

DETAILED PROJECT REPORT

1. AMLYMPIANG

2. AMKAHOH

INTEGRATED WATERSHED MANAGEMENT PROJECT

JH - IWMP – V

2010-2011

AMLAREM C&RD BLOCK

JAINTIA HILLS DISTRICT

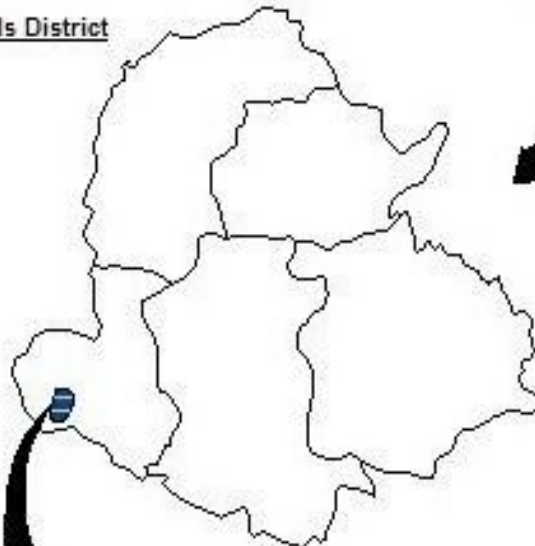
MEGHALAYA

Location Map

Meghalaya



Jaintia Hills District



Amlympianq Micro Watershed

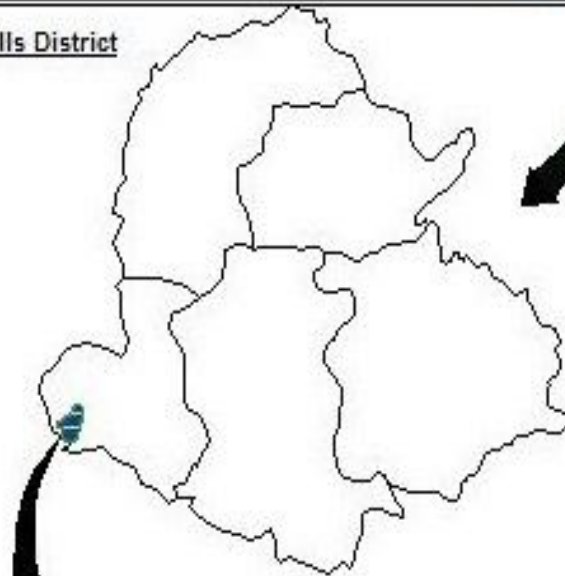


Location Map

Meghalaya



Jaintia Hills District



Amkahoh Micro Watershed



SUMMARY OF THE PROJECT.

Name of the State	:-	Meghalaya
Name of the District	:-	Jaintia Hills
Name of the C & RD Block	:-	Amlarem
Name of the Project	:-	Jaintia Hills – IWMP-V
Total Geographical Area	:-	2494 Ha.
Total Treatment Area	:-	2000Ha.
Total Project Cost	:-	Rs. 300.00 Lakhs
Project Duration	:-	5 Years
Name of the Micro Watershed	:-	(i) Amlympiang (ii) Amkahoh
With Name of the Villages		(i) Nongtalang (ii) Sohkha Shnong. Sohkha Mission, Sohkha Phlang
Project Implementing Agency	:-	Soil & Water Conservation Territorial Division, Jowai.

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CHAPTER I

INTRODUCTION AND BACKGROUND

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INTRODUCTION AND BACKGROUND

1.1 Project Background:

The JH-IWMP-V is derived from the Amlarem C&RD Block which falls in the Jaintia Hills District. There are 2 Nos of Micro Watersheds and 4 Nos of villages. The Watersheds are (i) Amlympiang Micro–Watershed comprising the Nongtalang village within its fold and (ii) Amkahoh Micro-Watershed comprising the villages of Sohkhah Shnong, Sohkhah Mission and Sohkhah Phlang within its boundary. Both the Micro Watersheds flows from North to South and drains at the Umngot River

1.2 Micro Watershed Information:

The micro-watershed codes are (1) Amlympiang - 3C1C2c4e and (2) Amkahoh – 3C1C2c4b, as codified by the North East Space Application Centre (NESAC). The total area of the micro-watersheds is 2494 Ha.out of which 2000 hectares is to be treated under the Integrated Watershed Management Programme (IWMP).

1.3 Need and Scope for Watershed Development:

The micro-watersheds falls under the High Priority category as per the prioritization of watersheds by the North East Space Application Centre (NESAC). There are lot of scope for various types of plantations like agro-horticulture which includes Citrus, Bettel Nut and Bettel Leaves plantations for increasing the livelihood and agricultural product and also to enhance the ground water table in the watershed area..

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

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

- i. MGNREGS
- iii. Total Sanitation Campaign (TSC)
- iii. Swarnjayanti Gram Swarozgar Yojana (SGSY)
- iv. Indira Awas Yojana (IAY)

CHAPTER II

BASIC INFORMATION OF THE PROJECT AREA

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BASIC INFORMATION OF THE PROJECT AREA

2.1 Location:

The project area under report is located in the located in the Amlarem C&RD Block, Jaintia Hills District and according to the Survey of India toposheet No. $83\frac{C}{8}$ the micro Watershed of (i) Amlympiang is situated between North Latitude $25^{\circ}11'$ and $25^{\circ}14'$ and East Longitude $92^{\circ}01'30''$ and $92^{\circ}06'30''$ and (ii) Amkahoh – North Latitude $25^{\circ}11'$ and $25^{\circ}14'30''$ and East Longitude $91^{\circ}59'30''$ and $92^{\circ}05'$. There are 2 Nos of Micro Watersheds and 4 Nos of Villages namely (i) Nongtalang (ii) Sohkhah Shnong (iii) Sohkhah Mission and (iv) Sohkhah Phlang. The total area of JH-IWMP-V is about 2494 ha, out of which 2000 Ha is proposed for treatment under different Soil & Water Conservation activities. Both the Watersheds Area are located on the sides of the NH-40 (E) running from Jowai to Dawki.

2.2 Physiography:

The Micro Watershed of (i) Amlympiang is oval in shape having the maximum altitude of 850 mts and minimum altitude of 480 mts above means sea level and (ii) Amkahoh is irregular in shape having the maximum altitude of 815 mts and minimum altitude of 480 mts above means sea level, The general topography of all the micro watersheds is moderately to slightly steep sloping with slope varying between 10 % to 40 %. The land of all the micro watersheds under report can be divided into three physiographic units (i) Intermediate plateau with gradient above 33 % slope (ii) Lower Plateau with gradient ranges from 15 to 33 % slope (iii) Valley rolling, undulating almost flat gradient varying 1 to 15 % slope. The over all drainage pattern is excessive and normal.

Table 2.1: Physiographic Details

Elevation (metres)	Slope Range (%)	Order of watershed Sub/Micro-watershed	Major streams	Topography
480 m to 850 m	10% to 40 %	Micro Watershed	Amlympiang & Amkahoh	Modarate to Steep Sloping

- 2.3 Drainage:** The major stream draining the micro-watersheds are the Amlympiang & Amkahoh rivers which both are 1st order stream flowing from north to south direction and drain at the Umngot River. The slopes of the micro-watersheds are dissected by numerous small tributaries of both Amlympiang and Amkahoh.
- 2.4 Soil:** The most common texture of the Soil in the Project is reddish clayey loam with top humus layer of about 4 cm deep. The depth of Soil generally varies between 50cm and 150cm, excessively drained, fine soil having loamy surface with moderate erosion hazard. Chemically the Soils are acidic in nature (ph value 6 and below) low in Nitrogen and Phosphorous and medium in Potassium content.

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

1	2	3	4	5	6	7	8	9
Sl. No.	Name of States	Name of District	Name of Projects	Cause	Types of erosion	Area affected (ha)	Run-off (mm/year)	Average soil loss (Tonnes/ha/year)
1	Meghalaya	Jaintia Hills	JH-IWMP-V	Water erosion				
				a	Sheet	NA	1400-2200	10.5 – 32.5
				b	Rill	NA		
				c	Gully	NA		
				Sub total		NA		
				Wind erosion		NA	NA	NA

2.5 Climate: The JH-IWMP-V is located in the Hills of Southern slopes 480 – 850 mts altitude from the mean Sea level of Agro-Climatic Sub-zone. From November to March the weather is dry, night is slightly cold and from June to October with the onset of South Western Monsoon the atmospheric temperature and humidity start rising. The mean temperature varies between maximum of 24.80°C and minimum of 8.5°C and humidity is varies between 94.20 and 55.30. The Maximum and Annual rainfall for 5 years are 3180.6 mm and 2895.20 mm respectively. The average rainfall has been about 1215.16mm.

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)	Name of the Districts	Name of the Projects	Major soil types		Average rainfall in mm (preceding 5 years average)	Major crops	
						a) Type	b) Area (ha)		a) Name	b)Area (ha)
1	Meghalaya	Central Thermic Plateau 480 – 850m	2494	Jaintia Hills	JH-IWMP-V	Loam to clay Loam	2494	1215.16 mm	Bettle Nut	155
									Betel Leave	85
									Citrus	110

- 2.6 Agriculture:** Horticulture plantation is the primary occupation of the people of the area. The people mostly planted their crops in the slopes. The size of the plantations varies between 1.00 ha to 1.50 ha. The principal horticulture crops grown are Betel Nut, Betel Leave and Citrus. The farmers also grow others horticulture cropsjack fruit, mango, pears, peach, plum, etc in their homestead garden which contribute to their income.

Table 2.4: Crop yield and production

Crops	Area (ha)	Average Yield (Qtl) per ha.	Total Production (Qtl.)
Betel Nut	155	10-15	1550-2325
Betel Leave	85	11-15	935-1275
Citrus	110	12-15	1320-1650

- 2.7 Natural Vegetation:-**The Project area is cover predominantly with mixed miscellaneous forest. The common species are:-

- Quercus Species (Diengsning; Diengsai).
- Castonopsis Species (Diengstap, Diengsoh ot).
- Michelus Species (Diengrang)
- Betula anoides (Dienglieng).
- Schima Wallichii (Diengngan).
- Myrica negre (Diengsoh phie)
- Carpinus Mancany Species (Diengsohrisang).

The prevalent creepers are listed below:

- Holbocilia latifolia (Soh lyngkait)
- Embelia floribenda (Jajew).
- Celastone feniculate (Mei-jynru).

2.8 Socio-Economic Profile: Socio- Economic Survey was conducted in all the 4 villages of the project area. A simple proforma was designed to collect information. The project area is inhabited by a population who are mainly dependent on agriculture for their livelihood.

Table showing the population, sex, agri-workers and occupation of 4 villages of JH-IWMP-V (2010-2011)

SI No.	Villages	No. of family	Total Population	Sex				Agri-workers	Literacy		Occupation
				Male	Female	Boys	Girls		Male	Female	
				A	A	M	M				
1.	Nongtalang	211	1487	253	256	486	492	625	218	276	Predominantly farmers
2.	Sohkha Shnong	97	711	129	116	233	233	358	256	245	- do -
3	Sohkha Mission	85	608	118	124	186	180	287	238	226	- do -
4	Sohkha Phlang	9	62	11	12	22	17	35	24	36	- do -
	Total-	402	2868	511	508	927	922	1305	736	783	

Socio- Economic Condition:- The Socio Economic set up of the people in the project area is very poor. The average annual income is about Rs. 32,000/-year/ household, since the prime occupation of the people is plantation crop cultivation.

Infrastructure facilities :

- 2.1.0 *Roads:* All the villages within the Project Area are connected by metalled road.
- 2.1.1 *School:* There are 1 H/S School, 5 nos of upper primary school; 6 nos of LP Schools within the Project Area.
- 2.1.2 *Electricity:* Electricity is available in all the villages .
- 2.1.3 *Health:* There is 1 CHC in the project area.
- 2.1.4 *Water Supply:* Drinking water supply has been provided by the PHE Deptt. However, during lean season the entire population has to depend on springs available in the area as the supply is not sufficient to meet the daily requirement.
- 2.1.5 *Market:* There is a weekly market held once in a week at Dawki. However, the main market where the people sell their produce is at at law musiang Jowai.

Table 2.5: Infrastructure Status:

Name of District	Name of Project	Parameters:		Status			
Jaintia Hills	JH-IWMP- V	(i)	No. of villages connected to the main road by an all-weather road.	4			
		(ii)	No. of villages provided with electricity	4			
		(iii)	No. of households without access to drinking water	-			
		(iv)	No. of educational institutions: Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	(P) 6	(S) -	(HS) 1	(VI) Nil
		(v)	No. of villages with access to Primary Health Centre	4			
		(vi)	No. of villages with access Veterinary Dispensary	-			
		(vii)	No. of villages with access Post Office	4			
		(viii)	No. of village with access Banks	1			
		(ix)	No. of villages with access Markets/ mandis	2			
		(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) Nil	(S) Nil	(PA) Nil	(O) Nil
		(xiii)	No. of villages with access to Anganwadi Centres	2			
		(xiv)	Any other facilities with no. of villages (please specify)	Nil			

2.9 Livestock: there are only 2 kinds of livestock farming being practiced in the area viz. Piggery & Poultry Farming

Table 2.6: Existing livestock population

Type of Animal	Population
Piggery	469
Poultry	1255
Total	1724

2.10 Land Ownership:

The land may be classified into

- Private land (Ri- Kynti)
- Community land (Ri Raid land) and
- Clan land (Ri Kur land)

Land use : - the Horticultural crops are planted on the hill slopes.

Farming system:- A traditional type of farming;

Cropping pattern:- Multi Cropping is practiced.

Table 2.7 Land holding:

1	2	3	4	5	6		
Name of District	Name of projects	Types of Farmer	No. of households	No. of BPL household	Land holding (ha)		
					Irrigated	Rainfed	Total
Jaintia Hills	JH-IWMP- V	(i) Large	18	-	-	180	-
		(ii) Small	148	-	-	276	-
		(iii) Marginal	210	-	-	594	-
		(iv) Landless	26	-	-	-	-
		Sub - Total	402	-	-	1050	-

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)
Jaintia Hills	JH-IWMP-V	(i) Wasteland/ Scrub Forest				796 ha				740 ha
		(ii) Pastures								
		(iii) Private land	1050 Ha				1050			
		(iv) Village woodlot								
		(v) Forest (degraded)				342 ha				210
		(vi) Village Ponds/ Tanks								
		(vii) Community Buildings		6 nos		5 Nos				
		(viii) Weekly Markets				Dawki				
		(ix) Permanent Markets				Jowai				
		(x) Temples/ Places of worship				Church-2 nos				
		(xi) Others (Pl. specify)				306				--
		Total	1050 Ha			1444 Ha	1050			950

2.11 Land use and land cover :

The different present land use of JH-IWMP- IV is as follows.

<u>Land Use</u>		<u>Area (in Ha)</u>
1. Agricultural land	=	-
2. Built – up area (Rural) *	=	37.00
3. Tree clad close *	=	269.00
4. Tree Clad Open *	=	1392.00
4. Waste land /Sandy	=	-
5. Waste land / open scrub *	=	796.00
Total	=	2494.00

* Area Estimation is based as per Field Survey Report

2.12 PROBLEM OF THE AREA

The following are the major problem face by the people & community in the project area.

(All these problem have been identified through the PRA exercise and during the process of details survey of preparation of DPR)

- (a) **Scarcity of drinking water**:- Almost all the village are situated in the Ridge area and elevated zone at higher elevation area of the watershed. As result, due to biotic interference and increase population the water resources nearby has dried up and polluted, causing scarcity of water especially during the months of November to April.
- (b) **Low agricultural productivity**:- Due to unscientific way of cultivation, eg, lack of soil and water conservation practices, irrigation facilities, proper use of manure and fertilizers, use of insecticides and pesticides, traditional method of cultivation (Cultivation along the slope), etc. It has resulted in low yield in almost all types of Horticultural crops.
- (c) **Poverty**:- Many of the farmers in project area are only marginal land holders where a few numbers of people own a majority of land in the areas. The people in the areas so far depend on horticultural crops only as main source of livelihood. Others sources of livelihood like Poultry, Piggery, Fishery, etc are still lacking behind in many respect in project area.
- (d) **Social Institution**:- Due to low literacy level in all the villages in project area, social institution like SHG, Users Groups, NGOs are very less in the project area. The existing groups who are available at present are also not functioning properly or progress as expected.
- (e) **Lack of Infrastructure**:- The villages in the project area suffer lack of infrastructure facilities in many respect like (i) Marketing. (ii) Education. (iii) Transportation & Communication. (iv) Agricultural & Veterinary Services etc.

CHAPTER III

PROJECT PLANNING & INSTITUTION BUILDING

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PROJECT PLANNING & INSTITUTION BUILDING

3.1.1 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 and 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 as per the Field Survey Report. 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	3
Total no of Project sanctioned	Scientific criteria/ input used	No. of project in which Scientific criteria were used
	Cluster approach	3
	Whether technical back – stopping for the project has been arranged? If yes, mention the name of the institute.	GIS LAB State Level Nodal Agency Soil & Water Conservation Department Meghalaya
	Base line survey	Yes
	Hydro- geological survey	No
	Contour mapping	No
	Participatory net planning (PNP)	No
	Remote sensing data – especially Soil / Crop/ Run-off cover	Yes
	Ridge to valley treatment	Yes
	Online IT connectivity between	
	(i) Project and DRDA cell/ ZP	Yes
	(ii) DRDA and SLNA	Yes
	(iii) 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

1	2	3
	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 analyses	No
	Normalized difference vegetation index (NDVI) #	Yes
	Weather station	No
	(B) Inputs	
	1. Bio-Pesticides	No
	2. organic manure	Yes
	3. Vermicompost	Yes
	4. Bio- fertilizer	Yes
	5. Water saving device	No
	6.Mechanized Tools / Implement	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, Jowai Jaintia Hills District of Meghalaya. The Project Manager will be the Divisional Soil and Water Conservation Officer and will be assisted by a team of Officers 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	
Name of District	Name of Project	Details of PIA	
Jaintia Hills	JH-IWMP-V	1. Type of Organisation #	Government Agency
		2. Name of organization	Soil & Water Conservation
		3. designation & Address	Shri. D. Shallam
		4. Telephone	9436119264
		5.Fax	03652223858
		6.Email	soildivjowai@gmail.com

3.3 Institution Building

i) Watershed Committee (WC)

The Watershed Committees of the Amlympiang and Amkahoh, JH-IWMP-V were constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Durbar/Council).

Table 3.2: Details of Watershed Committees (WC):

Names of the District	Names of projects	Names of WCs	Date of registration as a Society(dd/m m/yyyy)	Designation	M/F	SC	ST	SF	MF	LF	Land less	UG	SHG	GP	Any other	Educational qualification	Function/s assigned#
Jaintia Hills District	JH-IWMP -V	Amlympiang	Under process	President	M		ST							1		X	A to I
				Member	M/F		ST	2		2			4	8		VII to X	- do-
				Secretary	M		ST								1	Diploma in Forestry	-do-
		Amkahoh	Under process	President	M		ST							1		XII	A to I
				Member	M		ST	2		2			3	9		VI to BA	do
				Secretary	M		ST								1	Diploma in Forestry	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 Area:

1	2	3				4				5			6		
Name of District	Name of project	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
Jaintia Hills	JH –IWMP-V	-	-	2	2	(i) Landless									
						(ii) SF	10	12	22	10	12	22			
						(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		
Name of District	Name of Projects	Total no. of UGs				No. of Members				No. of SC/ ST in each category			No. of BPL in each category		
Jaintia Hills	JH-IWMP – V	Men	Women	both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
		-	-	-	-	(i) Landless	-	-	-	-	-	-	-	-	-
						(ii) SF		-	-	-	-	-	-	-	-
						(iii) MF	-	-	-	-	-	-	-	-	-
						(iv) LF	-	-	-	-	-	-	-	-	-
Total															

CHAPTER IV

PROJECT ACTIVITIES

CHAPTER IV PROJECT ACTIVITIES

4.1 Preparatory Phase:

i) Entry Point Activities (EPA)

1	2	3	4	5	6	7	8	9	10	11
SI 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	Jaintia Hills	JH-IWMP-V	12.00	1. C. C. Dam 2. Pipe line, 3. Storage Tank 4. Conservation Ponds	12.00	12.00	-	Improved domestic water supply	Portable Drinking Water

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 agree-ments	Preparation of DPR	Evaluation of DPR	Any other (please specify)	Cost incurred (Rs. In lakhs)
Jaintia Hills	JH-IWMP-V	1.no Watershed Committee at each Watershed	Yes	Training	Participatory Rural Appraisals	Not done	Done	Done	Done	Done	-	6.00

4.2 Watershed Works Phase:

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

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 m ³	Augmentation/ repair of existing structure				Construction of new structures				Total target			
								No.	Area to be treated (ha)	Storage capacity	Estimate cost	No.	Area to be treated (ha)	Storage capacity	Estimate cost In Lakhs	No	Area to be treated (ha)	Storage capacity	Estimate cost
	Meghalaya	Jaintia Hills	JH-IWMP-V	(i) Tank	-	-		-	-		-	-		-	-	-	-	-	-
				(ii)Pond	-	-	-					100	330	-	26.08	100	330	-	26.08
				(iii)Lake	-	-	-							-	-	-	-	-	-
				(iv)Check Dam	-	-						60	210	-	17.94	60	210	-	17.94
				(v) Percolation Tank	-	-		-	-		-			-		-	-	-	-
				(vi) Channel	-	-						-	-	-	-	-	-	-	-
				(vii) Protection Wall	-	-	-	-	-		-	40	60	-	9.132	40	60		9.132
			Total									200	600		53.152	200	600	-	53.152

8											9	10
Achievement due to project												
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	No	Area irrigated (ha)	Storage capacity	Expenditure incurred	Area irrigated (ha)	Storage capacity	Estimate incurred		

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

1	2	3	4	5	6		7								8								9
Sl. No	Name s of States	Names of Districts	Names of Projects	Type of structures	Pre-project		Proposed target								Achievement due to project								Chang e in irrigat ed area (Col.8-6) (ha)
					No	Area irriga ted (ha)	Augmentatio n/repair of existing recharging structures			Construction of new recharg-ing structures			Total target		Augmentation /repair of existing recharging structures		Constructio-n of new recharging structures			Total achievemen t			
							No	Area to be irriga teted (ha)	Esti ma ted cos t.	No.	Area to be irrigated (ha)	Esti ma ted cost.	Area to be irrigated (ha)	Esti ma ted cost	No	Area irrigat ed (ha)	Expen diture incurre d	No.	Area irrig ated (ha)	Expen diture incurr ed	Area irrig ated (ha)	Expen diture incurr ed	
	Megh alaya	Jaintia Hills	JH- IWMP-V	(i) Open wells		Nil					Nil												
				(ii) Bore wells																			
				(iii) Any other (pl specify)																			
				Total for the project																			

4.2.3 Activities executed by User Groups in the Project Areas.

1	2	3						
Names of District	Names of Projects	Majors activities of the UGs - Targets				No. of UGs involved	Estimated cost In Lakh	Amount of WDF to be collected (Rs). In Lakh
		Structure/ activity proposed						
		SL.No.	Type	No. #	Treatment (ha)			
Jaintia Hills	JH-IWMP-V	1.	Check Dam	60 nos	210		17.94	Rs. 0.90
		2.	W/H Structure	60 nos	270		19.68	Rs. 0.99
		3.	Improvement of degraded forest	2	210		7.56	Rs.0.38

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	

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

1	2	3		
Name of the district	Name of Project	Major activities of the SHGs		
		Name of Activity	No. of SHGs involved	Average annual income from activity per SHG
Jaintia Hills	JH-IWMP-V	Live stock	1	Rs 30,000.00
.		Production and Micro Enterprises	1	Rs 40,000.00

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		
1		11,000/=			66,000/=	30,000/=					
1		11,000/=			85,000/=	40,000/=					

