						1 unit	0.08				3 units	0.24			3 units	0.24								7 units	0.56				
	Carpentry/ Agri- Implements/ Hollow Block Making/Blacksmithy etc @ Rs. 5000/-											4 units	0.2			4 units	0.2								8 units	0.4				
	Vermi Composting/Weaving @Rs. 12500/- unit						1 unit	0.125				1 unit	0.125			2 units	0.25								4 units	0.5				
	Piggery & Poultry @Rs. 8000/- unit						1 unit	0.08				3 units	0.24			3 units	0.24								7 units	0.56				
	Apiculture @ Rs. 8000/ unit											2 units	0.16			4 units	0.32								6 units	0.48				
	Kitchen Gardening @ Rs. 2500/-						4 units	0.1				6 units	0.15			8 units	0.2	27 units	0.68						18 units	0.45	27 units	0.675		

Gongrang																								0		
Tailoring @ Rs. 8,000/-						1 unit	0.08				3 units	0.24			3 units	0.24							7 units	0.56		
Carpentry/ Agri- Implements/ Hollow Block Making/Blacksmithy etc @ Rs. 5000/-											4 units	0.2			4 units	0.2							8 units	0.4		
Vermi Composting/Weaving @Rs. 12500/- unit						1 unit	0.125				1 unit	0.125			2 units	0.25							4 units	0.5		
Piggery & Poultry @Rs. 8000/- unit						1 unit	0.08				3 units	0.24			3 units	0.24							7 units	0.56		
Apiculture @ Rs. 8000/ unit											2 units	0.16			5 units	0.4							7 units	0.56		
Kitchen Gardening @ Rs. 2500/-						4 units	0.1				6 units	0.15			8 units	0.2	49 units	1.23					18 units	0.45	49 units	1.225
Tarasin																								0		
Tailoring @ Rs. 8,000/-						1 unit	0.08				2 units	0.16			2 units	0.16							5 units	0.4		
Carpentry/ Agri- Implements/ Hollow Block Making/Blacksmithy etc @ Rs. 5000/-											4 units	0.2			2 units	0.1							6 units	0.3		
Vermi Composting/Weaving @Rs. 12500/- unit											2 units	0.25			2 units	0.25							4 units	0.5		
Piggery & Poultry @Rs. 8000/- unit						1 unit	0.08				3 units	0.24			1 unit	0.08							5 units	0.4		
Apiculture @ Rs. 8000/ unit						1 unit	0.08				2 units	0.16			1 unit	0.08							4 units	0.32		
Kitchen Gardening @ Rs. 2500/-						4 units	0.1				4 units	0.1			8 units	0.2	12 units	0.3					16 units	0.4	12 units	0.3
Total of D:						29 units	1.5				74 Units	4.5			88 units	5.25	150 units	3.75					191 units	11.25	150 units	3.75

E.	Production System and Micro Enterprises (SHG's):																											
i	Pakregre Chijong Apal																											
	Piggery/Poultry @ 30,000/ unit						1 unit	0.3						3 units	0.9	2 units	0.6							3 units	0.9	3 units	0.9	
	Mud Block Making @ Rs. 30,000/ unit													2 units	0.6	4 units	1.2							4 units	1.2	2 units	0.6	
	Weaving/Handloom @Rs.30000/- unit						1 unit	0.3						3 units	0.9	3 units	0.9							4 units	1.2	3 units	0.9	
	Rice Mill @Rs. 50,000/- unit															1 unit	0.5							1 unit	0.5			
ii	Rongcheck Songgitcham																											
	Piggery/Poultry @ 30,000/ unit						1 unit	0.3						3 units	0.9	2 units	0.6							3 units	0.9	3 units	0.9	
	Mud Block Making @ Rs. 30,000/ unit													1 unit	0.3	3 units	0.9							3 units	0.9	1 unit	0.3	
	Weaving/Handloom @Rs.30000/- unit													3 units	0.9	3 units	0.9							3 units	0.9	3 units	0.9	
	Rice Mill @Rs. 50,000/- unit															1 unit	0.5							1 unit	0.5			
iii	Gongrang																											
	Piggery/Poultry @ 30,000/ unit													2 units	0.6	2 units	0.6							2 units	0.6	2 units	0.6	
	Mud Block Making @ Rs. 30,000/ unit						1 unit	0.3						1 unit	0.3	3 units	0.9							4 units	1.2	1 unit	0.3	
	Weaving/Handloom @Rs.30000/- unit													2 units	0.6	2 units	0.6							2 units	0.6	2 units	0.6	
	Rice Mill @Rs. 50,000/- unit															1 unit	0.5							1 unit	0.5			
iv	Tarasin																											
	Piggery/Poultry @ 30,000/ unit													2 units	0.6	2 units	0.6							2 units	0.6	2 units	0.6	
	Mud Block Making @ Rs. 30,000/ unit						1 unit	0.3						1 unit	0.3	3 units	0.9							4 units	1.2	1 unit	0.3	
	Weaving/Handloom @Rs.30000/- unit													2 units	0.6	1 unit	0.3							1 unit	0.3	2 units	0.6	
	Rice Mill @Rs. 50,000/- unit																											
	Total of E :						5 unit	1.5						25 units	7.5	33 units	10.5								38 units	12	25 units	7.5

F.	Consolidation & Exit Phase:																										
	Repairs, Maintenance of CPR’s.																			2.75		0.25		2.75		0.25	
	Improving the sustainability of various Interventions																			2		0.25		2		0.25	
	Documentation of successful experiences & Preparation of Completion Report																			2		0.25		2		0.25	
	Total of F:																			6.75		0.75		6.75		0.75	
	Total of II (A+B+C+D+E+F)						14.25					57		7.5		27		3.75		6.75		0.75	1000 ha.	105		12	
	Grand Total (I + II)		8.1		0.9		18.9		2.1			67.5		7.5		33.75		3.75		6.75		0.75	1000 ha.	135		15	

Convergence of EGH IWMP Project -III with NREGS
Rubber Plantation Norms for NREGS

Location & Activities	2nd year of IWMP		1st Year of NREGS		3rd Year of IWMP		2nd Year of NREGS		4th Year of IWMP		3rd Year of NREGS		5th Year of IWMP		4th Year of NREGS		TOTAL (IWMP)		TOTAL (NREGS)	
	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.
Pakregre Chijong Apal																				
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	1350 nos.	0.338			10350 nos.	2.5875			1350 nos.	0.338							13050 nos.	3.2625		
	3 ha				23 ha				3 ha								29 ha.	0		
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			3 ha.	0.4728			23 ha	3.6248			3 ha.	0.4728							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.533				11.753				1.533								14.819
2nd Year Maintenance @Rs.1000/- per ha.							(M)	0.03			(M)	0.23			(M)	0.03			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								1.0773				8.2593				1.0773				10.4139
Rongcheck Songgitcham																		0		0
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	1350 nos.	0.338			10350 nos.	2.5875			1350 nos.	0.338							13050 nos.	3.2625		0
	3 ha				23 ha				3 ha								29 ha	0		0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			3 ha.	0.4728			23 ha	3.6248			3 ha.	0.4728							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.533				11.753				1.533								14.819
2nd Year Maintenance @Rs.1000/- per ha.							(M)	0.03			(M)	0.23			(M)	0.03			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								1.0773				8.2593				1.0773				10.4139

Gongrang																		0		0
Creation of Rubber Nursery (Polybag) @Rs.25/- per plant.	1800 nos.	0.45			14400 nos.	3.6			1800 nos.	0.45								18000 nos.	4.5	0
	4 ha.				32 ha.				4 ha.									40 ha.	0	0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			4 ha	0.6304			32 ha.	5.0432			4 ha	0.6304							40 ha.	6.304
Preliminary & 1st Year Wage Component @Rs.51100/-				2.044				16.352				2.044								20.44
2nd Year Maintenance @Rs.1000/- per ha.							(M)	0.04			(M)	0.32			(M)	0.04			(M)	0.4
2nd Year Wage Component. @Rs.35910/-								1.4364				11.4912				1.4364				14.364
Tarasin																		0		0
Creation of Rubber Nursery (Polybag) @Rs.25/- per plant.	900 nos.	0.225			11250 nos.	2.8125			900 nos.	0.225								13050 nos.	3.2625	0
	2 ha				25 ha				2 ha									29 ha	0	0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			2 ha.	0.3152			25 ha.	3.94			2 ha.	0.3152							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.022				12.775				1.022								14.819
2nd Year Maintenance @Rs.1000/- per ha.							(M)	0.02			(M)	0.25			(M)	0.02			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								0.7182				8.9775				0.7182				10.4139
TOTAL																		57150 nos.		0
		1.35	0	8.0232	0	11.5875	0	73.295	0	1.35	0	46.0405	0	0	0	3.711	127 ha.	14.2875	127 ha.	131.7879

