

DETAILED PROJECT REPORT

1. WAH PYRHUT

2. KYRTEM

3. LIAR LAKHIAT

4. MYNKSI

5. KHLIEH MYNI

INTEGRATED WATERSHED MANAGEMENT PROJECT

JH - IWMP – VI

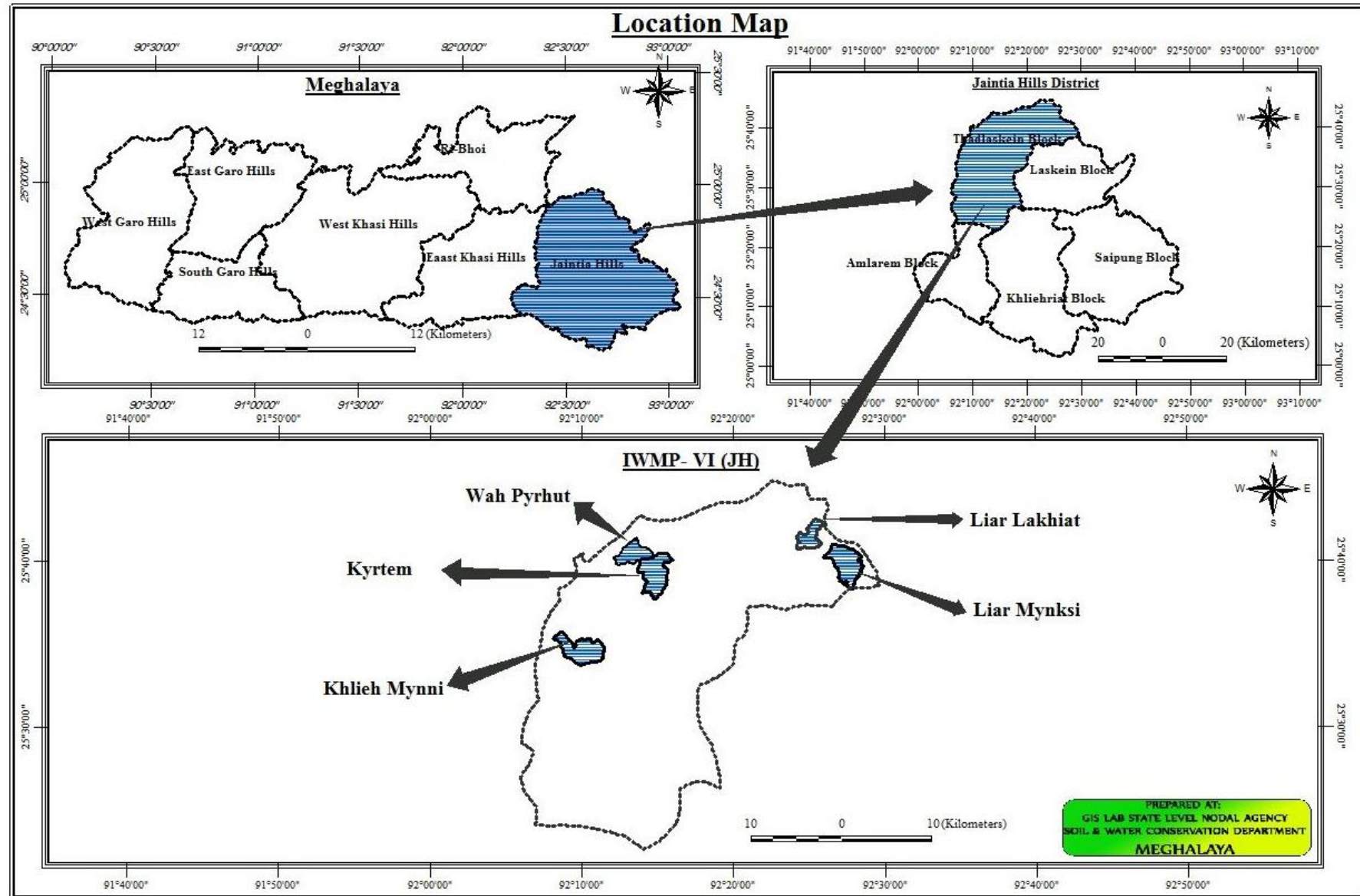
2011-2012

C& RD BLOCK

JAINTIA HILLS DISTRICT

MEGHALAYA

LOCATION MAP



SUMMARY OF THE PROJECT.

Name of the State	:-	Meghalaya
Name of the District	:-	Jaintia Hills
Name of the C & RD Block	:-	Thadlaskein
Name of the Project	:-	Jaintia Hills – IWMP-VI
Total Geographical Area	:-	4670 Ha.
Total Treatment Area	:-	4000 Ha
Total Project Cost	:-	600 Lakhs
Project Duration	:-	5 Years
Name of the Micro Watershed	:-	(i)Liar Lakhiat – Lumlakhiat (ii) Mynksi – Lapangap, Shaibnai, Pdengtaloo
With Name of the Villages		(iii) Wah Pyrhut - Umladang (iv) Khlieh Myni – Sohphoh, Larnai (v) Kyrtem – Rakabah, Nongrim Bambthong
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-VI IWMP is derived from the C&RD Block (Thadlaskein C&RD Block) falls in the Jaintia Hills District. There are 5 Nos of Micro Watershed in cluster and 9 Nos of villages. They are : (i).Liar Lakhiat - Lumlakhiat (ii). Mynksi – Lapangap, Shiabnai, Pdengtalu (iii). Wah Pырhut – Umladang(iv) Khlieh Myni – Sohphoh, Larnai (v). Kyrtem – Rakabah, Nongrim Bambthong . All the 5 Nos of Micro Watershed drained by the Mynriang & Mynkhen River flowing from West to East.

1.2 Micro Watershed Information:

The micro-watershed code is (1)Liarlakhiat 3B2A2b1e(2)Mynksi 3B2A2b1g,(3)Wah Pырhut – 3B2A6b2k 4)Khliehmynni – 3B2A6a2c ,(5)Kyrtem – 3B2A6b3g alf as codified by the North East Space Application Centre (NESAC). The total area of the micro-watershed is 4670 Ha. with 4000 hectares 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). The general topography of the area is an undulating often covered with grassy blanks of enormous size accordingly dotted with pine trees individually or in small groups. The ground is generally gentle sloping with slopes varying between 10 percent to 60 percent. It is only near the tributaries with Mynriang River that the ground becomes comparatively steeper based on the elevation, the land can be divided into three physiographic units (i) Intermediate plateau with gradient above 33 percent slope (2) Lower plateau with gradient ranges from 15 to 33 percent slope (3) Valley rolling, undulating almost flat gradient ranging from 1 to 15 percent slope. The area is mainly drained by two Rivers Mynriang & Mynkhen. There are lot of scope for land development, agro-forestry,agro-horticulture 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 catchment of Mynriang and Mynkhen river according to the Survey of India toposheet No. 83 $\frac{C}{6}$, it is situated between north Latitude 25^o.33 and 25^o.30' and East Longitude 92^o.07' and 92^o.30'. The project area is falls within the Thadlaskein C&RD Block of Jaintia Hills District and it is about 40 km from Jowai the Head Quarter of the Jaintia Hills District and is spread over 9 villages (i) Sohphoh (ii) Larnai (iii) Umladang (vi) Rakabah (v) Bambthong (vi) Liarlakhiat (vii) Lapangap (viii) Pdengtal (ix) Shiabnai. The total area of JH-IWMP is about 4548 ha, out of which 4000 Ha is proposed for treatment under different Soil & Water Conservation activities. At present the area is connected partly by metalled road and partly by Kacha road.

2.2 Physiography:

The area is feather in shape. The Hills ranges rise to the Maximum altitude of 1200 mts above sea level. The lowest point in the area is situated above the bank of Mynriang & Mynkhen River at an elevation of 600 mts above the sea level. The general topography of the area is an undulating often covered with grassy blanks of enormous size accordingly dotted with pine trees individually or in small groups. The ground is generally gentle sloping with slopes varying between 10 percent to 60 percent. It is only near the tributaries with Mynriang & Mynkhen River that the ground becomes comparatively steeper based on the elevation, the land can be divided into three physiographic units (i) Intermediate plateau with gradient above 33 percent slope (2) Lower plateau with gradient ranges from 15 to 33 percent slope (3) Valley rolling, undulating almost flat gradient ranging from 1 to 15 percent slope. The area is mainly drained by two rivers Mynriang and Mynkhen River. 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
800 – 1320	0 – 74%	Wah Pyrhut, Liar Mynksi, Liar lakhiat, Khlieh Myni, Kyrtem	Mynriang & Mynkhen	Undulating Topography

2.3 Drainage: The major stream draining the micro-watershed are the Mynriang and Mynkhen river which is a 4th order stream flowing from west to east direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Mynriang & Mynkhen river.

2.4 Soil: The most common texture of the Soil in the Project is reddish loam to Sandy Loam with top humus layer is about 4cm deep. The depth of Soil generally varies between 80cm and 180cm, 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-VI	Water erosion					
				a	Sheet	4000	1400 - 2200	10.5 – 32.5	
				b	Rill				
				c	Gully				
				Sub total		4000	1400 – 2200v	10.5 – 32.5	
				Wind erosion		NA	NA	NA	

2.5 Climate: The JH-IWMP-I is located in the Hills of Northern slopes 800-1320 mts altitude from the mean Sea level of Agro-Climatic Sub-zone. From November to March the weather is dry, nights is cold with the onset of South Western Monsoon the atmospheric temperature and humidity start rising. The mean temperature varies between maximum of 24.80⁰C and minimum of 8.5⁰C 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)
	Meghalaya	Hills of Northern slopes 600 - 1200	4670	Jaintia Hills	JH-IWMP-VI	Sandy loan to Sandy Clay loam	4000 ha	1215.16mm	Paddy Maize Ginger vegetable	768 227 250 163

2.6 Agriculture: Agriculture is the primary occupation of the people of the area. The people mostly cultivated in rainfed areas The cultivated rainfed areas varies vary from 0.5 to 1.0 Ha per family, The principal agricultural crops grown are paddy, maize, ginger, and vegetables. The farmer also grow horticulture like orange, jack 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.)
Paddy	768	25	19200
Maize	227	20	4540
Ginger	250	40	10000
Vegetables	163	30	4890

2.7 Natural Vegetation:-The catchment has large coverage of natural grassland often created as a result of past jhuming. Though the intensity of cattle grazing and felling of pine trees is not too heavy, there is no scientific range management and grazing takes place. In the project area, predominantly of Pinus khasiya are found with sprinkling miscellaneous forest. The common species are:-

- Pinus Kesiya (Diengkseh).
- Quercus Griffithii (Diengsai).
- Toana Ciliata (Dieng Poma)
- Schima Wallichii (Diengngan).
- Castanospis Spesies (Diengsning).
- Gmelina Arborea (Dieng Lophiang)
- Betula Anoides (Diengling).
- Michelia Champaca (Dieng rhi/ Dieng Champa)
- Docyma Hookeriana (Dieng Sohphoh).
- Emblica Officinalis (Dieng Soh mylleng).
-

2.8 Socio-Economic Profile: Socio- Economic Survey was conducted in all the 9 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 6 villages of JH-IWMP-vi(2011-2012)

Sl No.	Villages	No.of family	Total Population	Sex				Agri-workers	Literacy		Occupation
				Male	Female	Boys	Girls		Male	Female	
				A	A	M	M				
1.	Umladang	242	1142	401	374	170	197	119	104	139	
2.	Rakabah	97	498	125	152	120	101	89	56	60	
3.	Nongrim Bambthong	155	849	250	257	169	173	131	127	139	
4.	Sohphoh	130	665	154	165	181	165	100	20	17	
5.	Larnai	165	1028	261	299	237	231	114	128	144	
6.	Lapangap	289	1672	379	415	419	459	168	229	262	
7.	Lumlakhiat	81	436	106	103	103	124	64	81	96	
8.	Pdengtal	24	123	30	27	21	45	24	3	4	
9.	Shiabnai	31	129	30	38	27	34	31	8	16	
	Total	1214	6542	1736	1830	1447	1529	840	756	877	

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. 18,000/-year/ household, since the prime occupation of the people is Agriculture (Mono- agriculture).

Infrastructure facilities :

- 2.1.0 *Roads:* All the villages within the Project Area are connected partly by metalled road and partly by Kacha road.
- 2.1.1 *School:* there are 17 nos of LPS and 4 nos of UP Schools within the Project Area .
- 2.1.2 *Electricity :* Connections have been provided but some villages are yet to have electricity.
- 2.1.3 *Health :* There is no Community Health Centre and no Animal Husbandry Health centre in the project areas.
- 2.1.4 *Water Supply :* Drinking water supply have been provided by the drinking well, 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 lawpynsin However, the main market where the people sell their produce is at law musiang Jowai.

Table 2.5: Infrastructure Status:

1	2	3		4			
Name of District	Name of Project	Parameters:		Status			
Jaintia Hills	Jaintia Hills VI	(i)	No. of villages connected to the main road by an all-weather road.	6 out of 9 villages			
		(ii)	No. of village provided with electricity	All villages			
		(iii)	No. of households without access to drinking water	Nil			
		(iv)	No. of educational institutions: Primary (P)/ Upper primary (S) / Higher Secondary (HS)/ Vocational institution (VI)	(P) 17 Nos	(UP) 4 Nos	(HS)	(VI)
		(v)	No. of village with access to Primary Health Centre	Nil			
		(vi)	No. of village with access Veterinary Dispensary	Nil			
		(vii)	No. of village with access Post Office	1 out of 9 villages			
		(viii)	No. of village with access Banks	Nil			
		(ix)	No. of village with access Markets/ mandis	Nil			
		(x)	No. of village with access Agro-Industries	Nil			
		(xi)	Total quantity of surplus milk	Nil			
		(xii)	No. of milk collection centres (e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	(U) Nil	(S) Nil	(PA) Nil	(O)
		(xiii)	No. of villages with access to Anganwadi Centres	All Villages			
		(xiv)	Any other facilities with no. of villages (please specify)				

2.9 Livestock: there are only 4 kinds of livestock farming being farmed in the area viz. Cattle, Goat, Piggery & Poultry

Table 2.6: Existing livestock population

Villages	Type of Animal			
	Poultry	Cattle	Piggery	Goat
Umladang	1065	152	160	-
Rakabah	422	68	56	18
Nongrim Bambthong	1241	107	111	15
Sohphoh	922	-	114	-
Larnai	579	5	105	-
Lapangap	521	239	148	112
Lumlakhiat	262	71	89	20
Pdengtal	195	61	27	2
Chiabnai	107	18	7	-
Total:-	5314	721	817	167

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 :- Valley bottom land are put under permanent cultivation. Sloppy land are put under shifting cultivation.

Farming system:- A traditional type of farming;

Cropping pattern:- single crop of paddy 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	Jaintia Hills VI	(i) Large	60				1183.7 Ha
		(ii) Small	165	554			
		(iii) Marginal	306				
		(iv) Landless	683				
		Sub - Total	1214				

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 (Pl.specify)		Pvt. Person	Govt. (specif y Deptt.)	PRI	Any other (Pl. specify)	
						Vil. com	church					
Jaintia Hills	JH-IWMP-VI	(i) Wasteland/ degraded land	50 ha	-	-	1027ha	-	50ha	-	977ha	50ha	
		(ii) Pastures	-	-	-	-	-	-	-	-	-	
		(iii) Orchards	-	-	-	-	-	-	-	640ha	-	
		(iv) Village woodlot	-	-	-	150ha	-	-	-	150ha	-	
		(v) Forest (degraded)	-	-	-	292ha	-	-	-	292ha	-	
		(vi) Village Ponds/ Tanks	-	-	-	5ha	-	-	-	5ha	-	
		(vii) Community Buildings	-	-	-	-	-	-	-	-	-	
		(viii) Weekly Markets	-	-	-	-	-	-	-	-	-	
		(ix) Permanent Markets	-	-	-	-	-	-	-	-	-	
		(x) Temples/ Places of worship	-	-	-	-	-	-	-	-	-	
		(xi) Others (Pl. specify)	-	-	-	-	-	-	-	-	-	

2.11 Land use and land cover :

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

<u>Land Use</u>		<u>Area (in Ha)</u>
1. Agricultural land – crop land- kharif crop	-	233 ha
2. Built – up area (Rural)	-	380 ha
3. Tree clad area (closed)	-	2508 ha
4. Tree clad area (open)	-	442 ha
5. Waste land – scrub land- open scrub	-	1077 ha
6. Water Bodies	-	30 ha
	-	4670 ha

Note:- Land Use based on LISS III image 2005-2006

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/Bun and Jhum cultivation), etc. It has resulted in low yield in almost all types of Agricultural and 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 depends on agriculture only as main source of livelihood. Others sources of livelihood like Poultry, Piggery, Sericulture, Horticulture, Bee Keeping, 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

CHAPTER III

PROJECT PLANNING & INSTITUTION BUILDING

3.1 Scientific Planning

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

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
7Nos		
	Cluster approach	2
	Whether technical back – stopping for the project has been arranged ? if yes, mention the name of the institute.	Yes,NIRD(NERC) Guwahati
	Base line survey	Yes – 7 Nos
	Hydro- geological survey	No
	Contour mapping	Yes – 7 Nos
	Participatory net planning (PNP)	Yes
	Remote sensing data – especially Soil / Crop/ Run-off cover	Yes – 7 Nos
	Ridge to valley treatment	Yes – 3 Nos
	Online IT connectivity between	No
	(i) Project and DRDA cell/ ZP	Yes – 7 Nos
	(ii) DRDA and SLNA	No
	(iii) SLNA and DoLR	No
	Availability of GIS layers	No
	1 Cadastral map	No
	2 Village boundaries	Yes – 7 Nos
	3 Drainage	Yes – 7 Nos
4 Soil (Soil Nutrient status	Yes – 7 Nos	

1	2	3
	5 Land use	Yes – 7 Nos
	6 .Ground water Status	Yes – 7 Nos
	7. Watershed boundaries	Yes – 7 Nos
	8. Activity	No
	Crop Simulation modle [#]	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	Yes
	(B) Inputs	No
	1. Bio-Pesticides	Yes – 7 Nos
	2. organic manure	Yes – 7 Nos
	3. Vermicompost	Yes – 7 Nos
	4. Bio- fertilizer	Yes – 7 Nos
	5. Water saving device	Yes
	6.Mechanized Tools / Implement	Yes – 7 Nos
	7. Bio- Fencing	Yes – 7 Nos
	8. Nutrient budgeting	No
	9. Automatic water level recorders & Sediment samplers.	Yes – 1 No
	Any other (please specify)	No

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 an Asst. Soil & Water Conservation Officer along with WDT members in which expertise is drawn from the relevant fields for achieving smooth and successful implementation of the project.

1	2	3	
Name of District	Name of Project	Details of PIA	
Jaintia Hills	JH-VI	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 Committee of the JH-IWMP-VI was constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Durbar/Council). The JH-IWMP-VI Watershed Committee has been registered under the Society Registration Act 1860.