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		Crop demonstrations		Pasture development		Veterinary services		Fishery development		Non-conventional energy		Any other Horticulture, Arecanut, Betel Leaf & improvement of degraded forest		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)	
Jaintia Hills	JH-IWMP-V	120 ha	9.00	600	53.152	-	-	13 ha	2.288	40 units (7 ha)	0.40	-	-	-	-	-	-	-	-	1260 ha	85.16	150.00

4.2.8 Details of engineering structures in watershed works:

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) Pri- vate	(ii) Commu nity	(iii) Others (pl.specif y)		(i) UG (ii) SHG (iii)Others (pl. specify)	No.of units (No./ cu.m/ rmt)	Estimated cost (Rs.in lakh)				Expected month & Year of completi on (mm/yyy y)	No.of units (No./ cu.m/ rmt)	Expenditure incurred (Rs.in lakh)				Status of comp lation	Actual month & Year of completi on (mm/yyy y)
			M	W	O	Total	M	W	O	T												
Jaintia Hills	JH- IWM P-V	Contour bunding	-	-	√	-	√	-	(iii) Beneficia- ary	120 ha	-	9.00		9.00	2015							
		Peripheral bunding	√	-	-	-	√	-	do	4576 Rm		2.288		2.288	2015							
		Imp.of existing paddy filed	-	-	-	-	-	-		-		-		-								
		Check Dam (C.C.)		√	-	-	√	-	(i)	60 nos	7.18	10.79		17.94	2015							
		Protection wall		√	-	-	√	-	(iii) Beneficia- ry	40 nos	3.65	5.482		9.132	2015							
		Dug out pond		√	-	-	√	-	do	40 nos	-	6.40		6.40	2015							
		W/H structure (Earthen with CC canal)		√			-	√	-	(i)	60 nos	7.87	11.81		19.68	2015						
		Channel		-	-	-	-	-	-	-	-	-	-	-								

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.)		Mandays generated					No.beneficiaries				
		Pre- Project	Post Project	Pre- Project	Post Project	Pre- Project	Post Project	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
NA	733	1.5 – 2 m		11-15		32000 - 35000									184	192	376

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	Expenditure incurred (Rs.in lakh)	Actual month & year of completion (mm/yyyy)
Jaintia Hills	JHI-IWMP-V	Afforestation															
		Regeneration															
		Agro-forestry															
		Fuel Wood															
		Fodder															
		Horticulture				√				1050	210000	77.60	2015				
		Pasture dev.															
		Nursery raising															
		Others (pl. specify)															

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.)		Mandays generated					No. of beneficiaries				
	Pre- project	Post project	Pre- project	Post project	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
NA	11-15		32000 - 35000									184	192	376

4.2.12 Details of allied / other activities:

District	Project	Name of Activity @	Type of Land			Executing agency	Target		Achievement	
			(i) private	(ii) Community	(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)
Jaintia Hills	JH –IWMP -V	Crop demonstration	-	20 units	-	(i)	0.20	2015		
		Kitchen gardening /Organic farming/compost pit	296 units	-	-	(iii)	7.40	2015		
		Ginger/Turmeric/Vegetable cultivation	-	-	-	-	-			
		Poultry/Piggery/Duckery	60 units	-	-	(ii) & (iii)	18.00	2015		
		Carpentry/Sprayer/Black Smit/Hallow Block Making	140 units	-	-	(iii)	7.00	2015		
		Grocery Shop/mushroom cultivation/Pisciculture/Mud Block making	20 units	-	-	(ii) & (iii)	6.00	2015		
		Vermi compost/Weaving	16 units	-	-	(ii)	13.60	2015		
		Tailoring	170 units	-	-	(ii) & (iii)	2.40	2015		
		Milk cow rearing	-	-	-	-	-			
		Goat rearing	-	-	-	-	-			
		Betel Nut Processing Unit	-	30 units		(ii) & (iii)	15.00	2015		

from column no.2 no. of States; from column no.3 no. of District; from column no. 4. total no of projects; from column no. 5 activity wise totals; from column no.6 type wise totals; from column 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 items –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 re 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
32000 - 35000									184	192	376

4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5	6				7						
Name of the District	Name of project	Name (s) of the villages	CPR particular	Activity pro-posed	Target				Achievement						
					Target area under the activity (ha)	Estimate expenditure (Rs)	Expected no. of beneficiaries	Estimate contribution to WDF (Rs)	Area treated under the activity (ha)	Expendit-ure incurred (Rs)	Actual no. of benefi-ciaries	No of Mandays			WDF collecte d (Rs)
												SC	ST	F	
Jaintia Hills	JH-IWMP -V	Nongtalang	1. Water resources 2.Community forest land	1. Drinking wells 2. Check Dam 3. Water Harvesting Structures 4. Imprvmt. of degraded forest	300 ha	6.00	197	0.30							
		Sohkha	1. water resources 2.Community forest land	1. Drinking wells 2. Check Dam 3. Water Harvesting Structures 4. Imprvmt. of degraded forest	300 ha	6.00	179	0.30							

CHAPTER V

PROJECT PHASING & BUDGETING

ACTION PLAN OF JAINTIA HILLS I.W.M.P – V UNDER AMLAREM C&RD BLOCK 2010-2011

Name of District – Jaintia Hills District

No. of Watersheds – 2 nos.

No of Villages – 4 Nos

Treatable Area = 2000 Ha

Particulars			Preparatory Phase		Watershed Work Phase						Consolidation/ Withdrawal phase	
	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
2402 – S&WC - 800 – Other Expenditure												
15 – Integrated Watershed Management Programme (IWMP)												
01 – Administrative Expenditure												
02 – Wages	2%	6.00	-	-	0.5%	1.50	1%	3.00	0.5%	1.50		
13 – Office Expenses	2%	6.00	-	-	0.5%	1.50	1%	3.00	0.5%	1.50		
21 – Supplies & materials	3%	9.00	-	-	0.50%	1.50	2%	6.00	0.5%	1.50		
28 – Professional Services	1%	3.00	-	-	0.25%	0.75	0.5%	1.50	0.25%	0.75		
50 – Other charges	2%	6.00	-	-	0.25%	0.75	0.5%	1.50	1.25%	3.75		
TOTAL – 01	10%	30.00	-	-	2%	6.00	5%	15.00	3%	9.00		
02 – Monitoring & Evaluation												
13 – Office Expenses	1%	3.00	-	-	0.3%	0.90	0.4%	1.20	0.3%	0.90		
16 – Publication	0.5%	1.50	-	-	0.1%	0.30	0.3%	0.90	0.1%	0.30		
28 – Professional Services	0.5%	1.50	-	-	0.1%	0.30	0.3%	0.90	0.1%	0.30		
TOTAL - 02	2 %	6.00	-	-	0.5%	1.50	1%	3.00	0.5%	1.50		
03 – Entry Point Activities												
27 – Minor works/ maintenance	4%	12.00	4%	12.00	-	-	-	-	-	-		
TOTAL – 03	4%	12.00	4%	12.00	-	-	-	-	-	-		
04 – Institution & Capacity Building												
20 – Other Administrative Expenses	5%	15.00	1%	3.00	2%	6.00	1%	3.00	1%	3.00		
TOTAL – 04	5%	15.00	1%	3.00	2%	6.00	1%	3.00	1%	3.00		
05 – Preparation of Detailed Project Report												
02 – Wages	0.2%	0.60	0.2%	0.60	-	-	-	-	-	-		
13 – Office Expenses	0.2%	0.60	0.2%	0.60	-	-	-	-	-	-		
16 – Publication	0.2%	0.60	0.2%	0.60	-	-	-	-	-	-		
21 – Supplies & materials	0.4%	1.20	0.4%	1.20	-	-	-	-	-	-		
TOTAL – 05	1%	3.00	1%	3.00	-	-	-	-	-	-		
TOTAL of 01+02+03+04+05 -	22%	66.00	6%	18.00	4.5%	13.50	7%	21.00	4.5%	13.50		

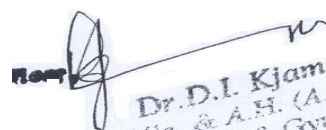
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>06 – Watershed Development Works</u>												
<u>I – Arable Land Treatment : -</u>												
<u>27 – Minor works/ Maintenance</u>												
(a) Agro –Hort with Citrus fruits @ Rs. 8600/-per Ha (200 Plants per ha.)	100.0 Ha	8.60										
(i) Preliminary @ Rs. 1300/- per Ha			-	-	100.0 ha	1.30	-	-	-	-	-	-
(ii) 1 st year @ Rs. 4600/- per Ha		-	-	-	-	-	-	4.60	-	-	-	-
(iii) 2 nd year @ Rs. 2700/- per Ha		-	-	-	-	-	-	-	-	2.70	-	-
(b) Contour Bunding @ Rs. 7500/- per Ha	120.0 ha	9.00	-	-	4.0 ha.	0.30	116.0 ha	8.70	-	-	-	-
(c) Peripheral Bunding @ Rs. 50/- per R.M	4576 Rm (13.0 ha)	2.288	-	-	956 Rm (3.0 ha)	0.478	2672 Rm (7.0 Ha)	1.336	948 Rm (3.0 Ha)	0.474	-	-
(d) Improvement of existing paddy field @ Rs. 4300/- per Ha	-	-	-	-	-	-	-	-	-	-	-	-
(e) Crop demonstration @ Rs. 1000/- per unit	40 units (7.0 ha)	0.40	-	-	10 units (1.5 ha)	0.10	30 units (5.5 ha)	0.30	-	-	-	-
TOTAL OF ARABLE LAND TREATMENT	240.0 ha	20.288	-	-	108.5 ha	2.178	124.5 ha	14.936	3.0 ha	3.174	-	-

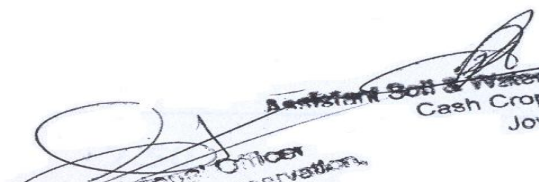
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>II – Non - Arable Land Treatment :-</u> <u>27 – Minor Works :-</u>												
(a) Arecanut Plantations @ Rs. 7500/-per Ha (200 plants/ha	500.0 ha	37.50										
(i) Preliminary @ Rs. Rs. 1300/- per Ha			-	-	500.0 ha	6.50	-	-	-	-	-	-
(ii) 1 st year @ Rs. 5000/- per Ha			-	-	-	-	-	25.00	-	-	-	-
(iii) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	6.00	-	-
(b) Bettel leaves Plantations @ Rs. 7000/- per Ha(200 plants/ha	450.0 ha	31.50										
(i) Preliminary @ Rs. 1300/- per Ha			-	-	450.0 ha	5.85	-	-	-	-	-	-
(ii) 1 st year @ Rs. 4500/- per Ha			-	-	-	-	-	20.25	-	-	-	-
(iii) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	5.40	-	-
(c) Improvement of degraded forest @ Rs. 3600/- per Ha	210.0 ha	7.56										
(i) Preliminary @ Rs. 700/- per Ha			-	-	210.0 ha	1.47	-	-	-	-	-	-
(ii) 1 st year @ Rs. 1900/- per Ha			-	-	-	-	-	3.99	-	-	-	-
(iii) 2 nd year @ Rs. 1000/- per Ha			-	-	-	-	-	-	-	2.10	-	-
TOTAL OF NON - ARABLE LAND TREATMENT	1160.0 ha	76.56	-	-	1160.0 ha	13.82	-	49.24	-	13.50	-	-

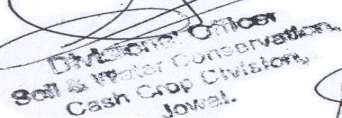
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>III – Drainage Line Treatment : -</u>												
<u>27 – Minor works</u>												
(a) C. C. Dam @ Rs. 29900/-per each	60 nos (210.0 ha)	17.94	-	-	2 no. (7.0 ha.)	0.598	44 nos (154.0 ha)	13.156	14 nos (49.0 ha)	4.186	-	-
(b) Protection wall @ Rs. 22830/- per each	40 nos (60.0 ha)	9.132	-	-	-	-	40 nos (60.0 ha)	9.132	-	-	-	-
(c) Small dug out Pond @ Rs. 16000/- per each	40 nos (60.0 ha)	6.40	-	-	-	-	40 nos (60.0 ha)	6.40	-	-	-	-
(d) Water Harvesting Structures @ Rs. 32800/- per each	60 nos (270.0 ha)	19.68	-	-	18 nos. (81.0 ha)	5.904	37 nos (166.5 ha)	12.136	5 nos (22.5 ha)	1.64	-	-
TOTAL OF DRAINAGE LINE TREATMENT	600 ha	53.152	-	-	88.0 ha	6.502	440.5 ha	40.824	71.5 ha	5.826	-	-
TOTAL OF – 06 – DEVELOPMENT WORKS	2000 ha	150.00 (50%)	-	-	1356.5 ha	22.50 (7.5 %)	569.0 ha	105.00 (35 %)	74.5 ha	22.50 (7.5 %)	-	-

Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>07 – Livelihood Activities</u>												
<u>27 – Minor works</u>												
(i) Kitchen gardening/Compost Pit @ 2500/- per unit	296 units	7.40	-	-	-	-	296 units	7.40	-	-	-	-
(ii) Organic farming @ Rs. 500/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iii) Carpentry/ Sprayer/ Black Smith & Agricultural Implements @ Rs. 5000/- per unit	140 units	7.00	-	-	60 units	3.00	-	-	80 units	4.00	-	-
(iv) Mud brick making, hallow block making, basket making, tailoring @ Rs. 8,000/- per unit	170 units	13.60	-	-	-	-	20 units	1.60	150 units	12.00	-	-
(v) Vermi compost/weaving @ Rs. 12,500/- per unit	16 units	2.00	-	-	-	-	-	-	16 units	2.00	-	-
TOTAL OF LIVELIHOOD ACTIVITIES	-	30.00	-	-	-	3.00	-	9.00	-	18.00	-	-
<u>08 – Production System and Micro Enterprises</u>												
<u>27 – Minor works</u>												
(i) Poultry/ Duckery/Piggery @ Rs. 30,000/- per unit	60 units	18.00	-	-	-	-	20 units	6.00	40 units	12.00	-	-
(ii) Grocery Shop/ Mushroom cultivation/ Pisciculture @ Rs. 30,000/- per unit	20 units	6.00	-	-	-	-	20 units	6.00	-	-	-	-
(iii) Milk cow rearing @ Rs. 40,000/- Per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iv) Goat rearing @ Rs. 30,000/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(v) Betel nut Prosessing Unit @ Rs. 50,000/- per unit	30 units	15.00	-	-	6 units	3.00	6 units	3.00	18 units	9.00		
TOTAL OF PRODUCTION SYSTEM & ME	-	39.00	-	-	-	3.00	-	15.00	-	21.00	-	-
TOTAL OF (07 + 08)	-	69.00	-	-	-	6.00	-	24.00	-	39.00		

Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
09 – Consolidation and withdrawal works												
13 – Office expenses	0.5%	1.50	-	-	-	-	-	-	-	-	0.5%	1.50
16 – Publication	0.25%	0.75	-	-	-	-	-	-	-	-	0.25%	0.75
26 – Advertisement & Publicity	0.25%	0.75	-	-	-	-	-	-	-	-	0.25%	0.75
27 – Minor works/ maintenance	4 %	12.00	-	-	-	-	-	-	-	-	4 %	12.00
TOTAL - 09	5%	15.00	-	-	-	-	-	-	-	-	5%	15.00
TOTAL = Basic Activities: (01+02+03+04+05)	22%	66.00	6%	18.00	4.5%	13.50	7 %	21.00	4.5 %	13.50	-	-
TOTAL = Development works (06)	2000 ha (50 %)	150.00	-	-	1356.5 ha (7.5 %)	22.50	569.0 ha (35 %)	105.00	74.5 ha (7.5 %)	22.50	-	-
TOTAL = Livelihood activities and Production System and Micro Enterprises (07+08)	- (23 %)	69.00	-	-	- 2 %	6.00	- (8 %)	24.00	- (13 %)	39.00	-	-
GRAND TOTAL	2000 ha (100 %)	300.00	6 %	18.00	1356.5 ha (14 %)	42.00	569.0 ha (50 %)	150.00	34.5 ha (25 %)	75.00	5 %	15.00


 Dr. D. L. Kjam
 B.V.Sc. & A.H. (A.A.U.)
 eGNEER (Obs & Gyndae) LV R1
 Regn. No :- MVC-043


 Assistant Soil & Water Conservation Officer
 Cash Crop Division,
 Jowai.


 Divisional Officer
 Soil & Water Conservation,
 Cash Crop Division,
 Jowai.



 Project Manager
 Meghalaya Rural Development Society
 (LIPH- IFAD)
 DMU- Jaintia Hills District
 Jowai, Meghalaya


 Assistant Soil & Water Conservation Officer
 Jaintia Hills (T) Division
 Jowai

ABSTRACT – J H – I.W.M.P – V – 2010 – 2011

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
1 st year	16.20	-	18.00
2 nd year	37.80	-	42.00
3 rd year	135.00	-	150.00
4 th year	67.50	-	75.00
5 th year	13.50	-	15.00
Total	= 270.00	- 30.00	- 300.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


Divisional Soil & Water Conservation Officer
Jaintia Hills (T) Division
Jowai

WATERSHED TREATMENT PLAN OF AMLYMPIANG MICRO - WATERSHED JAINTIA HILLS – IWMP –V (2010 2011)

Name of Village :- Nongtalang

No. of Village = 1 No

Treatable Area = 1000 Ha

(Rupees in Lakhs)

Particulars			Preparatory Phase		Watershed Work Phase						Consolidation/ Withdrawal phase	
	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>2402 – S&WC - 800 – Other Expenditure</u>												
<u>15 – Integrated Watershed Management Programme (IWMP)</u>												
<u>01 – Administrative Expenditure</u>												
02 – Wages	2%	3.00	-	-	0.5%	0.75	0.8%	1.20	0.7%	1.05		
13 – Office Expenses	2%	3.00	-	-	0.5%	0.75	0.8%	1.20	0.7%	1.05		
21 – Supplies & materials	3%	4.50	-	-	0.5%	0.75	1.5%	2.25	1%	1.50		
28 – Professional Services	1%	1.50	-	-	0.25%	0.375	0.5%	0.75	0.25%	0.375		
50 – Other charges	2%	3.00	-	-	0.25%	0.375	1.4%	2.10	0.35%	0.525		
TOTAL – 01	10%	15.00	-	-	2%	3.00	5%	7.50	3%	4.50		
02 – Monitoring & Evaluation												
13 – Office Expenses	1%	1.50	-	-	0.3%	0.45	0.4%	0.60	0.3%	0.45		
16 – Publication	0.5%	0.75	-	-	0.1%	0.15	0.3%	0.45	0.1%	0.15		
28 – Professional Services	0.5%	0.75	-	-	0.1%	0.15	0.3%	0.45	0.1%	0.15		
TOTAL - 02	2 %	3.00	-	-	0.5%	0.75	1%	1.50	0.5%	0.75		
03 – Entry Point Activities												
27 – Minor works/ maintenance	4%	6.00	4%	6.00	-	-	-	-	-	-		
TOTAL – 03	4%	6.00	4%	6.00	-	-	-	-	-	-		
04 – Institution & Capacity Building												
20 – Other Administrative Expenses	5%	7.50	1%	1.50	2 %	3.00	1%	1.50	1%	1.50		
TOTAL – 04	5%	7.50	1%	1.50	2 %	3.00	1%	1.50	1%	1.50		
05 – Preparation of Detailed Project Report												
02 – Wages	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
13 – Office Expenses	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
16 – Publication	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
21 – Supplies & materials	0.4%	0.60	0.4%	0.60	-	-	-	-	-	-		
TOTAL – 05	1%	1.50	1%	1.50	-	-	-	-	-	-		
TOTAL of 01+02+03+04+05 -	22%	33.50	6 %	9.00	4.5%	6.75	7%	10.50	4.5%	6.75		


Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>06 – WatershedDevelopment Works</u> <u>I – Arable Land Treatment : -</u> <u>27 – Minor works/ Maintenance</u> (a) Agro –Hort with Citrus fruits @ Rs. 8600/-per Ha (200 Plants per ha.) (iv) Preliminary @ Rs. 1300/- per Ha (v) 1 st year @ Rs. 4600/- per Ha (vi) 2 nd year @ Rs. 2700/- per Ha	50.0 Ha	4.30	-	-	50.0 ha	0.65	-	-	-	-	-	-
		-	-	-	-	-	-	2.30	-	-	-	-
		-	-	-	-	-	-	-	-	1.35	-	-
(b) Contour Bunding @ Rs. 7500/- per Ha	40.0 ha	3.00	-	-	-	-	40.0 ha	3.00	-	-	-	-
(c) Peripheral Bunding @ Rs. 50/- per R.M	2148 Rm (6.0 ha)	1.074	-	-	298 Rm (1.0 ha)	0.149	1548 Rm (4.0 Ha)	0.774	302 Rm (1.0 Ha)	0.151	-	-
(d) Improvement of existing paddy field @ Rs. 4300/- per Ha	-	-	-	-	-	-	-	-	-	-	-	-
(e) Crop demonstration @ Rs. 1000/- per unit	20 units (4.0 ha)	0.20	-	-	-	-	20 units (4.0 ha)	0.20	-	-	-	-
TOTAL OF ARABLE LAND TREATMENT	100.0 ha	8.574	-	-	51.0 ha	0.799	44.0 ha	6.274	1.0 ha	1.501	-	-

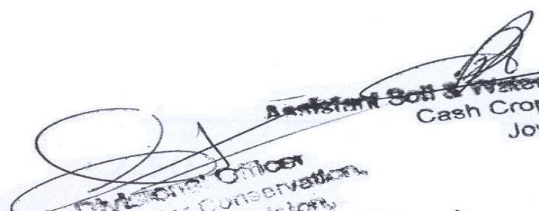
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>II – Non - Arable Land Treatment :-</u>												
<u>27 – Minor Works :-</u>												
(a) Arecanut Plantations @ Rs. 7500/-per Ha (200 plants/ha	250.0 ha	18.75										
(iv) Preliminary @ Rs. Rs. 1300/- per Ha			-	-	250.0 ha	3.25	-	-	-	-	-	-
(v) 1 st year @ Rs. 5000/- per Ha			-	-	-	-	-	12.50	-	-	-	-
(vi) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	3.00	-	-
(b) Bettel leaves Plantations @ Rs. 7000/- per Ha(200 plants/ha	250.0 ha	17.50										
(iv) Preliminary @ Rs. 1300/- per Ha			-	-	250.0 ha	3.25	-	-	-	-	-	-
(v) 1 st year @ Rs. 4500/- per Ha			-	-	-	-	-	11.25	-	-	-	-
(vi) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	3.00	-	-
(c) Improvement of degraded forest @ Rs. 3600/- per Ha	100.0 ha	3.60										
(iv) Preliminary @ Rs. 700/- per Ha			-	-	100.0 ha	0.70	-	-	-	-	-	-
(v) 1 st year @ Rs. 1900/- per Ha			-	-	-	-	-	1.90	-	-	-	-
(vi) 2 nd year @ Rs. 1000/- per Ha			-	-	-	-	-	-	-	1.00	-	-
TOTAL OF NON - ARABLE LAND TREATMENT	600.0 ha	39.85	-	-	600.0 ha	7.20	-	25.65	-	7.00	-	-


Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>III – Drainage Line Treatment : -</u>												
<u>27 – Minor works</u>												
(a) C. C. Dam @ Rs. 29900/-per each	30 nos (105.0 ha)	8.97	-	-	1 no. (3.5 ha.)	0.299	22 nos (77.0 ha)	6.578	7 nos (24.5 ha)	2.093	-	-
(b) Protection wall @ Rs. 22830/- per each	20 nos (30.0 ha)	4.566	-	-	-	-	20 nos (30.0 ha)	4.566	-	-	-	-
(c) Small dug out Pond @ Rs. 16000/- per each	20 nos (30.0 ha)	3.20	-	-	-	-	20 nos (30.0 ha)	3.20	-	-	-	-
(d) Water Harvesting Structures @ Rs. 32800/- per each	30 nos (135.0 ha)	9.84	-	-	9 nos. (40.5 ha)	2.952	19 nos (85.5 ha)	6.232	2 nos (9.0 ha)	0.656	-	-
TOTAL OF DRAINAGE LINE TREATMENT	300 ha	26.576	-	-	44.0 ha	3.251	222.5 ha	20.576	33.5 ha	2.749	-	-
TOTAL OF – 06 – DEVELOPMENT WORKS	1000 ha	75.00 (50%)	-	-	695.0 ha	11.25 (7.5 %)	270.5 ha	52.50 (35 %)	34.5 ha	11.25 (7.5 %)	-	-

Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>07 – Livelihood Activities</u>												
<u>27 – Minor works</u>												
(i) Kitchen gardening/Compost Pit @ 2500/- per unit	148 unit	3.70	-	-	-	-	148 unit	3.70	-	-	-	-
(ii) Organic farming @ Rs. 500/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iii) Carpentry/ Sprayer/ Black Smith & Agricultural Implements @ Rs. 5000/- per unit	70 units	3.50	-	-	30 units	1.50	-	-	40 units	2.00	-	-
(iv) Mud brick making, hallow block making, basket making, tailoring @ Rs. 8,000/- per unit	85 units	6.80	-	-	-	-	10 units	0.80	75 units	6.00	-	-
(v) Vermi compost/weaving @ Rs. 12,500/- per unit	8 units	1.00	-	-	-	-	-	-	8 units	1.00	-	-
TOTAL OF LIVELIHOOD ACTIVITIES	-	15.00	-	-	-	1.50	-	4.50	-	9.00	-	-
<u>08 – Production System and Micro Enterprises</u>												
<u>27 – Minor works</u>												
(i) Poultry/ Duckery/Piggery @ Rs. 30,000/- per unit	30 units	9.00	-	-	-	-	10 units	3.00	20 units	6.00	-	-
(ii) Grocery Shop/ Mushroom cultivation/ Pisciculture @ Rs. 30,000/- per unit	10 units	3.00	-	-	-	-	10 units	3.00	-	-	-	-
(iii) Milk cow rearing @ Rs. 40,000/- Per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iv) Goat rearing @ Rs. 30,000/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(v) Betel nut Prosessing Unit @ Rs. 50,000/- per unit	15 units	7.50	-	-	3 units	1.50	3 units	1.50	9 units	4.50		
TOTAL OF PRODUCTION SYSTEM & ME	-	19.50	-	-	-	1.50	-	7.50	-	10.50	-	-
TOTAL OF (07 + 08)	-	34.50	-	-	-	3.00	-	12.00	-	19.50		


Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
09 – Consolidation and withdrawal works												
13 – Office expenses	0.5%	0.75	-	-	-	-	-	-	-	-	0.5%	0.75
16 – Publication	0.25%	0.375	-	-	-	-	-	-	-	-	0.25%	0.375
26 – Advertisement & Publicity	0.25%	0.375	-	-	-	-	-	-	-	-	0.25%	0.375
27 – Minor works/ maintenance	4 %	6.00	-	-	-	-	-	-	-	-	4 %	6.00
TOTAL - 09	5%	7.50	-	-	-	-	-	-	-	-	5%	7.50
TOTAL = Basic Activities: (01+02+03+04+05)	22%	33.00	6%	9.00	4.5%	6.75	7 %	10.50	4.5 %	6.75	-	-
TOTAL = Development works (06)	1000 ha (50 %)	75.00	-	-	695.0 ha (7.5 %)	11.25	270.5 ha (35 %)	52.50	34.5 ha (7.5 %)	11.25	-	-
TOTAL = Livelihood activities and Production System and Micro Enterprises (07+08)	- (23 %)	34.50	-	-	- 2 %	3.00	- (8 %)	12.00	- (13 %)	19.50	-	-
GRAND TOTAL	1000 ha (100 %)	150.00	6 %	9.00	695.0 ha (14 %)	21.00	270.5 ha (50 %)	75.00	34.5 ha (25 %)	37.50	5 %	7.50


Dr. D. I. Kjam
 B.V.Sc. & A.H. (A.A.U.)
 PGNDAR (Obs & Gyndae) I.V.R.I
 Regn. No :- MVC-043


Assistant Soil & Water Conservation Officer
 Cash Crop Division,
 Jowai.


Division Officer
 Soil & Water Conservation,
 Cash Crop Division,
 Jowai.


Project Manager
 Meghalaya Rural Development Society
 (LIPH- IFAD)
 DMU- Jaintia Hills District
 Jowai, Meghalaya



Assistant Soil & Water Conservation Officer
 Jaintia Hills (T) Division
 Jowai

ABSTRACT – J H – I.W.M.P – V – 2010 – 2011

AMLYMPIANG MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
1 st year	8.10	-	9.00
2 nd year	18.90	-	21.00
3 rd year	67.50	-	75.00
4 th year	33.75	-	37.50
5 th year	6.75	-	7.50
Total	= 135.00	- 15.00	- 150.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


Divisional Soil & Water Conservation Officer
Jaintia Hills (T) Division
Jowai

WATERSHED TREATMENT PLAN OF AMKAHOH MICRO - WATERSHED JAINTIA HILLS – IWMP – V (2010 2011)

Name of Villages : - (1) Sohkh Shnong (2) Sohkh Mission (3) Sohkh Phlang

No. of Village = 3 Nos.

Treatable Area = 1000 Ha

(Rupees in Lakhs)

Particulars			Preparatory Phase		Watershed Work Phase						Consolidation/ Withdrawal phase	
	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
2402 – S&WC - 800 – Other Expenditure												
15 – Integrated Watershed Management Programme (IWMP)												
01 – Administrative Expenditure												
02 – Wages	2%	3.00	-	-	0.5%	0.75	0.8%	1.20	0.7%	1.05		
13 – Office Expenses	2%	3.00	-	-	0.5%	0.75	0.8%	1.20	0.7%	1.05		
21 – Supplies & materials	3%	4.50	-	-	0.5%	0.75	1.5%	2.25	1%	1.50		
28 – Professional Services	1%	1.50	-	-	0.25%	0.375	0.5%	0.75	0.25%	0.375		
50 – Other charges	2%	3.00	-	-	0.25%	0.375	1.4%	2.10	0.35%	0.525		
TOTAL – 01	10%	15.00	-	-	2%	3.00	5%	7.50	3%	4.50		
02 – Monitoring & Evaluation												
13 – Office Expenses	1%	1.50	-	-	0.3%	0.45	0.4%	0.60	0.3%	0.45		
16 – Publication	0.5%	0.75	-	-	0.1%	0.15	0.3%	0.45	0.1%	0.15		
28 – Professional Services	0.5%	0.75	-	-	0.1%	0.15	0.3%	0.45	0.1%	0.15		
TOTAL - 02	2 %	3.00	-	-	0.5%	0.75	1%	1.50	0.5%	0.75		
03 – Entry Point Activities												
27 – Minor works/ maintenance	4%	6.00	4%	6.00	-	-	-	-	-	-		
TOTAL – 03	4%	6.00	4%	6.00	-	-	-	-	-	-		
04 – Institution & Capacity Building												
20 – Other Administrative Expenses	5%	7.50	1%	1.50	2 %	3.00	1%	1.50	1%	1.50		
TOTAL – 04	5%	7.50	1%	1.50	2 %	3.00	1%	1.50	1%	1.50		
05 – Preparation of Detailed Project Report												
02 – Wages	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
13 – Office Expenses	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
16 – Publication	0.2%	0.30	0.2%	0.30	-	-	-	-	-	-		
21 – Supplies & materials	0.4%	0.60	0.4%	0.60	-	-	-	-	-	-		
TOTAL – 05	1%	1.50	1%	1.50	-	-	-	-	-	-		
TOTAL of 01+02+03+04+05 -	22%	33.50	6 %	9.00	4.5%	6.75	7%	10.50	4.5%	6.75		

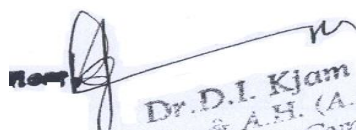
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>06 – Watershed Development Works</u>												
<u>I – Arable Land Treatment</u>												
<u>27 – Minor works/ Maintenance</u>												
(a) Agro –Hort with Citrus fruits @ Rs. 8600/-per Ha (200 plants per ha.)	50.0 Ha	4.30										
(i) Preliminary @ Rs. 1300/- per Ha			-	-	50.0 ha	0.65	-	-	-	-	-	-
(ii) 1 st year @ Rs. 4600/- per Ha		-	-	-	-	-	-	2.30	-	-	-	-
(iii) 2 nd year @ Rs. 2700/- per Ha		-	-	-	-	-	-	-	-	1.35	-	-
(b) Contour Bunding @ Rs. 7500/- per Ha	80.0 ha	6.00	-	-	4.0 ha	0.30	76.0 ha	5.70	-	-	-	-
(c) Peripheral Bunding @ Rs. 50/- per R.M	2428 Rm (7.0 ha)	1.214	-	-	658 Rm (2.0 ha)	0.329	1124 Rm (3.0 Ha)	0.562	646 Rm (2.0 Ha)	0.323	-	-
(d) Improvement of existing paddy field @ Rs. 4300/- per Ha	-	-	-	-	-	-	-	-	-	-	-	-
(e) Crop demonstration @ Rs. 1000/- per unit	20 units (3.0 ha)	0.20	-	-	10 units (1.5 ha)	0.10	10 units (1.5 ha)	0.10	-	-	-	-
TOTAL – 06 ARABLE LAND TREATMENT	140 ha	11.714	-	-	57.5 ha	1.379	80.5 ha	8.662	2.0 ha	1.673	-	-


Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>II – Non - Arable Land :</u>												
<u>27 – Minor Works :-</u>												
(a) Bettle Nut Plantations @ Rs. 7500/-per Ha (200 plants/ha	250.0 ha	18.75										
(i) Preliminary @ Rs. Rs. 1300/- per Ha			-	-	250.0 ha	3.25	-	-	-	-	-	-
(ii) 1 st year @ Rs. 5000/- per Ha			-	-	-	-	-	12.55	-	-	-	-
(iii) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	3.00	-	-
(b) Bettle leaves Plantations @ Rs. 7000/- per Ha(200 plants/ha	200.0 ha	14.00										
(i) Preliminary @ Rs. 1300/- per Ha			-	-	200.0 ha	2.60	-	-	-	-	-	-
(ii) 1 st year @ Rs. 4500/- per Ha			-	-	-	-	-	9.00	-	-	-	-
(iii) 2 nd year @ Rs. 1200/- per Ha			-	-	-	-	-	-	-	2.40	-	-
(c) Improvement of degraded forest @ Rs. 3600/- per Ha	110 ha	3.96										
(i) Preliminary @ Rs. 700/- per Ha			-	-	110 ha	0.77	-	-	-	-	-	-
(ii) 1 st year @ Rs. 1900/- per Ha			-	-	-	-	-	2.09	-	-	-	-
(iii) 2 nd year @ Rs. 1000/- per Ha			-	-	-	-	-	-	-	1.10	-	-
TOTAL – NON - ARABLE LAND TREATMENT	560 ha	36.71	-	-	560 ha	6.62	-	23.59	-	6.50	-	-

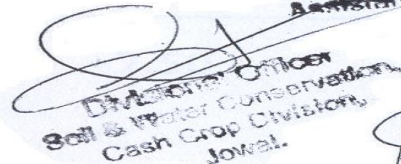
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>III – Drainage Line Treatment : -</u>												
<u>27 – Minor works</u>												
(a) C. C. Dam @ Rs. 29900/-per each	30 nos (105.0 ha)	8.97	-	-	1 no. (3.5 ha.)	0.299	22 nos (77.0 ha)	6.578	7 nos (24.5 ha)	2.093	-	-
(b) Protection wall @ Rs. 22830/- per each	20 nos (30.0 ha)	4.566	-	-	-	-	20 nos (30.0 ha)	4.566	-	-	-	-
(c) Small dug out Pond @ Rs. 16000/- per each	20 nos (30.0 ha)	3.20	-	-	-	-	20 nos (30.0 ha)	3.20	-	-	-	-
(d) Water Harvesting Structures @ Rs. 32800/- per each	30 nos (135.0 ha)	9.84	-	-	9 nos. (40.5 ha)	2.952	18 nos (81.0 ha)	5.904	3 nos (13.5 ha)	0.984	-	-
TOTAL OF DRAINAGE LINE TREATMENT	300 ha	26.576	-	-	44.0 ha	3.251	218.0 ha	20.576	38.0 ha	3.077	-	-
TOTAL OF – 06 – DEVELOPMENT WORKS	1000 ha	75.00 (50%)	-	-	661.5 ha	11.25 (7.5 %)	298.5 ha	52.50 (35 %)	40.0 ha	11.25 (7.5 %)	-	-

Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
<u>07 – Livelihood Activities</u>												
<u>27 – Minor works</u>												
(i) Kitchen gardening/Compost Pit @ 2500/- per unit	148 unit	3.70	-	-	-	-	148 unit	3.70	-	-	-	-
(ii) Organic farming @ Rs. 500/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iii) Carpentry/ Sprayer/ Black Smith & Agricultural Implements @ Rs. 5000/- per unit	70 units	3.50	-	-	30 units	1.50	-	-	40 units	2.00	-	-
(iv) Mud brick making, hallow block making, basket making, tailoring @ Rs. 8,000/- per unit	85 units	6.80	-	-	-	-	10 units	0.80	75 units	6.00	-	-
(v) Vermi compost/weaving @ Rs. 12,500/- per unit	8 units	1.00	-	-	-	-	-	-	8 units	1.00	-	-
TOTAL OF LIVELIHOOD ACTIVITIES	-	15.00	-	-	-	1.50	-	4.50	-	9.00	-	-
<u>08 – Production System and Micro Enterprises</u>												
<u>27 – Minor works</u>												
(i) Poultry/ Duckery/Piggery @ Rs. 30,000/- per unit	30 units	9.00	-	-	-	-	10 units	3.00	20 units	6.00	-	-
(ii) Grocery Shop/ Mushroom cultivation/ Pisciculture @ Rs. 30,000/- per unit	10 units	3.00	-	-	-	-	10 units	3.00	-	-	-	-
(iii) Milk cow rearing @ Rs. 40,000/- Per unit	-	-	-	-	-	-	-	-	-	-	-	-
(iv) Goat rearing @ Rs. 30,000/- per unit	-	-	-	-	-	-	-	-	-	-	-	-
(v) Betel nut Prosessing Unit @ Rs. 50,000/- per unit	15 units	7.50	-	-	3 units	1.50	3 units	1.50	9 units	4.50		
TOTAL OF PRODUCTION SYSTEM & ME	-	19.50	-	-	-	1.50	-	7.50	-	10.50	-	-
TOTAL OF (07 + 08)	-	34.50	-	-	-	3.00	-	12.00	-	19.50		

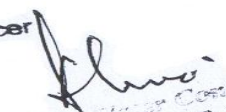
Particulars	Budget Outlay		First year		Second Year		Third Year		Fourth year		Fifth year	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
09 – Consolidation and withdrawal works												
13 – Office expenses	0.5%	0.75	-	-	-	-	-	-	-	-	0.5%	0.75
16 – Publication	0.25%	0.375	-	-	-	-	-	-	-	-	0.25%	0.375
26 – Advertisement & Publicity	0.25%	0.375	-	-	-	-	-	-	-	-	0.25%	0.375
27 – Minor works/ maintenance	4 %	6.00	-	-	-	-	-	-	-	-	4 %	6.00
TOTAL - 09	5%	7.50	-	-	-	-	-	-	-	-	5%	7.50
TOTAL = Basic Activities: (01+02+03+04+05)	22%	33.00	6%	9.00	4.5%	6.75	7 %	10.50	4.5 %	6.75	-	-
TOTAL = Development works (06)	1000 ha (50 %)	75.00	-	-	661.5 ha (7.5 %)	11.25	298.5 ha (35 %)	52.50	40.0ha (7.5 %)	11.25	-	-
TOTAL = Livelihood activities and Production System and Micro Enterprises (07+08)	- (23 %)	34.50	-	-	- 2 %	3.00	- (8 %)	12.00	- (13 %)	19.50	-	-
GRAND TOTAL	1000 ha (100 %)	150.00	6 %	9.00	661.5 ha (14 %)	21.00	298.5 ha (50 %)	75.00	40.0 ha (25 %)	37.50	5 %	7.50


 Dr. D. I. Kjam
 V.Sc. & A.H. (A.A.U.)
 PGNDAS (Obs & Gyndae) LVRI
 Regn. No :- MVC-043


 Assistant Soil & Water Conservation Officer
 Cash Crop Division,
 Jowai.


 Divisional Officer
 Soil & Water Conservation,
 Cash Crop Division,
 Jowai.


 Project Manager
 Meghalaya Rural Development Society
 (LIPH- IFAD)
 DMU- Jaintia Hills District
 Jowai, Meghalaya



 Assistant Soil & Water Conservation Officer
 Jaintia Hills (D) Division
 Jowai

ABSTRACT – J H – I.W.M.P – V – 2010 – 2011

AMKAHOH MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
1 st year	8.10	-	9.00
2 nd year	18.90	-	21.00
3 rd year	67.50	-	75.00
4 th year	33.75	-	37.50
5 th year	6.75	-	7.50
Total	= 135.00	- 15.00	- 150.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


Divisional Soil & Water Conservation Officer
Jaintia Hills (T) Division
Jowai

Detail of types of areas covered under the IWMP Programme:

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 of the Projects (Ha)				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)
1	Meghalaya	Jaintia Hills	JH-IWMP-V	2010-2011	2010	2015	2000 ha	300.00	Amlympiang 3C1C2c4e	180	-	402	-	550 Ha	100 Ha	350 Ha	-	1000 Ha
									Amkahoh 3C1C2c4b	175	-	394	-	500 Ha	110 Ha	390 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 Rs in lakhs	State share Rs in lakhs	Name of Scheme	Amount Rs in lakhs	Name of Private sector	Financial contribution	Name	Financial Contribution	Name	Financial Contribution	Name	Financial Contribution	
Jaintia Hills	JH-IWMP-V	270.00	30.00	MGNREGS	28.50	-	-	-	-	-	-	-	-	328.05

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

Sl No.	Names of States	Name of Districts	Name 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 No. (tobe obtained confidentially)	Account type (Savings/ Current/ Others)	Name & Designation of authorized Persons who operate the Account.	Name of Watershed comm-ittee	Name of the Bank and Branch Where proje3ct 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	Jaintia Hills	J.H.- IWMP-V	SBI Ladthalaboh Jowai Branch	30977895076	Saving	Shri D.Shallam	1.Amlympiang W. C. 2. Amkahoh W. C.	Under Process	-	-	Chairman & Secretary of WC

Details of convergence of IWMP with other Schemes:

District	Name of Projects	Name of Department with scheme converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakh)	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 ^s
				(a) Structures (b) Livelihood. (c) Land development		
Jaintia Hills	JH – IWMP-V	DRDA, Under MGNREGS	-	(a)	-	District level

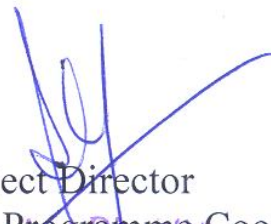
Public – Private partnership in the IWMP Project:

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 others (pl. specify)	IWMP	Private sector				
Jaintia Hills	JH – IWMP-V	-	NOT RELEVANT			-	-	-	-	-	-

from column no.2 totals no. of State implementing the programme, from column, no 3, total no. of District; from column no. 4 total no. of project under PPP from column no.5 total no of private companies / agencies, from column no.7, total amount may be mention at the end of the table for the entire Country.

TO WHOM IT MAY CONCERN

This is to certify that decision has been taken in principle for convergence of works identified under MGNREGA for convergence with IWMP Project proposed by the Divisional Soil & Water Conservation Officer (T) Division PIA of IWMP Jaintia Hills District which will be planned and executed within the parameters of MGNREGA and convergence guidelines of IWMP.


Project Director
& Addl. District Programme Coordinator
DRDA Jaintia Hills District, Jowai.
D.R.D.A., Jaintia Hills District, Jowai

CHAPTER VI

CAPACITY BUILDING

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				
Sl 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				
								Reference 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	Kyrdemkulai	Director	State Govt.	Animal Husbandry	NA	2010-11	2	100	2	20
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 2010 – 11 as on 31/03/2011 (dd/mm/yyyy)*

1	2	3	4	5	6		7	
Project Stakeholder	Total no. of persons.	No. of person trained so far	No. of person to be trained during current financial year	No. of person to be trained during current financial year	Sources of Funding for Training		Fund utilised	
					(a) DoLR	(b) Any others (State Govt)	(a) DoLR	(b) Any others (pl. specify)
SLNA				-	(a)	(b)	2.70	0.30
DRDA/ ZP cell				-				
PIAs	20	10		10 Nos				
WDTs	7	7		7 Nos				
UGs	-			-				
SHGs	155	42		42 Nos				
WCs	36	36		36 Nos				
GPs	-			-				
Community	680	220		220 Nos				
Others (pl. specify)								

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

1	2	3	4	5
Activity	Executing agency	Estimated expenditure (Rs.)	Expenditure incurred (Rs.)	Outcome (may quantify, wherever possible)
Awareness	SWC Div (T) Jowai	0.50	0.50	-
PRA Exercise		0.30	0.30	-
Exposure visit		0.20	0.20	-
Capacity Building		2.00	2.00	-

CHAPTER VII

EXPECTED OUTCOME

CHAPTER VII

EXPECTED OUTCOME

Table 7.1: Employment related outcomes:

SI No	Name of Village	1										2				
		Wages 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.	Nongtalang	-	-	32100	118750	50850	-	-	102	95	197	-	-	-	-	-
2.	Sohkha Shnong Sohkha Mission Sohkha Phlang	-	-	31500	20100	51600	-	-	82	97	179	-	-	-	-	-
Total		-	-	63600	38850	102450	-	-	184	192	376	-	-	-	-	-

Table 7.2: Migration Details:

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	
									Structures	Livelihoods
Jaintia Hills	JH – IWMP-V	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

*From column no.2, total number of States, from column no.3, total no. of Districts; from column no.4, total no. of project; 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 from 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)
Women days	Amount (Rs. In lakh)	No. of women participants	Amount (Rs. In lakh)	No. of women beneficiaries	Value of assistance provided (Rs. In lakh)	
38850	38.85	508	2.54	274	25.82	67.21

- 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	
Jaintia Hills	JH – IWMP - V	Nongtalang	Community	F, FW,	Whole years	-	197		197	Nil
		Sohkha Shnong	Forest,	Wd, Wi						Nil
		Sohkha Mission	Drinking wells,							
		Sohkha Phlang	Check Dams & WHS & Ponds			-	179		179	

*From Column no.2, no. of States; from Column no.3, no. of Districts; from column no.4, 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 of	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
So	for right to	collect soil for nursery and plantation activities and constructions
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 meters)--

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
Jaintia Hills	JH – IWMP-V	Open wells	1.50	-	-	-	
		Bore wells	Nil	-	-	-	
		Others (specify)	-	-	-	-	

*From column no.2, total number of States, from column no.3, total no. of Districts; from column no.4, total no. of project; 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 depth 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 Project	Availability of Drinking water (no. of month in a year)			Quality of Drinking water			Comments
		Pre- project	Post- project	Change in availability	Pre-project	Post- project	Change in availability	
Jaintia Hills	JH-IWMP - V	7-8 months	12 months	+ 5 months	Dirty & unhygienic drinking water	-	-	

- From column no. 2 total no. of states implementing the programme, from, column no.3 total no. of District, from column no. 4 category – wise no. of project, from column no. 5 average no. of month 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 Project	Name of major crop	Water saving in cu.m			
			Through water saving device	Through water conserving agronomic practices	Any others (pl. specify)	Total
Jaintia Hills	JH-IWMP - V	-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-

- * From column no. 2 total no. of states implementing the programme, from, column no.3 total no. of District, from column no. 4 total no. of project, from column no.6 practices –wise total may be mention at the end of the table for the entire country.