Convergence of EGH IWMP Project -III with NREGS
Rubber Plantation Norms for NREGS

Location & Activities	2nd year of IWMP		1st Year of NREGS		3rd Year of IWMP		2nd Year of NREGS		4th Year of IWMP		3rd Year of NREGS		5th Year of IWMP		4th Year of NREGS		TOTAL (IWMP)		TOTAL (NREGS)	
	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.	Phy .	Fin.
Pakregre Chijong Apal																				
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	1350 nos.	0.338			10350 nos.	2.5875			1350 nos.	0.338							13050 nos.	3.2625		
	3 ha				23 ha				3 ha								29 ha.	0		
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			3 ha.	0.4728			23 ha	3.6248			3 ha.	0.4728							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.533				11.753				1.533								14.819
2nd Year Maintenace @Rs.1000/- per ha.							(M)	0.03			(M)	0.23			(M)	0.03			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								1.0773				8.2593				1.0773				10.4139
Rongcheck Songgitcham																		0		0
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	1350 nos.	0.338			10350 nos.	2.5875			1350 nos.	0.338							13050 nos.	3.2625		0
	3 ha				23 ha				3 ha								29 ha	0		0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			3 ha.	0.4728			23 ha	3.6248			3 ha.	0.4728							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.533				11.753				1.533								14.819
2nd Year Maintenace @Rs.1000/- per ha.							(M)	0.03			(M)	0.23			(M)	0.03			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								1.0773				8.2593				1.0773				10.4139

Gongrang																		0		0
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	1800 nos.	0.45			14400 nos.	3.6			1800 nos.	0.45								18000 nos.	4.5	0
	4 ha.				32 ha.				4 ha.									40 ha.	0	0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			4 ha	0.6304			32 ha.	5.0432			4 ha	0.6304							40 ha.	6.304
Preliminary & 1st Year Wage Component @Rs.51100/-				2.044				16.352				2.044								20.44
2nd Year Maintenace @Rs.1000/- per ha.							(M)	0.04			(M)	0.32			(M)	0.04			(M)	0.4
2nd Year Wage Component. @Rs.35910/-								1.4364				11.4912				1.4364				14.364
Tarasin																		0		0
Creation of Rubber Nusery (Polybag) @Rs.25/- per plant.	900 nos.	0.225			11250 nos.	2.8125			900 nos.	0.225								13050 nos.	3.2625	0
	2 ha				25 ha				2 ha									29 ha	0	0
Preliminary 1st year plantation @Rs.15760/- per ha. (Material Component)			2 ha.	0.3152			25 ha.	3.94			2 ha.	0.3152							29 ha	4.5704
Preliminary & 1st Year Wage Component @Rs.51100/-				1.022				12.775				1.022								14.819
2nd Year Maintenace @Rs.1000/- per ha.							(M)	0.02			(M)	0.25			(M)	0.02			(M)	0.29
2nd Year Wage Component. @Rs.35910/-								0.7182				8.9775				0.7182				10.4139
TOTAL																		57150 nos.		0
		1.35	0	8.0232	0	11.5875	0	73.295	0	1.35	0	46.0405	0	0	0	3.711	127 ha.	14.2875	127 ha.	131.7879

Details of the types of areas covered under the IWMP Programme:

1	2	3	4	5	6		7	8	9	10				11				
SL No	Name of State	Name of Districts	Names of Projects	Year of sanction	Project duration (dd/mm/ yyyy)		Area of the projects	Project cost (Rs. In lakh)	Names of Micro watersheds & Code nos. (as per DoLR's unique codification)	Area (ha) of the projects				Area details (ha) (falling within the projects)				
					From	To												
										Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland		Pvt. Agri. Land	Forest land	Community land	Others (pl. specify)	Total area (ha)
												a) Tempora ry fallow	b) Permanent					
1	Meghalaya	East Garo Hills	East Garo Hills IWMP- III	2010-2011	2010-2011	2014-2015	1000 ha	150 lakhs	East Garo Hills IWMP – III 3B1B5a6h, 3CIA5a2g	90 Ha.	-	910 Ha.	-	-	-	-	-	1000 ha

Fund provision for the IWMP projects from all sources:

1	2	3		4										5
District	Name of Projects	IWMP Fund		Funds from other sources in addition to IWMP funds										Total
				Convergence funds		PPP		Community		Institutional finance		Others (Pl. specify)		
		Central Share	State Share	Name of Scheme	Amount (Lakhs)	Name of private sector	Financial contribution	Name	Financial contribution	Name	Financial contribution	Name	Financial contribution	
East Garo Hills	East Garo Hills IWMP-III	135 lakhs	15 lakhs	NREGS	139.7079									

Details of Project Fund Accounts of Distt. Agency and Watershed Committees:

1	2	3	4	5				6				
Sl. No.	Names of States	Name of Districts	Names of Projects	Distt. Agency's Project Account details				Watershed Committee (WC) account details:				
				Name of the Bank and Branch where project account has been opened	Account Number (to be obtained confidentially)	Account type (Savings/ Current/ Others)	Name & Designation of authorized persons who operate the account.	Name of Watershed Committee	Name of the Bank and Branch where project account has been opened	Account number (to be obtained confidentially)	Account type (Savings/ current others)	Name & Designation of authorized persons who operate the account.
1	Meghalaya	East Garo Hills	East Garo Hills IWMP-III	Yet to be opened	Yet to be obtained	N.A.	Chairman W.C, Secretary W.C, Project Leader / WDT	East Garo Hills IWMP-III Watershed Committee	Yet to be opened	Yet to be obtained	N.A.	Chairman W.C, Secretary W.C, Project Leader / WDT

Details of Convergence of IWMP with other Schemes:

	1	2	3	4	5	6	7
Sl. No.	District	Names of projects	Names of Departments with Schemes converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakhs)	Name of activity/task/structure undertaken with converged funds	Reference no. of activity/ task/ structure in DPR [@]	Level at which decision for convergence was taken ^{\$}
					(a) Structures (b) livelihoods (c) Any other (pl. specify) [#]		
1	East Garo Hills	East Garo Hills – IWMP-III	* Community Rural Development Department NREGS	N.A.	(i) Agro – Horticulture – 120 ha. (ii) Plantation of Rubber – 127 ha.	List of NREGS Convergence Enclosed	Block Level & District Level

Note:

(i)

Public-Private Partnership in the IWMP projects: NIL

1	2	3	4			5		6	7	8	9
District	Name of project	Name of Private Sector Partner Agency	Type of agreement signed			Financial contribution		Partnership Interventions	Expected Outcomes	Actual Outcomes	Comments
			a)MoU	b)Contract	c) Any other (pl. specify)	IWMP	Private sector				

* from Column no. 2, total no. of States implementing the programme, from Column no. 3, total no. of Districts; from Column no. 4, total no. of projects under PPP; from Column no. 5, total no. of private companies/ agencies, from column no. 7, total amounts may be mentioned at the end of the table for the entire country.

CHAPTER VI CAPACITY BUILDING

Capacity Building is a process to systematically upgrade the skill of individuals or groups for achieving a specific target. Capacity building in the project has been planned for all the stake holders involved i.e. State Level, District Level, Project Level and Village Level. The relevant details pertaining to Capacity Building has been shown below.