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/mm/yyyy)	Designation	M/F	SC	ST	SF	MF	LF	Land less	UG	SHG	GP	Any other	Educational qualification	Function/s assigned#	
Jaintia Hills District	IWMP Jainti Hills -VI	Lington Mukhim		Chairman	M		ST									I		
		P. Rapthap		Secy	M		ST										B.E	
		Auguster Lamare		Members	M		ST										II	
		Probis Suting		-do-	M		ST										VI	
		Plinder Lamare		-do-	F		ST										IX	
		Kishon Kharsahnoh		-do-	M		ST										II	
		Ebennigo Lyngdoh		-do-	M		ST										XII	
		Molibon Suting		-do-	F		ST										IX	
		Kampher Mynsong		-do-	M		ST										III	
		Nores Mynsong		-do-	M		ST										II	
		Subor Susngi		-do-	F		ST										I	
		Brut Suting		-do-	M		ST										I	
		Paia Mukhim		-do-	M		ST										III	
		Biang Satein		-do-	F		ST										III	
		Marso Suting		-do-	M		ST										I	
		Discipline		-do-	F		ST										III	
		Story Dkhar		-do-	M		ST										VIII	
		Deimonmi Lyngdoh		-do-	M		ST										X	
		Pynskhem Synshar		-do-	F		ST										VIII	
		Nisonphot Tang		-do-	M		ST										XII	
		Paia Suchiang		-do-	M		ST										X	
		Sian Papiah		-do-	F		ST										VII	
		Michael Dkhar		-do-	M		ST										VII	
		Kharis Nongrum		-do-	M		ST										VIII	
		Roimon Siangshai		-do-	F		ST										IX	
		Taisir Phira		-do-	M		ST										XII	
Erius Suting		-do-	M		ST										X			
Blastar Sumen		-do-	F		ST										VIII			

A. PNP and PRA

B. Planning

C. Maintenance of Accounts

- | | | | | | |
|----|--|----|--|----|-----------------|
| D. | Signing of cheques and making payments | E. | Supervision of construction activities | F. | Cost Estimation |
| G. | Verification & Measurement | H. | Record of labour employed | | |
| I. | Social Audit | 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- VI		8		8	(i) Landless	12	8	20	12	8	20	12	8	20	
						(ii) SF	-	76	76	-	76	76	-	76	76	
						(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		
		Men	Women	both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
Jaintia Hills	Jaintia Hills –VI					(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
Names of Project	Amount earmarked for EPA	Entry Point Activities planned	Geographical Location
JH- IWMP-VI	24.00	Drinking Water Supply to Villages 5 Nos Washing Platform 3Nos	Latitude 25 ^o .33 and 25 ^o .30' Longitude 92 ^o .07' and 92 ^o .30'

ii) Other activities of Preparatory Phase:

1	2	3	4	5	6	7
Initiation of village level institution	Capacity building	IEC activities	Baseline survey	Hydro-geological survey	Identifying technical support agencies	Resource agree-ments
1(One) Watershed Committee	4 nos.	2 nos.	Participatory Rural Appraisals	N.A	Done	Done

4.2 Watershed Works Phase:

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

1	2	3			4												
Name of Projects	Type of structures	Pre Project			Proposed Project												
		No	Area irrigated (ha)	Storage capacity	Augmentation/ repair of existing structures				Construction of new structures				Total target				
					No	Area to be treated (ha)	Storage capacity	Estimated cost (in lakhs)	No	Area to be treated (ha)	Storage capacity (per unit)	Estimated cost (in lakhs)	No	Area to be treated (ha)	Storage capacity (m ³)	Estimated cost	
JH – IWMP VI	(i) Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(ii) Pond	-	-	-	-	-	-	-	-	66 Nos	264	20148	23.456	66 Nos.	264	20148	23.456
	(iii) Lake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(iv) Check Dam	-	-	-	-	-	-	-	-	52 Nos	364	576.16	31.2	52 Nos.	364	576.16	31.2
	(v) Percolation Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(vi) Diversion Channel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(vii) Any others (please specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total					-	-	-	-	118 Nos	628	20724.16	54.656	118	628	20724.16	54.656	

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

1	2	3		4							
Names of projects	Type of structures	Pre-project		Proposed target							
		No.	Area irrigated (ha)	Augmentation/ repair of existing recharging structures			Construction of new recharging structures			Total target	
				No.	Area to be irrigated (ha)	Estimated cost	No.	Area to be irrigated (ha)	Estimated cost	Area to be irrigated (ha)	Estimated cost
JH -IWMP-VI	(i)Open wells						18	270	7.5		
	(ii)Bore wells										
	(iii)Any others (Pl. specify)		Nil		Nil			-		Nil	
	Total for the project						18	270	7.5		

4.2.3 Activities executed by User Groups in the Project Areas.

Presently there are no User Group under the Project area and they are yet to be formed, trained and organized for different related activities.

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

There about 6 Nos of existing SHG's under different villages falling within the Project area of JH-IWMP-VI. However, many of them have not received sufficient training in matter related to Account & Records keeping and also in different income generating and livelihood activities. Under the Project more nos of SHG's will be promoted and different training and financial assistance will be given through the Project Fund to help them to improve their income generating capacity.

4.2.5 Other activities of watershed works phase:

1	2		3		4		5		6		7		8		9		10		11		12
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 (please specify)		Total estimated cost
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	
JH- IWMP-VI	1853.75 Ha	187.051 lakh	293 nos.	95.796 lakh	-	-	204 Ha	40.8 lakhs	38 Ha	1.9 lakhs	-	-	150 units	37.5lakhs	40 Units	64 lakhs	-	-	-	-	

4.2.6 Details of engineering structures in watershed works:

1	2	3			4			5					
Project	Name of structures	Type of treatment			Type of land			Target					
		(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Pri-vate	(ii) Com-munity	(iii) Others (pl. specify)	No. of units (No./ cum./ rmt)	Estimated cost (Rs. in lakh)				Expected month & year of completion (mm/yyyy)
									M	W	O	T	
JH- IWMP -VI	Check Dam		D		P			42 Nos	10.08	15.12		25.20	03/2015
	Protection wall		D					168 Nos.	15.456	23.184		38.64	03/2015
	Small Dugout Pond		D					40 Nos	2.56	3.84		6.40	03/2015
	Water Harvesting Structure		D					26 Nos	6.8224	10.2336		17.056	03/2015

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

1	2	3			4			5			
Project	Name of structure/ work	Type of treatment			Type of land			Target			
		(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	Area (ha)	No. of plants	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/ yyyy)
JH-IWMP-VI	Afforestation	R						525	157500	53.025	03/2016
	Strip Plantation	R						155	3875	6.6123	03/2016
	Improvement of Degraded Forest	R						1240	124000	44.64	03/2016
	Agro- Horticulture with Citrus Fruit							640	64000	55.04	03/2016

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.

4.2.8 Details of allied / other activities:

1	2	3			4	
Project	Name of activity@	Type of land			Target	
		(i) Private	(ii) Community	(iii) Others (landless)	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/yyyy)
JH-IWMP-VI	Agro-Horticulture	P	C		55.04	03/2015
	Contour Bunding	P	C		17.49	03/2015
	Terracing	P	C		40.8	03/2015
	Afforestation	P	C		53.025	03/2015
	Strip Plantation	P	C		6.6123	03/2015
	Peripheral Bunding	P	C		11.8627	03/2015
	Crop Demonstration	P	C		1.9	03/2015

* from column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, total no. of Projects; from column no. 5, activity-wise totals, from column no. 6, type-wise totals, from 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, item-wise totals, for the entire country may be indicated at the end of the table

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

4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5			
Names of projects	Name(s) of the villages	CPR particulars	Activity proposed	Target			
				Target area under the activity (ha)	Estimated expenditure (Rs.)	Expected no. of beneficia-ries	Estimated contribution to WDF (Rs.)
JH-IWMP-VI	1.Sohphoh 2.Larnai 3.Bambthong 4.Rakabah 5. Umladang 6. Lumlakhiat 7. Pdeintalu 8. Shiabnai	1. Drinking Water Resources 2. Com Forest Land	1. Drinking Well 2. Afforestation 3. Improvement of degraded village forest	466 ha	42.8	4925	2.23475

CHAPTER V

PROJECT PHASING & BUDGETING

CHAPTER V - PROJECT PHASING & BUDGETING
ACTION PLAN OF JAINTIA HILLS I.W.M.P – VI UNDER THADLASKEIN C&RD BLOCK 2011-2012

Name of District – Jaintia Hills

No of Village- 9 Nos

Treatable Area = 4000 Ha

9 villag es	Activities	TOTAL				1st Year				2nd Year				3rd Year				4th Year				5th Year			
		Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin
		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.	
I	Administrative Cost	10%			60.00					2%			12.00	5%			30.00	3%			18.00				
II	Monitoring & Evaluation	2%			12.00					0.5%			3.00	1%			6.00	0.5%			3.00				
	Sub-Total of I & II	12%			72					2.5			15	6%			36	3.50%			21				
III	Preparatory Phase																								
	EPA																								
	i. Drinking Well/Spring tapped chamber																								
	ii. Washing Platform	1.50%	3		9.00		3		9																
	iii. Drinking water supply	2.50%	5		15.00		5		15																
	iv.																								
	v.																								
	DPR	1%			6.00	1%			6.00																
	Institutional & Capacity Building	5%			30.00	1%			6.00	2%			12.00	1%			6.00	1%			6.00				6.00
	Sub-Total of III	10%			60.00				36.00				12.00				6.00				6.00				6.00
IV	Work Phase																								
A.	Arable Land Treatment																								
	Vegetative Barriers												223.2				16.74	10.00						0.75	
	Contour Bunds	233.20			17.49																				
	Graded Bunds																								
	Loose Boulder Contour Bunds																								
	Bench Terrace	204.00			40.80								21.5121			4.3	150.1705			30.03	32.3174				6.4635
	Box Terrace																								
	Half Moon Terrace																								
	Field Bunding																								
	Peripheral Bunding	46.108			23725.4	11.86							10.7725		4052	2.03	16.5255		12884	6.442	918.81		6790		3.395
	Crop Demonstration	38			1.9								6			0.3	32			1.6					
	Kitchen Garden																								
	Improvement of Existing Paddy Fields	205.442			8.834												205.442			8.834					
	Crop Demonstration																								
	Agro-Horticulture	640			55.04								640		8.32	640			29.44	640					17.28
	Horticulture Development																								
	Sub-Total of A	1366.75			135.9								678.2846		14.9	627.338			93.09	61.1274					27.8885
B.	Non-Arable Land																								
	Improvement of Degraded Forest/Existing Natural Forest	1240			44.64								1240		8.68	1240			23.56	1240					12.4
	Afforestation	525			53.03								525		8.93	525			28.88	525					15.225
	Agro-Forestry																								
	Nursery Establishment																								
	Avenue Plantation																								
	Strip Plantation	155			6.612								155		1.14	155			3.627	155					1.8445
	Sub-Total of B	1920			104.3								1920		18.7			56.06							29.4695

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

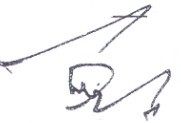
MICRO WATERSHED


YEARWISE		CENTRAL SHARE (Rs. In Lakhs)		STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
1 st year		32.40	-	3.60	- 36.00
2 nd year		75.60	-	8.40	- 84.00
3 rd year		270.00	-	30.00	- 300.00
4 th year		145.80	-	16.20	- 162.00
5 th year		16.20	-	1.80	- 18.00
Total	=	540.00	-	60.00	- 600.00

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

WAH PYRHUT MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
	90%	5%	
1 st year	4.50	0.45	4.50
2 nd year	9.45	1.05	10.50
3 rd year	33.75	3.75	37.50
4 th year	18.225	2.025	20.25
5 th year	2.025	0.225	2.25
Total	67.50	7.50	75.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


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

VILLAGE TREATMENT PLAN OF KYRTEM MICRO WATERSHED JAINTIA HILLS-IWMP-VI (2011-2012)

Name of Village= Rakabah, Nongrim Bambthong

No.of Village 1 No


Treatable Area = 1000Ha


Kyrtem Microwatershed																									
4	Activities	TOTAL				1st Year				2nd Year				3rd Year				4th Year				5th Year			
		Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin				
		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.	
7	I	Administrative Cost	10%			15				2%			3	5%			7.5	3%			4.5				
8	II	Monitoring & Evaluation	2%			3				0.50%			0.75	1%			1.5	0.50%			0.75				
9		Sub-Total of I & II	12%			18				2.50%			3.75	6%			9	3.50%			5.25				
10	III	Preparatory Phase																							
11		EPA																							
12		i. Drinking Well/Spring tapped chamber																							
13		ii. Washing Platform	2%	1		3.00		1	3.00																
14		iii. Drinking water supply	2%	1		3.00		1	3.00																
15		iv.																							
16		v.																							
17		DPR	1%			1.5	1%		1.5																
18		Institutional & Capacity	5%			7.5	1%		1.5	2%			3.00	1%			1.50	1%			1.50				
19		Sub-Total of III	10%			15.00			9.00				3.00				1.50				1.50				
20	IV	Work Phase																							
21	A.	Arable Land Treatment																							
22		Vegetative Barriers																							
23		Contour Bunds	60			4.5							60				4.5								
24		Graded Bunds																							
25		Loose Boulder Contour Bunds																							
26		Bench Terrace	70			14				21.5121			4.3	38.1705			7.634	10.3174			2.0635				
27		Box Terrace																							
28		Half Moon Terrace																							
29		Field Bunding																							
30		Peripheral Bunding	22			9293.80004	4.647						22			9293.8	4.647								
31		Crop Demonstration	6			0.3				6			0.3												
32		Kitchen Garden																							
33		Improvement of Existing Paddy Fields	38			1.634							38			1.634									
34		Crop Demonstration																							
35		Agro-Horticulture	1600			13.76				160			2.08			7.36					4.32				
36		Horticulture Development																							
37		Sub-Total of A	356			38.84				187.5121			6.68	158.1705			25.78	10.3174			6.3835				
38	B.	Non-Arable Land																							
39		Improvement of Degraded Forest/Existing Natural Forest	300			0.8				300			2.1			5.7					3				
40		Afforestation	130			13.13				130			2.21			7.15					3.77				
41		Agro-Forestry																							
42		Nursery Establishment																							
43		Avenue Plantation																							
44		Strip Plantation	35			1.493				35			0.28			0.819					0.4165				
45		Sub-Total of B	465			25.42				465			4.57			13.67					7.1865				

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

KYRTEM MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
	90%	10%	
1 st year	8.10	0.90	9.00
2 nd year	18.90	2.10	21.00
3 rd year	67.50	7.50	75.00
4 th year	36.45	4.05	40.50
5 th year	4.05	0.45	4.5
Total	135.00	15.00	150.00


 Deputy Commissioner,
 Jaintia Hills District,
 Jowai


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

VILLAGE TREATMENT PLAN OF LIAR LAKHIAT MICRO WATERSHED JAINTIA HILLS-IWMP-VI (2011-2012)

Name of Village=Lumlakhiat

No.of Village 1No

Treatable Area = 500 Ha

Micro Watershed:- Liar lakhiat


LUM LAKHIAT MICRO WATERSHED																																																		
3	4	5	TOTAL																																															
			Physical			Fin	1st Year			2nd Year			3rd Year			4th Year			5th Year																															
			Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.	Fin	Ha.	Nos.	Rmt.	Fin	Ha.	Nos.	Rmt.	Fin	Ha.	Nos.	Rmt.	Fin																												
6	I	Administrative Cost	10%			7.5						2%			1.5			5%			3.75			3%			2.25																							
7	II	Monitoring & Evaluation	2%			1.5						0.50%			0.38			1%			0.75			0.50%			0.375																							
8		Sub-Total of I & II	12%			9						2.50%			1.88			6%			4.5			3.50%			2.625																							
9	III	Preparatory Phase																																																
0		EPA																																																
1		i. Drinking Well/Spring tapped chamber																																																
2		ii. Washing Platform	4%	1		3.00																																												
3		iii.																																																
4		iv.																																																
5		v.																																																
6		DPR	1%			0.75	1%					0.75																																						
7		Institutional & Capacity Building	5%			3.75	1%					0.75	2%		1.5			1%			0.75			1%			0.75																							
8		Sub-Total of III	10%			7.50						4.50			1.5						0.75						0.75																							
9	IV	Work Phase																																																
0	A.	Arable Land Treatment																																																
1		Vegetative Barriers																																																
2		Contour Bunds	13.2			0.99												13.2			0.99																													
3		Graded Bunds																																																
4		Loose Boulder Contour Bunds																																																
5		Bench Terrace	10.00			2																		10			2.00																							
6		Box Terrace																																																
7		Half Moon Terrace																																																
8		Field Bunding																																																
9		Peripheral Bunding	5.358			1274.6	0.637					1.5075		277.6	0.14			2.3005		768	0.384		1.55			229	0.1145																							
0		Crop Demonstration	10 units (2ha)			0.5												10 units (2ha)			0.5																													
1		Kitchen Garden																																																
2		Improvement of Existing Paddy Fields	17.442			0.75												17.442			0.75																													
3		Crop Demonstration																																																
4		Agro-Horticulture	90			7.74						90			1.17						4.14						2.43																							
5		Horticulture Development																																																
6		Sub-Total of A	138			12.62						91.5075			1.31		34.9425				6.764		11.55				4.5445																							
7	B.	Non-Arable Land																																																
8		Improvement of Degraded Forest/Existing Natural Forest	50			1.8						50			0.35						0.85						0.5																							
9		Afforestation	105			10.61						105			1.79						5.775						3.045																							
0		Agro-Forestry																																																
1		Nursery Establishment																																																
2		Avenue Plantation																																																
3		Strip Plantation	45			1.92						45			0.33						1.053						0.5355																							
4		Sub-Total of B	200			14.32						200			2.47						7.778						4.0805																							


5	C. Drainage Line Treatment																			
6	Farm Ponds/Dug out Ponds	30	5	0.8					30	5	0.8									
7	Water Harvesting structures	12	3	1.968			4	1	0.65	8	2	1.318								
8	Nallah Bund																			
9	Earthen Embankment																			
0	Check Dams, H/W Dam, Diversion Dam/Irrigation Dam	40	10	6			8	2	1.2	32	8	4.8								
1	Loose Boulder Check Dam																			
2	Gabion Protection /Retaining																			
3	Stone Masonry/Protection wall/Retaining wall	69	23	5.29						69	23	5.29								
4	Bamboo wall, Bamboo spurs																			
5	Drip Irrigation																			
6	Water Tank/Percolation Tank																			
7	Run off Disposal Channel	11	3846	1.00						11	3846	1.00								
8	Earthen Irrigation Channel																			
9	CC Irrigation Channel																			
0	Aqueduct																			
1	Sub-Total of C	162		15.06			12		1.85	150		13.21								
2	D. Livelihood																			
3	Tailoring	12 units		1.20			2 units		0.2	10 units		1.00								
4	Carpentry/Blacksmith	30 units		1.5						20 units		1.00	10 units			0.5				
5	Agriculture Implements																			
6	Vegetable Production/Kitchen Gardening	102 units		2.55			12 units		0.3				90 units			2.25				
7	Apiculture																			
8	Masonry Hollow Block Making																			
9	Piggery																			
0	Poultry																			
1	Vermi-composting																			
2	Composting	50 units		0.25						50 units		0.25								
3	Weaving	5 units		1.25			1 unit		0.25				4 units			1.00				
4	Stabilized Mud Block Making																			
5	Grocery Shop/Food Stalls																			
6	Promotion of Indigenous Medicinal Practitioner																			
7	Pisciculture																			
8	Soap Making																			
9	Sub-Total of D	199 units		6.75			15 units		0.75	80 units		2.25	104 units			3.75				
0	E. Production Systems																			
1	Poultry/Piggery	18 units		4.5			3 units		0.75	5 units		1.25	10 units			2.5				
2	Poultry Farming																			
3	Piggery Farming																			
4	Food Processing																			
5	Floriculture																			
6	Pisciculture (Including Supply of Fingerlings)																			
7	Betle nut Soaking Tank																			

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

LIAR LAKHIAT MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
1 st year	90% 4.50	5% 0.45	4.50
2 nd year	9.45	1.05	10.50
3 rd year	33.75	3.75	37.50
4 th year	18.225	2.025	20.25
5 th year	2.025	0.225	2.25
Total	= 67.50	7.50	75.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


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

VILLAGE TREATMENT PLAN OF MYNKSI MICRO WATERSHED JAINTIA HILLS-IWMP-VI (2011-2012)