^s Sprinkler, Drip PVC pipe etc.

[#] Vermi- Compost, Organic manuring, mulching, Check basin, alternate furrow, ridges & furrow and 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 District	Name of Project	Name of Crops	Pre-Project						Mid-Term						Post-Project					
			Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)	
			Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf
Jaintia Hills	JH-IWMP -V	Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- From column no. 2 total no. of states, from column no.3 total no. of District, from column no. 4 total no. of project, from column no.5 total no. of crop from column no.6 to 8 the total for the area average yield per ha and total production category-wise entire country may be given at the end of the table for the

-: 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					
SI No.	Names of States	Names of the District	Name of Project	Name of Crops	Pre-Project						Mid-Term						Post-Project					
					Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)	
					Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf
1	Meghalaya	Jaintia Hills	JH-IWMP- V	Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Total for the District																			

- From column no. 2 total no. of states, from column no.3 total no. of District, from column no. 4 total no. of project, from column no.5 total no. of crop from column no.6 to 8 the total for the area average yield per ha and total production category-wise entire country may be given at the end of the table for the

∴ 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 District	Name of Project	Name of Crops	Pre-Project						Mid-Term						Post-Project					
					Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)		Area (ha)		Average yield (Qtl) /ha		Total production (Qtl)	
					Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf	Irri	Rf
1	Meghalaya	Jaintia Hills	JH-IWMP- V	Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Nil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Total for the District		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- From column no. 2 total no. of states, from column no.3 total no. of District, from column no. 4 total no. of project, from column no.5 total no. of crop from column no.6 to 8 the total for the area average yield per ha and total production category-wise entire country may be given at the end of the table for the

∴ 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
Jaintia Hills	JH- IWMP-V	5 Years	NA	NA	NA			

*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 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 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
Jaintia Hills	JH- IWMP-V	5 Years	Field Survey Report	2010	269 Ha	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 7.6.6: 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
Jaintia Hills	JH-IWMP-V	5 Years	Field Survey Report	2010	350 Ha	1050		

*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 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 fuel-wood (ha)			Achievement (ha)		
			Source/ Name of report	Year of reference	Area already under fuel-wood	Area under fuel-wood proposed to be covered through IWMP	Area under fuel-wood actually covered through IWMP	Change in area under fuel-wood
Jaintia Hills	JH IWMP-V	5 Years	Filed Survey Report	2010	Nil			

*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 total areas 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
Name of the District	Name of the Project	Type of Animal	Pre-Project			Mid-term			Post-project			Remarks
			No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	
Jaintia Hills	JH-IWMP-V	Milch-animals	Nil	Nil	Nil							
		Poultry	1255	942 kgs	1.413							
		Piggery	469	9400 kgs	14.10							
		Cow	-	-	-							
		Goat	-	-	-							
	Total for all projects		1724		15.513							
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 no.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	Funds 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				
Jaintia Hills	JH-IWMP -V	Kitchen Gardening, Tailoring & Carpentry	1.352	1.2844	0.0676	-	1.352						26					

*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 in directly in the activity		Annual increase in income due to activity (Rs.)	Impact of livelihoods programmes				Any other information (pl.Specify)
			Migration (No. beneficiaries)		Development of backward- forward linkages		
Total	Grand Total (8+9)		Pre-project	Post-project	Pre-project	Post-project	
-	26	10000 -15000					

Table 7.7.4: Details of other livelihoods created for farmers:

1	2	3	4	5				6	7				8			
District	Project	Name of activity	Funds of required for the activity (Rs.)	Source of funding (Rs.)				Actual Expenditure incurred on activity (Rs.)	No. Farmers trained				No. of Farmers taking up activity			
				Project fund	Beneficiary	Others (please specify)	Total		SF	MF	LF	Total	SF	MF	LF	Total
Jaintia Hills	JH-IWMP-V	Kitchen Gardening, Compost pit, Carpentry, Tailoring, Vermi compost, etc.	28.648	27.2156	1.4324	-	28.648	-	148	210	18	376				

*From column no.2, total no. of State, from column no.3, total no. of District; from column no. 4, no. of projects; from column no. 5, total no. of activities, from column 6, no total . of fund required for the activity, from column no. 7 to 12, category-wise total, from column no. 13 cartegory-wise total 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		Annual increase in income due to activity (Rs.)	Impact of livelihood programme				Any other information (Pl. Specify)
			Migration (No. of beneficiaries)		Development of backward-forward linkage		
Total	Grand total (8+9)		Pre-project	Post-project	Pre-project	Post-project	
156	532	15000 - 20000					

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.)
Jaintia Hills	JH – IWMP-V	(A) Backward linkages			
		(i) Seed certification	Nil	Nil	
		(ii) Seed supply system	Nil	Nil	
		(iii) Fertilizer supply system	Nil	Nil	
		(iv) Pesticide supply system	Nil	Nil	
		(v) Credit institutions	Nil	Nil	
		(vi) Water supply	2	2	
		(vii) Extension services	Nil	Nil	
		(viii) Nurseries	Nil	Nil	
		(ix) Tools/machinery suppliers	Nil	2	
		(x) Price Support system	Nil	Nil	
		(xi) Labour	Nil	Nil	
		(xii) Any other (please specify)	-	-	
		(B) Forward linkages	-	-	
		(i) Harvesting/threshing machinery	Nil	Nil	
		(ii) Storage (including) cold storage)	Nil	Nil	
		(iii) Road network	1	1	
		(iv) Transport facilities	4	4	
		(v) Markets/Mandis	2	2	
		(vi) Agro and other Industries	Nil	Nil	
		(vii) Milk and other collection centres	Nil	Nil	
		(viii) Labour	Nil	Nil	
		(ix) Any other (please specify)	-	-	

*From column no.2, total no. of State implementing the programme, from column no.3, total no. of District; 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
S. No.	State	Item	Unit	Pre-project Status	Post-project Status	Remarks
		Status of Water table		Poor		
		Ground water structures repaired/rejuvenated	No	Nil		
		Quality of drinking water		Moderately good		
		Availability of drinking water		Insufficient		
		Increase in irrigation potential	Ha	Nil		
		Chang in cropping/ land use pattern		Mixed		
		i Area under single crop	Ha	-		
		ii Area under double crop	Ha	-		
		iii Area under multiple crop	Ha	350 ha.		
		Net increase in crop production area	Ha	Nil		
		Increase in area under vegetation	Ha	Nil		
		Increase in area under horticulture	Ha	Nil		
		Increase in area under fuel & fodder	Ton/Day	Nil		
		Increase in milk production	Lit/yr	Nil		
		No. of SHGs	Nos	2		
		Increase in no. of livelihoods	Nos	Nil		
		Increase in income	Rs/Nos/Ha	10000-15000		
		Migration	Nos	Nil		
		No. of school going children	Nos	550		
		SHG Federations formed	Nos	Nil		
		Credit linkage with banks	Nos	Nil		
		Resource use agreements	Nos	Nil		
		WDF collection & managements	Rs	Nil		
		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
Jaintia Hills	JH-IWMP-V	Amlympiang WC & Amkahoh WC	As per Treatment Plan	234.00	351.00	234.00	-	1.25	-

*From column no.2, total no. of State implementing the programme, from column no.3, total no. of District; from column no. 4, no. of projects; from column no.

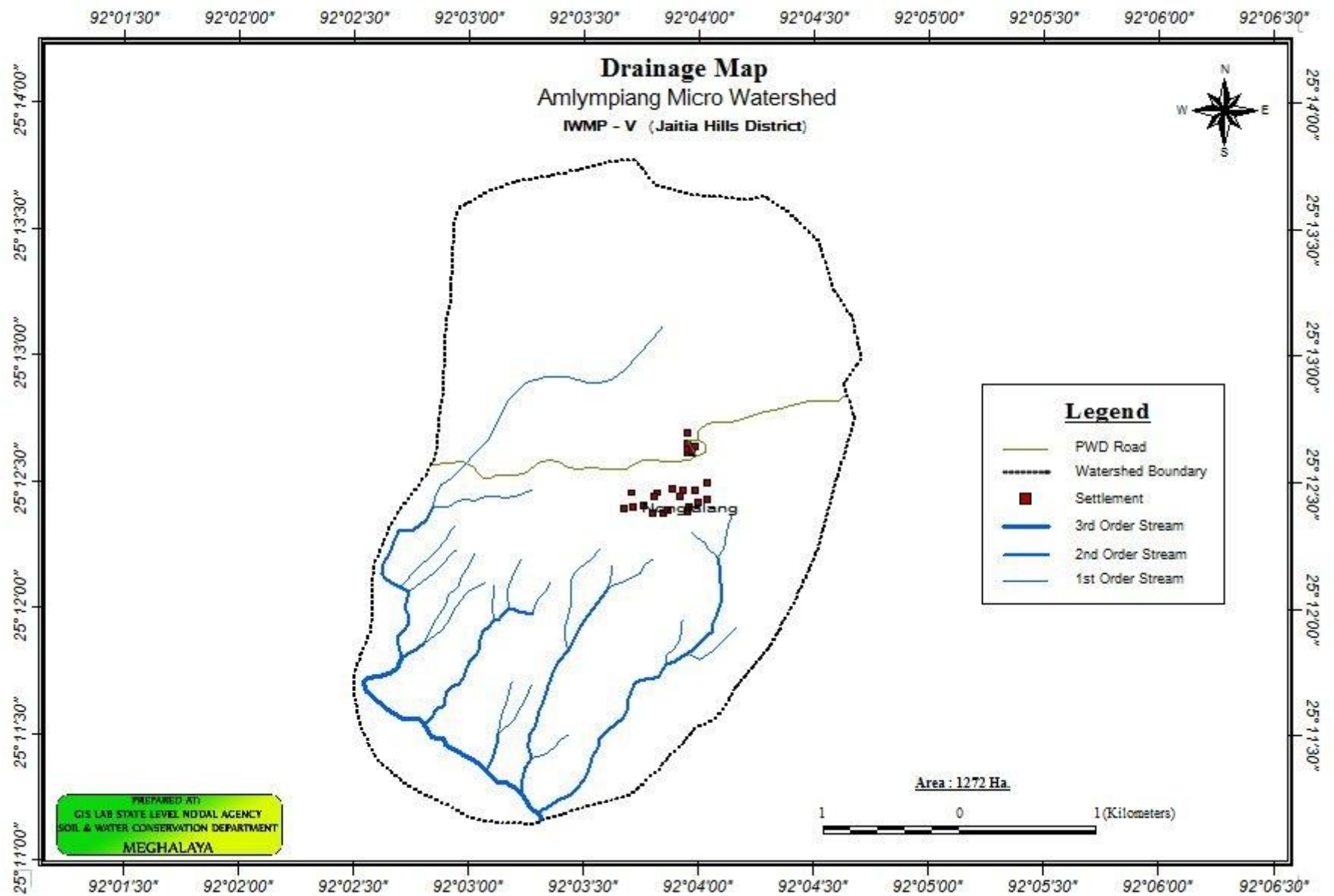
5, no. of WCs, from column 6, no. of structures/ activities, from column no. 7 to 10, category-wise# totals may be mentioned at the end of the table for the entire country.