Table 6.1: List of approved Training Institutes for Capacity Building:

1	2	3	4	5	6	7	8	9				
S. No	State	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designation of the Head of Institute	Type of Institute [#]	Area(s) of specialization ^{\$}	Accreditation details	Performance				
								Refer-ence Year	No. of trainings assigned	No. of trainees to be trained	No. of trainings conducted	No. of trainees trained
1	Meghalaya	NIRD (NER)	Guwahati	Director	Central Govt.	Remote Sensing, Rural Devt.	NA	-				
2		SIRD	Nongsder	Director	State Govt.	Capacity Building	NA	-				
3		RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship	NA					
4		ICAR	Umiam	Director	Central Govt.	Do	NA					
5		VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry	NA					
6		Fruit Garden	Shillong	Director	State Govt.	Agri-Horti, Fruit Processing	NA					

- From Column no. 2, total no. of States implementing the programme, from Column no. 3, no. of training institutes, from column No. 9, total no. of category-wise trainings and trainees may be given at the end of the table for the entire country

- # Central govt. Dept./ State govt. Dept./ Autonomous Body/ Research Institutes/ Universities/ Others (pl. specify)

\$ Capacity Building/ Agriculture/ Horticulture/ Animal Husbandry/ Pisciculture/ Remote Sensing/ Water conservation/ Ground water/ Forestry/ livelihoods/ entrepreneurship development/ others (pl. specify)

@ The training institutes must fulfill the conditions mentioned in the operations guidelines.

- (i) Technical experts in fields required by IWMP
- (ii) Past experiences
- (iii) Annual Turnover
- (iv) Receives funds either from the Central or State Government
- (v) Publications
- (vi) Not blacklisted by any Govt. organizations
- (vii) Audited accounts
- (viii) Organizational structure

Table 6.2: Capacity Building activities for the year 10-11 as on 31/03/2010 (dd/mm/yyyy)*

1	2	3	4	5	6		7	
Project Stakeholders	Total no. of persons	No. of persons trained so far	No. of persons to be trained during current financial year	No. of persons trained during current financial year	Sources of funding for training		Funds utilized (Lakhs)	
					a) DoLR	b) Any other (Pl. specify)	a) DoLR	b) Any other (Pl. specify)
SLNA			-	-	-	-	-	-
DRDA/ZP cell			-	-				
PIAs			-	-				
WDTs			-	-				
UGs			-	-				
SHGs			-	-				
WCs			-	-				
GPs			-	-				
Community			-	-				
Others Pl. specify)								

Table 6.3: Information, Education & Communication (IEC) activities for the year 10-11 as on 31/03/10 (dd/mm/yyyy)*

	1	2	3	4	5
	Activity	Executing agency	Estimated expenditure (Rs.)	Expenditure incurred (Rs.)	Outcome (may quantity, wherever possible)
1.	Awareness	S&WC (T) Division	0.50	0.50	
2	Exposure Visits	S&WC (T) Division	1.2	0.30	
3.	Capacity Building	S&WC (T) Division	5.3	.70	

CHAPTER VII **EXPECTED OUTCOME**

Table 7.1 Employment related outcomes:

Sl No	Name of Village	1										2				
		Wage employment										Self employment				
		No. of mandays					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1.	(i) Pakregre Chijong Apal (ii) Rongchek Songgitcham (iii) Gongrang (iv) Tarasin	-	48700	-	23200	48700	-	266	-	-	266	-	16	-	6	16

Table 7.2 Migration Details:

1	2	3	4	5	6	7	8	9	10	
Names of the Districts	Names of Projects	Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)	For reduced migration identify major activities of IWMP responsible	
									(a) Structures	(b) Livelihoods
				N	I	L				

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 5, total no. of villages; from column no. 6, total no. of persons migrating; from column no. 7, average no. of days for annual migration; from column no. 9, average distance of migration from the village and form column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

Table 7.3 Economic benefits accrued to women:

1		2		3		4
Wages		Training		Livelihoods		Total (Rs. in lakh)
Woman days	Amount (Rs. in lakhs)	No. of women participants	Amount (Rs. in lakhs)	No. of women beneficiaries	Value of assistance provided (Rs. in lakh)	
23200	2320000	N.A.	N.A.	N.A.	N.A.	2320000

* from Column no. 2, total no. of States implementing the programme, from Column no. 3 to 6, category-wise totals, may be mentioned at the end of the table for the entire country.

Table 7.4 Details of rights conferred in the CPRs of the project areas:

1	2	3	4	5	6	7				8
Names of the Districts	Names of the projects	Names of the villages	Particular of CPR	Nature of right	Period of right	Beneficiary details (no. of families)				User Charges (Rs.)
						SC	ST	Others	Total	
East Garo Hills	East Garo Hills IWMP-III	(i) Pakregre Chijong Apal (ii) Rongchek Songgitcham (iii) Gongrang (iv) Tarasin	Check Dam – 14 Nos.	F ,Fw, G, P, Rd, So, T, Wd, Wi.	Live Long	-	All	-	-	N.A.

* From column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, no. of projects; from column no. 5, no. of villages; from column nos. 9 & 10, particular-wise totals for the entire country may be given at the end of the table.

@ In column no. 6, the categories given in table no. M(SP) 10, column 5 may be filled as required.

In column no. 7, only the letter assigned to each type, as given below, needs to be typed.

F	for right to	fishing [culture, harvest and sale]
Fw	for right to	collect firewood for domestic purposes
G	for right to	grazing for cattle and
MFP	for right to	collect and sell minor forest produces
P	for right to	passage across the CPR
Rd	for right to	construct a road for access to individual property
S/M	for right to	collect and sell sand and minerals
T	for right to	collect timber for construction of house
Wd	for right to	collect/ use water for drinking
Wi	for right to	use water for irrigation
O	for any right other than indicated above	(please specify)

Table 7.5 Water related outcomes:

Table 7.5.1 Details of average ground water table depth in the project areas of the Country: State-wise * (in metres)

1	2	3	4	5	6	7	8
Names of Districts	Names of Projects	Sources	Pre-Project level	Mid-term project level	Post-Project level	Increase/decrease (Col. 8 – Col. 6)	Remarks
East Garo Hills	East Garo Hills IWMP- III	Open wells	-	-	-	-	-
		Bore wells	-	-	-	-	-
		Others (specify) Springs	very poor poor	poor	Good	Increased	-

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 to 9, the average measurements, category-wise, for the entire country may be given at the end of the table. The data must be based on the average of the Ground Water Table collected by PIA with the help of concerned technical expert in the same sample of 10 % of selected wells and bore wells in the villages in the watershed project area during pre-project, mid-term and post-project periods.

Table 7.5.2 Status of Drinking water:

1	2	3			4			5
District	Name of the project	Availability of drinking water (no. of monyhs in a year)			Quality of drinking water			Comments
		Pre-project	Post-project	Change in availability	Pre-project	Post-project	Change in quality	
East Garo Hills	East Garo Hills IWMP - III	Insufficient	Sufficient	10 – 12 months	Moderate	Improved	Improved	-

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, category-wise no. of projects, from column no. 5, average no. of months may be given at the end of the table for the entire country.

Table 7.5.3 Water Use efficiency:

1	2	3	4			
District	Name of the project	Name of major crop	Water savings in cu.m.			
			through water saving devices ^{\$}	through water conserving agronomic practices [#]	Any other (pl specify)	Total
East Garo Hills	East Garo Hills IWMP - III	Paddy	-	-	-	-
		Ginger	-	-	-	-

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 6, practice-wise totals may be mentioned at the end of the table for the entire country.

^{\$} Sprinkler, Drip, PVC pipe, etc.

[#] Vermi-compost, organic manuring, Mulching, Check basin, Alternate furrow, Ridges & furrow & other scientific practices.