Name of Village= Lapangap, Shiabnai, Pdenctaloo

No.of Village 3 No

Treatable Area = 1000Ha


Sl. No.	Activities	TOTAL				1st Year				2nd Year				3rd Year				4th Year				5th Year					
		Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin						
		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.		Ha.	Nos.	Rmt.							
16	I																										
17	Administrative Cost	10%			15				2%			3	5%			7.5	3%			4.5							
18	II																										
19	Monitoring & Evaluation	2%			3				0.50%			0.75	1%			1.5	0.50%			0.75							
20	Sub-Total of I & II	12%			18				2.50%			3.75	6%			9	3.50%			5.25							
21	III																										
22	Preparatory Phase																										
23	EPA																										
24	i. Drinking Well/Spring tapped chamber																										
25	ii. Washing Platform																										
26	iii. Drinking water supply	4%	2		6.00	2	6.00																				
27	iv.																										
28	v.																										
29	DPR	1%			1.5	1%	1.5																				
30	Institutional & Capacity Building	5%			7.5	1%	1.5	2%			3.00	1%			1.50	1%			1.50								
31	Sub-Total of III	10%			15.00		9.00				3.00			1.50		1.50											
32	IV																										
33	Work Phase																										
34	A.																										
35	Arable Land Treatment																										
36	Vegetative Barriers																										
37	Contour Bunds	60			4.5																						
38	Graded Bunds																										
39	Loose Boulder Contour Bunds																										
40	Bench Terrace	39			7.8				37			7.4	2			0.4											
41	Box Terrace																										
42	Half Moon Terrace																										
43	Field Bunding																										
44	Peripheral Bunding	10.75		3900.4	1.95			1.996		798.4	0.4	3.6		1040	0.52	5.154		2062	1.031								
45	Crop Demonstration	6			0.3																						
46	Kitchen Garden																										
47	Improvement of Existing Paddy Fields	80			3.44																						
48	Crop Demonstration																										
49	Agro-Horticulture	170			14.62			170			2.21			7.82				4.59									
50	Horticulture Development																										
51	Sub-Total of A	365.75			32.61			171.996			2.61	186.6		23.98	7.154			6.021									
52	B.																										
53	Non-Arable Land																										
54	Improvement of Degraded Forest/Existing Natural Forest	370			13.32			370			2.59	370		7.03				3.7									
55	Afforestation	90			9.09																						
56	Agro-Forestry																										
57	Nursery Establishment																										
58	Avenue Plantation																										
59	Strip Plantation	30			1.28			30			0.22	30		0.702				0.357									
60	Sub-Total of B	490			23.69			490			4.34			12.68				6.667									

8	C.	Drainage Line Treatment																	
9		Farm Ponds/Dug out Ponds	17	17	2.72			5	5	0.8	12	12	1.92						
0		Water Harvesting structures	3.25	5	3.28						1.95	3	1.968	1.3	2		1.312		
1		Nallah Bund																	
2		Earthen Embankment																	
3		Check Dams, H/W Dam, Diversion Dam/Irrigation Dam	21	12	7.2			3	2	1.2	15	9	5.4	3	1		0.6		
4		Loose Boulder Check Dam																	
5		Gabion Protection /Retaining Wall																	
6		Stone Masonry/Protection wall/Retaining wall	100	5	11.5			20	10	2.3	70	35	8.05	10	5		1.15		
7		Bamboo wall, Bamboo spurs																	
8		Drip Irrigation																	
9		Water Tank/Percolation Tank																	
0		Run off Disposal Channel	3	11538	3						1.5	5769	1.5	1.5		5769	1.5		
1		Earthen Irrigation Channel																	
2		CC Irrigation Channel																	
3		Aqueduct																	
4		Sub-Total of C	144.25		27.7			28		4.3	100.45		18.84	15.8		4.562			
5	D.	Livelihood																	
6		Tailoring	40 units		4			5 units		0.5	20 units		2	15 units		1.5			
7		Carpentry/Blacksmith	50 units		2.5			10 units		0.5	5 units		0.25	35 units		1.75			
8		Agriculture Implements																	
9		Vegetable Production/Kitchen Gardening	200 UNITS		5			20 units		0.5	50 units		1.25	130 units		3.25			
0		Apiculture																	
1		Masonry Hollow Block Making																	
2		Piggery																	
3		Poultry																	
4		Vermi-composting																	
5		Composting	100 units		0.5						500 units		0.25	50 units		0.25			
6		Weaving	6 units		1.5						3 units		0.75	3 units		0.75			
7		Stabilized Mud Block Making																	
8		Grocery Shop/Food Stalls																	
9		Promotion of Indigenous Medicinal Practioner																	
0		Pisciculture																	
1		Soap Making																	
2		Sub-Total of D	396 units		13.5			35 units		1.5	128 units		4.5	233 units		7.5			
3	E.	Production Systems																	
4		Poultry/Piggery	40 units		10			6 units		1.5	12 units		3	22 units		5.5			
5		Poultry Farming																	
6		Piggery Farming																	
7		Food Processing																	

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

MYNKSI MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
	90%	10%	
1 st year	8.10	0.90	9.00
2 nd year	18.90	2.10	21.00
3 rd year	67.50	7.50	75.00
4 th year	36.45	4.05	40.50
5 th year	4.05	0.45	4.5
Total	= 135.00	- 15.00	- 150.00


Deputy Commissioner,
Jaintia Hills District,
Jowai


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

VILLAGE TREATMENT PLAN OF KHLIEH MYNI MICRO WATERSHED JAINTIA HILLS-IWMP-VI (2011-2012)

Name of Village= Saphoh,Larnai

No.of Village 2 No

Treatable Area = 1000Ha


1	2	3																							
		TOTAL				1st Year				2nd Year				3rd Year				4th Year				5th Year			
		Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin	Physical			Fin
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
51	I	Administrative Cost	10%			15				2%			3	5%			7.5	3%			4.5				
52	II	Monitoring & Evaluation	2%			3				0.50%			0.75	1%			1.5	0.50%			0.75				
53		Sub-Total of I & II	12%			18				2.50%			3.75	6%			9	3.50%			5.25				
54	III	Preparatory Phase																							
55		EPA																							
56		i. Drinking Well/Spring tapped chamber																							
57		ii. Washing Platform																							
58		iii. Drinking water supply	4%	2		6.00		2	6.00																
59		iv.																							
60		v.																							
61		DPR	1%			1.5	1%		1.5																
62		Institutional & Capacity Building	5%			7.5	1%		1.5	2%			3.00	1%			1.50	1%			1.50				
63		Sub-Total of III	10%			15.00			9.00				3.00				1.50				1.50				
64	IV	Work Phase																							
65	A.	Arable Land Treatment																							
66		Vegetative Barriers																							
67		Contour Bunds	80			6							70				5.25	10			0.75				
68		Graded Bunds																							
69		Loose Boulder Contour Bunds																							
70		Bench Terrace	65			13							55				11	10			2				
71		Box Terrace																							
72		Half Moon Terrace																							
73		Field Bunding																							
74		Peripheral Bunding	17			6620.4	3.31			3.446		1446	0.72	2.64		988	0.494	10.914		4186	2.093				
75		Crop Demonstration	6			0.30								6			0.30								
76		Kitchen Garden																							
77		Improvement of Existing Paddy Fields	26			1.118								26			1.118								
78		Crop Demonstration																							
79		Agro-Horticulture	130			11.18				130		1.69					5.98				3.51				
80		Horticulture Development																							
81		Sub-Total of A	324			34.91				133.446		2.41	159.64				24.14	30.914			8.353				
82	B.	Non-Arable Land																							
83		Improvement of Degraded Forest/Existing Natural Forest	400			14.4				400		2.8	400				7.6	400			4				
84		Afforestation	120			12.12				120		2.04					6.6				3.48				
85		Agro-Forestry																							
86		Nursery Establishment																							
87		Avenue Plantation																							
88		Strip Plantation	30			1.28				30		0.22	30				0.702	30			0.357				
89		Sub-Total of B	550			27.8				550		5.06					14.9				7.837				


4	C. Drainage Line Treatment																		
5	Farm Ponds/Dug out Ponds																		
6	Water Harvesting structures	10	7	4.592			1.5	1	0.66	8.5	6	3.936							
7	Nallah Bund																		
8	Earthen Embankment																		
9	Check Dams, H/W Dam, Diversion Dam/Irrigation Dam	39	13	7.8			6	2	1.2	30	10	6	3	1			0.6		
0	Loose Boulder Check Dam																		
1	Gabion Protection /Retaining Wall																		
2	Stone Masonry/Protection wall/Retaining wall	75	30	6.9			10	4	0.92	60	24	5.52	5	2			0.46		
3	Bamboo wall, Bamboo spurs																		
4	Drip Irrigation																		
5	Water Tank/Perrcolation Tank																		
6	Run off Disposal Channel	2	7692	2			1	3846	1	1	3846	1							
7	Earthen Irrigation Channel																		
8	CC Irrigation Channel																		
9	Aqueduct																		
0	Sub-Total of C	126		21.29			18.5		3.78	99.5		16.46	8				1.06		
1	D. Livelihood																		
2	Tailoring	40 units		4						5 units		0.5	35 units				3.5		
3	Carpentry/Blacksmith	20 units		1			3 units		0.15	5 units		0.25	12 units				0.6		
4	Agriculture Implements																		
5	Vegetable Production/Kitchen Gardening	200 units		5			24 units		0.6	80 units		2	96 units				2.4		
6	Apiculture																		
7	Masonry Hollow Block Making																		
8	Piggery																		
9	Poultry																		
0	Vermi-composting																		
1	Composting	200 units		1						100 units		0.5	100 units				0.5		
2	Weaving	10 units		2.5			3 units		0.75	5 units		1.25	2 units				0.5		
3	Stabilized Mud Block Making																		
4	Grocery Shop/Food Stalls																		
5	Promotion of Indigenous Medicinal Practioner																		
6	Pisciculture																		
7	Soap Making																		
8	Sub-Total of D	470 units		13.5			30 units		1.5	105 units		4.5	245 units				7.5		
9	E. Production Systems																		
0	Poultry/Piggery	32 units		8			6 units		1.5	4 units		1	22 units				5.5		
1	Poultry Farming																		
2	Piggery Farming																		
3	Food Processing																		
4	Floriculture																		
5	Pisciculture (Including Supply of Fingerlings)																		
6	Betle nut Soaking Tank																		

ABSTRACT – J H – I.W.M.P – VI – 2011 – 2012

KHLIEH MYNI MICRO WATERSHED

YEARWISE	CENTRAL SHARE (Rs. In Lakhs)	STATE SHARE (Rs. In Lakhs)	TOTAL (Rs. In Lakh)
	90%	10%	
1 st year	8.10	0.90	9.00
2 nd year	18.90	2.10	21.00
3 rd year	67.50	7.50	75.00
4 th year	36.45	4.05	40.50
5 th year	4.05	0.45	4.5
Total	135.00	15.00	150.00


 Deputy Commissioner,
 Jaintia Hills District,
 Jowai


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

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

1	2	3		4	5	6	7				8				
Names of Projects	Year of sanction	Project duration (dd/mm/yyyy)		Area of the projects to be treated (Treatable Area)	Project cost (Rs. In lakh)	Names of Micro watersheds & Code nos. (as per DoLR's unique codification)	Treatable Area (ha) (As per LULC)				Area details (ha) (falling within the projects) (As per ownership)				
		From	To				Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland		Pvt. Agri. Land	Forest land	Community land	Others (pl. specify)	Total area (ha)
									a) Temporary fallow	b) Permanent					
JH – IWMP VI	2011-12	2011-12	2015-16	4000 Ha	600 Lakhs		256 Ha	78 Ha	1077 Ha	NIL	233 Ha	2508 Ha	1377 Ha	552 Ha	4670 Ha

Fund provision for the IWMP projects from all sources:

1	2		3										4
Name of Projects	IWMP Fund		Funds from other sources in addition to IWMP funds										Total
			Convergence funds		PPP		Community		Institutional finance		Others (Pl. specify)		
	Central Share	State Share	Name of Scheme	Amount (Lakhs)	Name of private sector	Financial contribution	Name	Financial contribution	Name	Financial contribution	Name	Financial contribution	
JH – IWMP VI	540.00	60.00	NREGA	143.694	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	743.694 Lakhs

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

1	2				3				
Names of Projects	Distt. Agency's Project Account details				Watershed Committee (WC) account details:				
	Name of the Bank and Branch where project account has been opened	Account Number (to be obtained confidentially)	Account type (Savings/ Current/ Others)	Name & Designation of authorized persons who operate the account.	Name of Watershed Committee	Name of the Bank and Branch where project account has been opened	Account number (to be obtained confidentially)	Account type (Savings/ current others)	Name & Designation of authorized persons who operate the account.
JH- IWMP VI	SBI Bank		Saving	Shri D.Challam DS&WCO	1. Liarlakhiat W/S Committee 2. Mynksi W/S Committee 3. Wahpyrhut W/S Committee 4. Khliehmyni W/S Committee 5. Kyrtem W/S Committee	SBI		Saving	

Details of Convergence of IWMP with other Schemes:

	1	2	3	4	5	6	7
Sl. No.	District	Names of projects	Names of Departments with Schemes converging with IWMP	Fund to be 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 [§]
					(a) Structures (b) livelihoods (c) Any other (pl. specify) [#]		
1	Jaintia Hills	JH – IWMP-VI	* Community Rural Development Department MNREGS	143.694	Land Development	-	District Level
2							

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
S. No	State	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designation of the Head of Institute	Type of Institute [#]	Area(s) of specialization [§]
1	Meghalaya	NIRD (NER)	Guwahati	Director	Central Govt.	Remote Sensing, Rural Devt.
2		SIRD	Nongsder	Director	State Govt.	Capacity Building
3		RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship
4		ICAR	Umiam	Director	Central Govt.	Do
5		VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry
6		Fruit Garden	Shillong	Director	State Govt.	Agri-Horti, Fruit Processing

- 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 2011 – 12 as on 31/03/2012 (dd/mm/yyyy)*

1	2	3	4					5
Project	Type of Training/ Capacity Building	Agency/Institution to provide training	No. of Trainings targeted during each financial year					Total
			1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	
SLNA								
DRDA/ZP Cell								
PIAs	Watershed Management	NIRD, ICAR	1	1	1	2		5
WDTs	Watershed Management	NIRD, ICAR	4	3	2	2		11
UGs	Agriculture/ Horticulture, livelihood	Soil Deptt. Agri Deptt. Horti. Deptt.		10	5	5		20
SHGs	Livelihood & income generating	NGO's,	1	5	5	2		13
WCs	Exposure trip, Natural resources Management	Soil & Water conservation Deptt.	1	3	2	2		9
GPs	Participation/maintenance of community assets	Soil & Water conservation Deptt. & NGO's,	1	4	2	2		9
Community	Awareness Programme, Livestock management	Soil & Water conservation Deptt. & Vety Deptt.	1	4	2	-		7
Others Pl. specify)								

Table 6.3: Information, Education & Communication (IEC) activities for the year 09-10 as on 31/03/10 (dd/mm/yyyy)*

Sl. No.	1	2	3
	Activity	Executing agency	Estimated expenditure (Rs.)
1.	Awareness	S&WC (T) Division, Jaintia Hills	1.00
2.	PRA Exercises	S&WC (T) Division, Jaintia Hills	0.60
3.	Exposure Visit	S&WC (T) Division, Jaintia Hills	0.40
4.	Capacity Building	S&WC (T) Division, Jaintia Hills	4.00

CHAPTER VII

EXPECTED OUTCOME

CHAPTER VII

EXPECTED OUTCOME

Table 7.1 Employment related outcomes:

SI No	Name of Villages	1										2				
		Wage employment										Self employment				
		No. of mandays					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Men	Women	Total	SC	ST	Men	Women	Total	SC	ST	Men	Women	Total
1.	Umladang		100 %	7560	6720	14280		100 %					100 %	768	374	1142
2.	Rakabah		100%	7560	6720	14280		100 %					100 %	332	152	484
3	Nongrim Bambthong		100 %	7560	6720	14280		100 %					100 %	659	257	916
4	Sohphoh		100%	7560	6720	14280		100 %					100 %	500	165	665
5	Larnai		100%	7560	6720	14280		100 %					100 %	727	299	1026
6	Lapangap		100%	7560	6720	14280		100 %					100 %	1267	415	1682
7	Lumlakhiat		100%	7560	6720	14280		100 %					100 %	333	103	436
8	Pdeintalu		100%	7500	6000	13500		100 %					100 %	96	27	123
9	Shiabnai		100%	60	720	780		100 %					100 %	95	38	133

Table 7.2 Migration Details:

1	2	3	4	5	6	7	8	
Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)	For reduced migration identify major activities of IWMP responsible	
							(a) Structures	(b) Livelihoods
Umladang	Nil							
Rakabah	Nil							
Nongrim Bambthong	Nil							
Sohphoh	Nil							
Larnai	Nil							
Lapangap	Nil							
Lumlakhiat	Nil							
Pdeintalu	Nil							
Shiabnai	Nil							

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 5, total no. of villages; from column no. 6, total no. of persons migrating; from column no. 7, average no. of days for annual migration; from column no. 9,

average distance of migration from the village and form column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

Table 7.5.2 Status of Drinking water:

1			2			3
Availability of drinking water			Quality of drinking water			Comments
Pre-project	Post-project	Change in availability	Pre-project	Post-project	Change in quality	
10 months			Moderately portable			Shallow

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

Table 7.5.3 Water Use efficiency:

1	2	3			
Name of the project	Name of major crop	Water savings in cu.m.			
		through water saving devices [§]	through water conserving agronomic practices [#]	Any other (pl specify)	Total
JH-IWMP-VI	Paddy	NA	NA	-	-
	Maize	NA	NA	-	-

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

[§] Sprinkler, Drip, PVC pipe, etc.

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

Table 7.6: Vegetation/ crop related outcomes:

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

1	2	3						4						5					
		Pre-project						Mid-term						Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
JH- IWMP- VI	Paddy	-	768	-	25	-	19200	-	-	-	-	-	-	-	-	-	-	-	-
	Maize	-	227	-	20	-	4540	-	-	-	-	-	-	-	-	-	-	-	-
	Ginger	-	250	-	40	-	10000	-	-	-	-	-	-	-	-	-	-	-	-
	Vegetables	-	163	-	30	-	4890	-	-	-	-	-	-	-	-	-	-	-	-

Note : The Area of Jhum crops decreases in the Mid- term and Post project because of converting it to Permanent Plantation (Rubber & Arecanut).

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

Irri. – Irrigated Rf – Rainfed

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

1	2	3						4						5					
Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total for the District																			

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

Irri. – Irrigated Rf – Rainfed

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

1	2	3						4						5					
Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
JH-IWMP-VI																			
Total for the District																			

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

Irri – Irrigated Rf – Rainfed

Table 7.6.4 Availability of Fodder:

1	2	3			4		
Name of project	Duration of Project	Pre project (tonnes/ha)			Post project (tonnes/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
JH-IWMP V	5 yrs	Field survey Report	2011-2012	NA	155ha	Nil	Nil

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

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

Table 7.6.5 Increase/ Decrease in Forest/vegetation cover:

1	2	3			4		
Name of project	Duration of Project	Existing area tree cover (ha)			Expected Outcome (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
JH-IWMP-VI	5 yrs	Field Survey Report & LULC Map, NESAC, Umiam	2011 - 12	1240 Ha	525 Ha	-	-

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

Table 7.6.6 Increase/ Decrease in area under horticulture:

1	2	3			4	
Name of project	Duration of Project	Pre Project Area (ha)			Expected outcome Area (ha.)	
		Source/Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Expected change in area under horticulture
JH-IWMP-VI	5 yrs	Field Survey Report	2011-12	NIL	640 Ha	-

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

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

1	2	3			4	
Name of project	Duration of Project	Pre Project Area (ha)			Post Project Area (ha)	
		Source/Name of report	Year of reference	Area already under fuel-wood	Area under fuel-wood proposed to be covered under IWMP	Expected change in area under fuel-wood
JH-IWMP VI	5 years	Field survey Report	2011-12	1240 Ha	525 Ha	-

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

Table 7.7 Livelihood related outcomes:

Table 7.7 Details of livestock in the project areas (for fluids please mention in liters, for solids please mention in kgs. and income in Rs.):

1	2	3			4			5			6
Name of Projects	Type of Animal	Pre-project			Mid-term			Post-project			Remarks
		No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	

JH-IWMP VI	Poultry	5314	10,628 kg	34.0096 lakhs						
	Cattle	721	57,680 Kg	103.824 lakhs						
	Piggery	817	32,680 kg	58.824 lakhs						
	Goat	167	2,505 kg	7.515 lakhs						

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

Table 7.10 Benefit Cost Analysis

Note: Details of B:C ratio should be enclosed and the calculation of BC Ratio should be based on a return period of 7 years