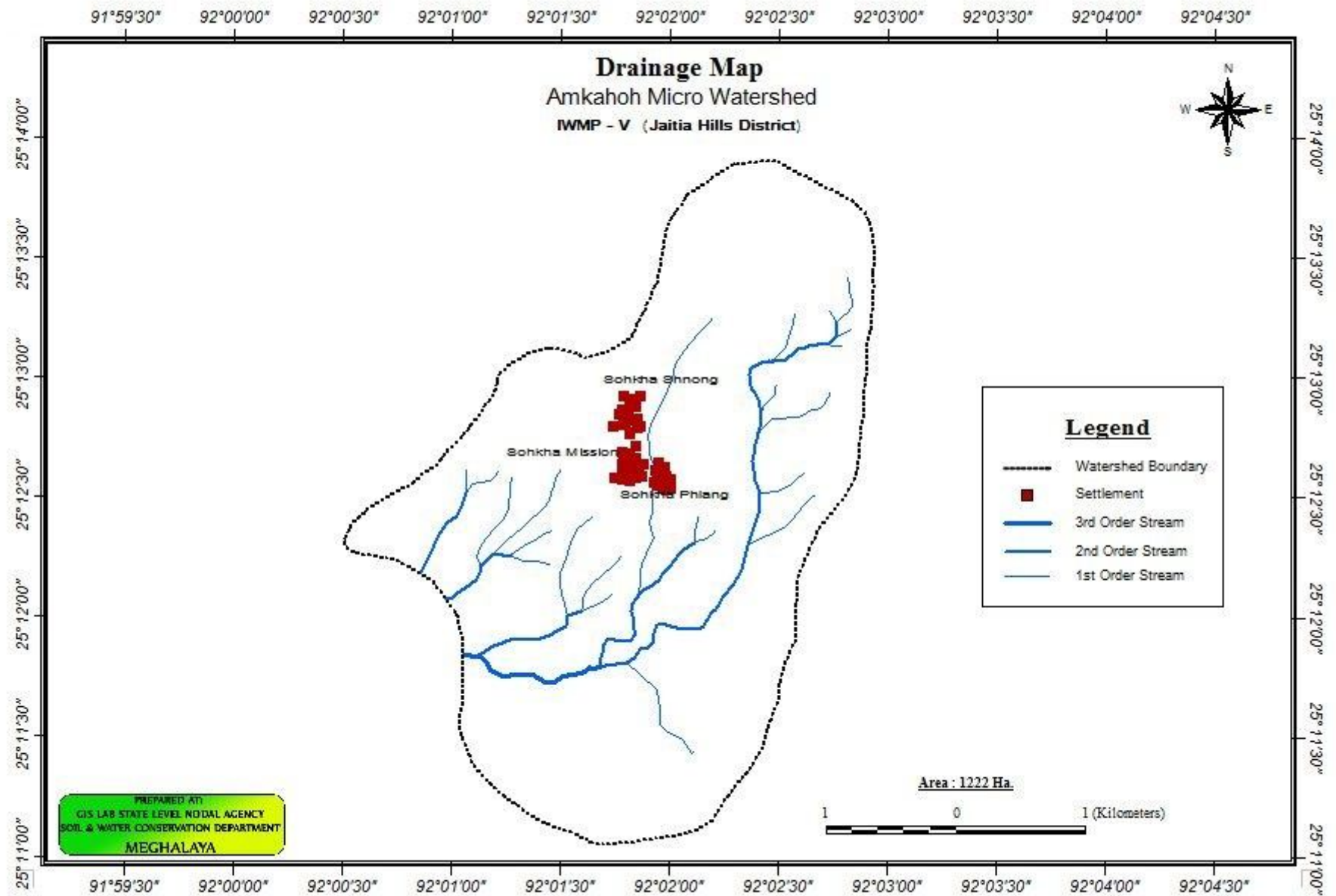
B:C ratio more than 1 – cost effective

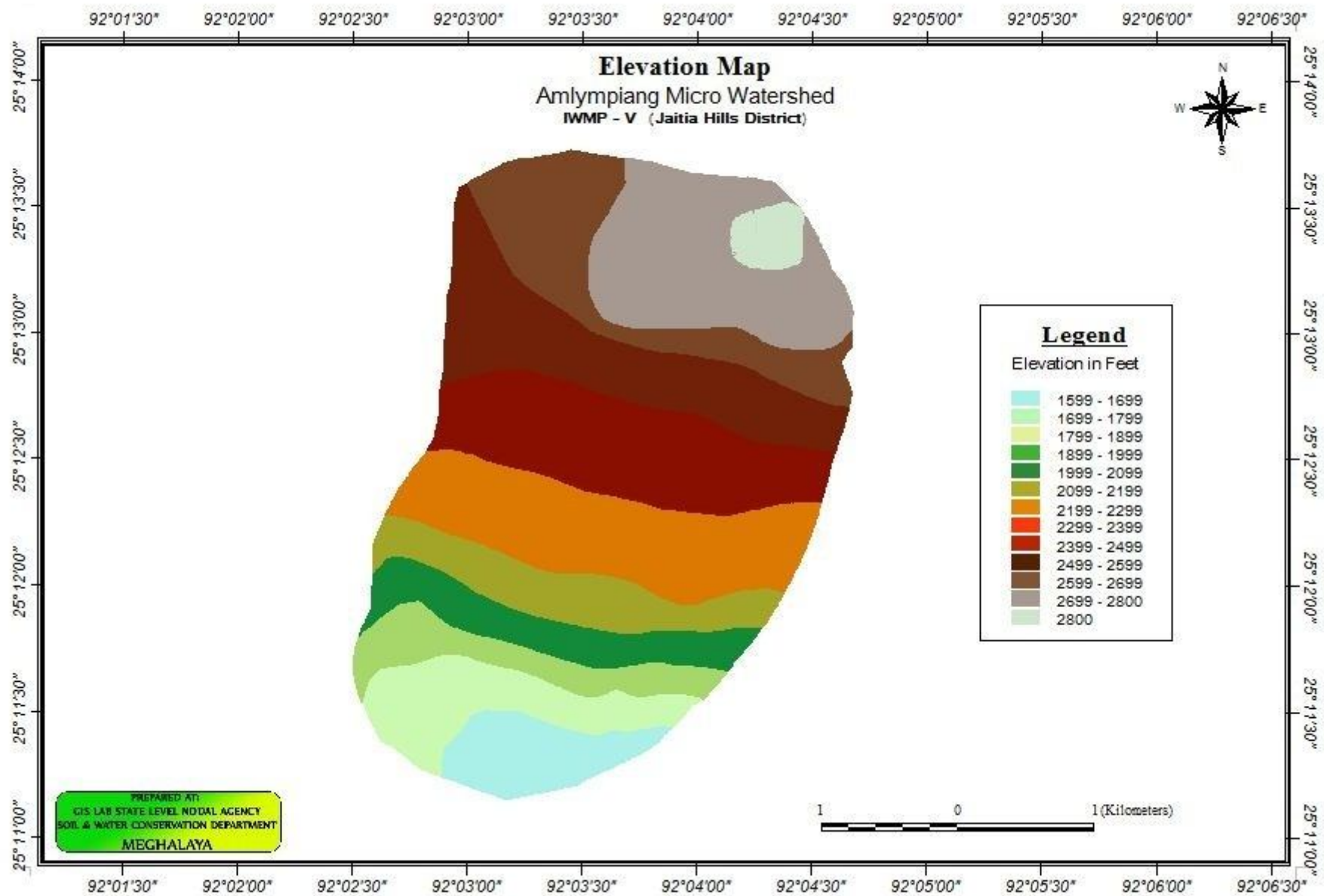
Less than 1- Not cost effective

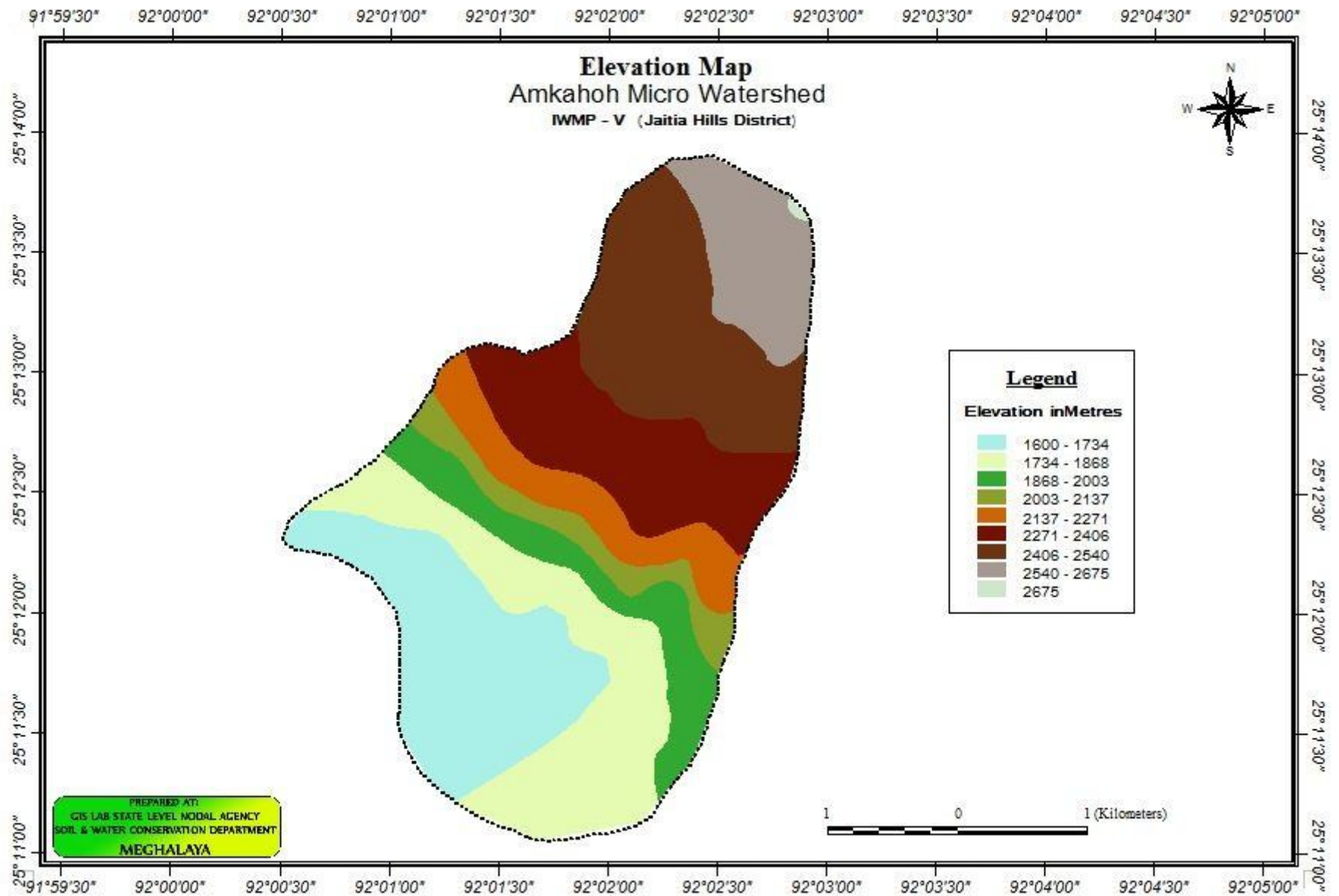
ANNEXURE I

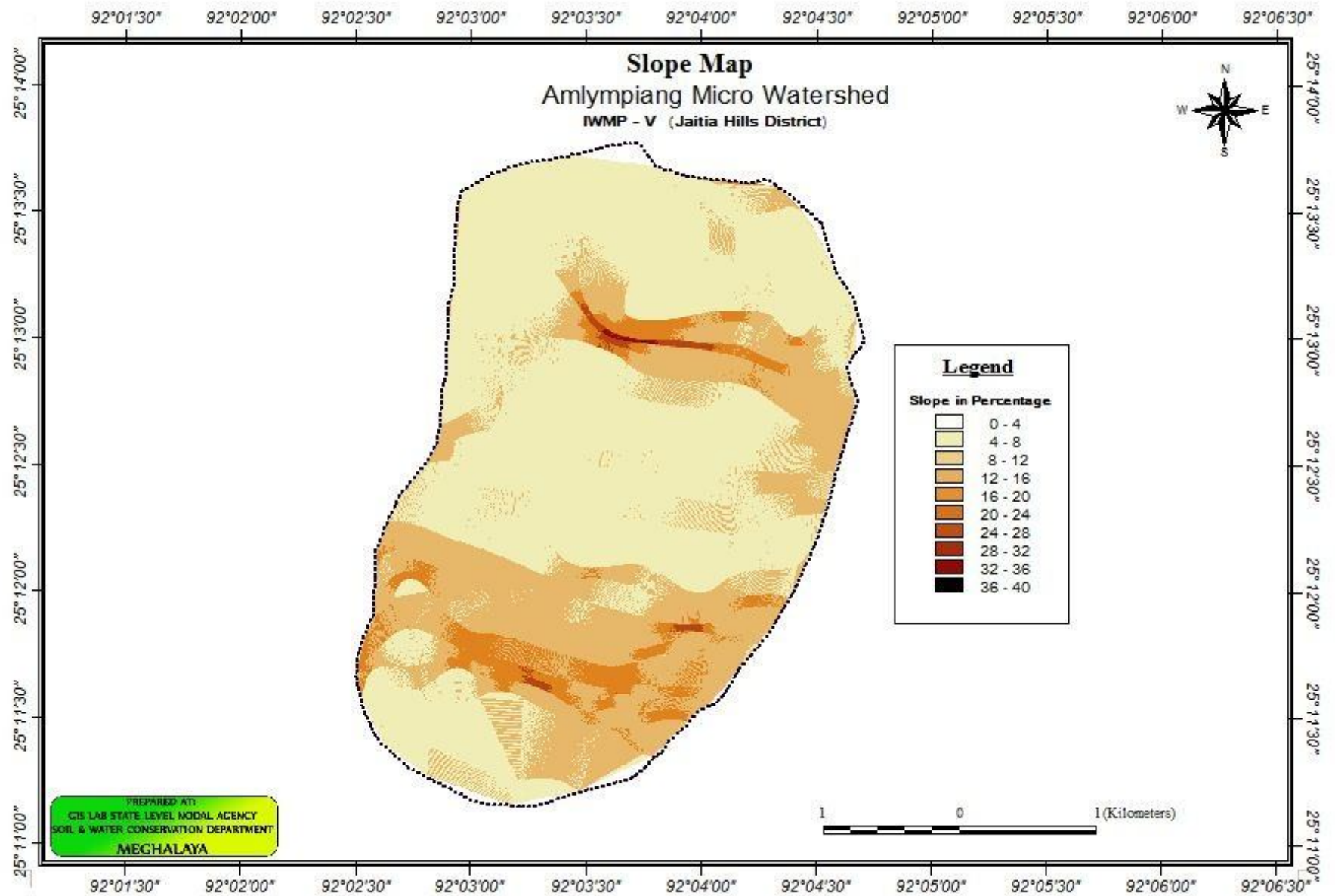
MAPS

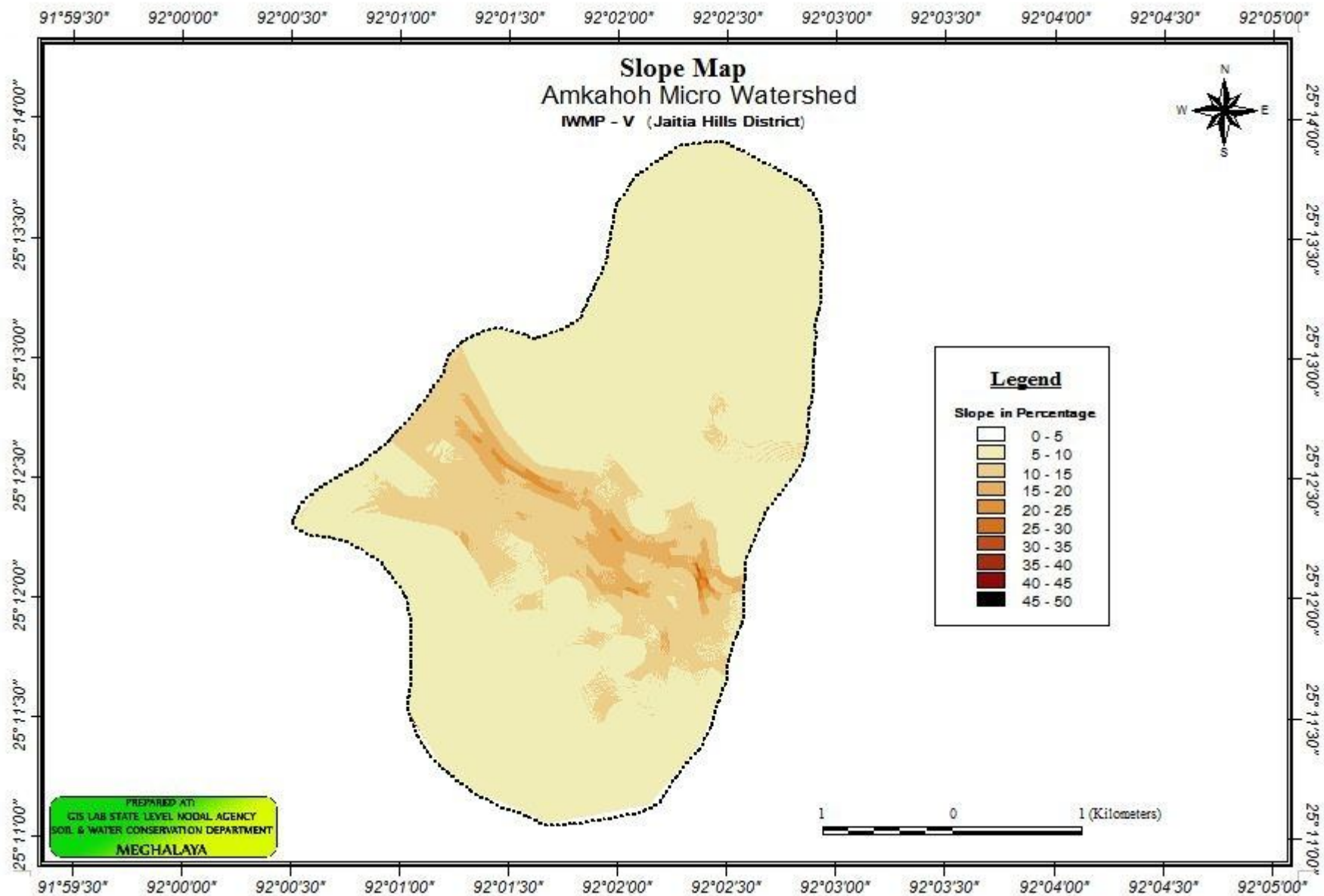


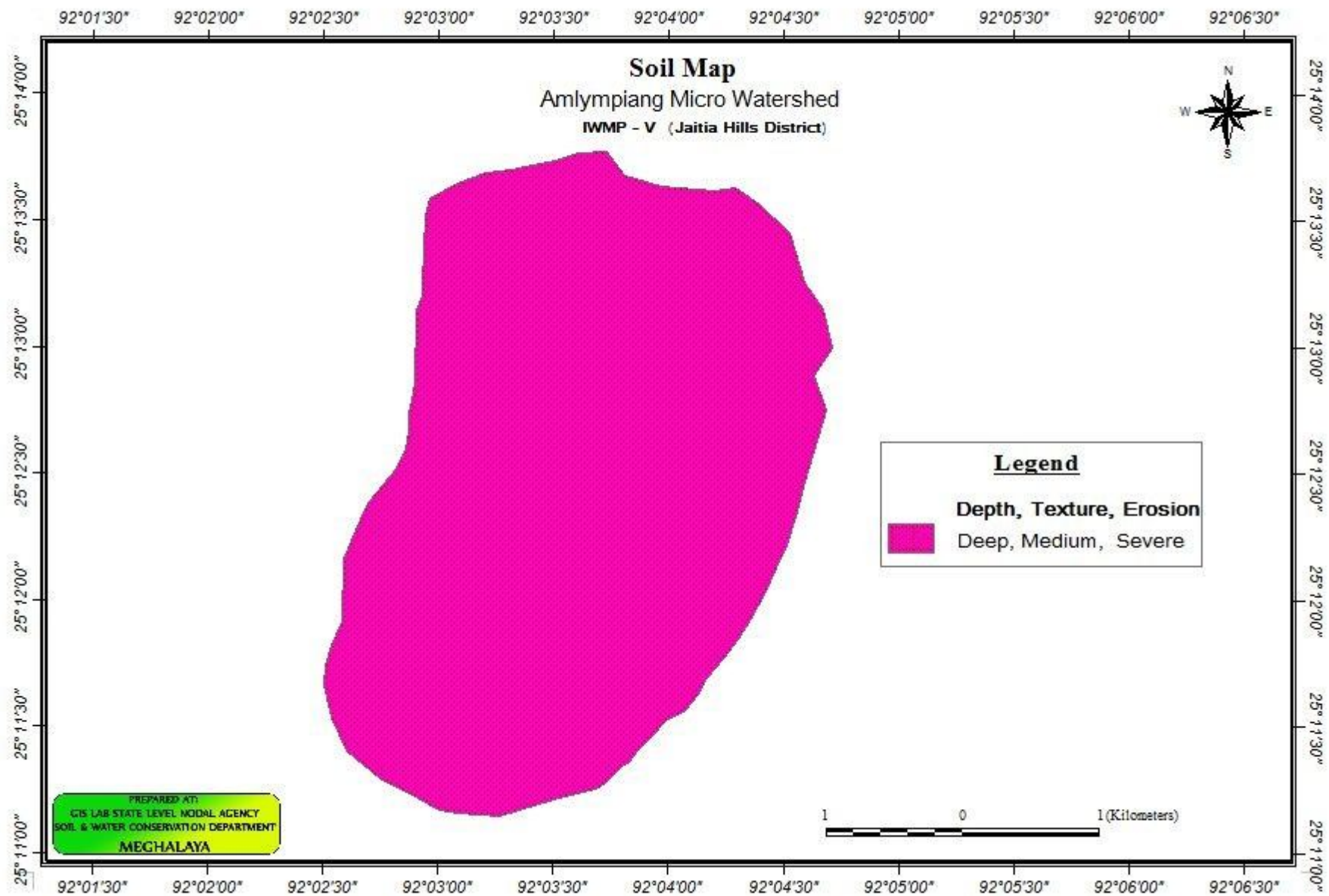


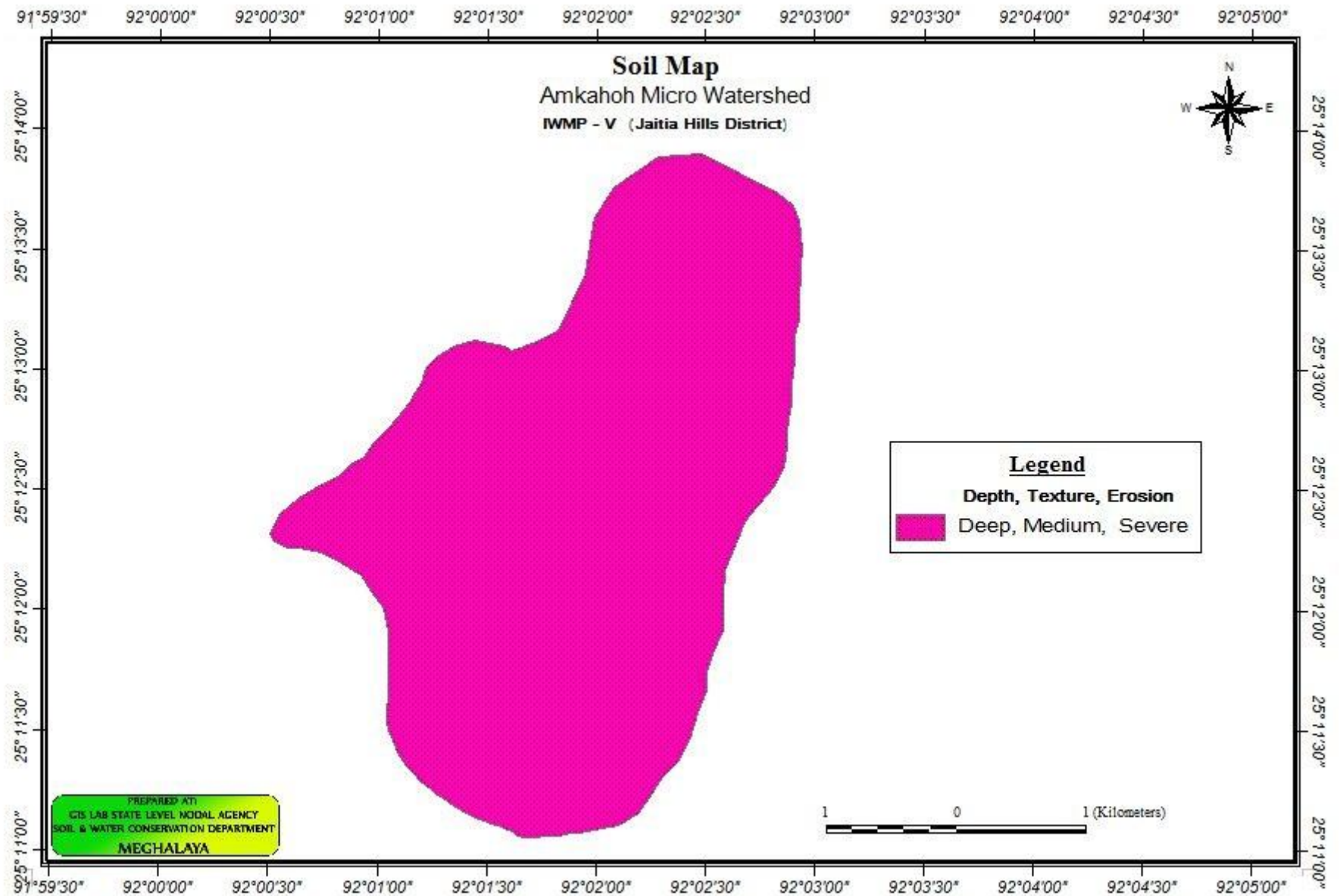


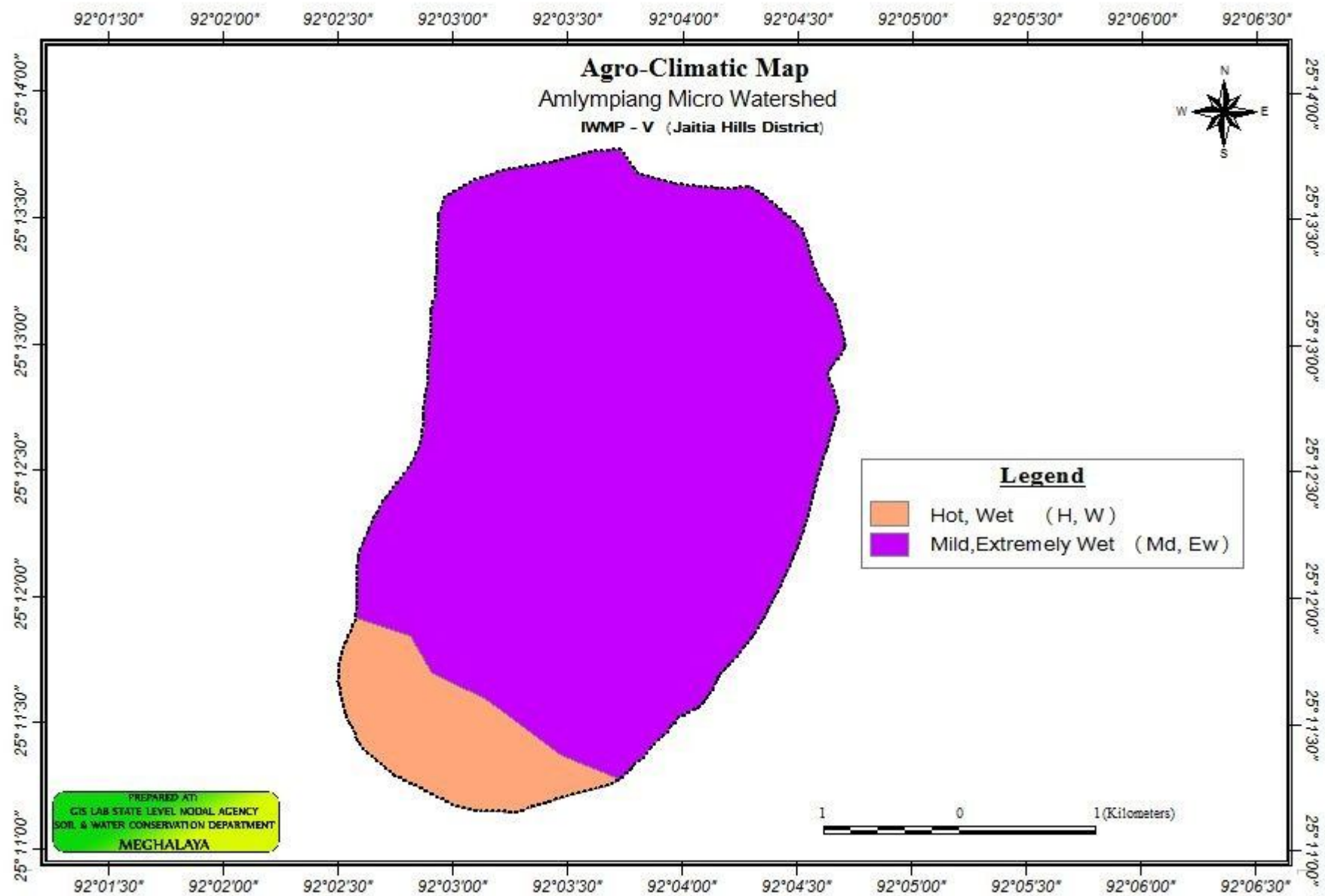


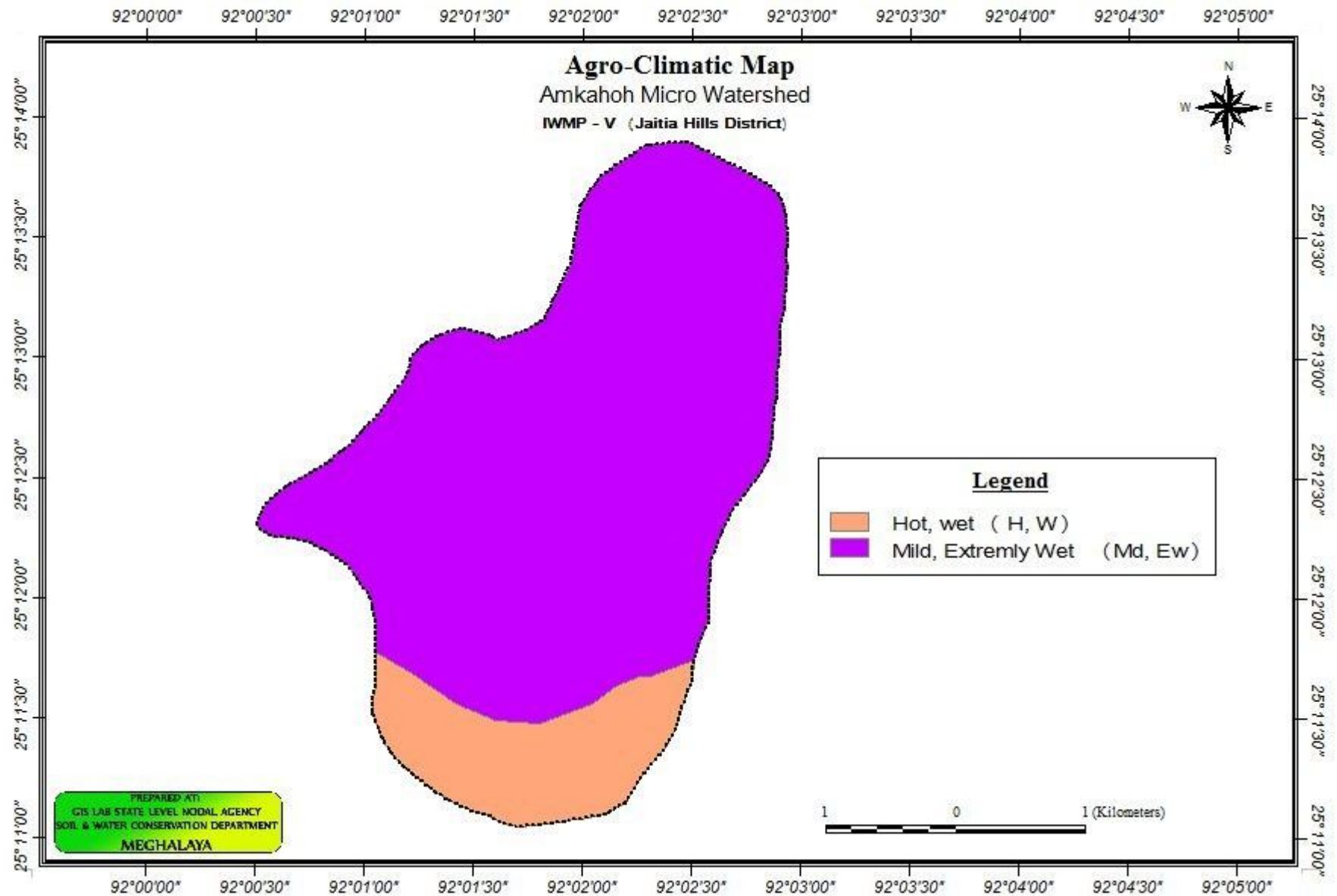


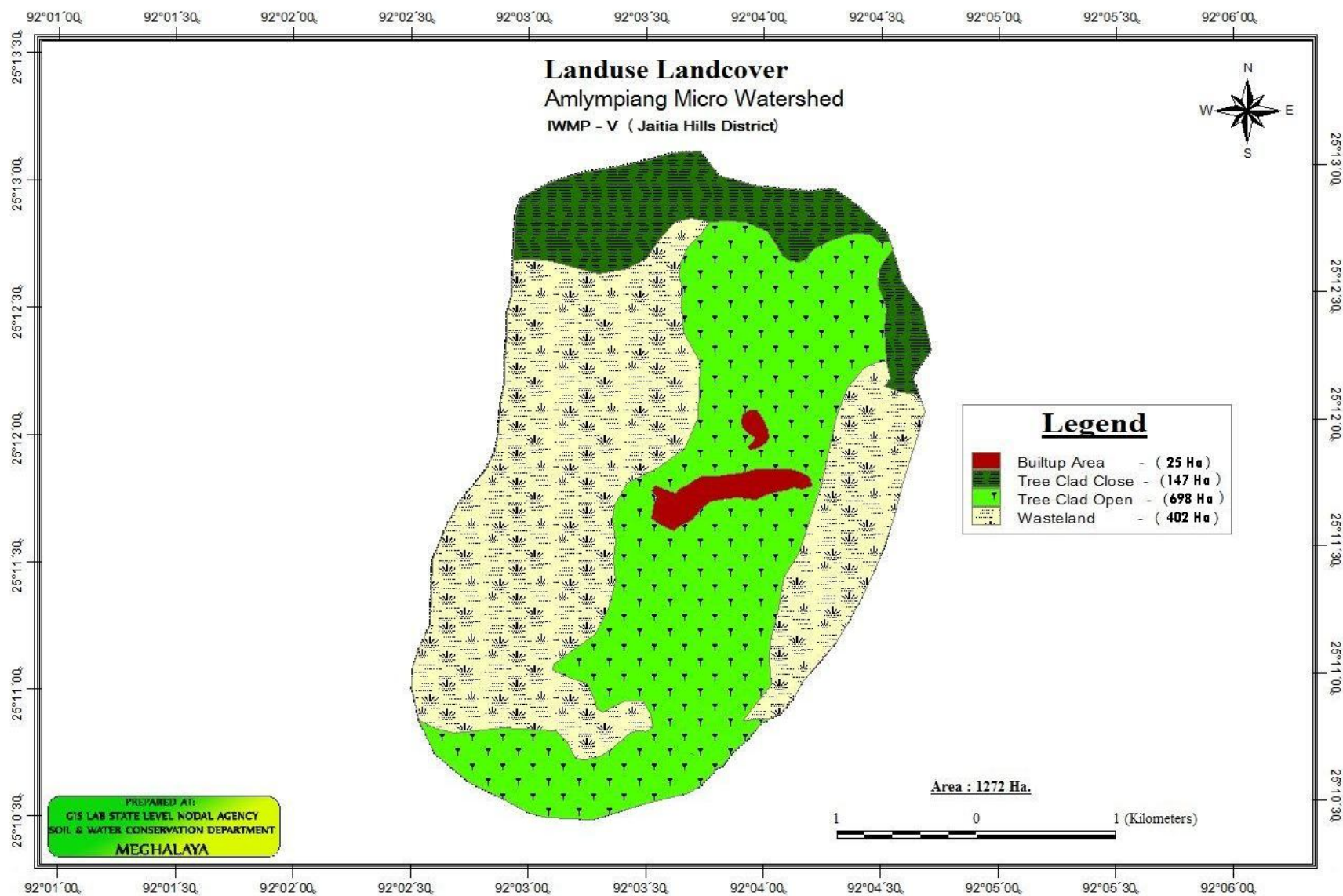


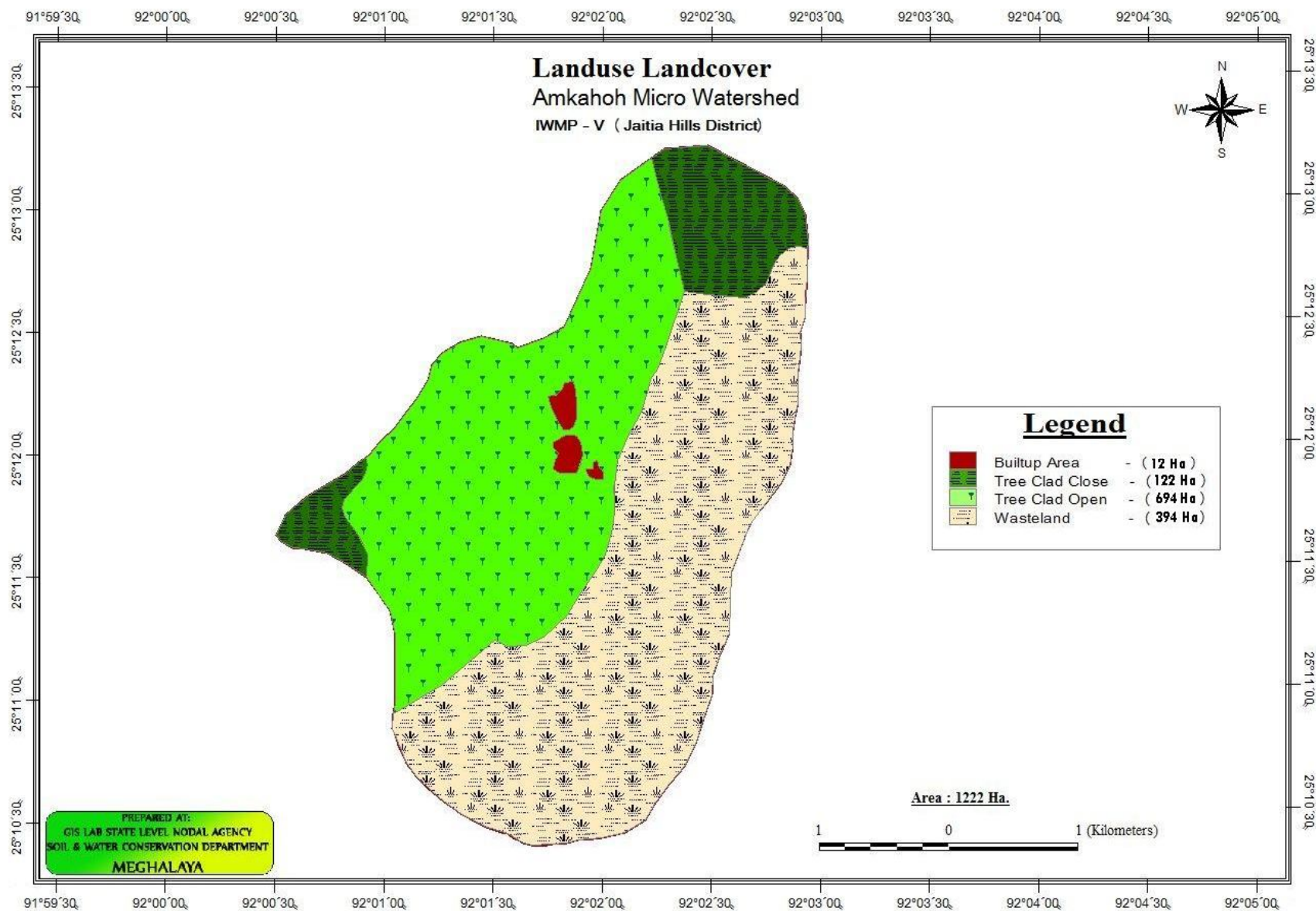


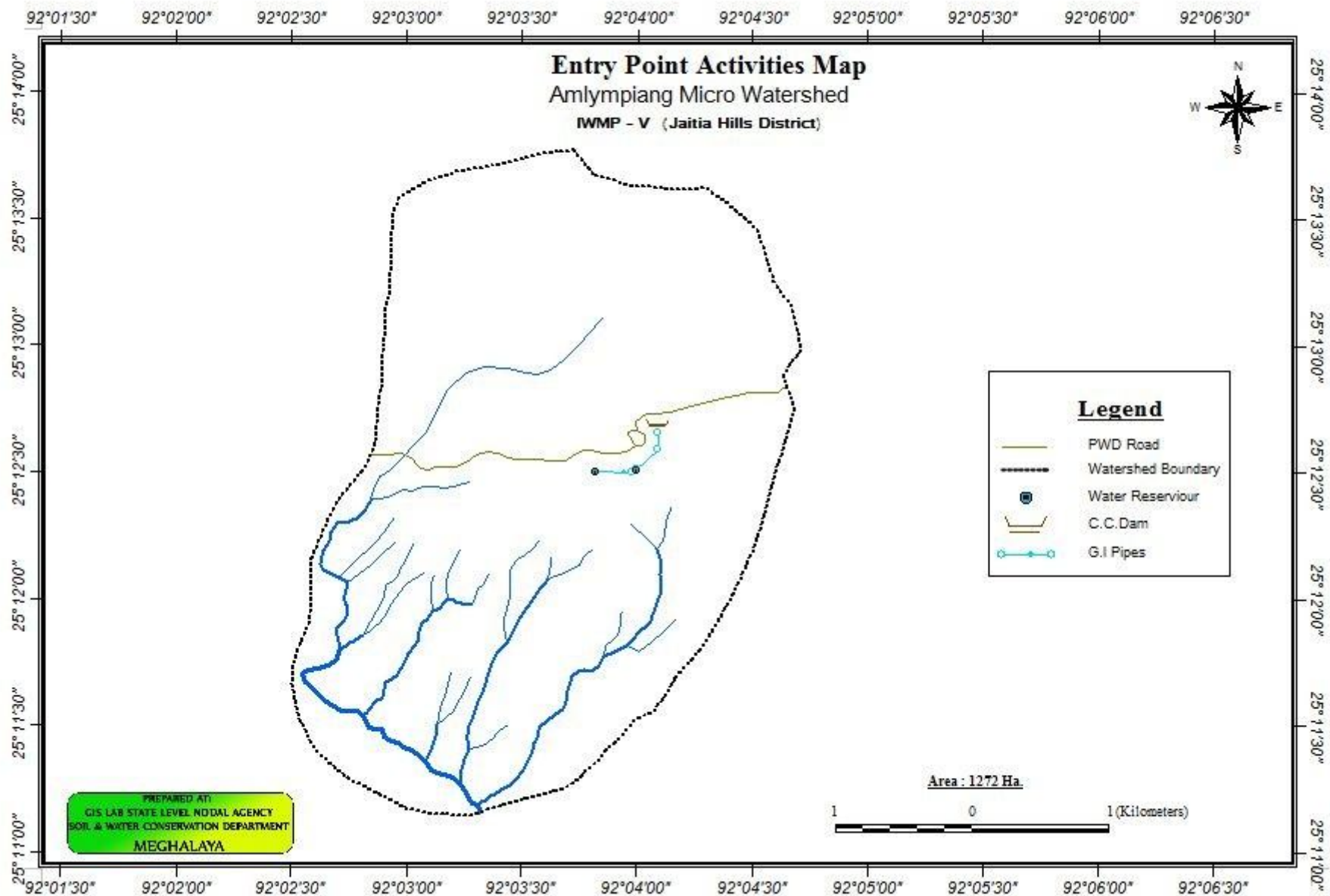


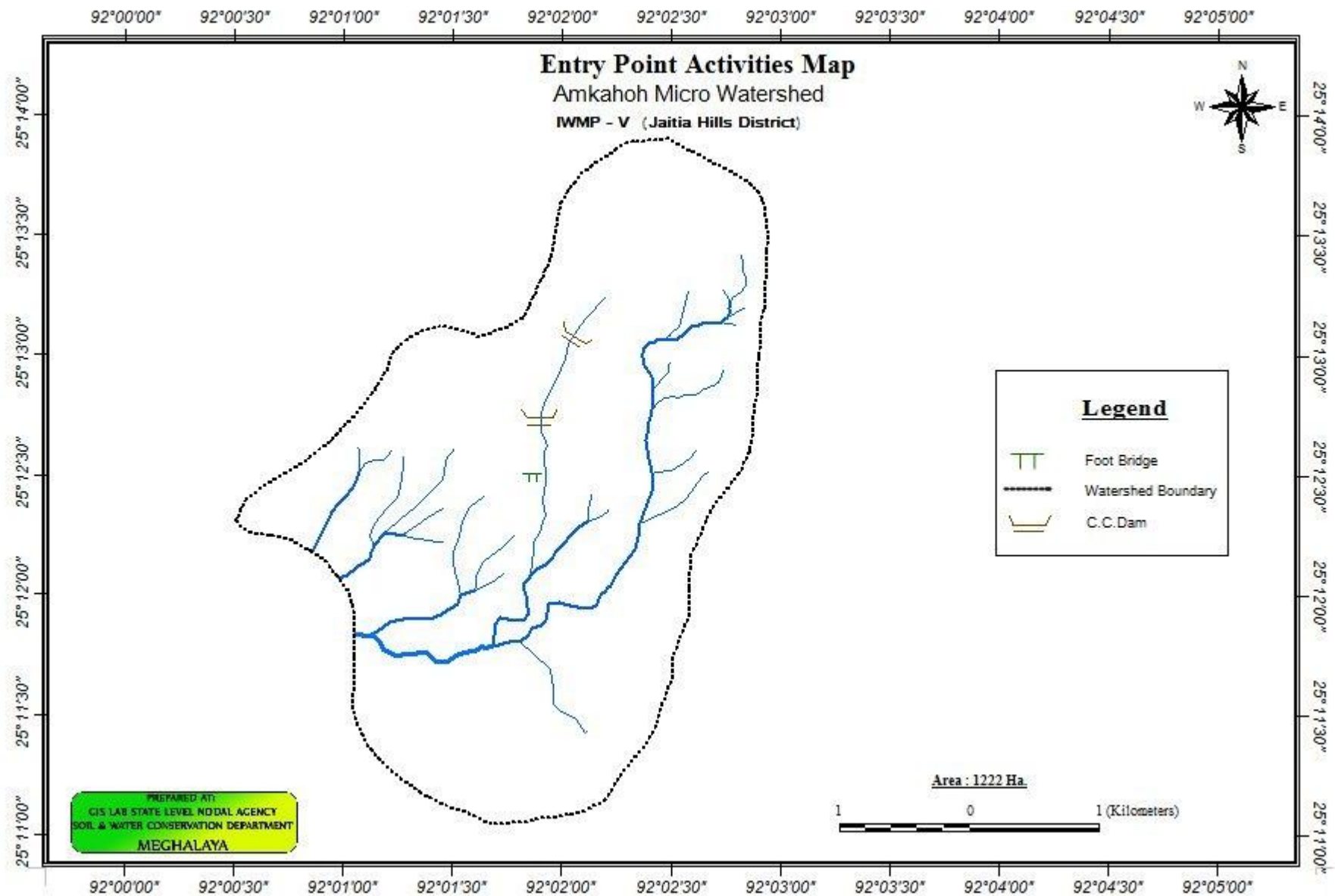


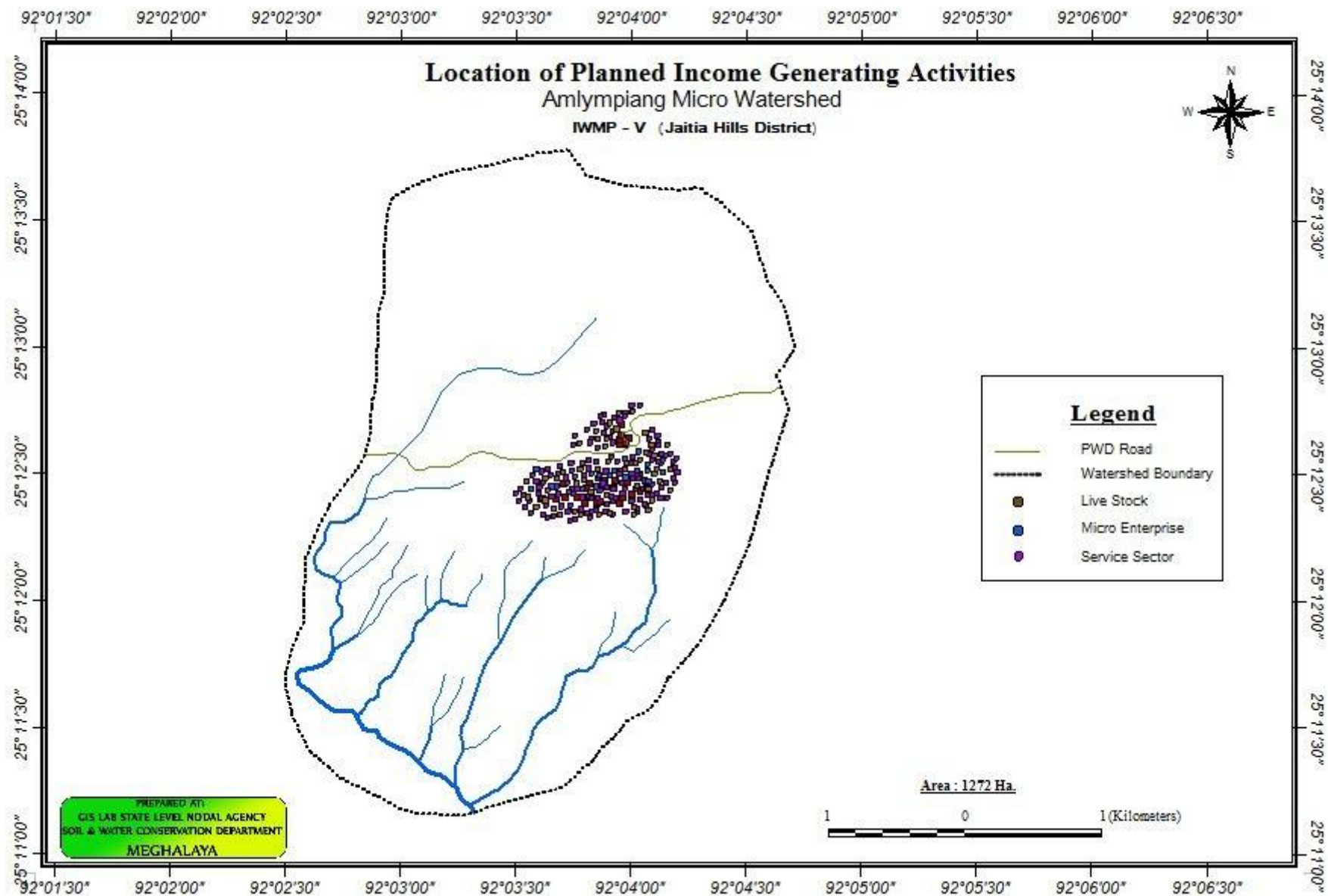


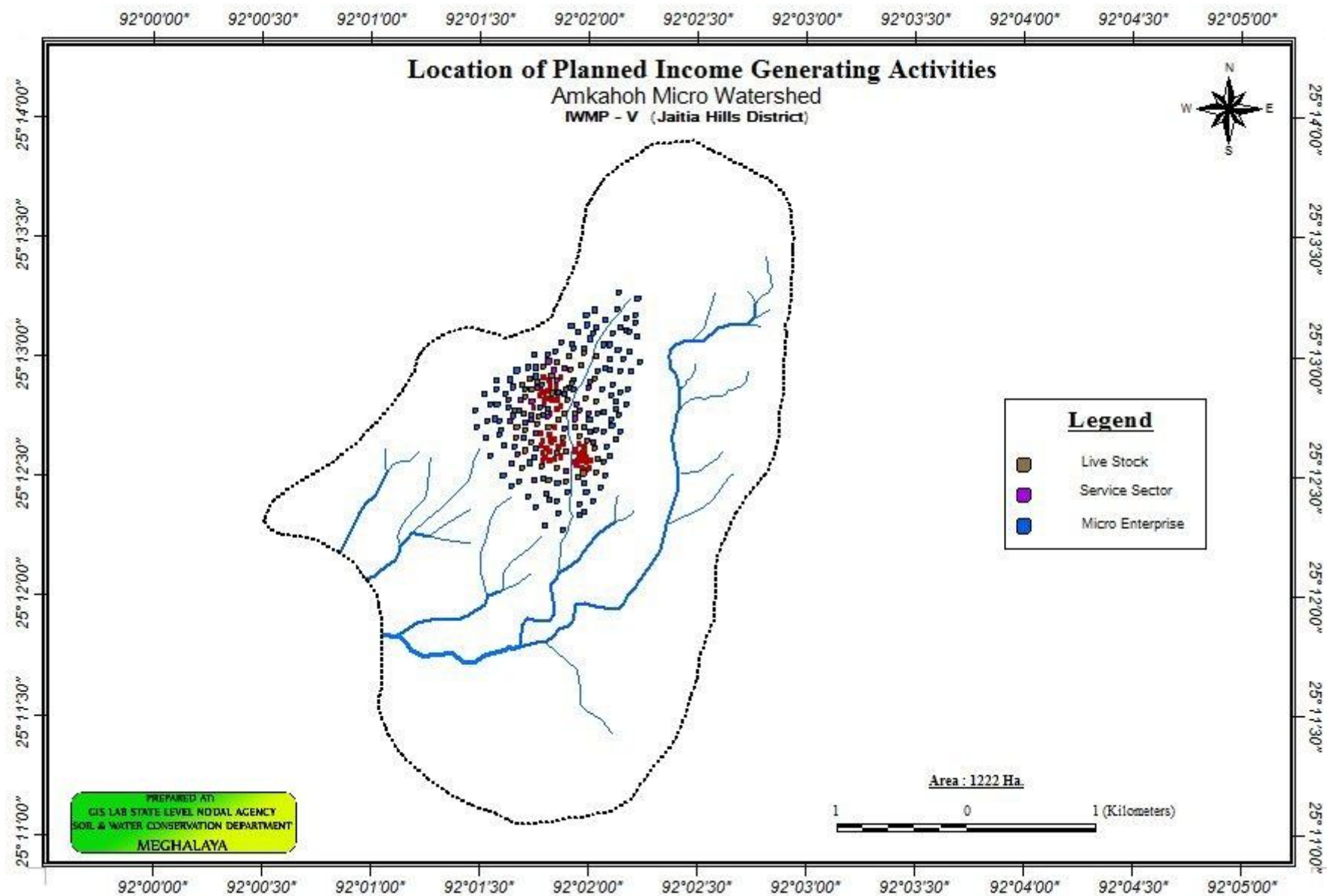


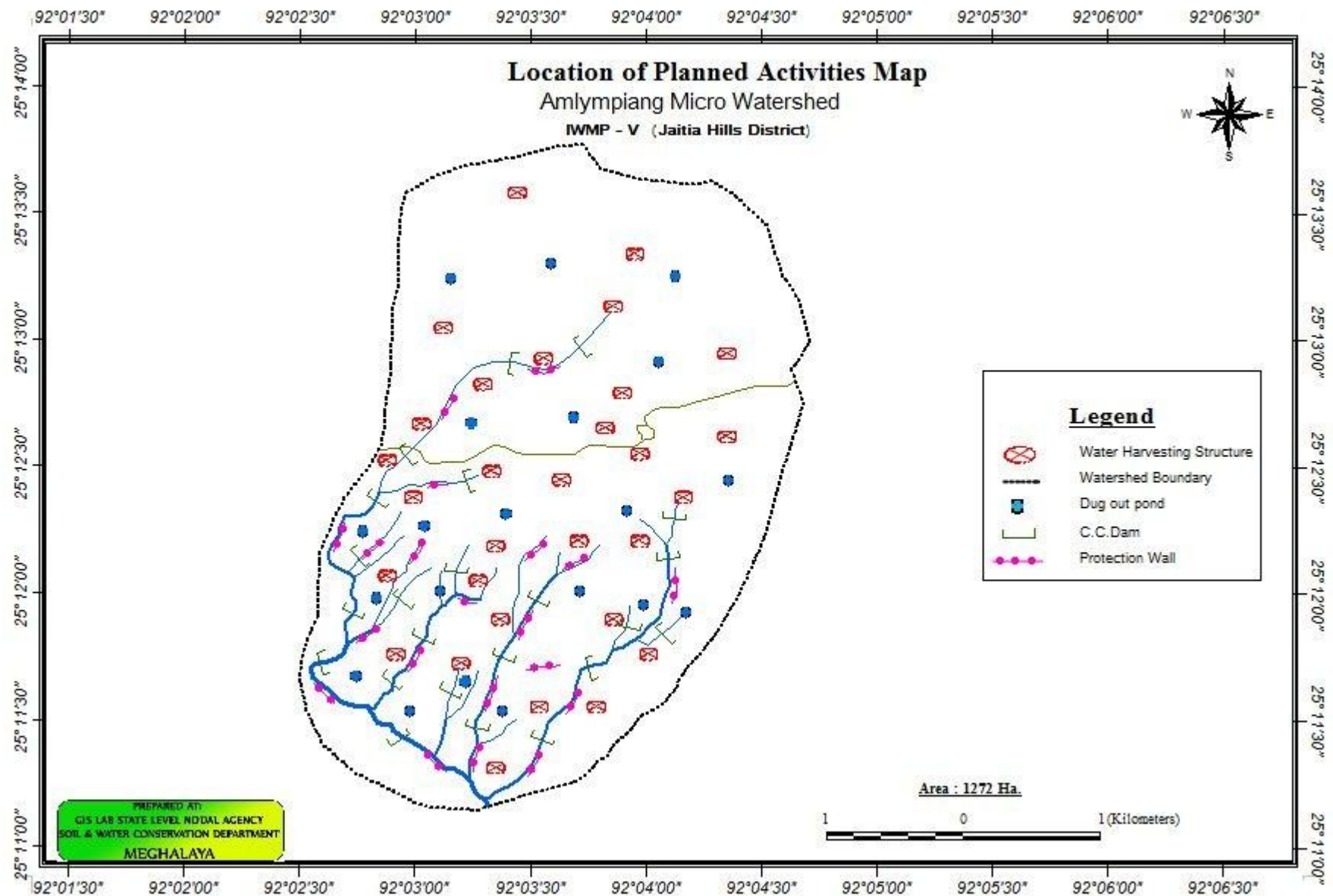


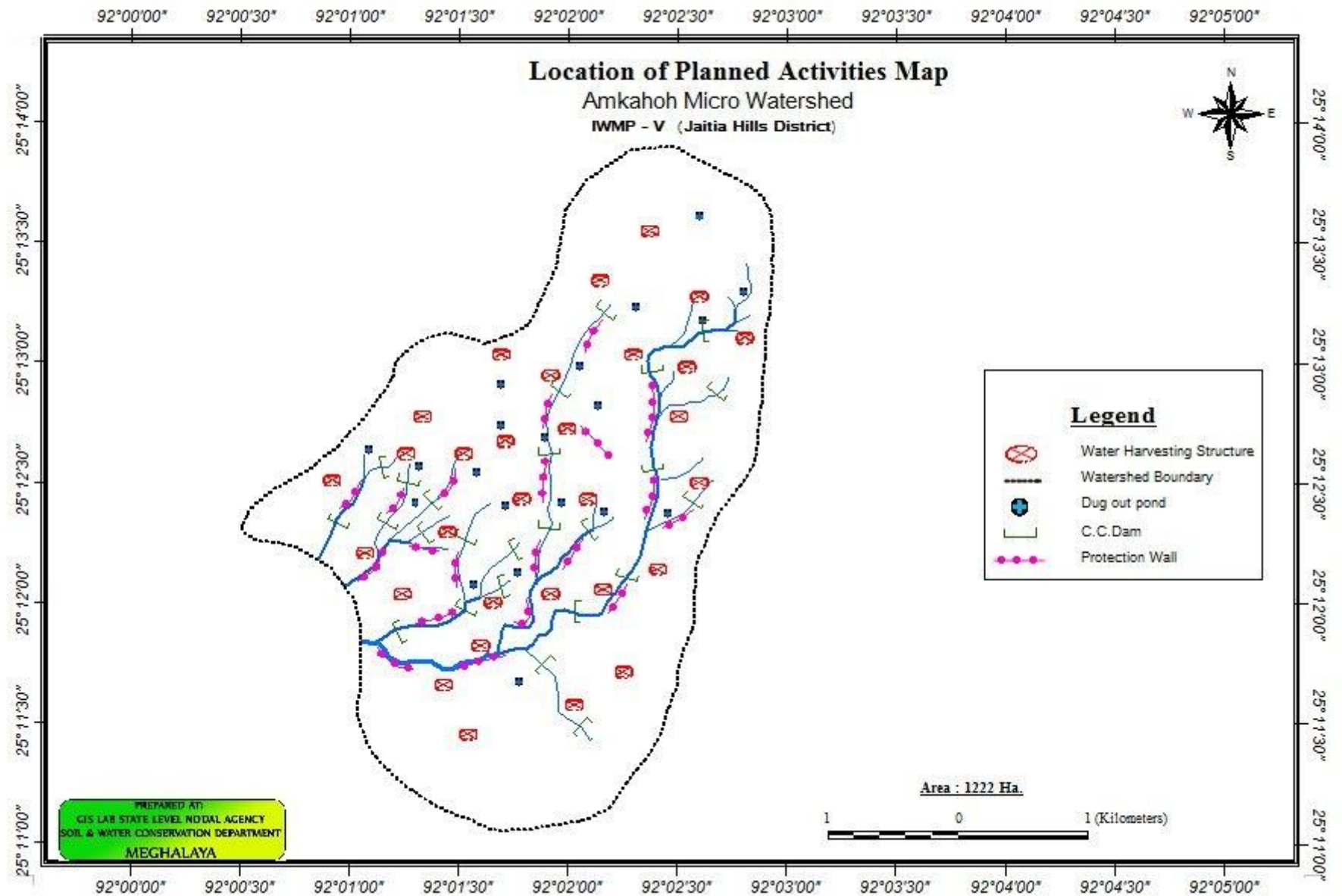


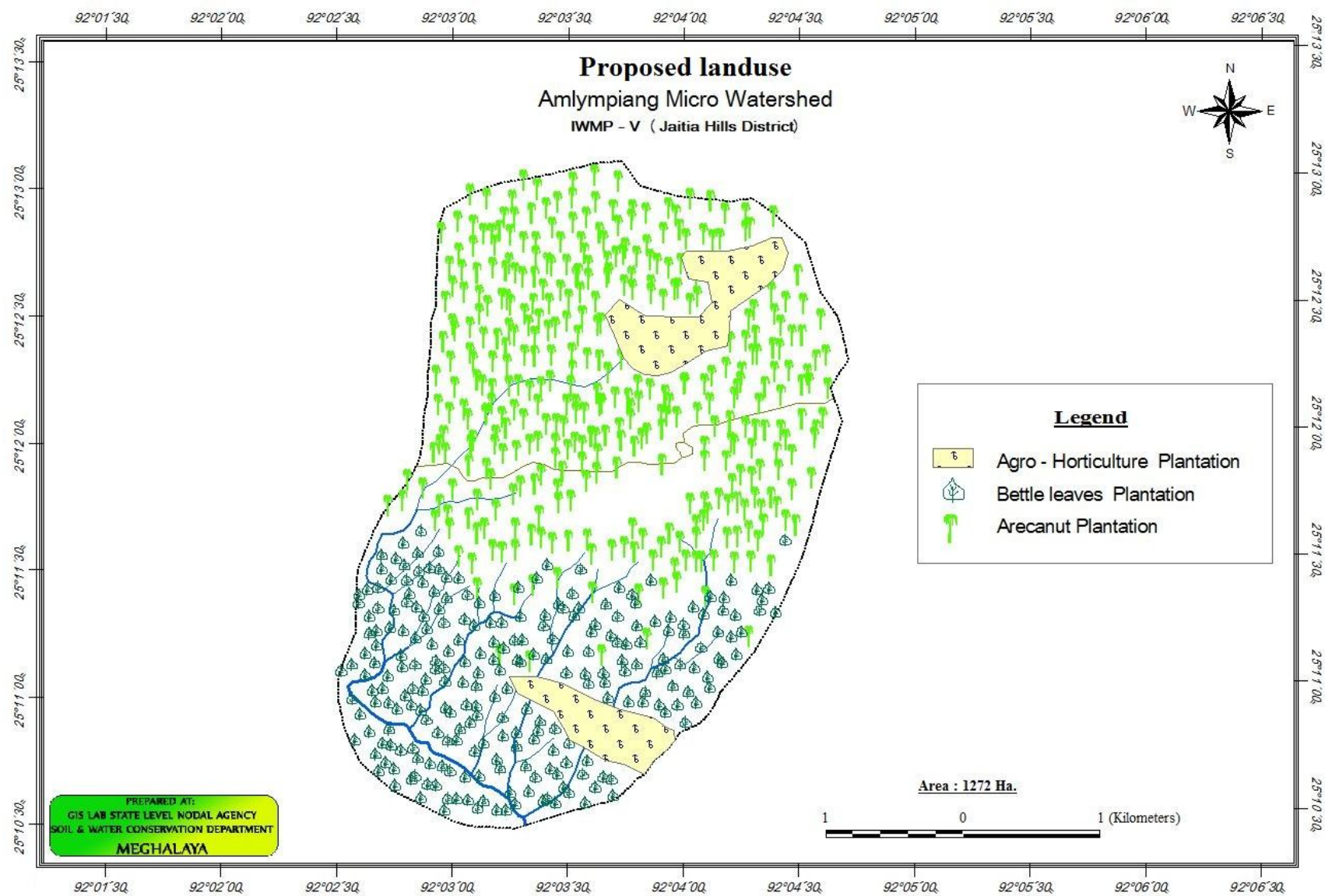


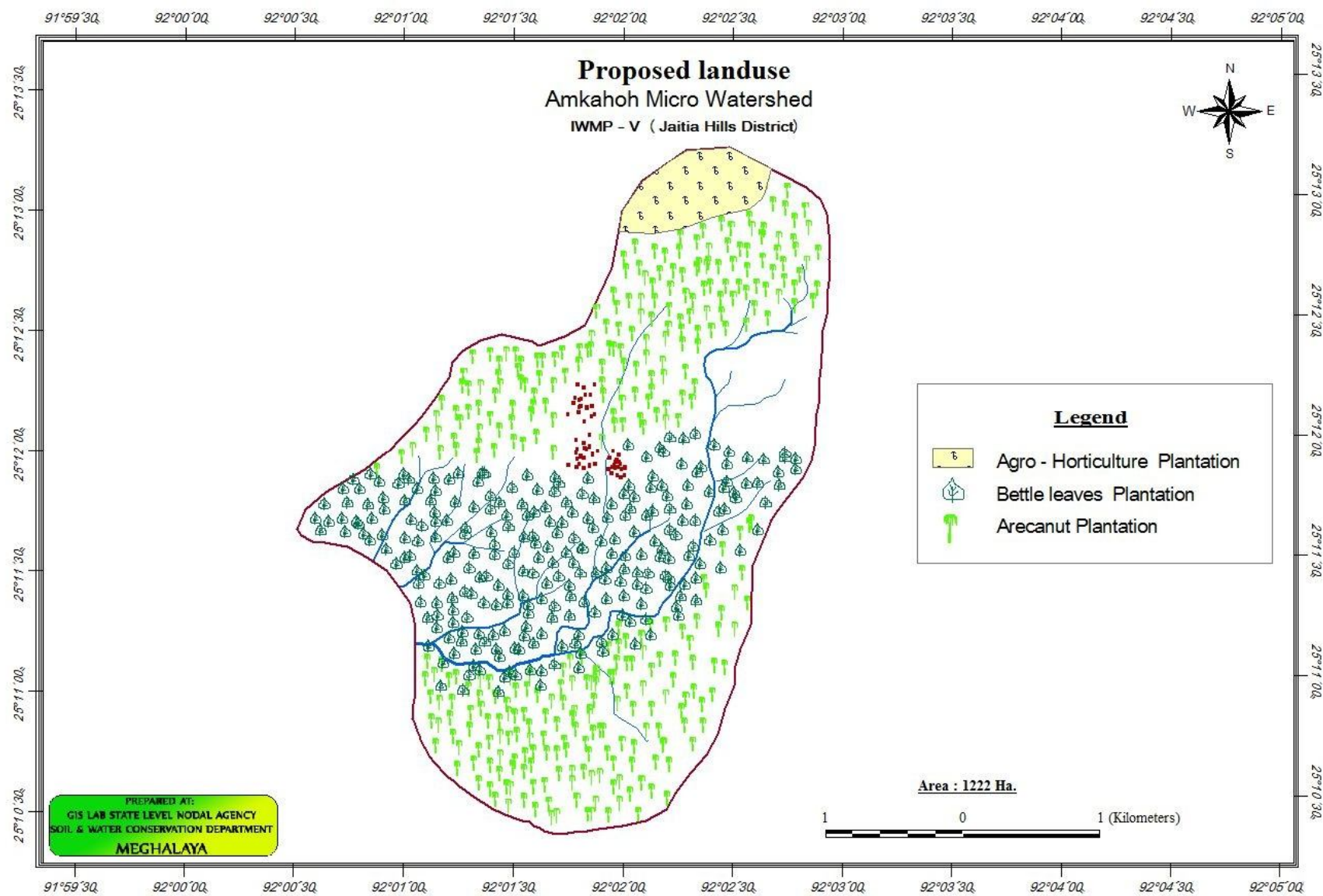












ANNEXURE II

SOCIO-ECONOMIC SURVEY DETAILS

Socio-Economic Profile: Socio- Economic Survey was conducted in all the 4 villages of the project area. A simple proforma was designed to collect information.

The project area is inhabited by pnar population who are mainly dependent on agriculture of their livelihood.

Table showing the population, sex, agri-workers and occupation of 4 villages of JH-IWMP-V (2010-2011)

SI No.	Villages	No.of family	Total Population	Sex				Agri-workers	Literacy		Occupation
				Male	Female	Boys	Girls		Male	Female	
				A	A	M	M				
1.	Nongtalang	211	1487	253	256	486	492	625	218	276	
2.	Sohkha Shnong	97	711	129	116	233	233	358	256	245	
3	Sohkha Mission	85	608	118	124	186	180	287	238	226	
4	Sohkha Phlang	9	62	11	12	22	17	35	24	36	
	Total-	402	2868	511	508	927	922	1305	736	783	

Socio- Economic Condition:- The Socio Economic set up of the people in the project area is very poor. The average annual income is about Rs. 32,000/-year/ household, since the prime occupation of the people is Agriculture (Mono- agriculture).

ANNEXURE III
COST ESTIMATES

MODEL NORMS PER HECTARE FOR AGRO-HORTICULTURE
WITH CITRUS FRUIT
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per P.W.D schedule of rate for Road and bridge 2008-2009)

Spacing - 8mx6.3m

Plant Density - 200 Nos.

A. Preliminary Works:

I. Site clearance

3 man days @Rs.100/-per man day - Rs.300.00

II. Pit digging (pit size 0.45mx0.45mx0.45m)

200 Nos. @Rs.5/-each - Rs.1,000.00

TOTAL = Rs.1,300.00

B. First year planting:

I. Cost of planting materials

200Nos. @Rs.10/-each - Rs.2,000.00

II. Cost of planting 200 Nos. @Rs.3/-each - Rs. 600.00

III. Weeding two times 20 man days

@Rs.100/- per man day. - Rs.2,000.00

TOTAL = Rs. 4,600.00

C. Second year planting:

I. Refilling vacancy (10%)

- Rs. 360.00

II. Weeding two times 20 mandays

@Rs.100/-per man day - Rs.2,000.00

III. Plant protection measures including cost of chemical

- Rs. 340.00

TOTAL = Rs.2,700.00

Grand Total A+B+C = Rs.1300.00+Rs.4600.00+Rs.2700.00 = Rs.8,600.00

(Rupees eight thousand six hundred) only.

MODEL NORMS PER HECTARE FOR AGRO-HORTICULTURE WITH TEMPERATE FRUIT
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)
(Rate as per PWD schedule of rate for road And bridge 2008-09)

.....

Spacing – 8m x 7.8m
Plant Density – 160 Nos.

A. Preliminary works:

I. Site clearance

3 man days @Rs.100/- man day - Rs.300.00

II. Pit digging (Pit size 0.45mx0.45mx0.45m)

160Nos. @Rs.5/-each - Rs.800.00

TOTAL = Rs.1,100.00

B. First year planting:

I. Cost of planting materials 160Nos.

@Rs.15/-each - Rs.2,400.00

II. Cost of planting 160 Nos. @Rs.3/- each - Rs. 480.00