Table 7.6: Vegetation/ crop related outcomes:

Table 7.6.1 Details of Karif crop area and yield in the project areas:

1	2	3	4						5						6					
Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
			Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
			Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
East Garo Hills	East Garo Hills – IWMP	Paddy	-	120	-	1400	-	1400	-	-	-	-	-	-	-	600	-	2000	-	2000
		Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Soyabean	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Yam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Ginger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tapioca	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Betel nut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Betel leaf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Black Pepper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Oranges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.
Irri. – Irrigated Rf – Rainfed

Table 7.6.2 Details of Rabi crop area and yield in the project areas:

1	2	3	4	5	6						7						8					
Sl No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
					Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
1.	Meghalaya	East Garo Hills	East Garo Hills – IWMP	Paddy	-	-	-	-	-	-	-	-	-	-	-	-	-	200	-	1800	-	1800
				Ginger	-	130	-	5570	-	5570	-	-	-	-	-	-	-	200	-	6000	-	6000

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.3 Details of Zaid crop area and yield in the project areas of the Country: State-wise:

1	2	3	4	5	6						7						8					
SI No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
					Area (ha)		Average Yield (Qtl) per ha.		Total Producti on (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Productio n (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
									N	I	L											

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.4 Increase/ Decrease in area under fodder:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under fodder (ha)			Achievement (ha)		
			Source/Name of report	Year of reference	Area already under fodder	Area under fodder proposed to be covered through IWMP	Area under fodder actually covered through IWMP	Change in area under fodder
East Garo Hills	East Garo Hills IWMP - III	5 yrs	NA	NA	NA	Nil	Nil	Nil

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.5 Increase/ Decrease in Forest/vegetation cover:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area tree cover (ha)			Achievement (ha)		
			Source/Name of report	Year of reference	Area already under forest/vegetative cover	Forest/vegetative cover area proposed to be covered under IWMP	Forest/vegetative cover area actually covered under IWMP	Change in forest/vegetative cover area
East Garo Hills	East Garo Hills IWMP - III	5 yrs	Statistical Report, Meghalaya	-	-	260 Ha.	-	-

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.6 Increase/ Decrease in area under horticulture:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under horticulture (ha)			Achievement (ha)		
			Source/Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Area under horticulture actually covered through IWMP	Change in area under horticulture
East Garo Hills	East Garo Hills IWMP- III	5 yrs	-	-	-	120 Ha.	-	-

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.7 Increase/ Decrease in area under fuel-wood:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under fodder (ha)			Achievement (ha)		
			Source/Name of report	Year of reference	Area already under fuel-wood	Area under fuel-wood proposed to be covered under IWMP	Area under fuel-wood actually covered under IWMP	Change in area under fuel-wood
East Garo Hills	East Garo Hills IWMP - III	5 yrs	Nil	Nil	Nil	Nil	Nil	Nil

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.7 Livelihood related outcomes:

Table 7.7.1 Details of livestock in the project areas (for fluids please mention in litres, for solids please mention in kgs. and income in Rs.):

1	2	3	4			5			6			7
Names of the Districts	Name of Projects	Type of Animal	Pre-project			Mid-term			Post-project			Remarks
			No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	
East Garo Hills	East Garo Hills IWMP - III	Milch- animals										
		Piggery										
		Poultry										
		Apiculture in unit										
	Total for all projects											
Total for all Districts												

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 5 to 8, the total nos. of animals and the average yield and incomes, category-wise, for the entire country may be given at the end of the Table.

Table 7.7.2 Details of other livelihoods created for landless people:

1	2	3	4	5				6	7					8				
District	Project	Name of activity	Fund required for the activity (Rs.)	Sources of funding (Rs.)				Actual Expenditure incurred on activity (Rs.)	No. of beneficiaries trained					No. of beneficiaries taking up activity				
				Project Fund	Beneficiary	Others (pl. specify)	Total		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
East Garo Hills	East Garo Hills IWMP - III	Tailoring																
		Basket - Making/Carpentry			AS ENCLOSED IN ACTION PLAN													
		Stabilized Mud - making																
		Kitchen - gardening																

(Contd.)

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of activities; from column no. 6, total funds required for the activity, from column no. 7 to 12, category-wise totals, from column no. 13, category-wise totals, for the entire country may be given at the end of the Table.

Table 7.7.3 Details of other livelihoods created for landless people:

9		10	11				12
No. of persons employed indirectly in the activity		Annual increase in income due to activity (Rs.)	Impact of livelihoods programme				Any other information (pl. Specify)
			Migration (No. of beneficiaries)		Development of backward-forward linkages		
Total	Grand Total (8+9)		Pre-project	Post-project	Pre-project	Post-project	
			AS ENCLOSED IN ACTION PLAN				

Table 7.7.4 Details of other livelihoods created for farmers:

1	2	3	4	5				6	7				8			
District	Project	Name of activity	Fund required for the activity (Rs.) in lakhs	Sources of funding (Rs.) in Lakhs				Actual Expenditure incurred on activity (Rs.)	No. of farmers trained				No. of farmers taking up activity			
				Project Fund	Benefi-ciary	Others (pl. specify)	Total		SF	MF	LF	Total	SF	MF	LF	Total
East Garo Hills	East Garo Hills IWMP - III															
				AS ENCLOSED IN ACTION PLAN												

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of activities; from column no. 6, total funds required for the activity, from column no. 7 to 12, category-wise totals, from column no. 13, category-wise totals, for the entire country may be given at the end of the Table.

Table 7.7.5 Details of other livelihoods created for farmers * (contd.)

9		10	11				12
No. of persons employed indirectly in the activity		Annual increase in income due to activity (Rs.)	Impact of livelihoods programme				Any other information (pl. Specify)
			Migration (No. of beneficiaries)		Development of backward-forward linkages		
Total	Grand Total (8+9)		Pre-project	Post-project	Pre-project	Post-project	
			NIL	NIL	NIL	NIL	NIL

Table 7.8 Marketing related outcomes:

Backward-Forward linkages *

1	2	3	4	5	6
District	Project	Type of Marketing Facility	Pre-project (no.)	During the project (no.)	Post-project (no.)
East Garo Hills	East Garo Hills IWMP-III	(A) Backward linkages	-	-	-
		(i) Seed certification	-	-	-
		(ii) Seed supply system	-	-	-
		(iii) Fertilizer supply system	-	-	-
		(iv) Pesticide supply system	-	-	-
		(v) Credit institutions	-	2	2
		(vi) Water supply	-	-	-
		(vii) Extension services	-	1	1
		(viii) Nurseries	-	4 Nos.	4 Nos.
		(ix) Tools/machinery suppliers	-	3 Nos.	3 Nos.
		(x) Price Support system	-	-	-
		(xi) Labour	-	1000	1200
		(xii) Any other (please specify)	-	-	-
		(A) Forward linkages	-	-	-
		(i) Harvesting/threshing machinery	-	-	-
		(ii) Storage (including cold storage)	-	-	-
		(iii) Road network	-	2 Nos.	2 Nos.
		(iv) Transport facilities	-	-	-
		(v) Markets / Mandis	-	2 Nos.	2 Nos.
		(vi) Agro and other Industries	-	-	-
		(vii) Milk and other collection centres	-	-	-
		(viii) Labour	-	1300	1500
		(ix) Any other (please specify)	-	-	-

* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 6, 7 & 8, category-wise totals may be given at the end of the table for the entire country.

Table 7.9 Abstract of outcomes:

1	2	3	4	5	6	7
Sl. No.	State	Item	Unit	Pre-project Status	Post-project Status	Remarks
		Status of water table	-	-	Good	
		Ground water structures repaired/ rejuvenated	-	-	4 Nos.	
		Quality of drinking water	-	-	Improved	
		Availability of drinking water	-	-	Sufficient	
		Increase in irrigation potential	-	-	-	
		Change in cropping/ land use pattern	-	-	-	
		Area under agricultural crop	-	-	-	
		i Area under single crop	-	-	-	
		ii Area under double crop	-	-	-	
		iii Area under multiple crop	-	-	-	
		Net increase in crop production area	-	-	-	
		Increase in area under vegetation	-	-	135 Ha.	
		Increase in area under horticulture	-	-	120 Ha	
		Increase in area under fuel & fodder	-	-	-	
		Increase in milk production	-	-	-	
		No. of SHGs	-	-	4 Nos.	
		Increase in no. of livelihoods	-	-	-	-
		Increase in income	-	-	48000	
		Migration	-	-	-	
		No. of school going children	-	-	-	
		SHG Federations formed	-	-	-	
		Credit linkage with banks	-	-	2 Nos.	
		Resource use agreements	-	-	-	-
		WDF collection & management	-	-	1 No.	
		Summary of lessons learnt	May be attached as a separate file			