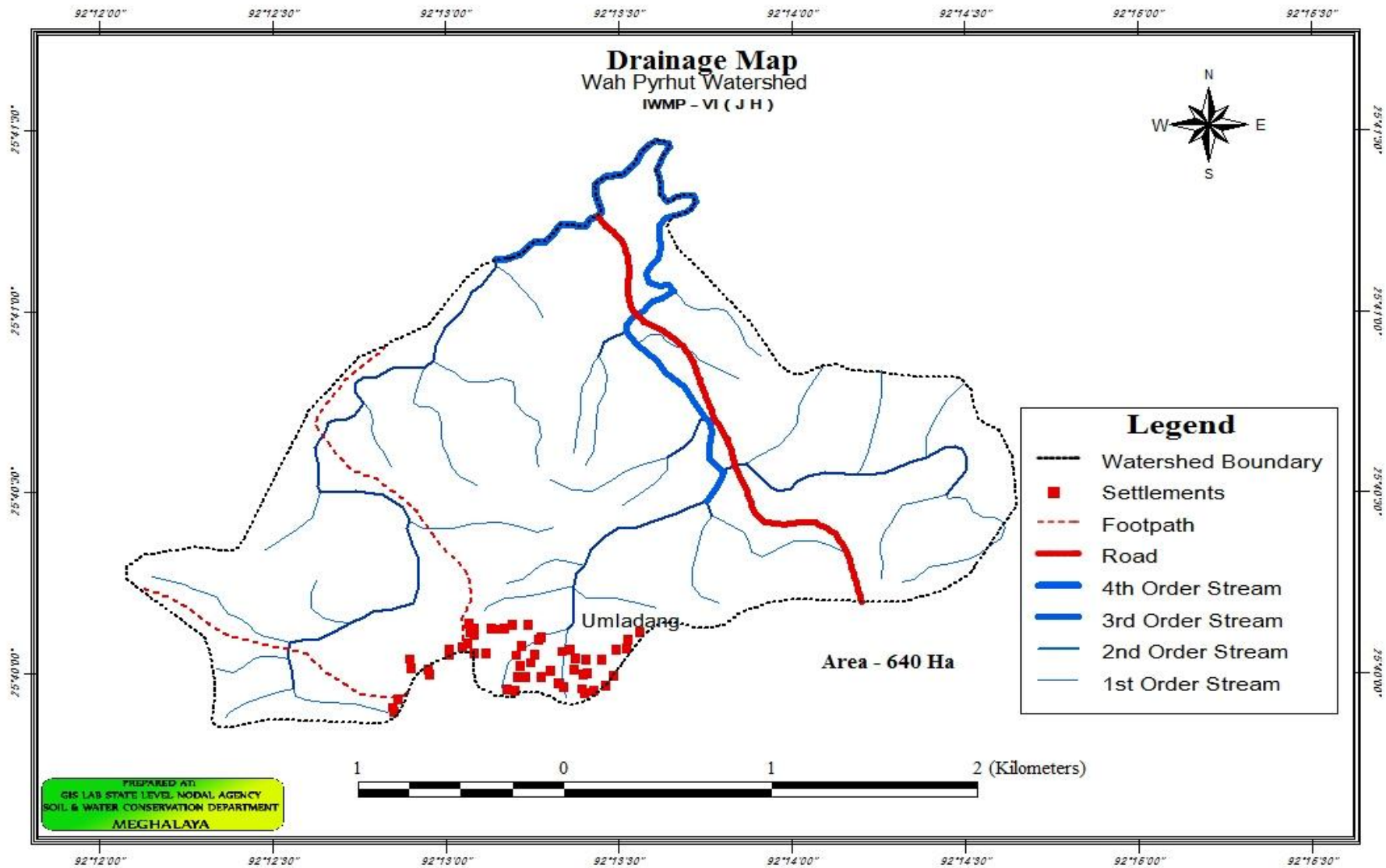
1	2	3	4	5	6	7
District	Name of project	Name of WC	Name of structure/ activity	Estimated cost (Rs. In lakhs)	Expected quantifiable benefits (Rs.)	Benefit: Cost ratio [#]
Jaintia Hills District	JH-IWMP-VI	-	As per Treatment Plan	600 lakhs	1850	3.1:1

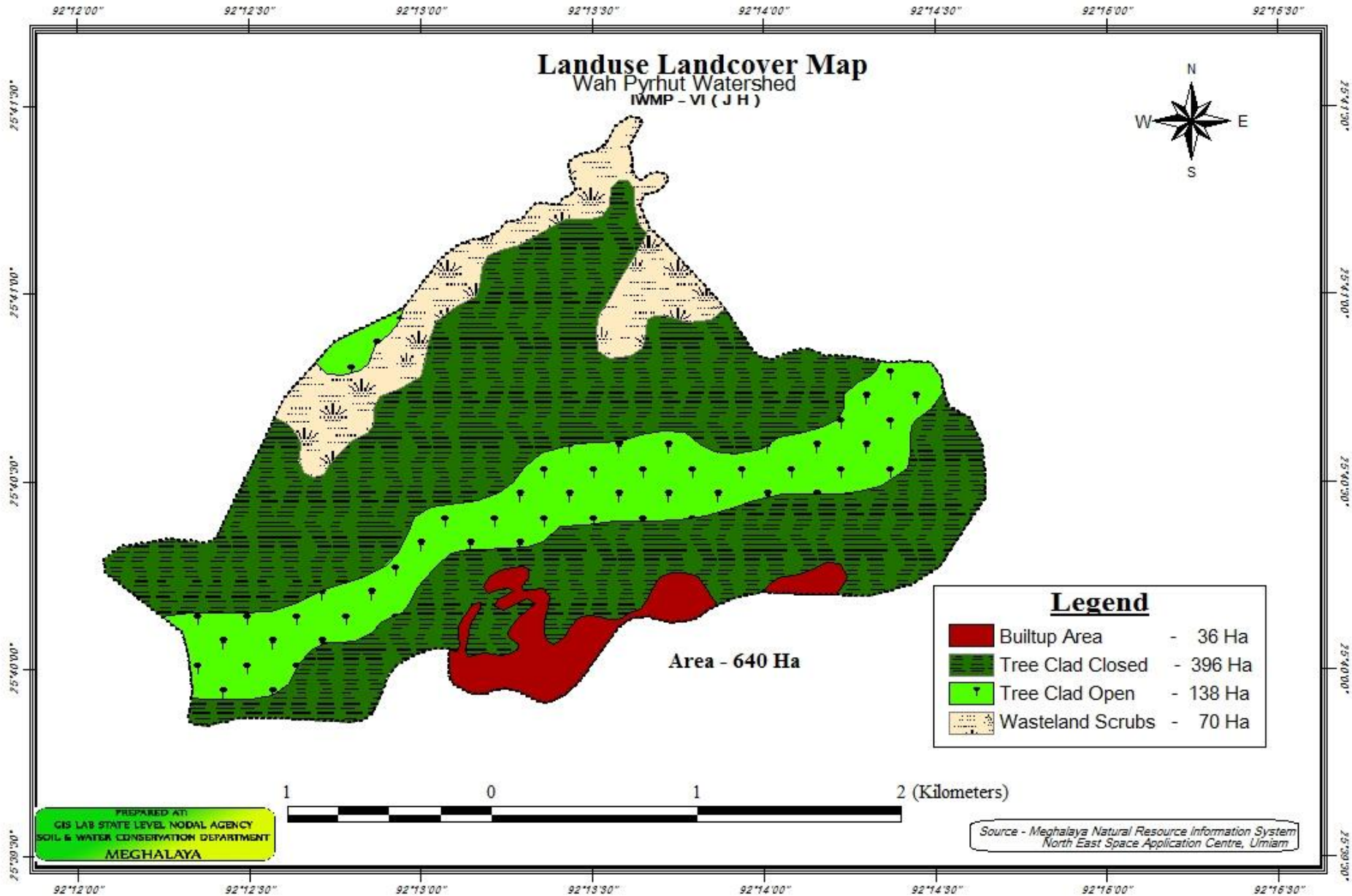
* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from Column no. 4, no. of projects, from column no. 5, no. of WCs, from column no. 6, no. of structures/ activities, from column no. 7 to 10, category-wise# totals, may be mentioned at the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

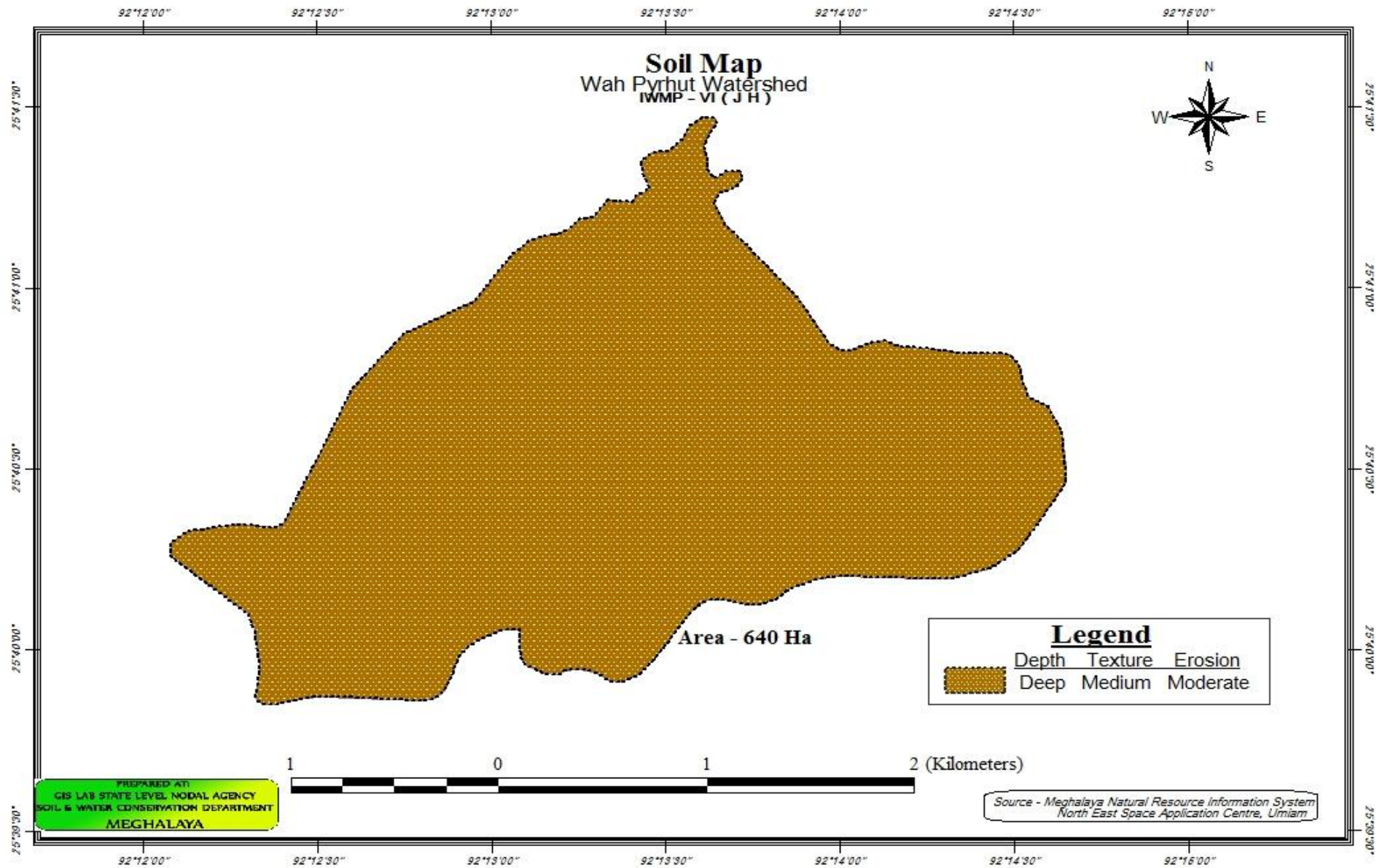
[#] B:C ratio more than 1 – cost effective