III. Weeding two times 20 mandays

@Rs.100/-per manday - Rs.2,000.00

TOTAL: Rs.4,880.00

C. Second year planting:

I. Refilling vacancy (10%) - Rs. 370.00

II. Weeding two times 20 mandays

@Rs.100/-per manday - Rs.2,000.00

TOTAL = Rs.2,370.00

Grand Total A+B+C = Rs.1100.00+Rs.4880.00+Rs.2370.00 = Rs.8,350.00

(Rupees eight thousand three hundred fifty) only.

MODEL COST NORMS PER HECTARE FOR BETEL NUT PLANTATIONS
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

Spacing - 8m x 6.3m

Plant Density - 200 Nos.

A. Preliminary Works:

I.	Site clearance	
	3 man days @Rs.100/-per man day	- Rs. 300.00
II.	Pit digging (pit size 0.45mx0.45mx0.45m)	
	200 Nos. @Rs.5/-each	- Rs. 1,000.00
	TOTAL	= Rs. 1,300.00

B. First year planting:

I.	Cost of planting materials	
	200Nos. @Rs.10/-each	- Rs. 2,000.00
II.	Cost of planting 200 Nos. @Rs.5/-each	- Rs. 1,000.00
III.	Weeding two times 20 man days	
	@Rs.100/- per man day.	- Rs. 2,000.00
	TOTAL	= Rs. 5,000.00

C. Second year planting:

I.	Refilling vacancy (10%)	- Rs. 200.00
II.	Weeding ONE times 10 mandays	
	@Rs.100/-per man day	- Rs. 1,000.00
	TOTAL	= Rs. 1,200.00

Grand Total A+B+C = Rs. 1300.00 + Rs. 5000.00 + Rs. 1200.00 = Rs. 7,500.00

(Rupees seven thousand five hundred) only.

MODEL COST NORMS PER HECTARE FOR BETTLE LEAVES PLANTATIONS
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

Spacing – 8m x 6.3m
Plant Density – 200 Nos.

A. Preliminary works:

I. Site clearance

5 man days @ Rs.100/- man day - Rs. 500.00

II. Pit digging (Pit size 0.40m x 0.40m x 0.40m)

200 Nos. @Rs.4/-each - Rs. 800.00

TOTAL - Rs. 1,300.00

B. First year planting:

I. Cost of planting materials 200 Nos.

@Rs.7.50/-each - Rs. 1,500.00

II. Cost of planting 200 Nos. @ Rs.5/- each - Rs. 1,000.00

III. Weeding two times 20 mandays

@ Rs.100/- per manday - Rs. 2,000.00

TOTAL - Rs. 4,500.00

C. Second year planting:

I. Refilling vacancy (10%) - Rs. 200.00

II. Weeding 1 (one) time 10 mandays

@ Rs.100/-per manday - Rs. 1,000.00

TOTAL - Rs. 1,200.00

Grand Total A+B+C = Rs.1300.00+Rs. 4500.00+Rs. 1200.00 = Rs. 7,000.00

(Rupees seven thousand) only.

MODEL NORMS PER HECTARE FOR AFFORESTATION WITH PINE/NON-PINE
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per P.W.D. schedule of rate for Road and Bridge 2008-09)

Spacing 6m x 5.5m

Plant density – 300 Nos.

A. Preliminary works:

- I. Jungle clearance etc., 5 man days
@Rs.100/-per man day - Rs.500.00
- II. Pit digging (Pit size 0.30mx0.30mx0.30m)
300Nos. @Rs.4/-each - Rs.1,200.00

TOTAL = Rs.1,700.00

B. First year planting:

- I. Cost of planting materials 300Nos.
@Rs.8/-each - Rs.2,400.00
- II. Cost of planting 300 Nos. @Rs.2/-each - Rs. 600.00
- III. Weeding two times 20 man days
@Rs.100/-per man day - Rs.2,000.00
- IV. Fire protection measures 5 man days
@Rs.100/-per man day - Rs. 500.00

TOTAL: Rs.5,500.00

C. Second year planting:

- I. Vacancy refilling (10%) - Rs. 400.00
- II. Weeding two times 20 mandays
@Rs.100/-per man day - Rs. 2,000.00
- III. Fire protection measures 5 man days
@Rs.100/-per manday - Rs. 500.00

TOTAL = Rs.2,900.00

Grand Total A+B+C = Rs.1700.00+Rs.5500.00+Rs.2900.00 = Rs.10,100.00

(Rupees ten thousand one hundred) only.

COST NORMS FOR EARTHEN PERIPHERAL BUND WITH LIVE VEGETATION PER METRE
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per PWD schedule of rate for Road and Bridge 2008-2009)

.....

A. PHERIPHERAL BUNDS SPECIFICATION & COSTS

Top width = 1.0m

Bottom width = 1.2m

Height = 1.0m

1/3(a) Earth work in excavation etc in ordinary soil, etc