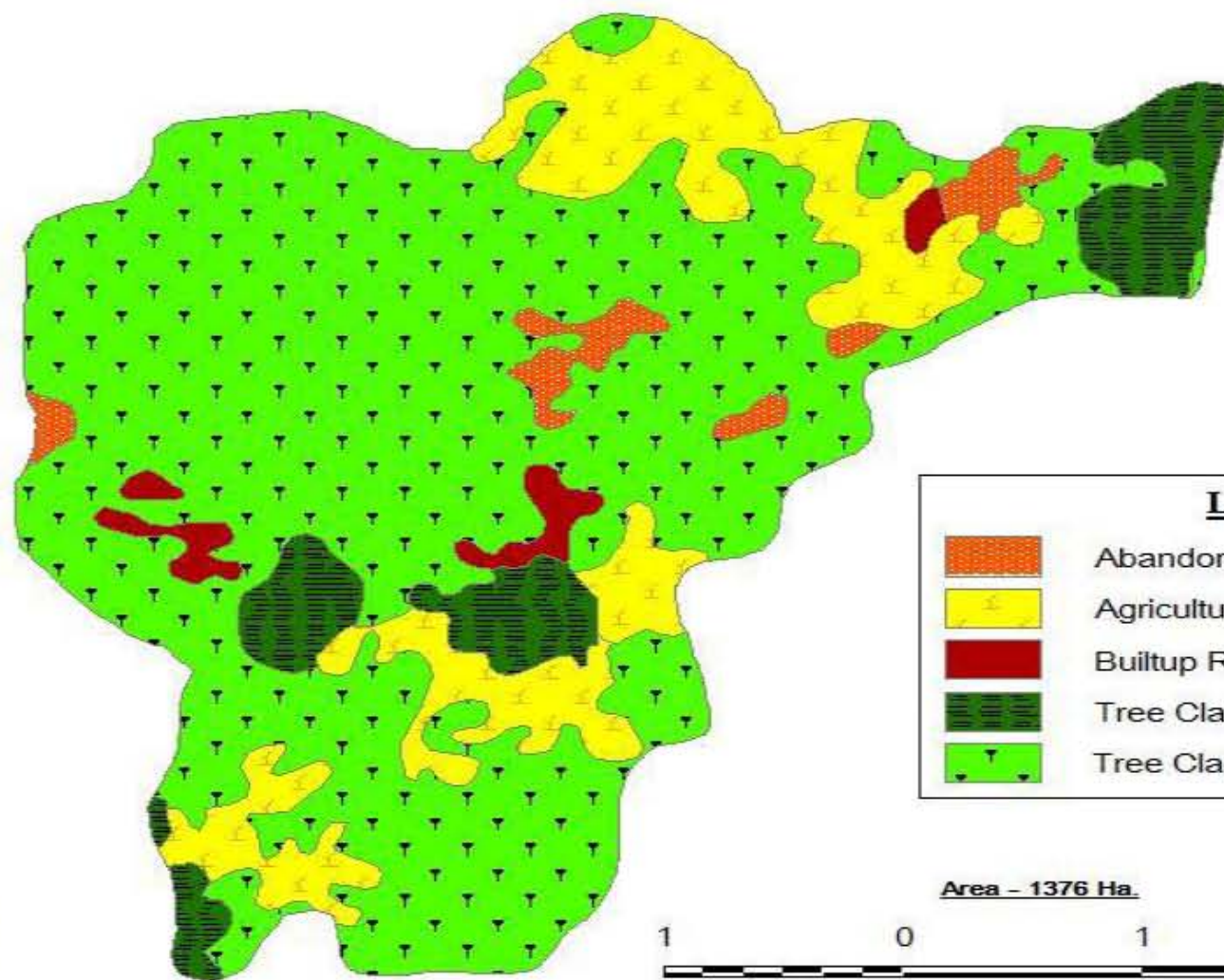
Table 7.10 Cost effectiveness of structures/ activities*

1	2	3	4	5	6	7	8	9	10
District	Name of project	Name of WC	Name of structure/ activity	Estimated cost (Rs.)	Expected quantifiable benefits (Rs.)	Expenditure incurred (Rs.)	Actual quantifiable benefit (Rs.)	Benefit: Cost ratio [#]	IRR
East Garo Hills	East Garo Hills IWMP III	East Garo Hills – IWMP III Watershed Committee	N.A.	117.0 Lakh	N.A.	N.A.	N.A.	1: 1.5	N.A.

* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from Column no. 4, no. of projects, from column no. 5, no. of WCs, from column no. 6, no. of structures/ activities, from column no. 7 to 10, category-wise# totals, may be mentioned at the end of the table for the entire country.

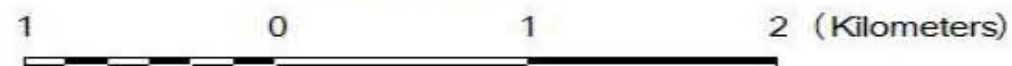
[#] B:C ratio more than 1 – cost effective
less than 1 – Not cost effective

Landuse Lancover Map Middle Manda Watershed IWMP (EGHD)



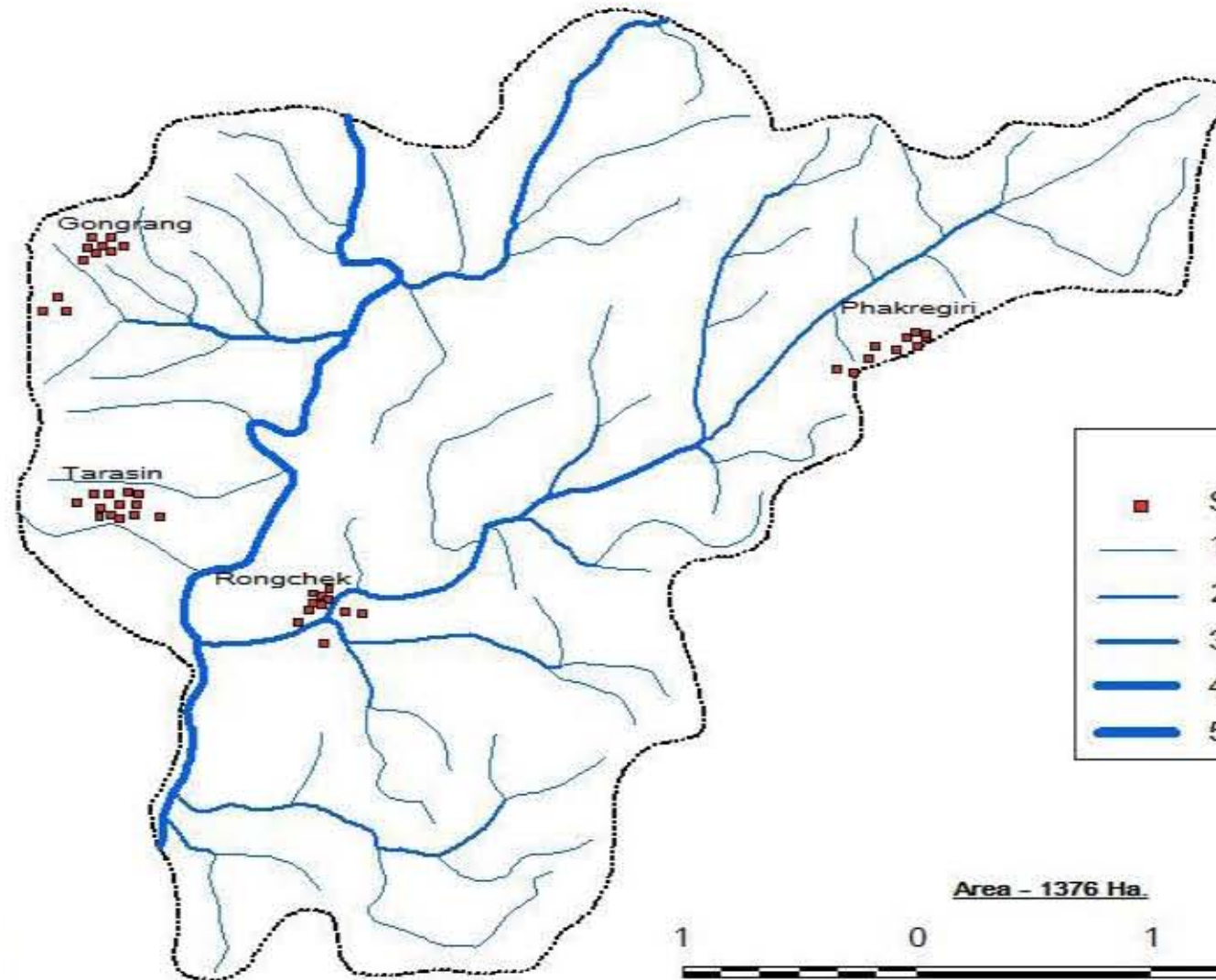
Legend		
	Abandoned Jhum	- 39 Ha.
	Agriculture	- 227 Ha.
	Builtup Rural	- 28 Ha.
	Tree Clad close	- 115 Ha.
	Tree Clad Open	- 967 Ha.