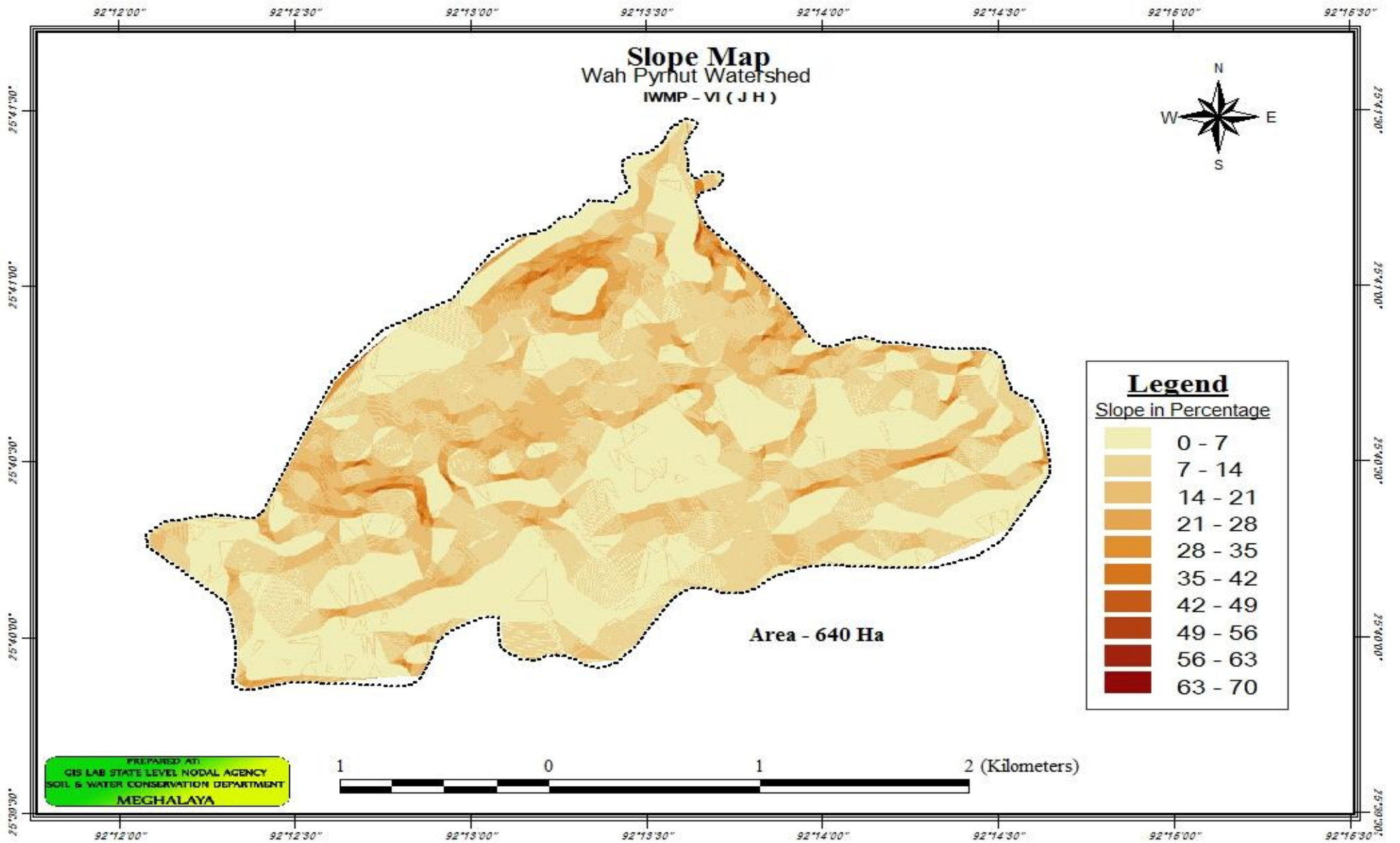
less than 1 – Not cost effective

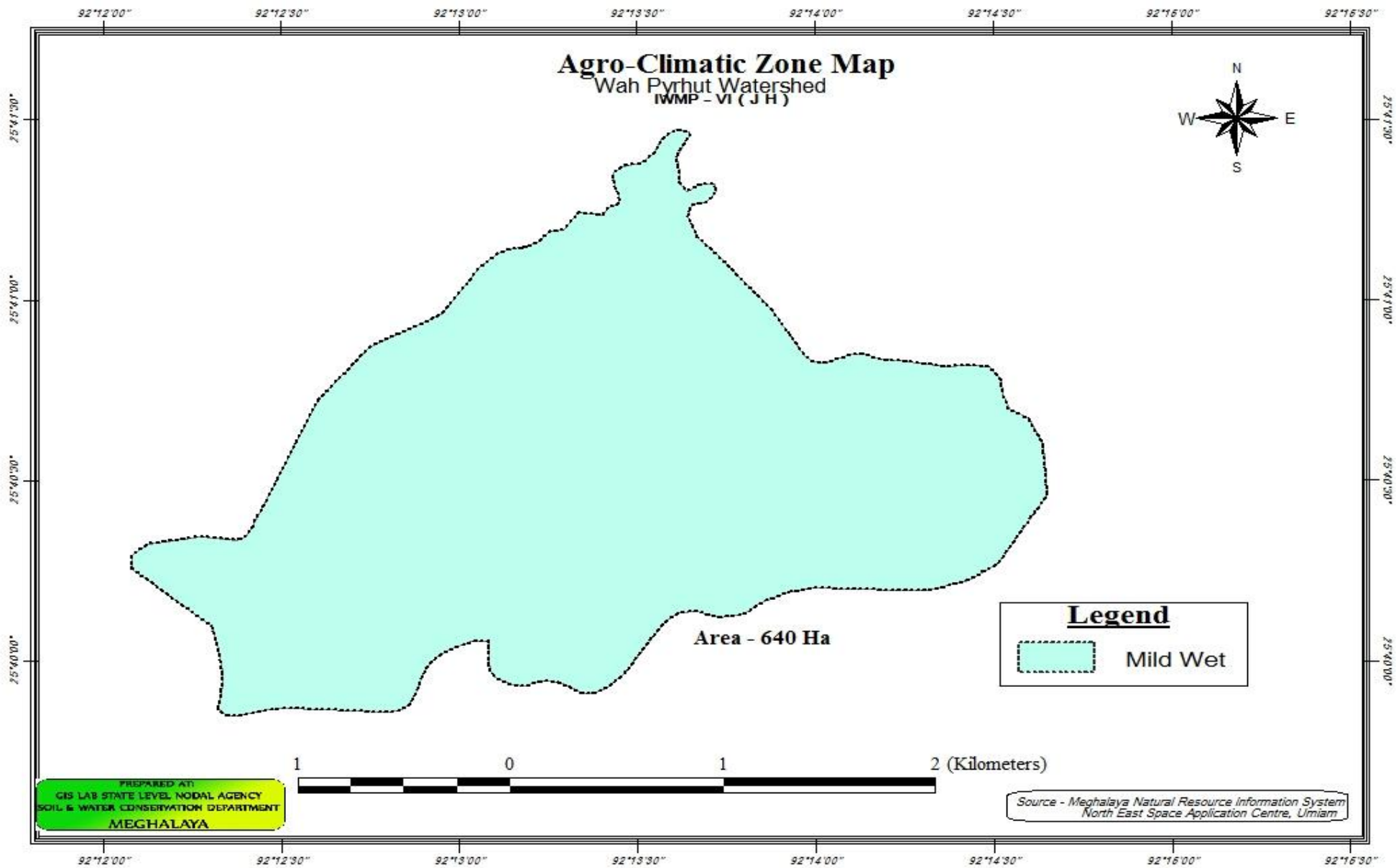
ANNEXURE I
MAPS

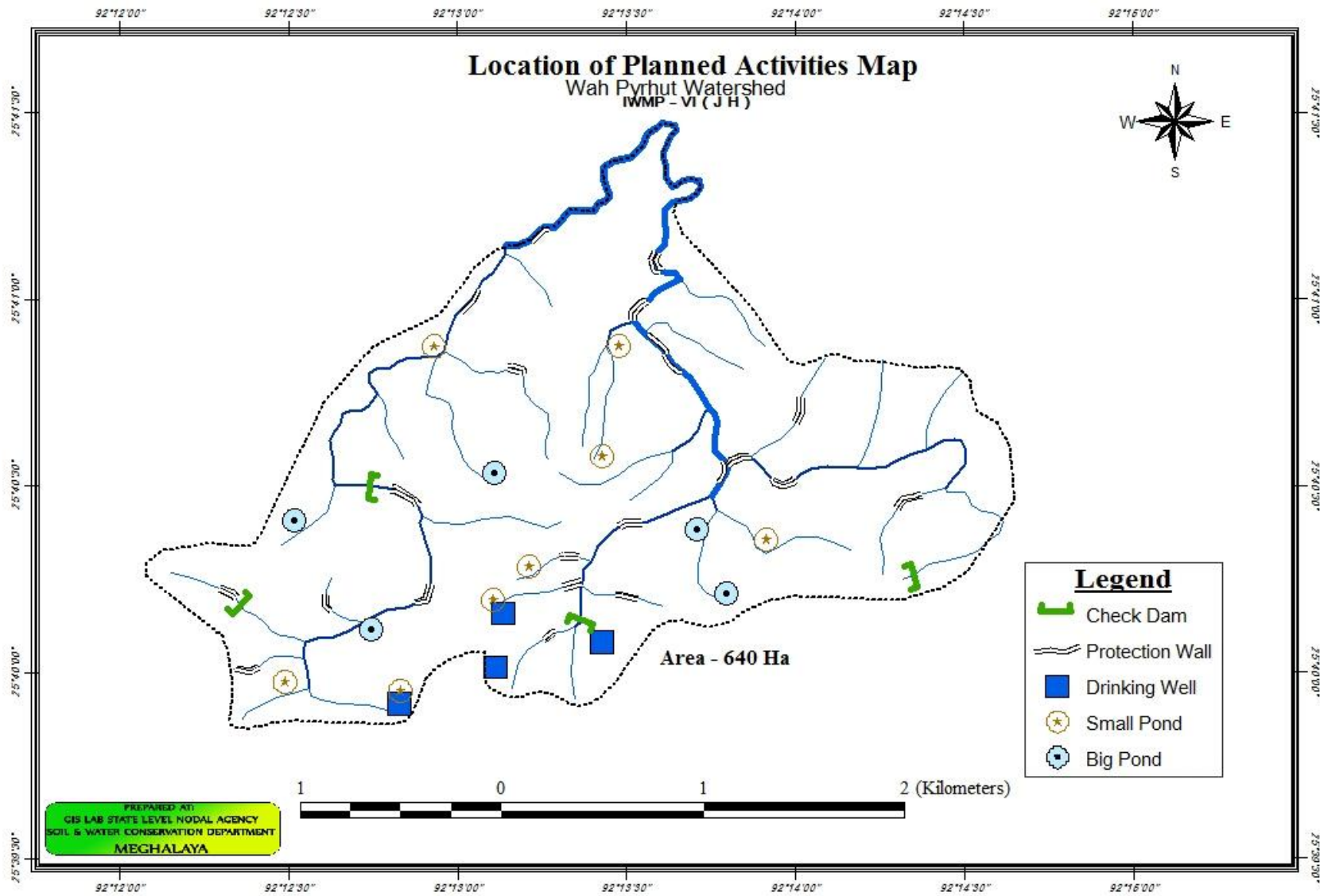


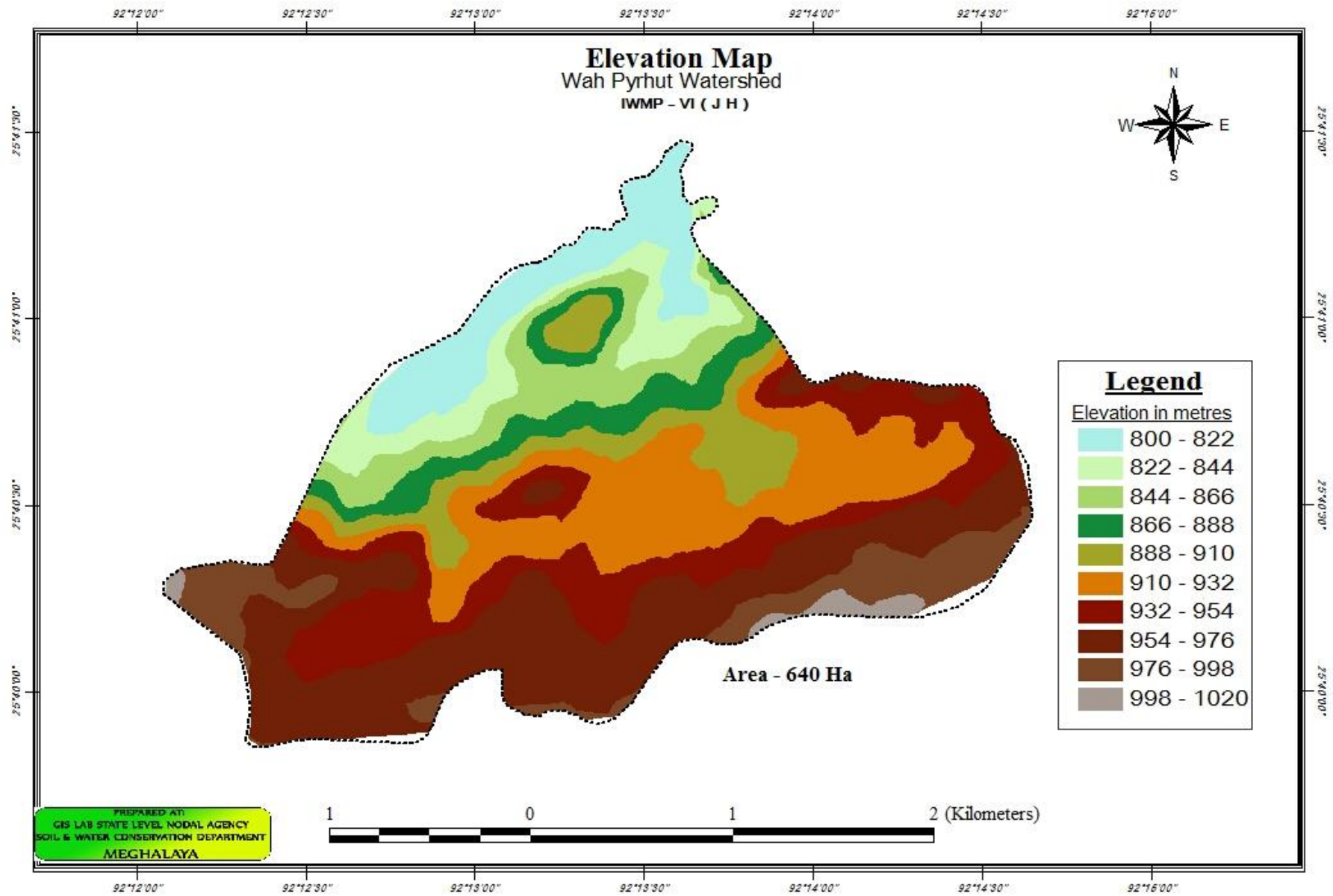


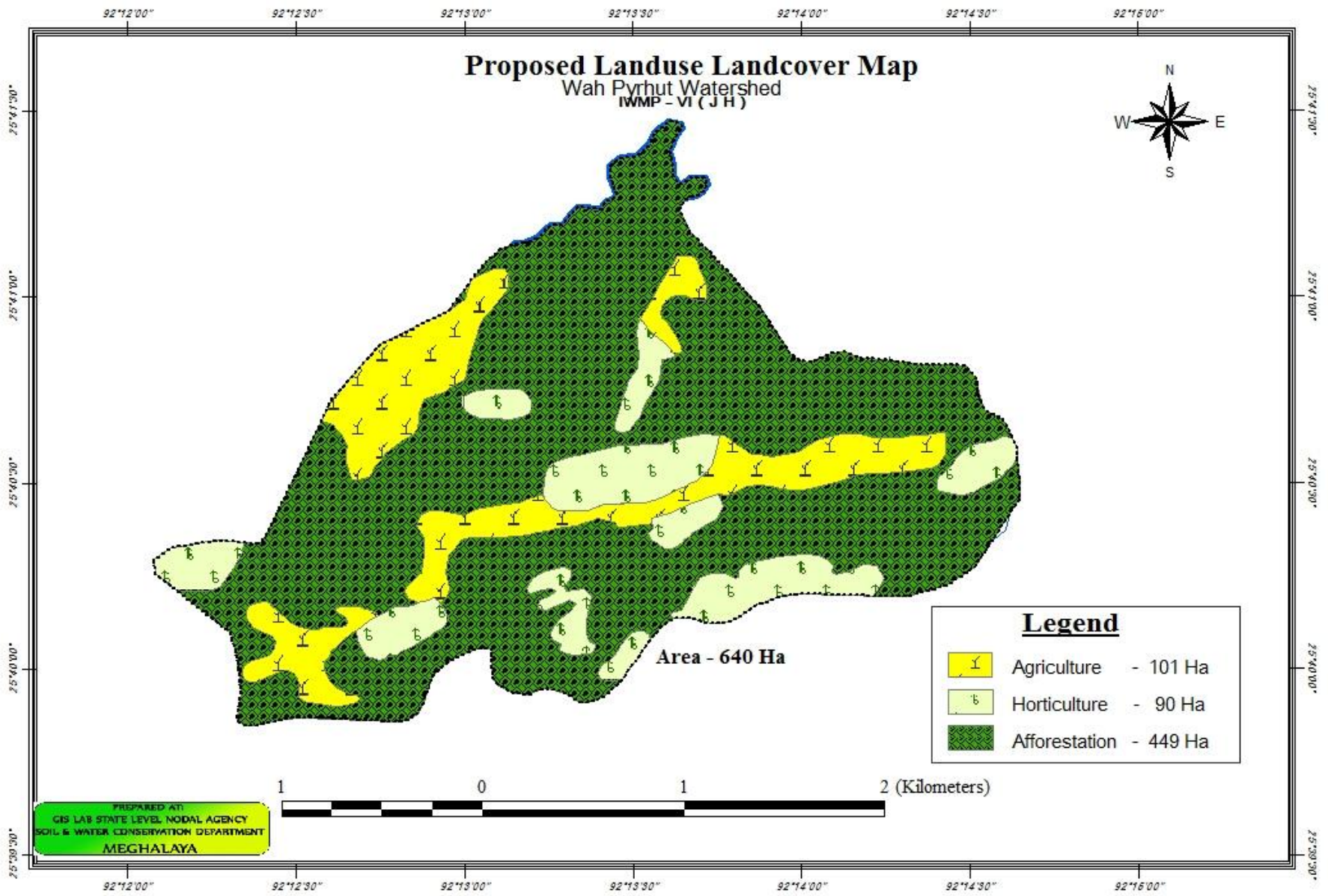


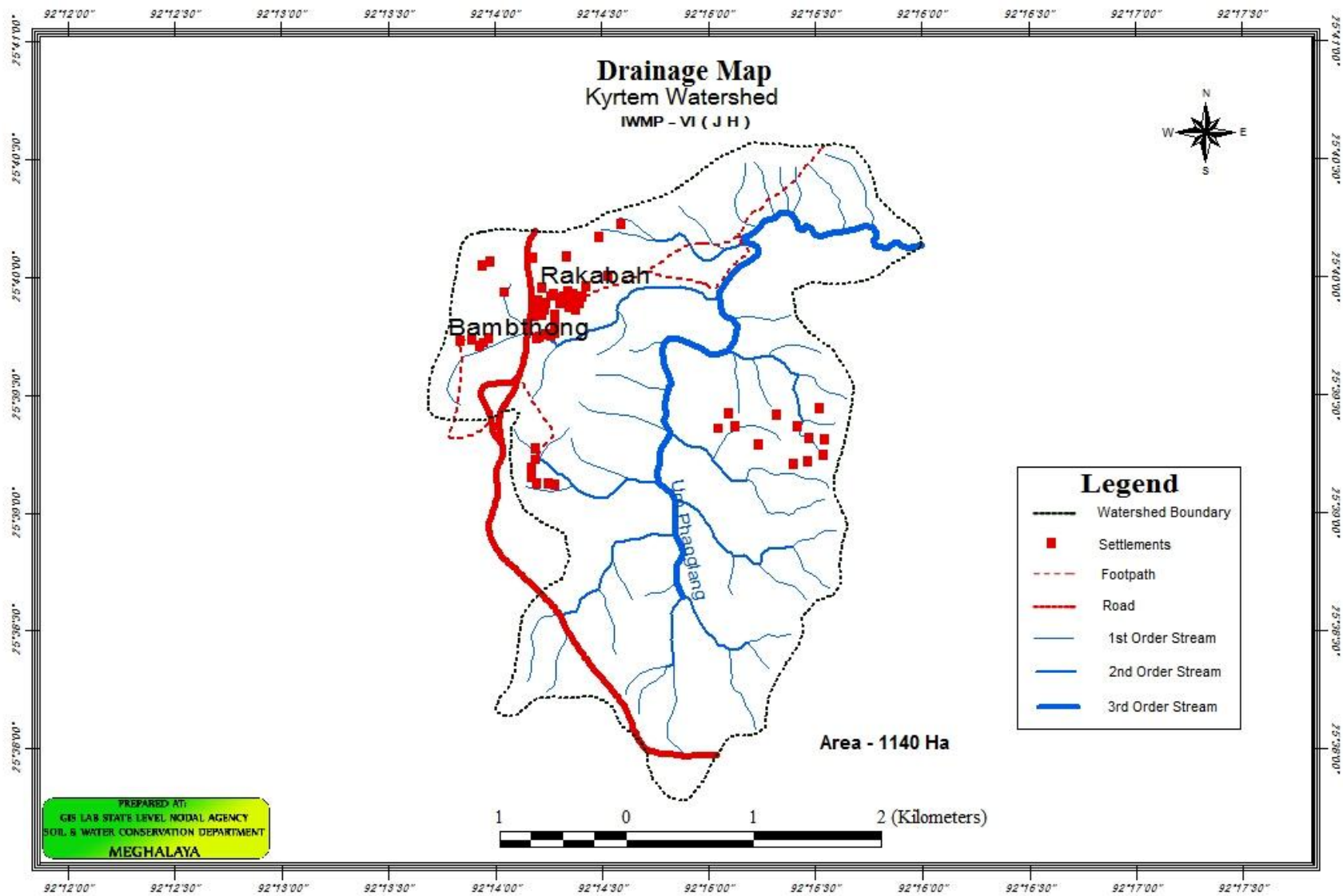


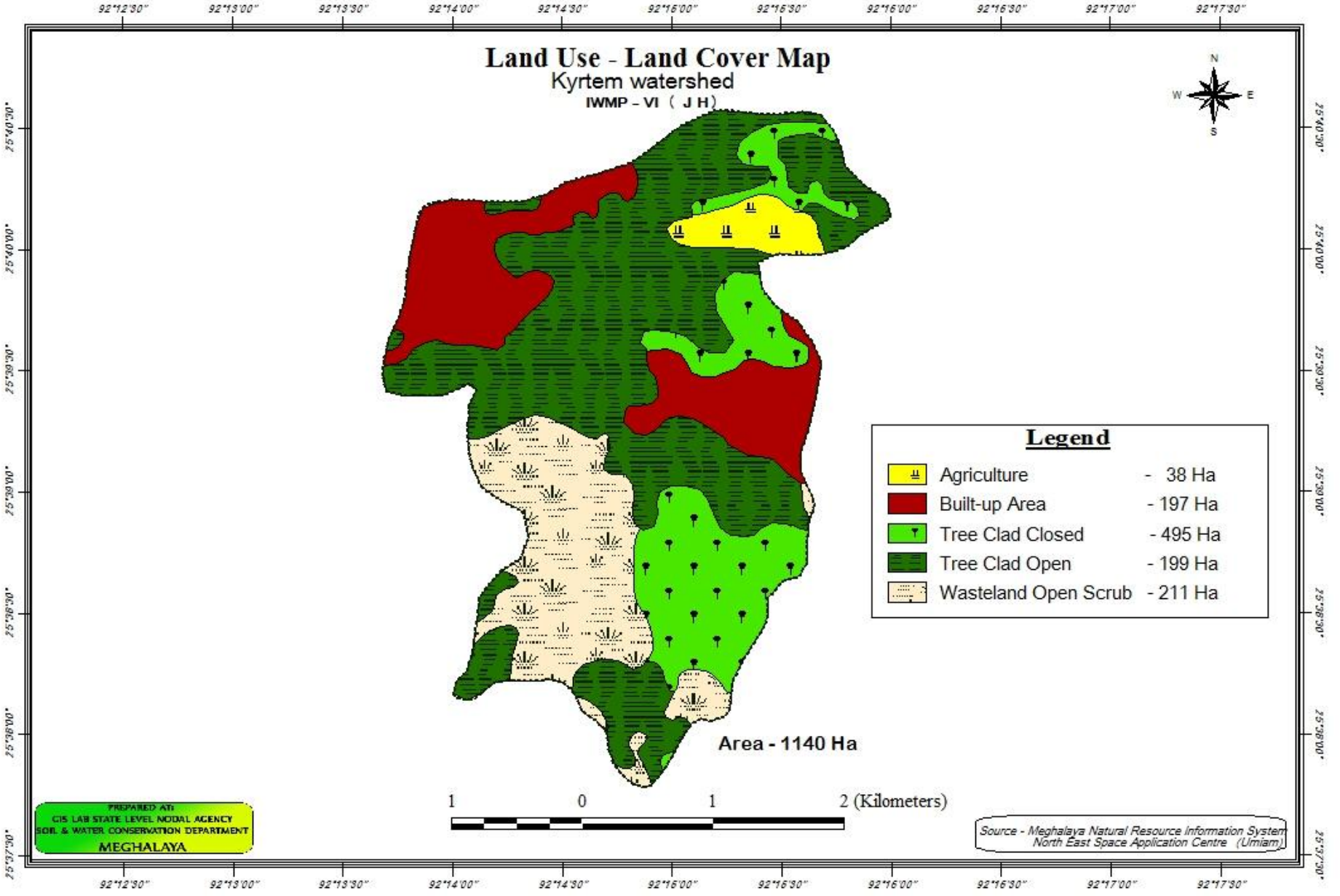