$$1.0\text{m} \times \frac{1.0 + 1.2}{2} \times 1.0\text{m} = 1.10\text{m}^3 \quad @\text{Rs.}39.00/\text{-m}^3 \quad \dots \quad \text{Rs.} \quad 43.00$$

2. Supplying and planting of live hedges on toe of bunds
with local shrubs/cutting, etc.

per Running metre in L.S

..... Rs. 7.00

TOTAL = Rs. 50.00

(Rupees Fifty) only.

COST NORMS FOR EARTHEN CONTOUR BUND
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per PWD schedule of rate for Road and Bridge 2008-2009)

.....

A. CONTOUR BUNDS SPECIFICATION & COSTS

Top width = 0.5m

Bottom width = 1.0m

Height = 0.77m

Spacing = 20 m

Total Length = 5 x 100 = 500m

1/3(a) Earth work in excavation etc in ordinary soil, etc

$$500\text{m} \times \frac{0.5 + 1.0}{2} \times 0.77\text{m} = 288.5\text{m}^3 \quad @\text{Rs.}26.00/\text{-m}^3 \quad \dots\dots \text{Rs. } 7,500.00$$

TOTAL Rs. 7,500.00

(Rupees Seven thousand five hundred) only.

COST NORMS FOR LOOSE BUOLDER BUNDS (IWMP)

(Rate as per PWD schedule of rate for Road & Bridge 2008-2009)

.....

A. SPECIFICATIONS & COSTS OF LOOSE BOULDER BUNDS

Top width = 0.4 m

Bottom width = 1.0 m

Height = 0.9 m

Length = 10 m

1/3.11 Providing dry stone masonry walls etc.

$$10\text{m} \times \frac{0.4 + 1.0}{2} \text{ m} \times 0.90 = 6.30\text{m}^3 \text{ @Rs.1,191/-m}^3 \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{Rs.7,500.00}$$

TOTAL Rs.7,500.00

(Rupees Seven thousand five hundred) only.

COST NORMS FOR RUN-OFF DISPOSAL CHANNEL
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per P.W.D. schedule of rate for Road & Bridge 2008-2009)

Specification – Top width - 1.00m
 Bottom width - 0.70m
 Depth - 1.2 m

1/3(a) Earthwork in excavation etc., in ordinary soil.

$$1\text{m} \times \frac{1.00 + 0.7}{2} \times 1.2\text{m} = 1.02\text{m}^3 \quad @\text{Rs.}26.00/-\text{per m}^3 \quad \dots \quad \text{Rs. } 26.52$$

Total = Rs. 26.52

Say Rs.26.00

In words (Rupees twenty six) only.

COST NORMS FOR HALF MOON TERRACES (IWMP)

(Rate as per P.W.D. schedule of rate for Road & Bridge 2008-2009)

.....

A. SPECIFICATIONS & COSTS OF BOX/HALF MOON TERRACES

Terrace width	= 1.2 m
Terrace Height	= 1.2 m
Terrace Length	= 1.2 m
Spacing of Boxes	= 6m x 5m
No. of Box/Hectare	= 334 Nos.

1/3(a) Earthwork in excavation etc., in ordinary soil, etc.

$$334\text{Nos.} \times \frac{1}{2} \times 1.2 \times 1.2 \times 1.2 = 288.50\text{m}^3 \text{ @Rs.26.00/m}^3 \underline{\hspace{1cm}} = \text{Rs.7,500.00}$$

$$\text{TOTAL} = \text{Rs.7,500.00}$$

(Rupees seven thousand five hundred) only.

MODEL NORMS PER HECTARE FOR IMPROVEMENT OF DEGRADED FOREST
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per P.W.D. schedule of rate for Road & Bridge 2008-2009)

A. Preliminary works:

I. Site clearance 3 mandays @Rs.100/-per man day	.....	Rs.300.00
II. Pit digging (Pit size 0.30mx0.30mx0.30m) 100 Nos. @Rs.4/-each	.....	Rs.400.00
TOTAL =		Rs.700.00

B. First year Planting:

I. Cost of planting materials 100Nos. @Rs.8/-each	.....	Rs.800.00
II. Cost of planting 100Nos. @Rs.2/-each	.....	Rs.200.00
III. Round weeding around the plant four times 5 man days @Rs.100/-per man day.	.....	Rs.500.00
IV. Fire protection measures 4 man days @Rs.100/-per man day	.....	Rs.400.00
TOTAL =		Rs.1,900.00

C. Second year planting:

I. Refilling vacancy (10%)	.....	Rs.100.00
II. Round weeding around the plant four times 5 man days @Rs.100/-per man day	.....	Rs.500.00
III. Fire protection measures 4 man days @Rs.100/-per man day	.....	Rs.400.00
TOTAL =		Rs.1,000.00

Grant Total A+B+C = Rs.700.00+Rs.1900.00+Rs.1000.00 = Rs.3,600.00

(Rupees three thousand six hundred) only.