Area - 1376 Ha.



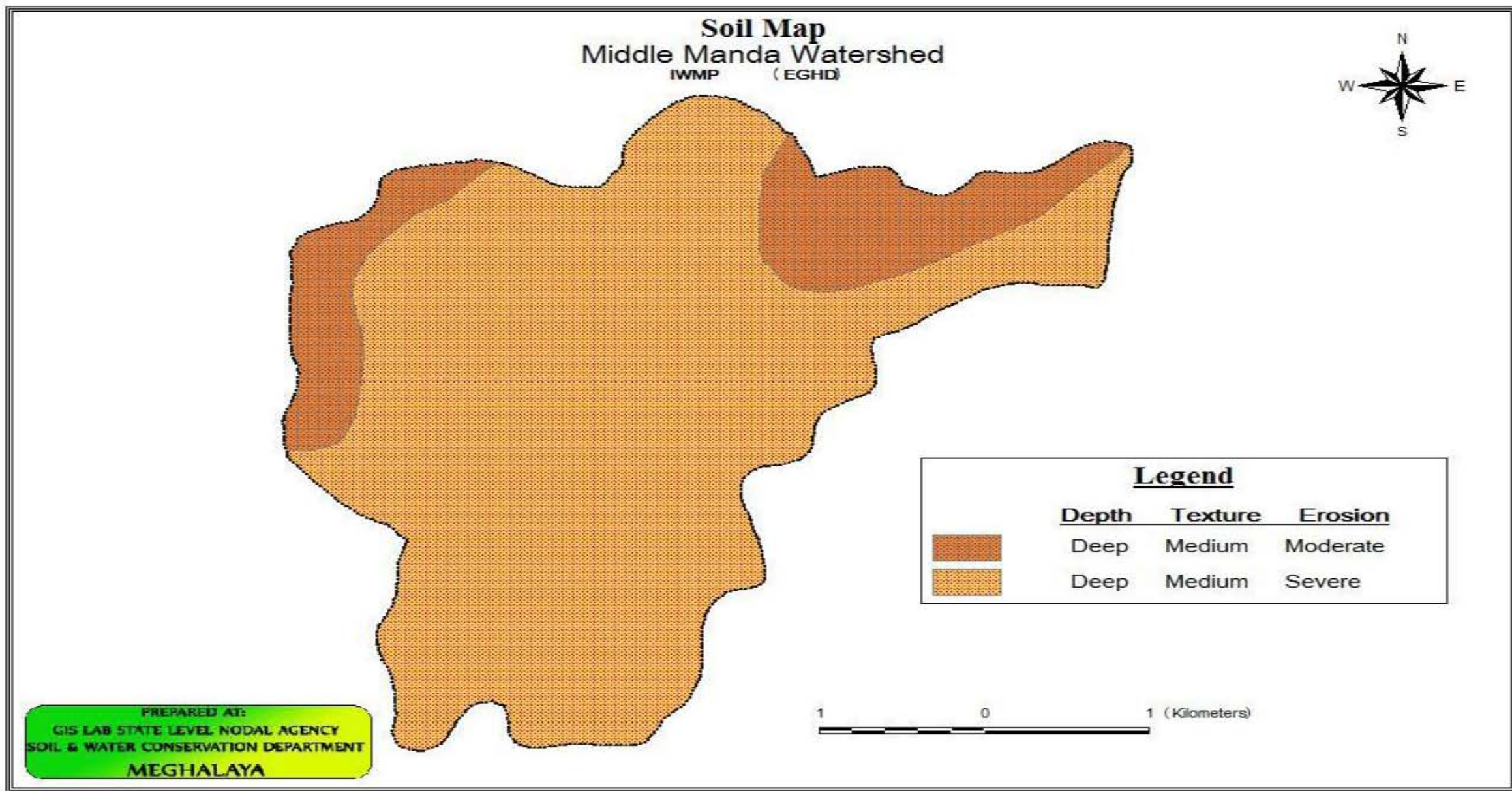
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SOIL & WATER CONSERVATION DEPARTMENT
MEGHALAYA

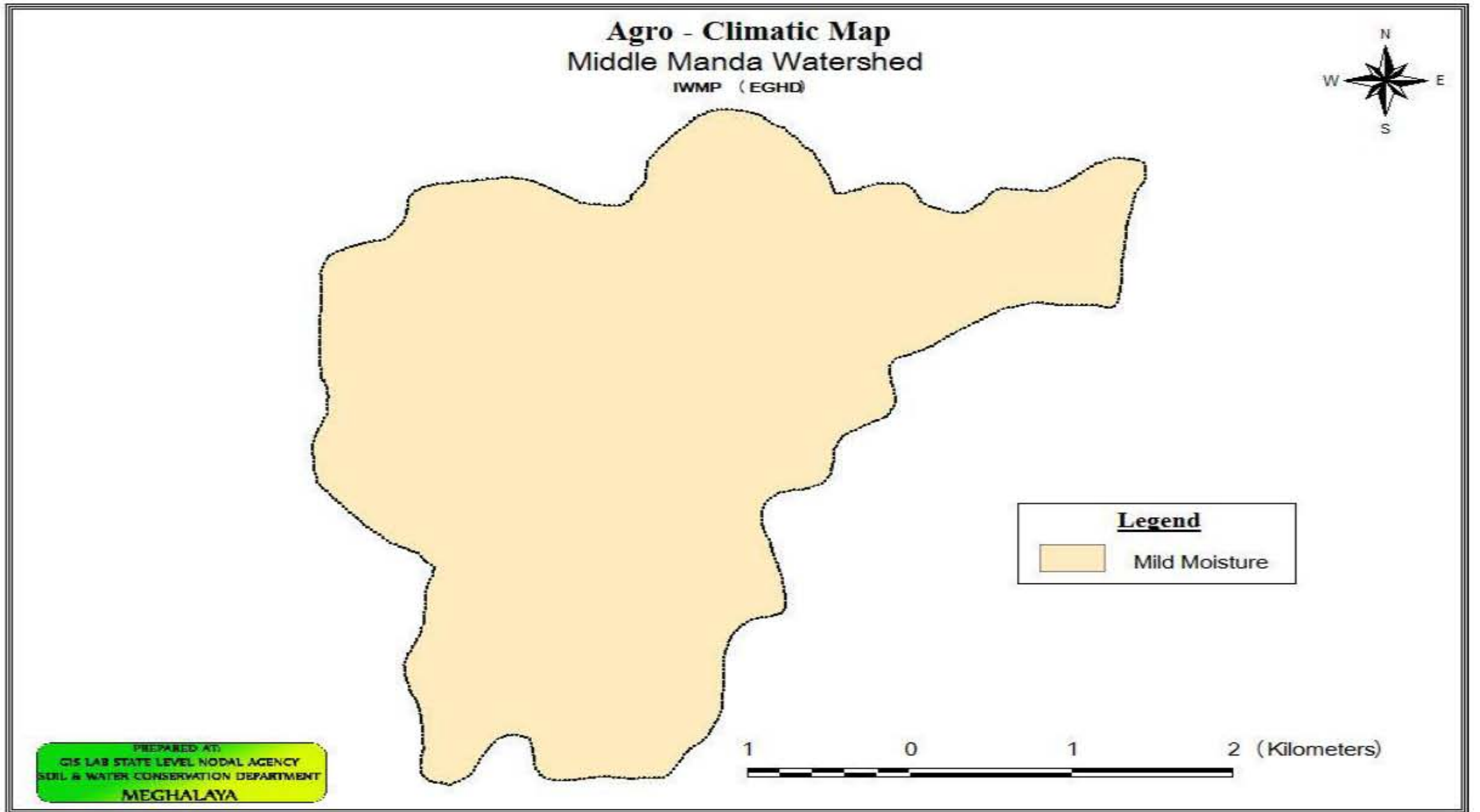
Drainage Map
Middle Manda Watershed
IWMP (EGHD)