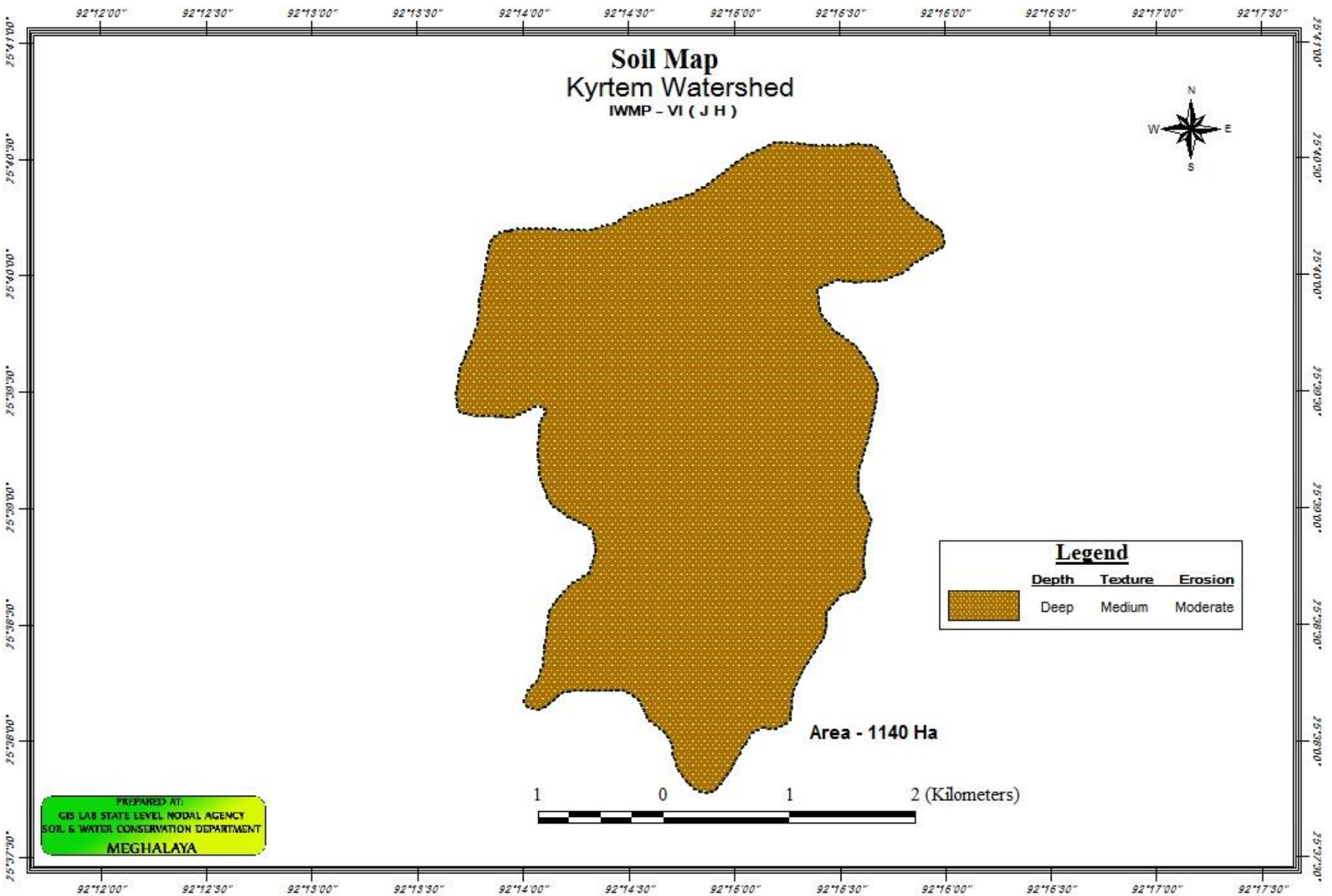


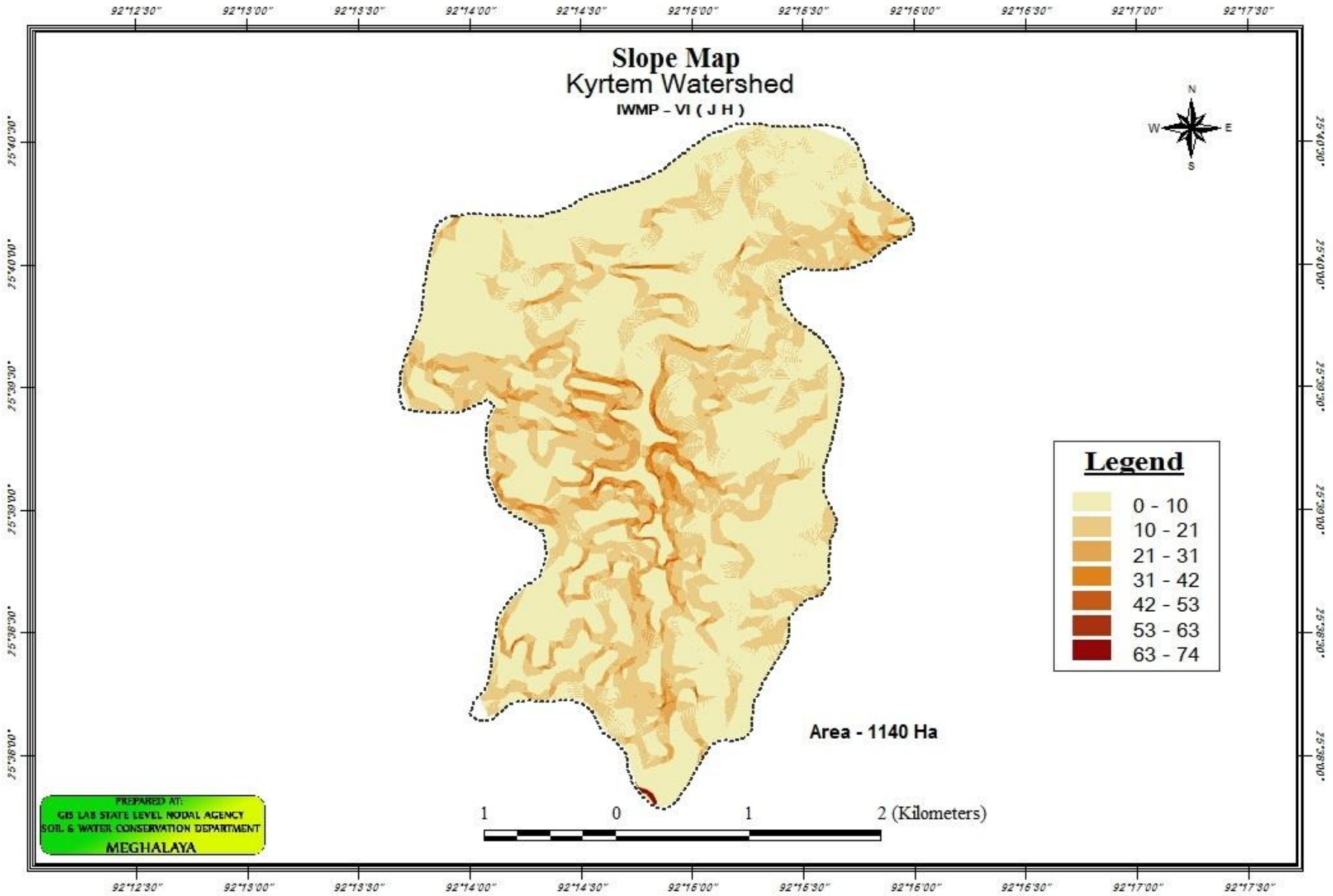


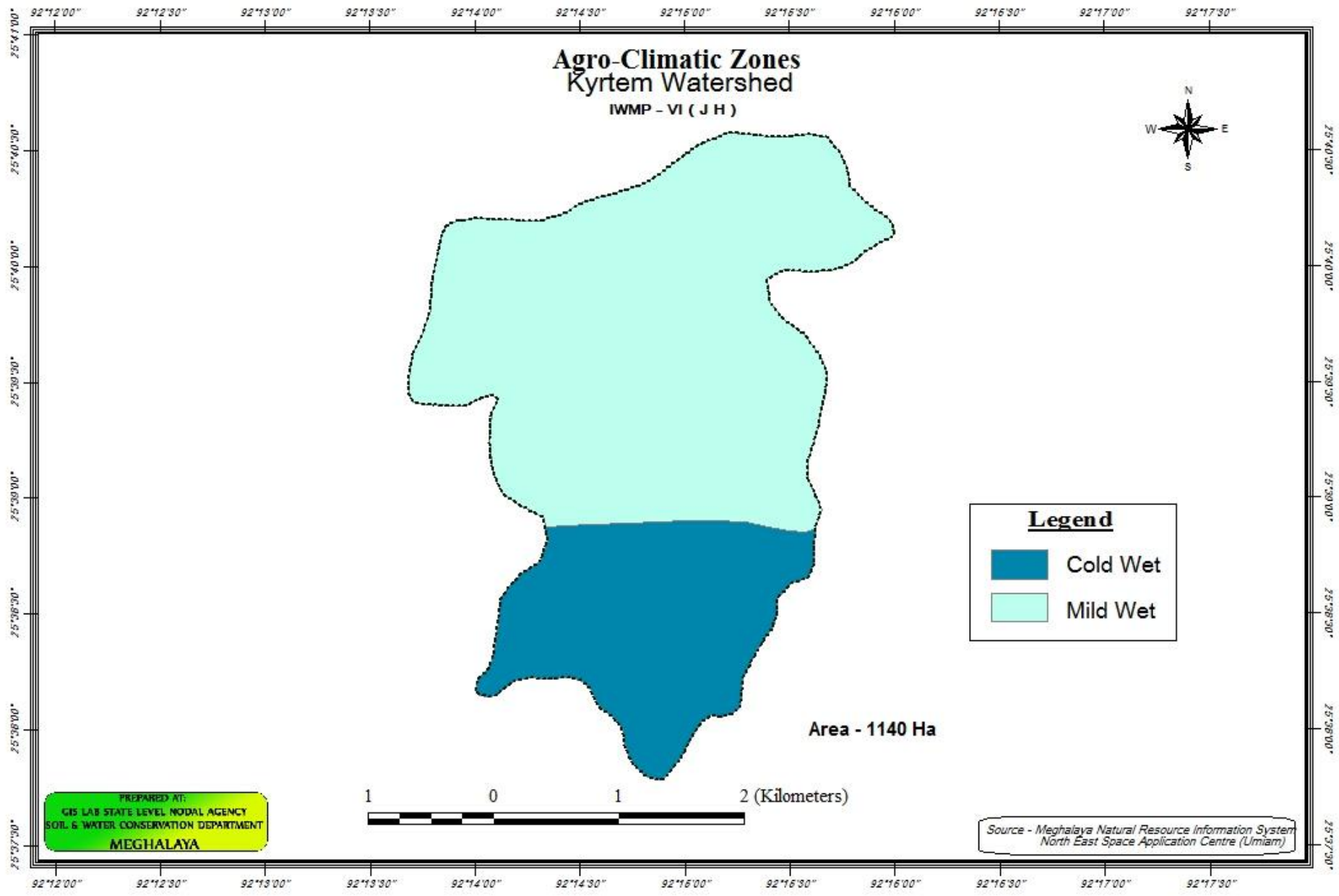


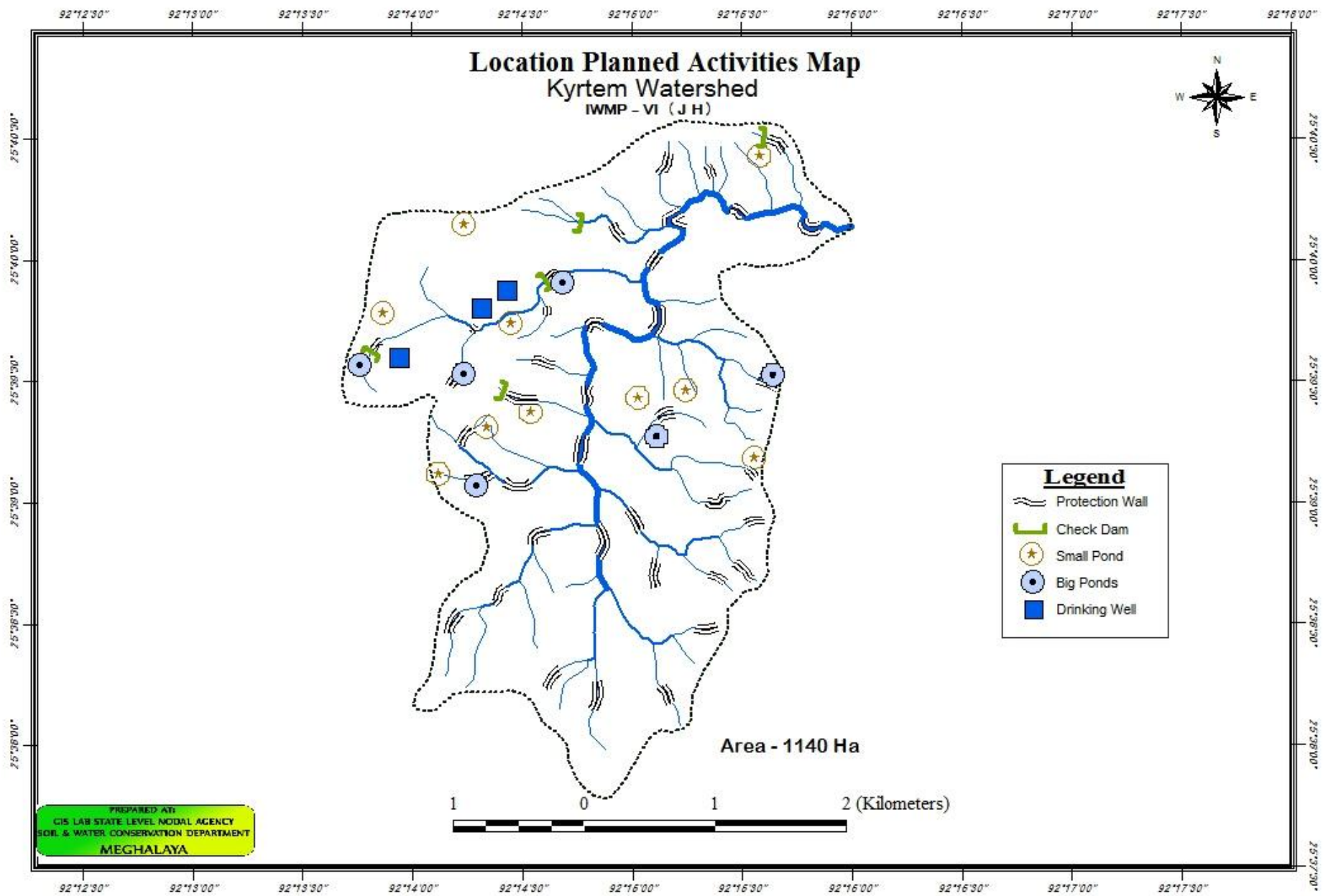


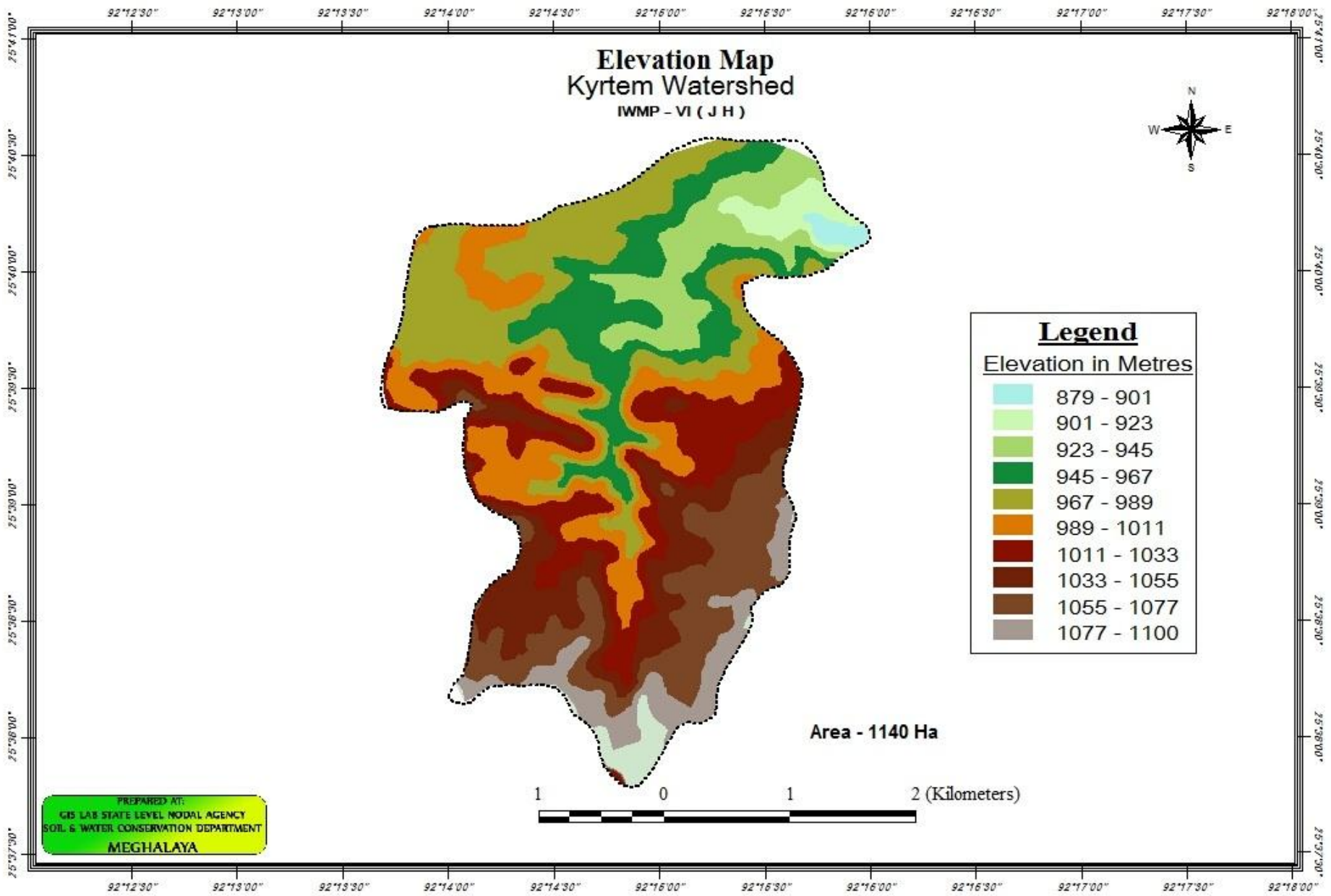


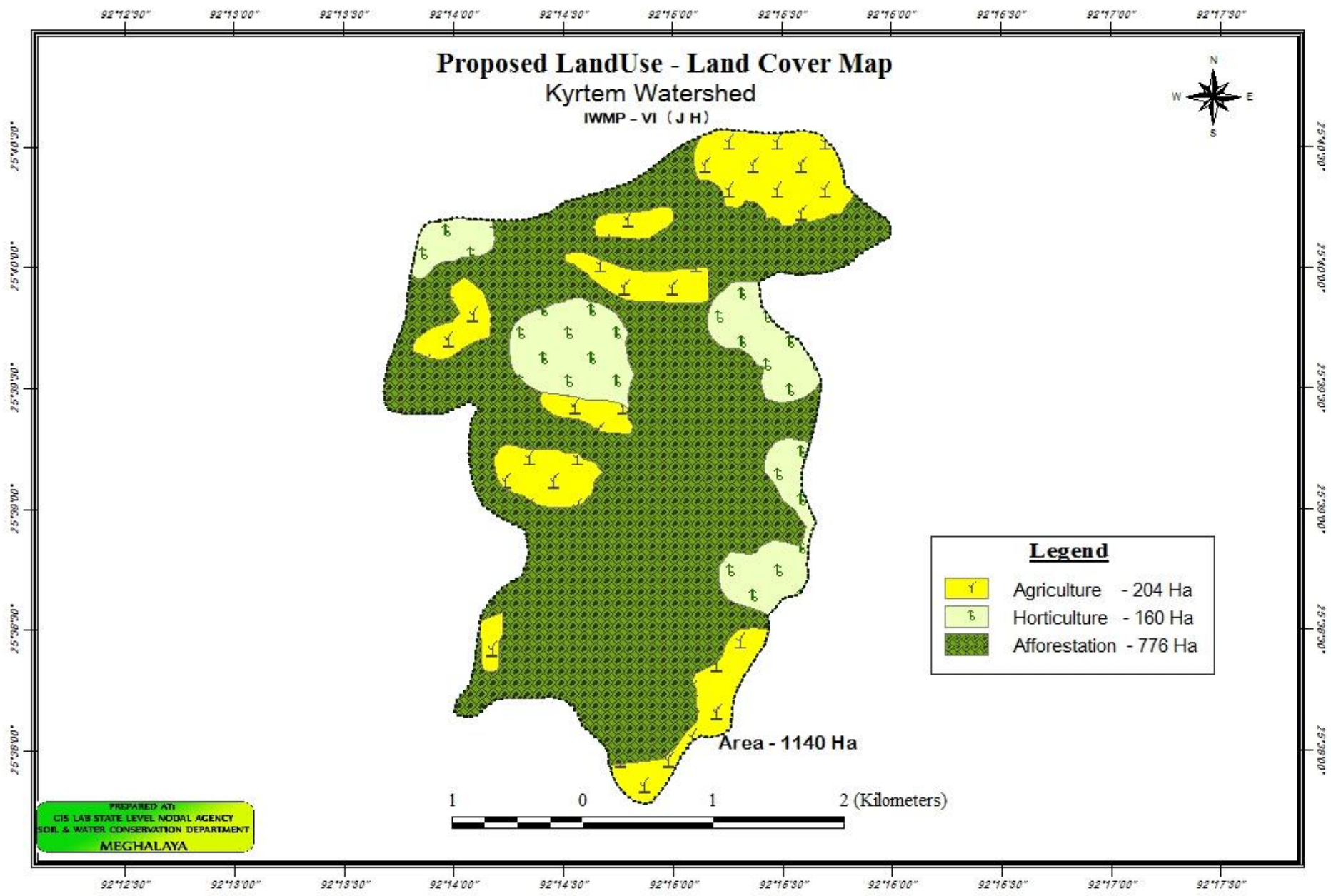


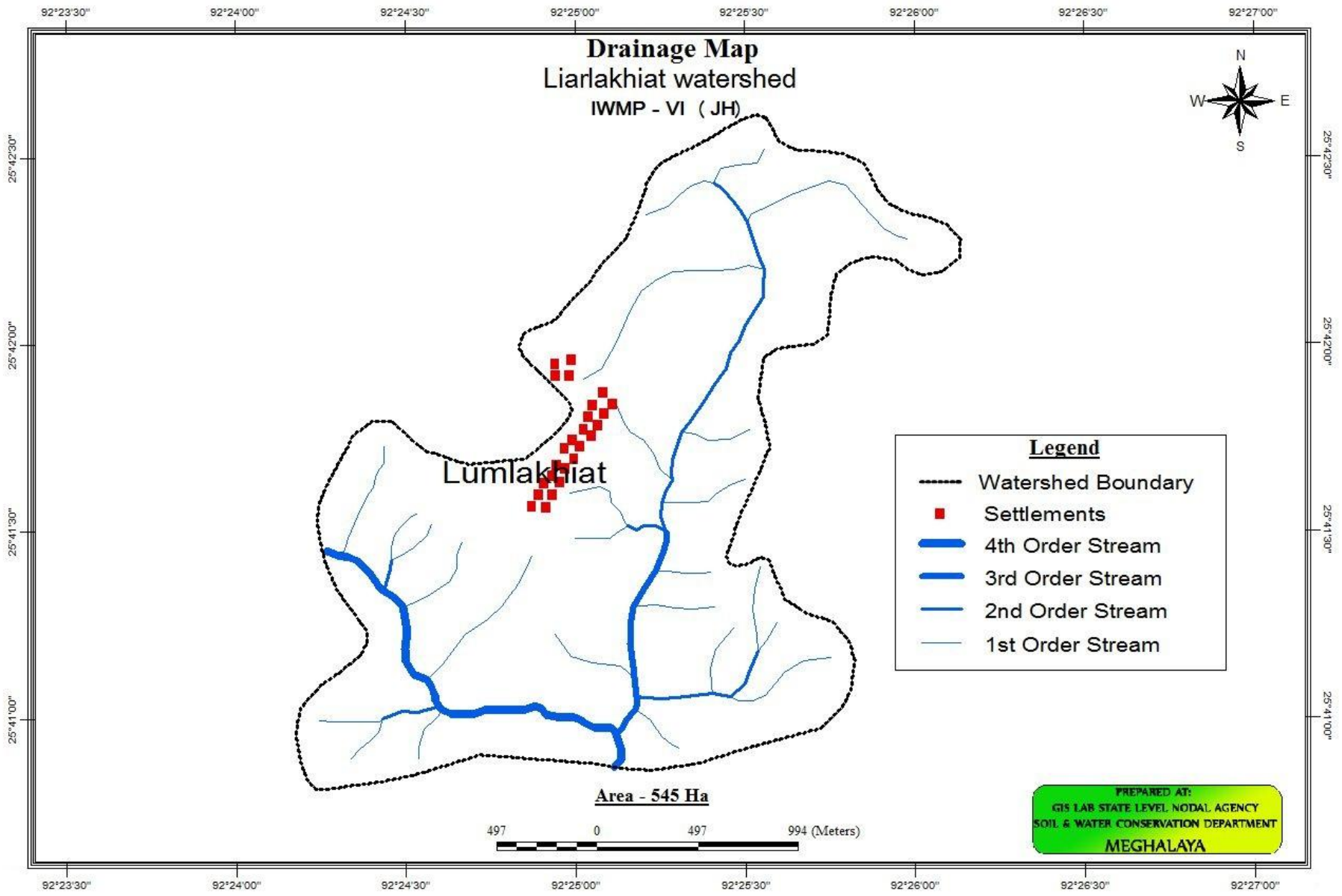


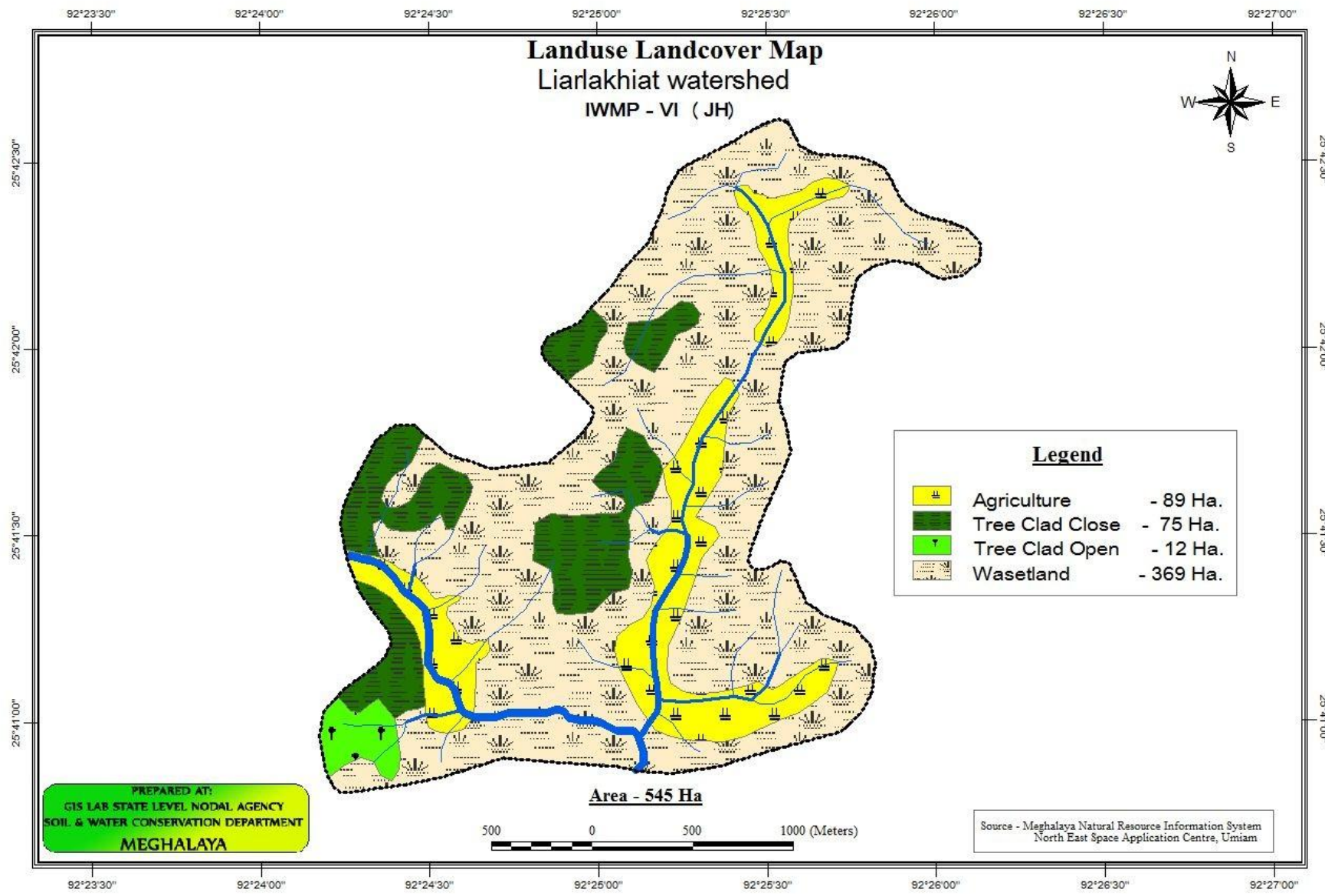