MODEL NORMS PER HECTARE OF STRIP PLANTATION TWO ROWS ALONG THE BOUNDARY WITH FAST GROWING SPECIES
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

(Rate as per PWD schedule of rate for Road & Bridge 2008-2009)

Spacing 6m from plant to plant
 2.5m from row to row

A. Preliminary works:

I. Site clearance 2 man days

@Rs.100/-per man day Rs.200.00

II. Pit digging (Pit size 0.30mx0.30mx0.30m)

134 Nos. @Rs.4/-each Rs.536.00

TOTAL = Rs.736.00

B. First year Planting:

I. Cost of planting materials 134Nos.

@Rs.8/-each Rs.1072.00

II. Cost of planting 134Nos. @Rs.2/-each

..... Rs.268.00

III. Round weeding around the plant two times

6 man days @Rs.100/-per man day. Rs.600.00

IV. Fire protection measures 4 man days

@Rs.100/-per man day Rs.400.00

TOTAL: Rs.2,340.00

C. Second year planting:

I. Refilling vacancy (10%)

..... Rs.190.00

II. Round weeding around the plant two times

6 man days @Rs.100/-per man day Rs.600.00

III. Fire protection measures 4 man days

@Rs.100/-per man day Rs.400.00

TOTAL = Rs.1,190.00

Grant Total A+B+C = Rs.736.00+Rs.2340.00+Rs.1190.00 = Rs.4,266.00

(Rupees four thousand two hundred sixty six) only.

ESTIMATE FOR CONSTRUCTION OF FARM POND

(The Rate base as per M.P.W.D schedule of rate for Road & Bridge and E&D works 2008-2009)

- 1/3(d) Earth work in excavation to the proper including light dressing, providing cambering and superlative as directed and removal of spoils up to 30m lead and all lift.
Soft or laminated rock or medium shale.

$$V = \frac{1.20}{6} \{20 \times 10 + 18.8 \times 8.8 + 4 (19.4 \times 9.40)\}$$

V = 219.00m³ @Rs.63.00/-m³ Rs.13,795.00

- 2/14 Cutting road side drain including dressing, grading
(ii) and removal of spoils up to 15.0m complete as directed.
In ordinary soil, comprising of black cotton soil, Green vegetation soil, red soil, loamy soil, clay, soft shale and loose moorum etc.

60Rm @Rs.38.00/-Rm Rs.2,280.00

TOTAL: Rs.16,075.00

Say Rs.16,000.00

In words (Rupees sixteen thousand) only.

MODEL ESTIMATE FOR CONSTRUCTION OF C.C CHECK DAM

(The rate based as per PWD Schedule of rate for Reads, bridges and E&D Works 2008 – 2009)

1/5 (a)	Earthwork in excavation for abutment and wing walls of bridges and culverts, up to the desired etc complete. $1 \times 5.80 \times 1.00 \times 0.50 = 2.90 \text{ m}^3$ $1 \times 4.85 \times 1.50 \times 0.30 = 2.18 \text{ m}^3$ $5.08 \text{ m}^3 @ \text{Rs. } 124.00/\text{m}^3$	= Rs. 629.92
2/26	Providing cement concrete work in prop 1:4:8 with hard broken stone aggregates 40 mm etc complete. $1 \times 5.80 \times 1.00 \times 0.10 = 0.58 \text{ m}^3 @ \text{Rs. } 2136.00/\text{m}^3$	= Rs. 1236.88
3/41(a)	Providing shuttering with dressed planks not less than 25mm thick etc complete. $1 \times 5.80 \times 1.10 = 6.38 \text{ m}^2$ $1 \times 5.80 \times 1.20 = 6.96 \text{ m}^2$ $2 \times 3.50 \times 0.40 = 2.80 \text{ m}^2$ $1 \times 7.85 \times 0.05 = 0.39 \text{ m}^2$ $= 16.53 \text{ m}^2 @ \text{Rs. } 295.00/\text{m}^2$	= Rs. 7876.35
4/28	Providing cement concrete work in abutments, wing walls etc complete $1 \times 5.80 \times 1.00 \times 0.40 = 2.32 \text{ m}^3$ $1 \times 5.80 \times \frac{1.00 + 0.50}{2} \times 1.10 = 4.78 \text{ m}^3$ $2 \times 1.50 \times 0.50 \times 0.40 = 0.60 \text{ m}^3$ $1 \times 4.85 \times 1.50 \times 0.10 = 0.73 \text{ m}^3$ $= 8.43 \text{ m}^3 @ \text{Rs. } 2344.00/\text{m}^3$	= Rs. 19759.92
5/24	Providing stone pitching with one man size boulder not less than 25cm× 30cm etc complete $1 \times 4.85 \times 1.50 \times 0.25 = 1.82 \text{ m}^3 @ \text{Rs. } 512.00/\text{m}^3$	=Rs. 931.84
6/27	Providing 12mm thick cement plastering including cleaning surface etc complete $1 \times 5.80 \times 1.10 = 6.38 \text{ m}^2$ $1 \times 5.80 \times 1.20 = 6.96 \text{ m}^2$ $2 \times 3.50 \times 0.40 = 2.80 \text{ m}^2$ $1 \times 5.80 \times 0.50 = 2.90 \text{ m}^2$ $1 \times 4.85 \times 1.50 = 7.28 \text{ m}^2$ $= 26.32 \text{ m}^2 @ \text{Rs. } 93.00/\text{m}^2$	= Rs. 2447.76
TOTAL		= Rs. 29884.67

Say Rs. 29,900.00

(Rupees twenty Nine thousand nine hundred) only

MODEL ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE

(The rate based as per P.W.D Schedule of rates for Roads, Bridges and E & D Works 2008 - 2009)

Name of Beneficiary -

Name of Location/Village -

- 1/5 (a) Earthwork in excavation for abutment and wing walls of bridges and culverts, up to the desired founding level including dewatering, bailing out of water and protecting the foundation sides by adequate shoring, scaffolding and including leveling the foundation longitudinally and transversely etc.

$$\begin{aligned} 1 \times 6.00 \times 1.00 \times 0.50 &= 3.00 \text{ m}^3 \\ 1 \times 1.90 \times 1.50 \times 0.35 &= 0.99 \text{ m}^3 \\ 1 \times 1.90 \times 0.20 \times 0.30 &= 0.11 \text{ m}^3 \\ &\underline{4.10 \text{ m}^3} \end{aligned}$$

@ Rs.124.00/m³

Rs. 508.40

- 2/26 Providing cement concrete work in proportion 1:4:8 with hard broken stone aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed.

$$\begin{aligned} 1 \times 6.00 \times 1.00 \times 0.10 &= 0.60 \text{ m}^3 \\ &\text{@ Rs.2136.00/m}^3 \end{aligned}$$

Rs. 1281.60

- 3/41 Providing shuttering with dressed planks not less than 25mm thick properly joined including battens, props to the proper level and removing the same after the concrete hardened.

$$\begin{aligned} 1 \times 6.00 \times 1.10 &= 6.60 \text{ m}^2 \\ 1 \times 6.00 \times 1.20 &= 7.20 \text{ m}^2 \\ 2 \times 5.00 \times 0.40 &= 4.00 \text{ m}^2 \\ 4 \times 1.70 \times 0.30 &= 2.40 \text{ m}^2 \\ 4 \times 1.20 \times 0.30 &= 1.44 \text{ m}^2 \\ 4 \times 0.40 \times 0.30 &= 0.48 \text{ m}^2 \\ 2 \times 1.20 \times 0.20 &= 0.48 \text{ m}^2 \\ 2 \times 0.40 \times 0.20 &= 0.16 \text{ m}^2 \\ 2 \times 1.90 \times 0.20 &= 0.76 \text{ m}^2 \\ &\underline{23.16 \text{ m}^2} \end{aligned}$$

@ Rs.295.00/m²

Rs. 6832.20

- 4/28 Providing cement concrete work in abutments, wing walls and return walls in proportion 1:3:6 with hard broken stone aggregates 40mm down graded including necessary carriage of stone and sand within a distance of 200m etc.

$$\begin{aligned} 1 \times 6.00 \times 1.00 \times 0.40 &= 2.40 \text{ m}^3 \\ 1 \times 6.00 \times \frac{1.00 + 0.50}{2} \times 1.10 &= 4.95 \text{ m}^3 \\ 2 \times 2.25 \times 0.50 \times 0.40 &= 0.90 \text{ m}^3 \\ 2 \times 1.70 \times 0.50 \times 0.20 &= 0.34 \text{ m}^3 \\ 2 \times 1.20 \times 0.30 \times 0.20 &= 0.14 \text{ m}^3 \\ 2 \times 0.40 \times 0.30 \times 0.20 &= 0.05 \text{ m}^3 \\ 1 \times 1.90 \times 0.50 \times 0.20 &= 0.19 \text{ m}^3 \\ 1 \times 1.90 \times 1.50 \times 0.10 &= 0.28 \text{ m}^3 \\ &\underline{9.25 \text{ m}^3} \end{aligned}$$

@ Rs.2344.00/m³

Rs.21682.00

- 5/24 Providing stone pitching with one man size boulders not less than 25cm X 25cm X 30cm long including filling the interstices with spoils and carriage of stone within a distance of 200m complete as directed.

$$1 \times 1.90 \times 1.50 \times 0.25 = 0.71 \text{ m}^3$$

$$@ \text{Rs.} 512.00/\text{m}^3$$

Rs. 363.52

- 6/27 Providing 12mm thick cement plastering including cleaning surface, curing and carriage of sand within 200m complete.

$$\begin{aligned} 1 \times 6.00 \times 1.10 &= 6.60 \text{ m}^2 \\ 1 \times 6.00 \times 1.20 &= 7.20 \text{ m}^2 \\ 2 \times 5.00 \times 0.40 &= 4.00 \text{ m}^2 \\ 4 \times 1.70 \times 0.30 &= 2.04 \text{ m}^2 \\ 4 \times 1.20 \times 0.30 &= 1.44 \text{ m}^2 \\ 4 \times 0.40 \times 0.30 &= 0.48 \text{ m}^2 \\ 2 \times 1.20 \times 0.20 &= 0.48 \text{ m}^2 \\ 2 \times 0.40 \times 0.20 &= 0.16 \text{ m}^2 \\ 2 \times 1.90 \times 0.20 &= 0.76 \text{ m}^2 \\ &= 23.16 \text{ m}^2 \\ &@ \text{Rs.} 93.00/\text{m}^2 \end{aligned}$$

Rs. 2153.88
Rs. 32821.60

TOTAL:

Say Rs. 32,800.00

(Rupees Thirty two thousand eight hundred) only.

SCHEME FOR SETTING UP OF 50 NOS KUROILERS (LOW INPUT BIRD)

C. CAPITAL EXPENDITURE

1. Cost of construction of shed of 25 sq. ft. covered room @ Rs. 120/sq. ft and 100 sq. ft. range area @ 60/sq. ft.	Rs.9000.00
2. Cost of equipments like Feeds, drinking water, etc. (L.S)	Rs. 775.00
3. Misc. expenditure including transportation cost	Rs. 800.00
TOTAL	Rs. 10,575.00

B. RECURRING EXPENDITURE

1. Cost of 50 nos. Kuroilers 8 weeks old @ Rs. 64/bird	Rs. 3200.00
2. Cost of feed:-	
a) Grower mash for 1 month (50x90gmsx60days=135kgs)	
i) 70% kitchen waste @ Rs. 3/Kg (95 Kg x 3 = Rs. 285)	Rs. 285.00
ii) 30% Concentrated feed @ Rs. 17.50/Kg (40Kg x 17.50=Rs.700)	Rs. 700.00
b) Grower mash for 2 month (50x100gmsx30days=300kgs)	
i) 70% kitchen waste @ Rs. 3/Kg (210 Kg x 3 = Rs. 630)	Rs. 630.00
ii) 30% Concentrated feed @ Rs. 17.50/Kg (90Kg x 17.50=Rs.1575)	Rs.1575.00
c) Layer mash to be supplied for 5 months and remaining period of feeding for laying will be borne by the beneficiaries (50x120gmsx150days=900kgs)	
i) 70% kitchen waste @ Rs. 3/Kg (630 Kg x 3 = Rs. 1890)	Rs. 1890.00
ii) 30% Concentrated feed @ Rs. 17.50/Kg (270Kg x 17.50=Rs.4725)	Rs.4725.00
3. ~ Cost of medicines	Rs.1000.00
4. Cost of Insurance @3% par bird. The bird will be insured at the age of 6-17 months when the bird attained 2-2.5kgs live weight @ Rs. 14/kg	Rs. 420.00
TOTAL	Rs. 14,425.00

Total Expenditure A + B
 Rs. 10,575 + Rs. 14,425
 Rs. 25,000.00 (Rupees Twenty five thousand) only


INCOME:-

1. By sale of 23 nos. of Cockerels @ Rs. 140/Weighing 2.5-3kgs/each	Rs. 9660.00
2. By Sale of 4238 nos. of Eggs @ Rs. 5/egg	Rs.21,190.00
3. By sale Culled hen weighing 1.8-2 kgs Rs. 140/kg	Rs. 6440.00
4. Sale of manure, gunny bags, etc (L S)	Rs. 500.00
TOTAL	Rs.37,790.00

(Rupees thirty seven thousand seven hundred ninety only)

PARAMETERS:-

Weighing of cockerels	- 2.5 – 3 kg
Weighing of Culling hen	- 1.8 – 2 kg
Breakage %	- 3%
Rate of mortality	- Grower -5 % Layer – 1%
Laying capacity	- 180 – 200/ egg/bird


Dr. J. LING
 A.V. & V.P. G.

SCHEME FOR COMMERCIAL PIG BREEDING
(Unit Size - 1 no. Sow and 1 No. Boar)

A. Non-Recurring Expenditure:-

- | | |
|--|---------------------------|
| 1. Construction of pig sty with an area of 120 sq. ft for accommodation of 2 nos. Pigs @ Rs. 65/ sq. ft. with locally available material | Rs. 7800.00 |
| 2. Cost of Breeding Stock:- | |
| a) Cost of 1 no. Sow of 4-5 months age @ Rs. 2200/- | Rs. 2200.00 |
| b) Cost of 1 no. Boar of 5-6 months age @ 2700/- | Rs. 2700.00 |
| 3. Misc. Expenditure like equipments transportation charge | Rs. 1206.00 |
| 4. Annual insurance cover for 2 nos. breeding stock @ 6 per adult animal | Rs. 294.00 |
| | <u>TOTAL Rs. 14200.00</u> |

B. RECURRING EXPENDITURE:-

- | | |
|--|----------------------------|
| 1. Cost of feed:- | |
| a) 2.5 Kgs. for 1 no. Sow for 364 days = 910 kgs | |
| i) 70% kitchen waste @ Rs. 2/Kg (637 Kg x 2 = Rs. 1274) | Rs. 1274.00 |
| ii) 30% Concentrated feed @ Rs. 12/ Kg (273 Kg x 12 = Rs. 3275) | Rs. 3275.00 |
| b) 2 Kgs. for 1 no. Boar for 364 days = 728 kgs | |
| iii) 70% kitchen waste @ Rs. 21/kg (509 Kg x 2 = Rs. 1018) | Rs. 1018.00 |
| iv) 30% Concentrated feed @ Rs. 12/ Kg (219 Kg x 12 = Rs. 2628) | Rs. 2628.00 |
| c) For weaners 0.2 kg for 16 nos. for 60 days (0.2 kgx 16x 60x12 = Rs. 2304) | Rs. 2304.00 |
| 2. Health coverage (I.S) | Rs. 300.00 |
| | <u>TOTAL Rs.10, 800.00</u> |


Total Project Cost A + B
Rs. 14,200+ Rs. 10,800
Rs. 25,000.00 (Rupees Twenty five thousand) only

INCOME:-

- | | |
|---|------------------------------------|
| 3) By sale of 16 nos. of piglets @ Rs. 2000/ each | Rs. 32,000.00 |
| 4) By sale of manure and gunny bags (I.S) | Rs. 3,000.00 |
| | <u>TOTAL Rs. 35,000.00</u> |
| | (Rupees Thirty five thousand only) |

PARAMETERS:-

- | | | |
|---|---|---------|
| Numbers of farrowing per sow/ year | - | 2 times |
| Numbers of piglets per sow/ farrowing | - | 2 times |
| Mortality rate | - | 10 % |
| Percentage of conc. Feed of Total feed | - | 30% |
| Percentage of Kitchen waste of Total feed | - | 70% |


Dr. J. L. N. Srinivas
C & Vety. Officer
Mysuram C&RD Division

ANNEXURE - IV
MoA, SUB – COMMITTEES , ETC.

**OFFICE OF THE NONGTALANG VILLAGE DURBAR
NONGTALANG
AMLAREM SUB-DIVISION
JAINTIA HILLS DISTRICT**


No Objection Certificate.

This is to certify that Nongtalang Village Durbar has no objection to the Soil & Water Conservation Department of Meghalaya to implement the Integrated Watershed Management Programme (IWMP) under Amlympiang Micro- Watershed (JH-IWMP-V) falling within the jurisdiction of Nongtalang Village.


**HEADMAN
NONGTALANG VILLAGE
JAINTIA HILLS DISTRICT
MEGHALAYA-793109**

ANNEXURE – I

Certified that the Amlympiang Micro-Watershed (JH-IWMP-V) comprising within its fold the Nongtalang village falls under Amlarem C & R D Block and possesses lands more than 2000 Hectares which may be taken up for treatment with various developmental Scheme under the Integrated Watershed Management Programme (IWMP) by the Soil & Water Conservation Department, Jaintia Hills Division (T).


READMAN
NONGTALANG VILLAGE
JAINTIA HILLS DISTRICT
MECHALAYA-781105

ANNEXURE – II

This is to certify that Amlympiang Micro-Watershed (JH-IWMP- V) has been selected based on the following criteria:-

- (a) That the watershed has a population of Schedules Tribes only.
- (b) That it has a preponderance of Wastelands and Degraded Lands.
- (c) That it had a preponderance of Common Lands.
- (d) That it has acute shortage of drinking water.
- (e) That the people of the Watershed had assured of their full participation during the implementation of the programme as well as for the operation and maintenance of the assets created after the handing over of the land.
- (f) That the common profit will be shared amongst all with in the villages including the weaker section, women and the landless


HEADMAN
ONGTALANG VILLAGE
JAINTE HILLS DISTRICT
MEGHALAYA-793109

**RESOLUTIONS ADOPTED BY THE GENERAL MEETING OF NONGTALANG
VILLAGE DURBAR**

A General Meeting of Nongtalang Village Durbar which was held on the 23rd Nov. 2010 has unanimously adopted the following resolutions.

1. To form the Amlympiang Watershed Committee for implementing the Scheme Integrated Watershed Management Programme (IWMP)
2. That the Secretary of the Watershed Committee will be an officer from the Office of the Soil & Water Conservation Department, Jaintia Hills Division (T) Jowai and the Chairman of the Watershed Committee will be a person from the Nongtalang village.
3. The village will extend all possible help to the Soil & Water Conservation Department while implementing the Integrated Watershed Management Programme (IWMP) in the Watershed area.
4. That the village have got land more than 2000.00 Hectares to be treated under various Soil & Water Conservation Works.
5. That the Village Durbar will take over and maintain all assets created by at the close of the Project.
6. That the common profit will be shared amongst all with in the villages including the weakers section, women and the landless.

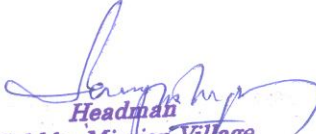

HEADMAN
NONGTALANG VILLAGE
JAINTL. HILLS DISTRICT
MEGHALAYA-793102

**OFFICE OF THE DURBAR PYLLUN OF SOHKHA SHNONG,
SOHKHA MISSION & SOHKHA PHLANG VILLAGES
AMLAREM SUB-DIVISION
JAINTIA HILLS DISTRICT**

No Objection Certificate.

This is to certify that Durbar Pyllun of three villages comprising of Sohkhah Shnong, Sohkhah Mission & Sohkhah Phlang has no objection to the Soil & Water Conservation Department of Meghalaya in implementing the Integrated Watershed Management Programme (IWMP) under Amkahoh Micro- Watershed (JH-IWMP-V) falling within the jurisdiction of the three village.


Headman
Sohkhah Shnong Village
Elaka Nongtalang, R. No. 007

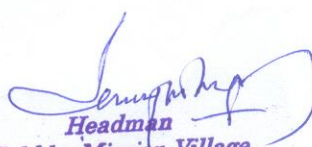

Headman
Sohkhah Mission Village
Elaka, Nongtalang R. N. : 012


Headman
Sohkhah Phlang Village
Elaka Nongtalang, R.No.015

ANNEXURE – I

Certified that the Amkahoh Micro-Watershed (JH-IWMP-V) comprising within its fold the three villages of Sohkhah Shnong, Sohkhah Mission and Sohkhah Phlang falls under Amlarem C & R D Block and possesses lands more than 2000 Hectares which may be taken up for treatment with various developmental Scheme under the Integrated Watershed Management Programme (IWMP) by the Soil & Water Conservation Department, Jaintia Hills Division (T).


Headman
Sohkhah Shnong Village
Elaka Nongtalang, R.No.007


Headman
Sohkhah Mission Village
Elaka, Nongtalang R. N. : 012


Headman
Sohkhah Phlang Village
Elaka Nongtalang, R.No.015

ANNEXURE – II

This is to certify that Amkahoh Micro-Watershed (JH-IWMP- V) has been selected based on the following criteria:-

- (a) That the watershed has a population of Schedules Tribes only.
- (b) That it has a preponderance of Wastelands and Degraded Lands.
- (c) That it had a preponderance of Common Lands.
- (d) That it has acute shortage of drinking water.
- (e) That the people of the Watershed had assured of their full participation during the implementation of the programme as well as for the operation and maintenance of the assets created after the handing over of the land.
- (f) That the common profit will be shared amongst all with in the villages including the weaker section, women and the landless


Headman
Sohkha Shnong Village
Elaka Nongtalang, R.No.007


Headman
Sohkha Mission Village
Elaka, Nongtalang R. N. : 012

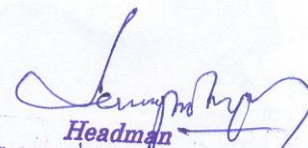

Headman
Sohkha Phlang Village
Elaka Nongtalang, R.No.015

**RESOLUTIONS ADOPTED BY THE GENERAL MEETING OF DURBAR
PYLLUN OF SOHKHA SHNONG, SOHKHA MISSION & SOHKHA PHLANG
VILLAGES**

A General Meeting of the villages comprising the Village Durbars of Sohkhah Shnong, Sohkhah Mission & Sohkhah Shnong which was held on the 24th Nov. 2010 has unanimously adopted the following resolutions.

1. To form the Amkahoh Watershed Committee for implementing the Scheme Integrated Watershed Management Programme (IWMP)
2. That the Secretary of the Watershed Committee will be an officer from the Office of the Soil & Water Conservation Department, Jaintia Hills Division (T) Jowai and the Chairman of the Watershed Committee will be a person to be nominate by the Joint Committee of the three Villages.
3. The three villages will extend all possible help to the Soil & Water Conservation Department while implementing the Integrated Watershed Management Programme (IWMP) in the Amkahoh Watershed area.
4. That the Watershed area is comprising lands of more than 2000.00 Hectares to be treated under various Soil & Water Conservation Works.
5. That the Joint Committee of the Durbar Pyllun of the three villages will take over and maintain all assets created by at the close of the Project.
6. That the common profit will be shared amongst all with in the villages including the weakers section, women and the landless.


Headman
Sohkhah Shnong Village
Elaka Nongtalang, R.No.007


Headman
Sohkhah Mission Village
Elaka, Nongtalang R. N. : 012


Headman
Sohkhah Phlang Village
Elaka Nongtalang, R.No.015