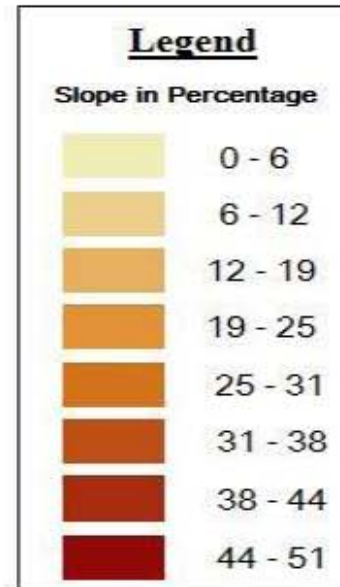
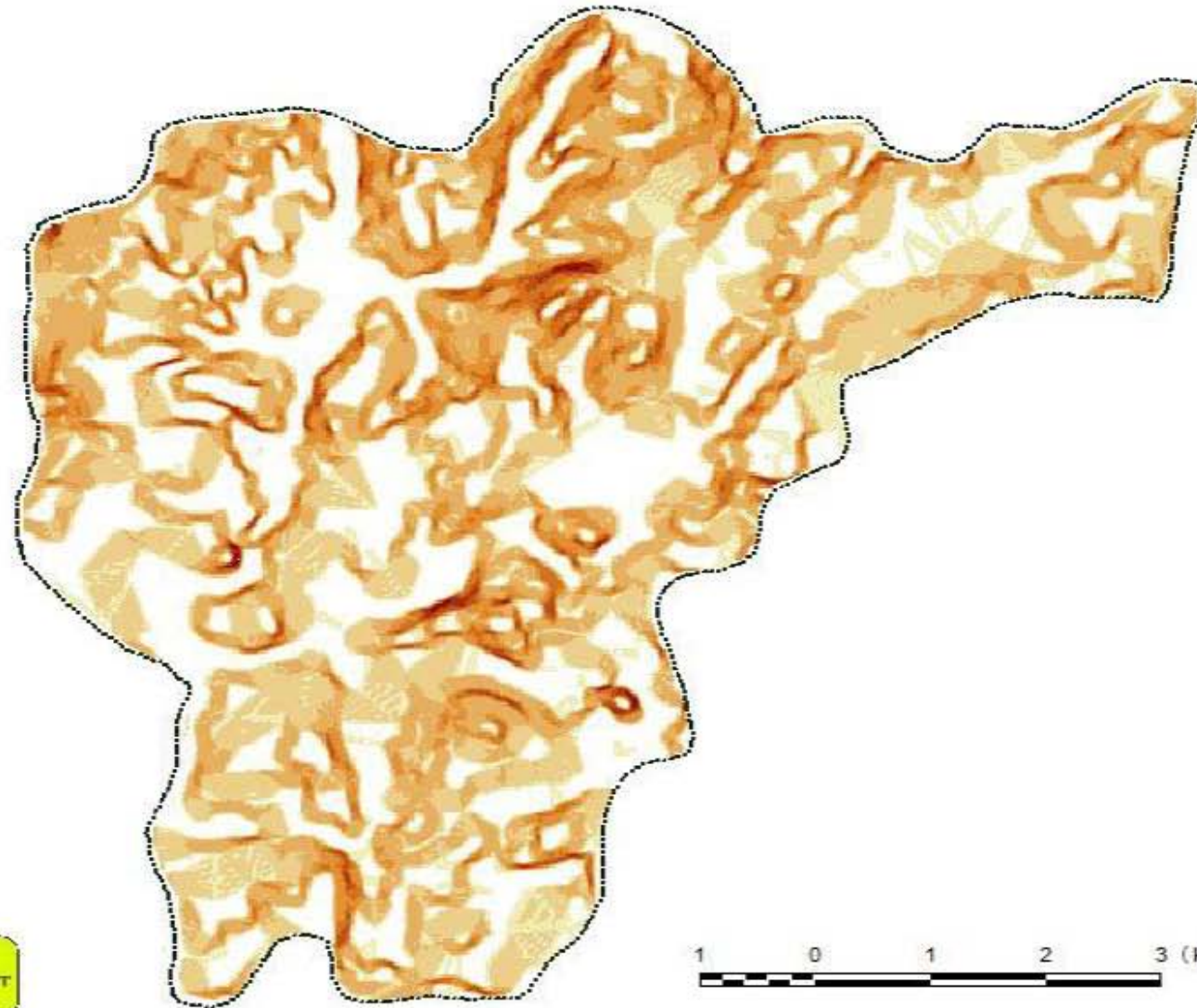
Legend	
	Settlement
	1st Order Stream
	2nd Order Stream
	3rd Order Stream
	4th Order Stream
	5th Order Stream

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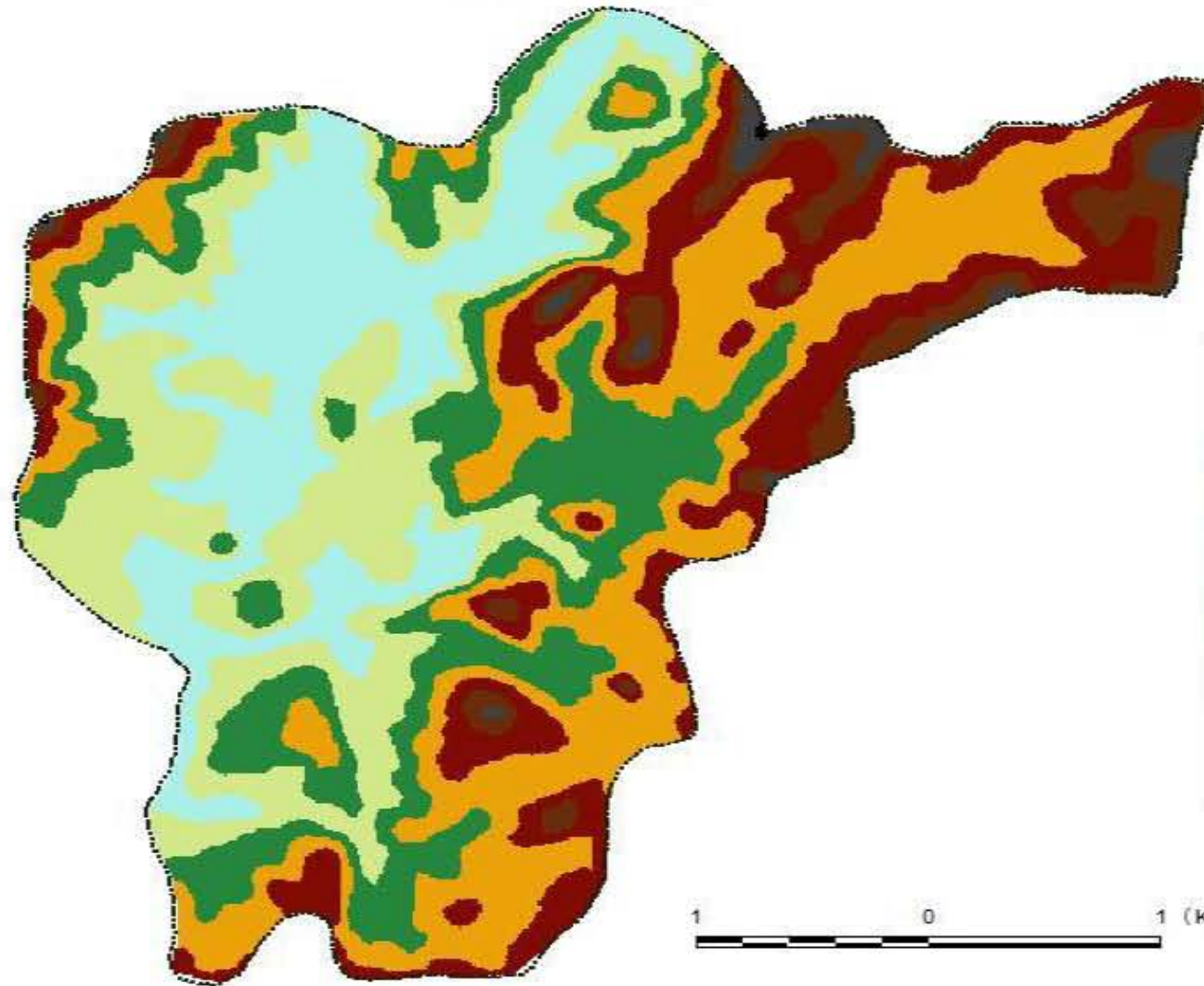
Slope Map
Middle Manda Watershed
IWMP (EGHD)



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1 0 1 2 3 (Kilometers)

Elevation Map
Middle Manda Watershed
IWMP (EGHD)