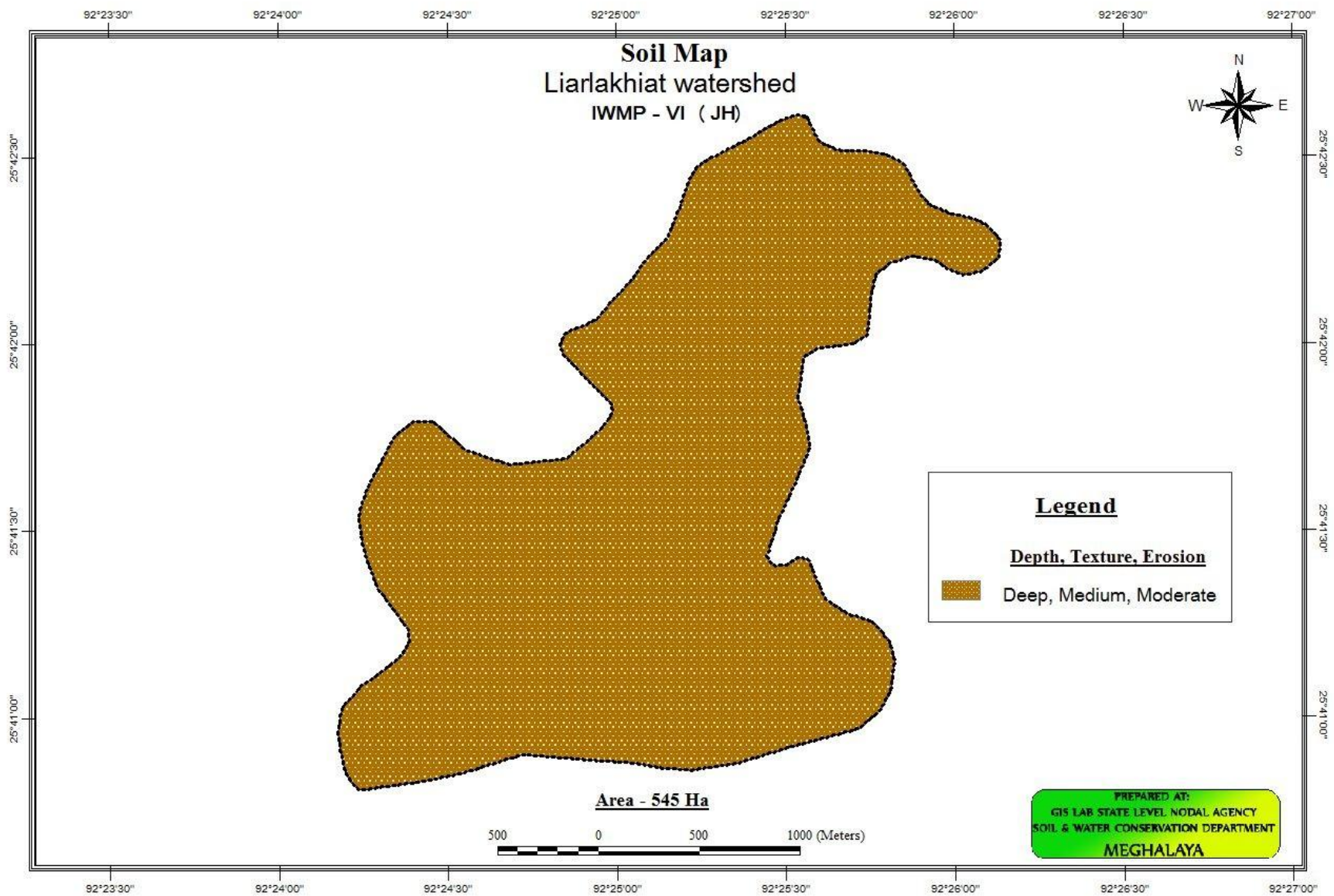


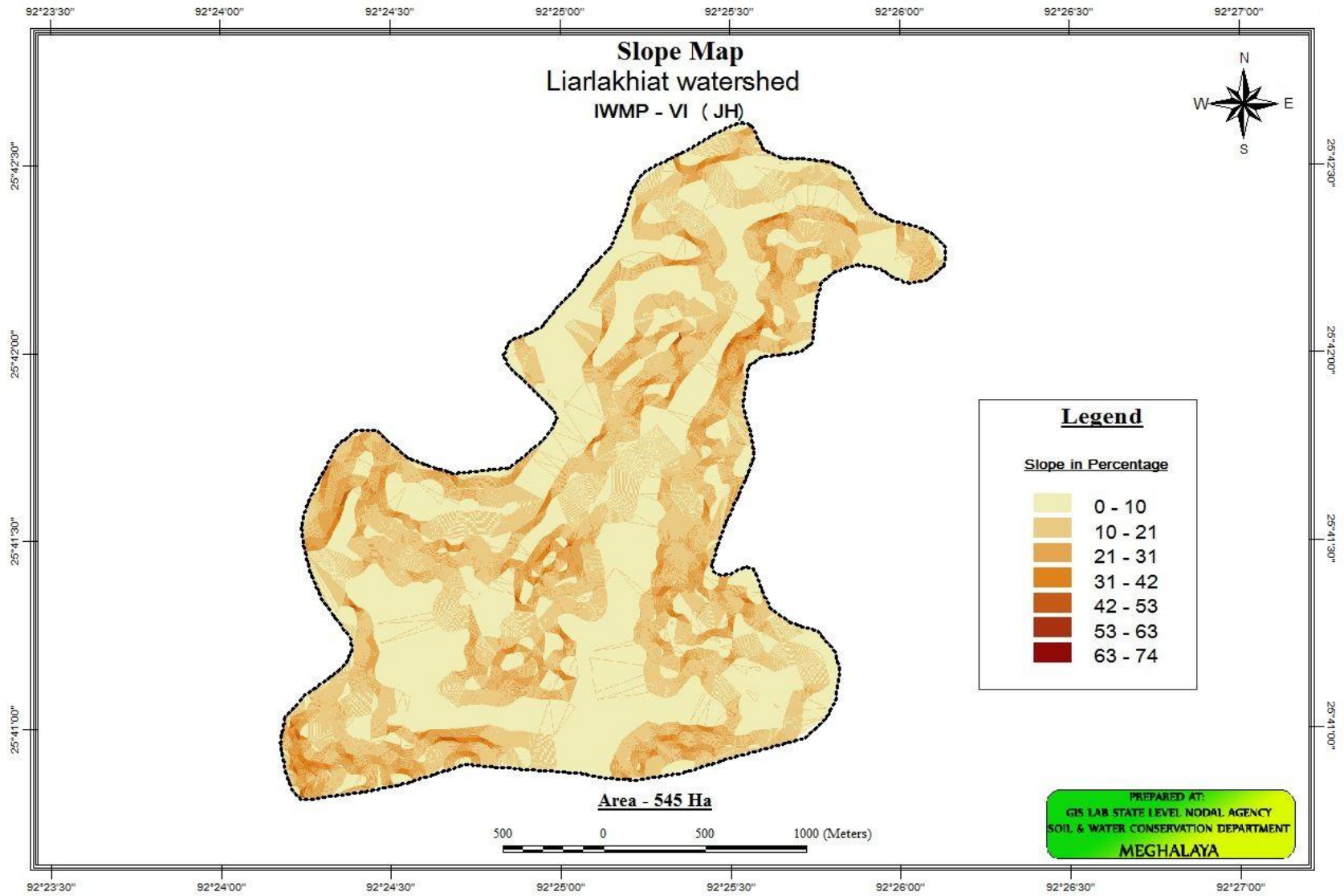


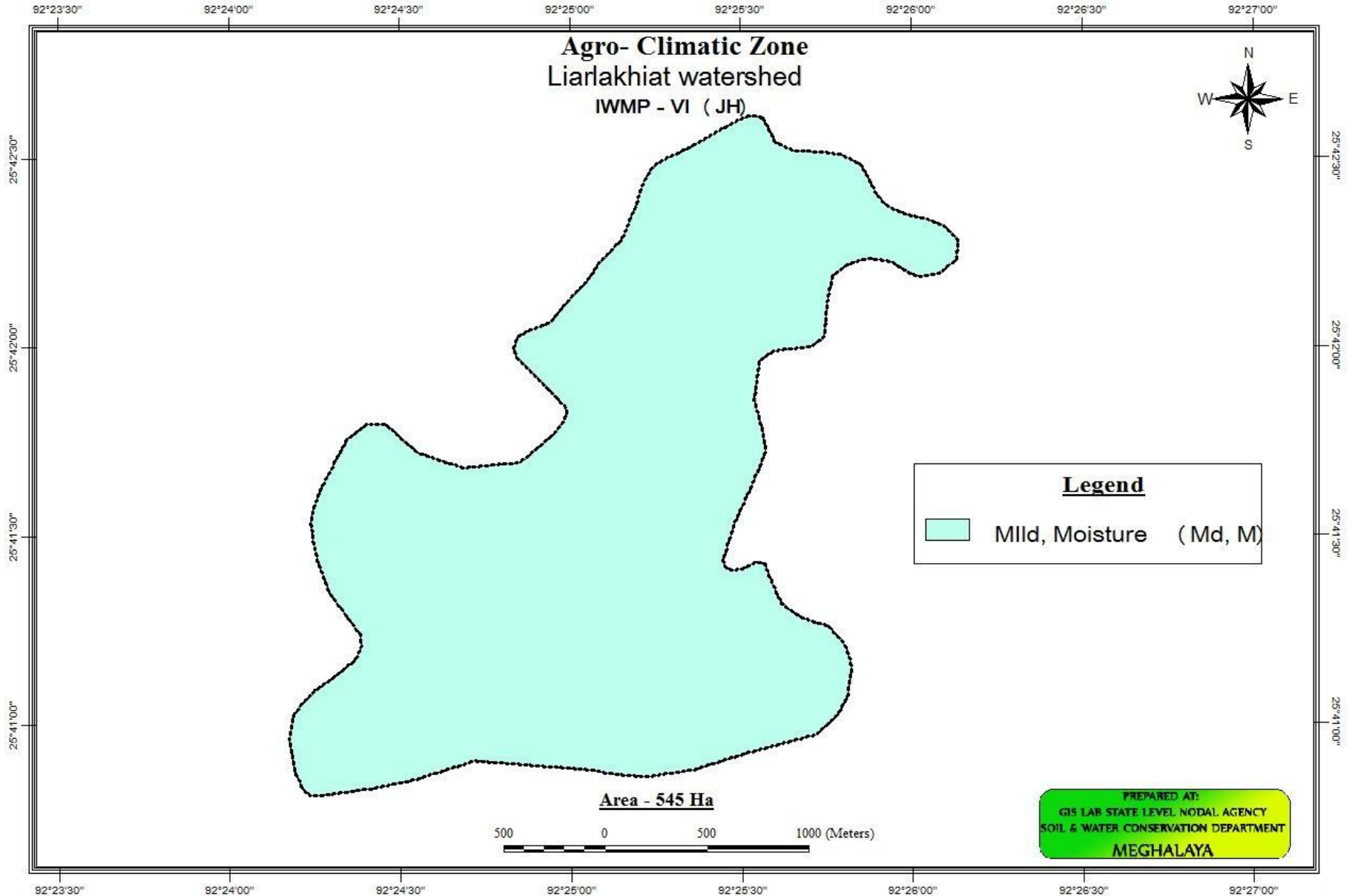


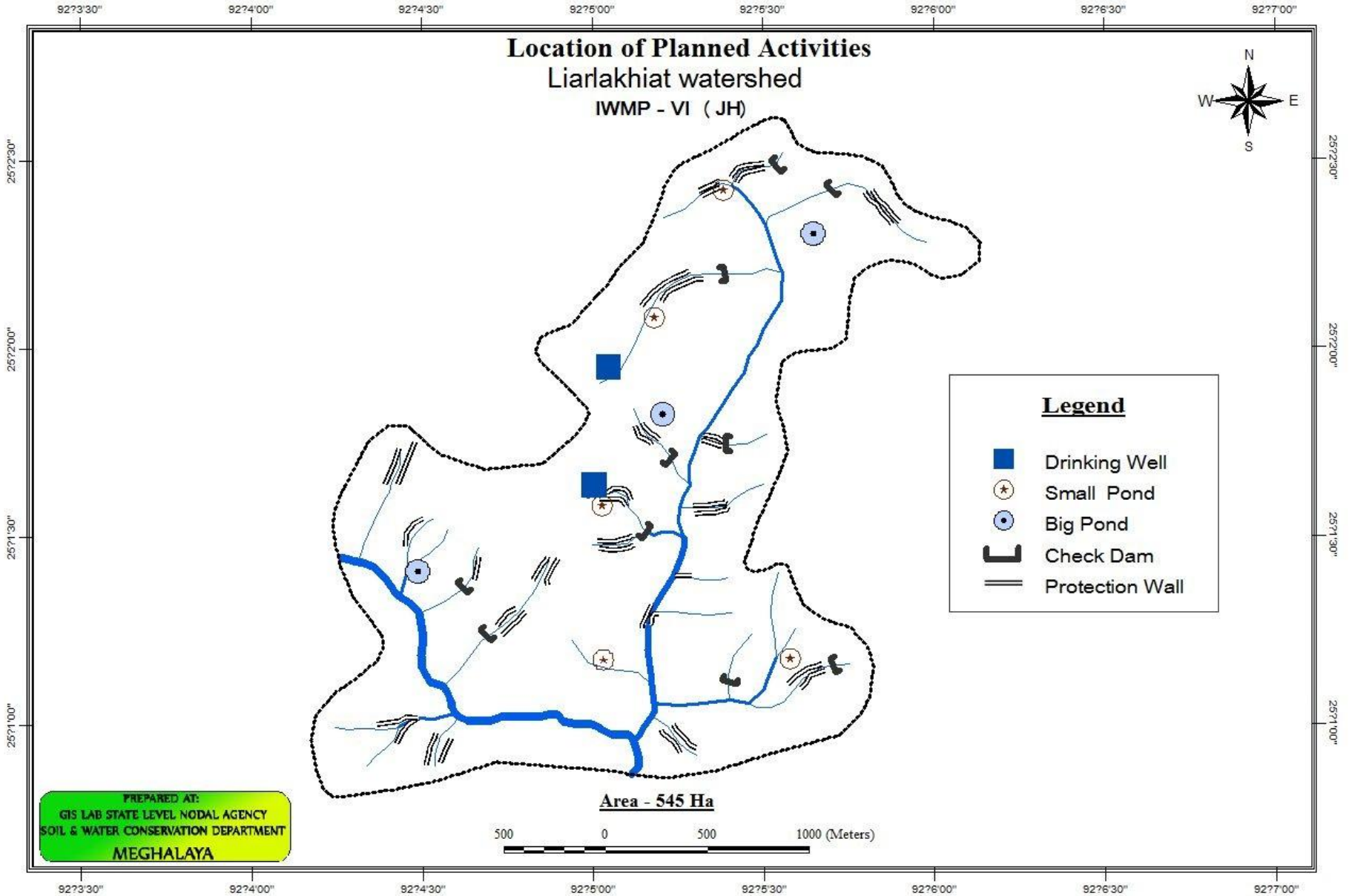


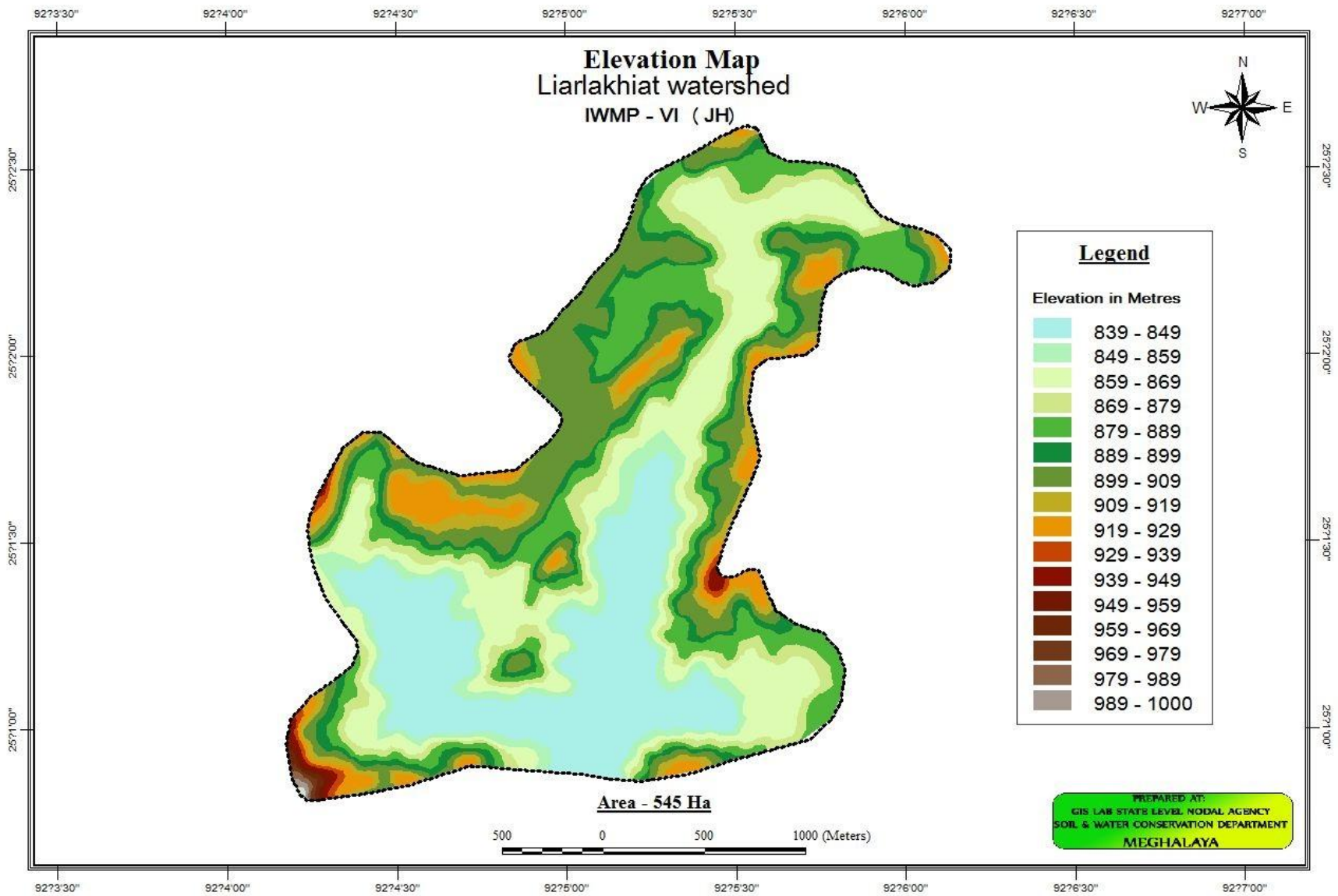


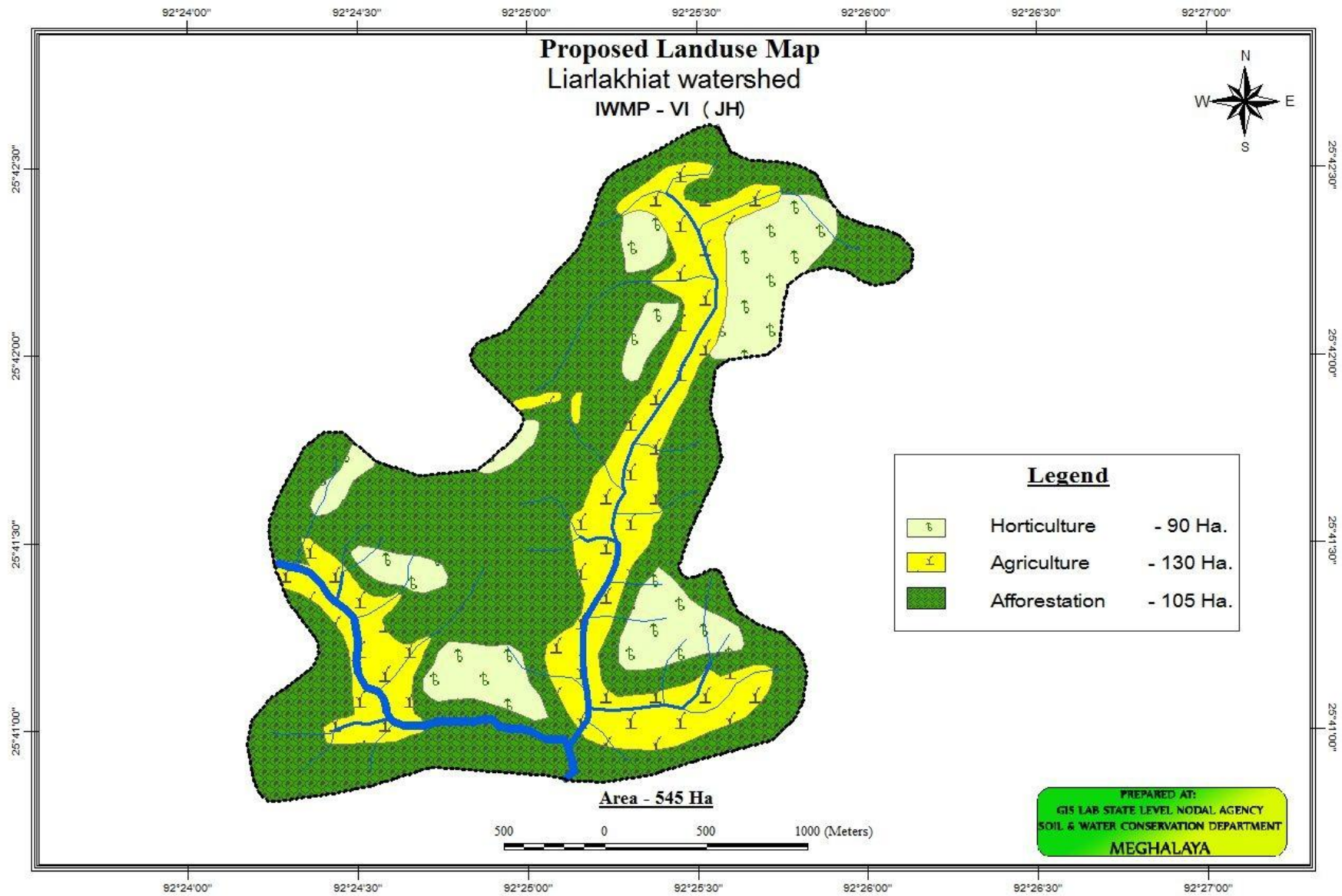


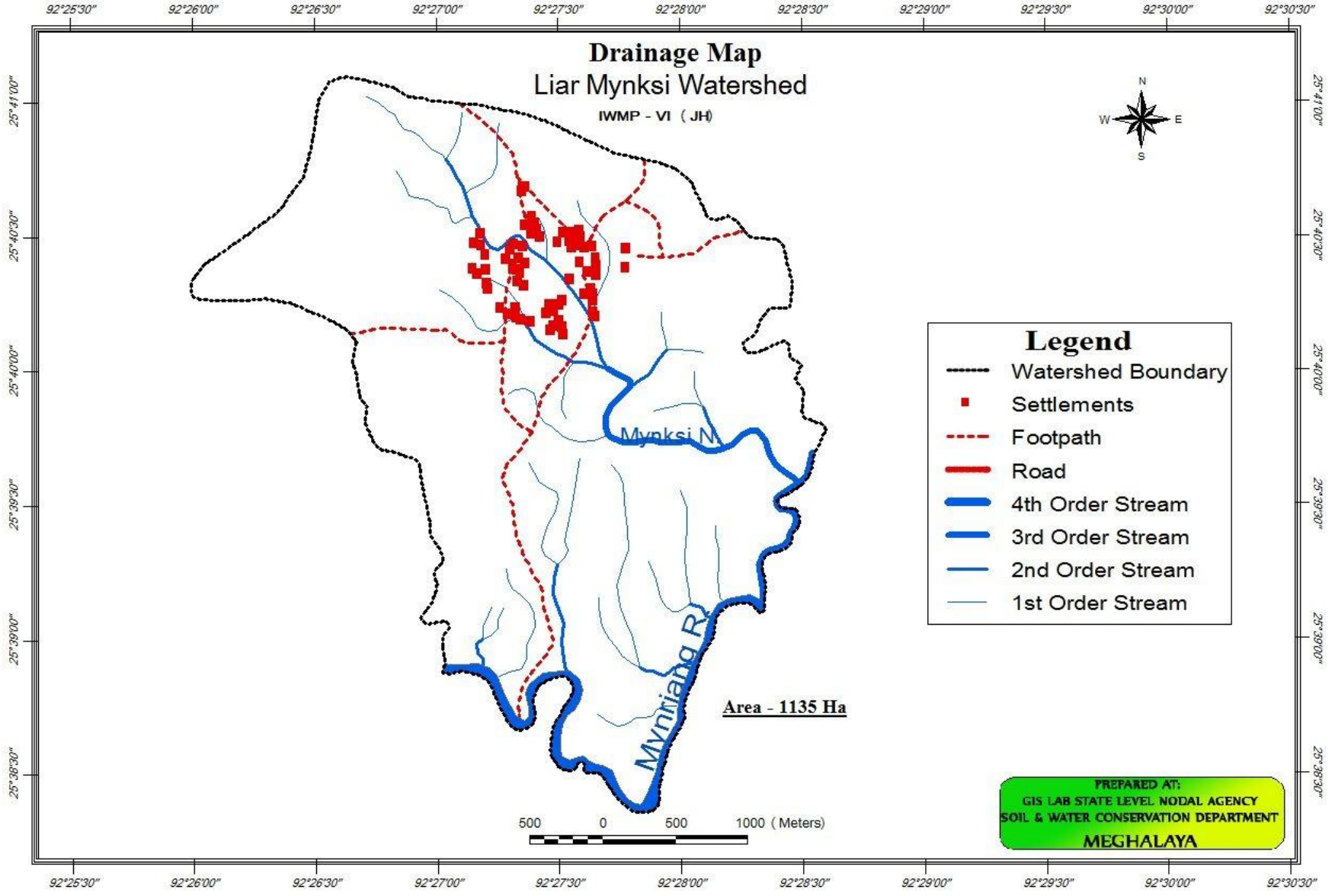