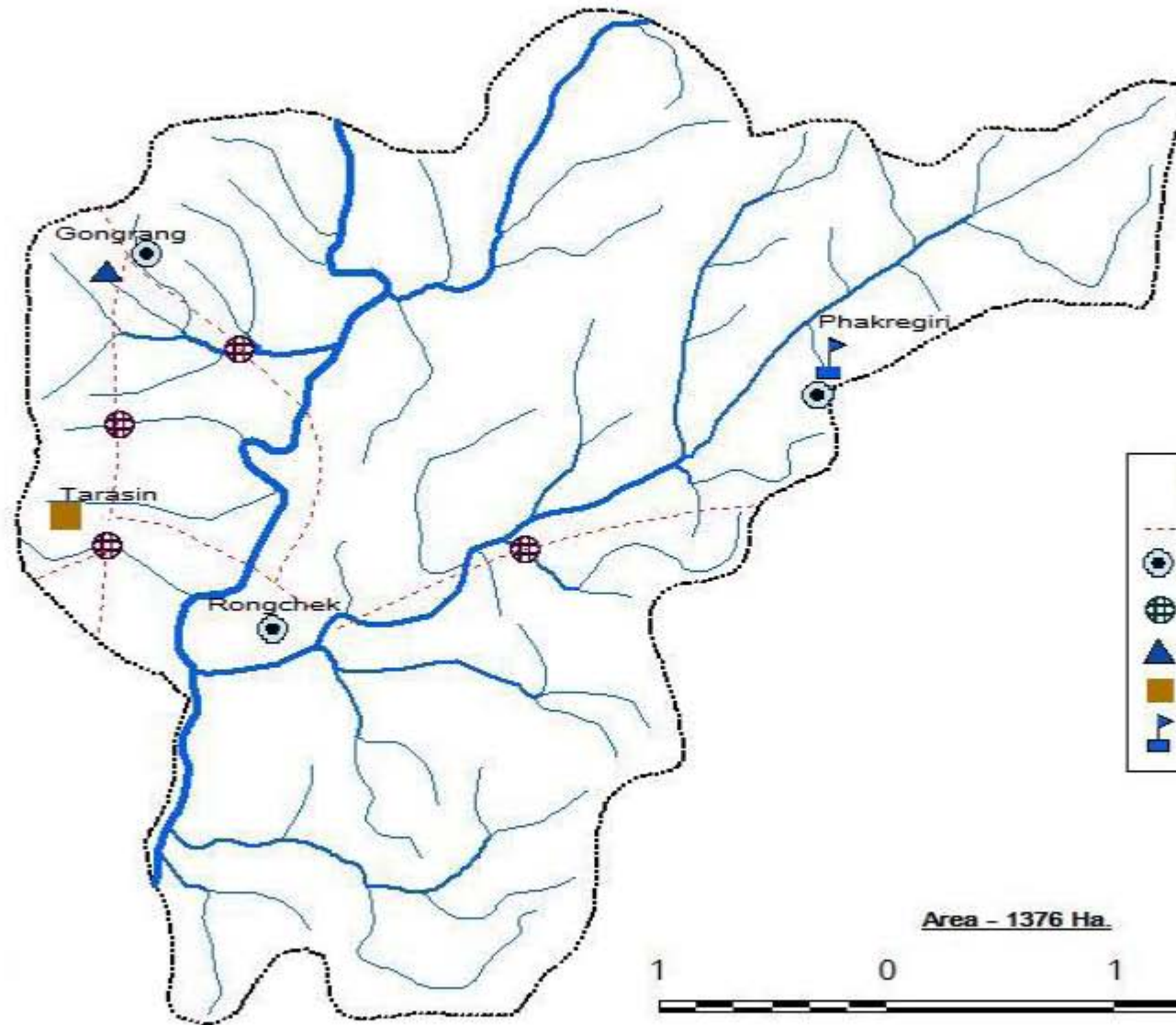


Legend	
Elevation in Metres	
	279 - 302
	302 - 325
	325 - 348
	348 - 371
	371 - 394
	394 - 417
	417 - 440
	440

1 0 1 (Kilometers)

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Entry Point Activity
Middle Manda Watershed
IWMP (EGHD)



Legend

- Footpath
- Ringwell
- ⊗ Culvert
- ▲ Community Hall
- Playground
- ▢ School Building

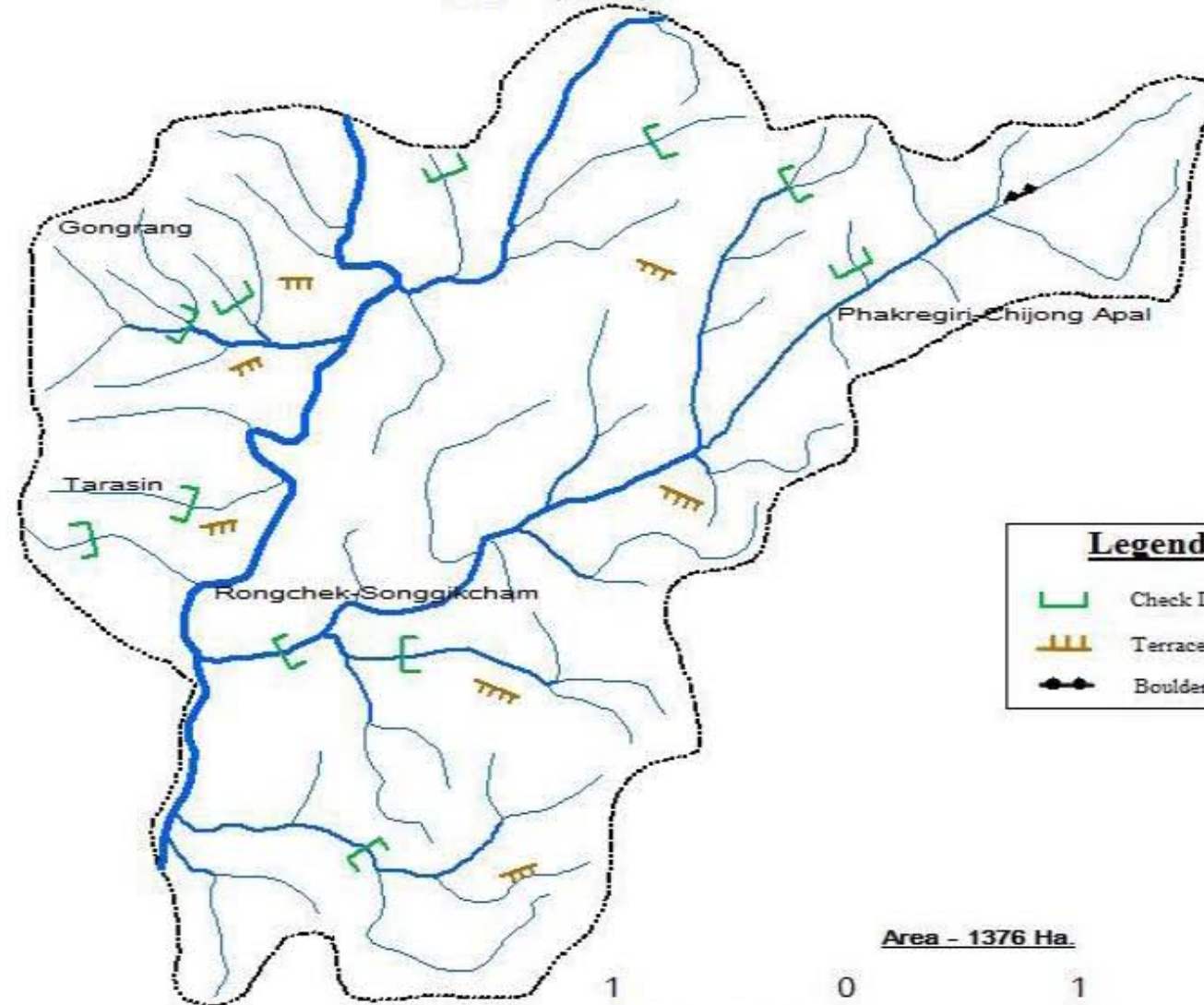
Area - 1376 Ha

1 0 1 2 (Kilometers)

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Proposed Engineering Map Middle Manda Watershed

IWMP (EGHD)



Legend

- Check Dam
- Terrace
- Boulder Sausage

Area - 1376 Ha.

1 0 1 2 (Kilometers)

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