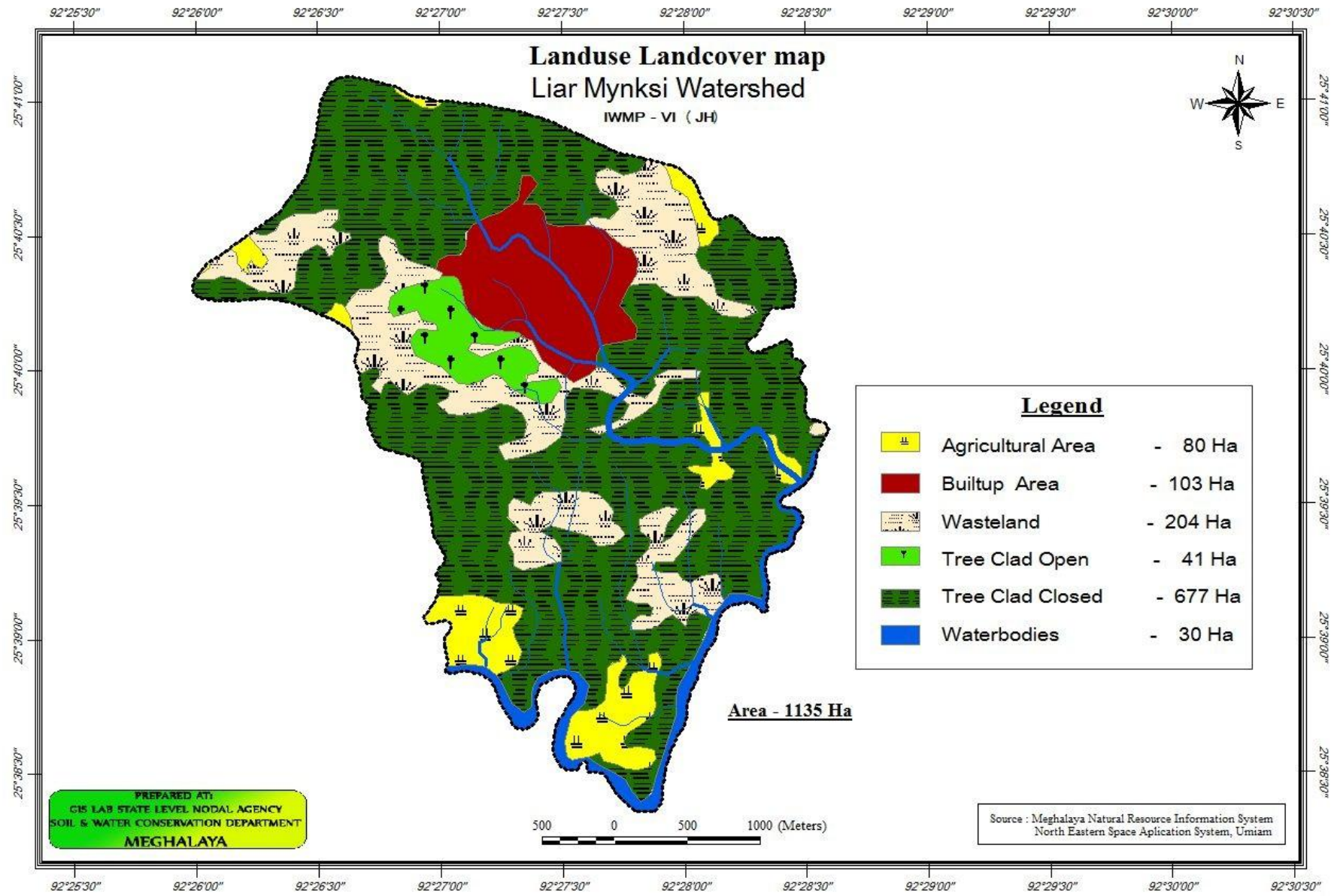












Landuse Landcover map
Liar Mynksi Watershed
 IWMP - VI (JH)

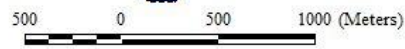


Legend

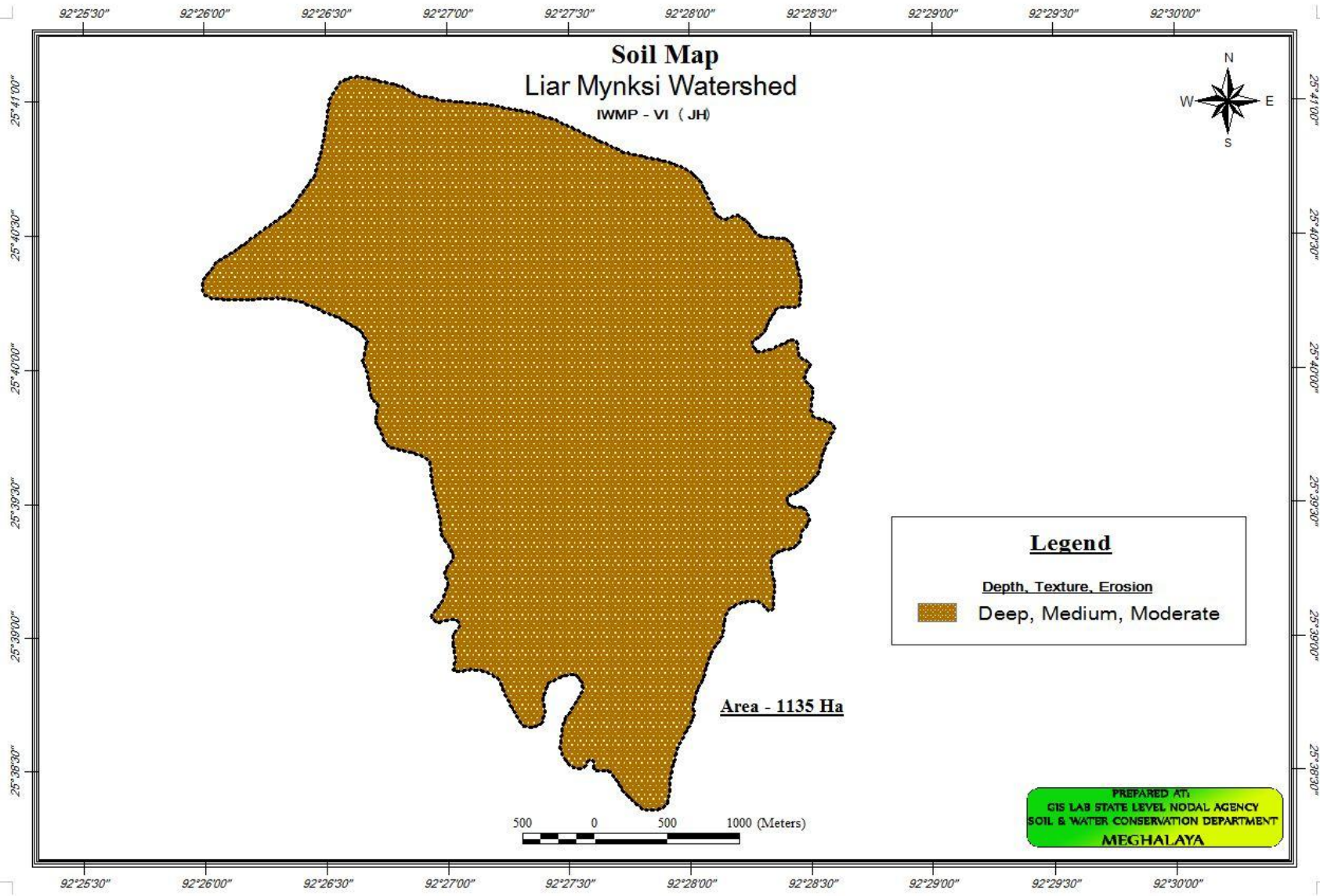
	Agricultural Area	- 80 Ha
	Builtup Area	- 103 Ha
	Wasteland	- 204 Ha
	Tree Clad Open	- 41 Ha
	Tree Clad Closed	- 677 Ha
	Waterbodies	- 30 Ha

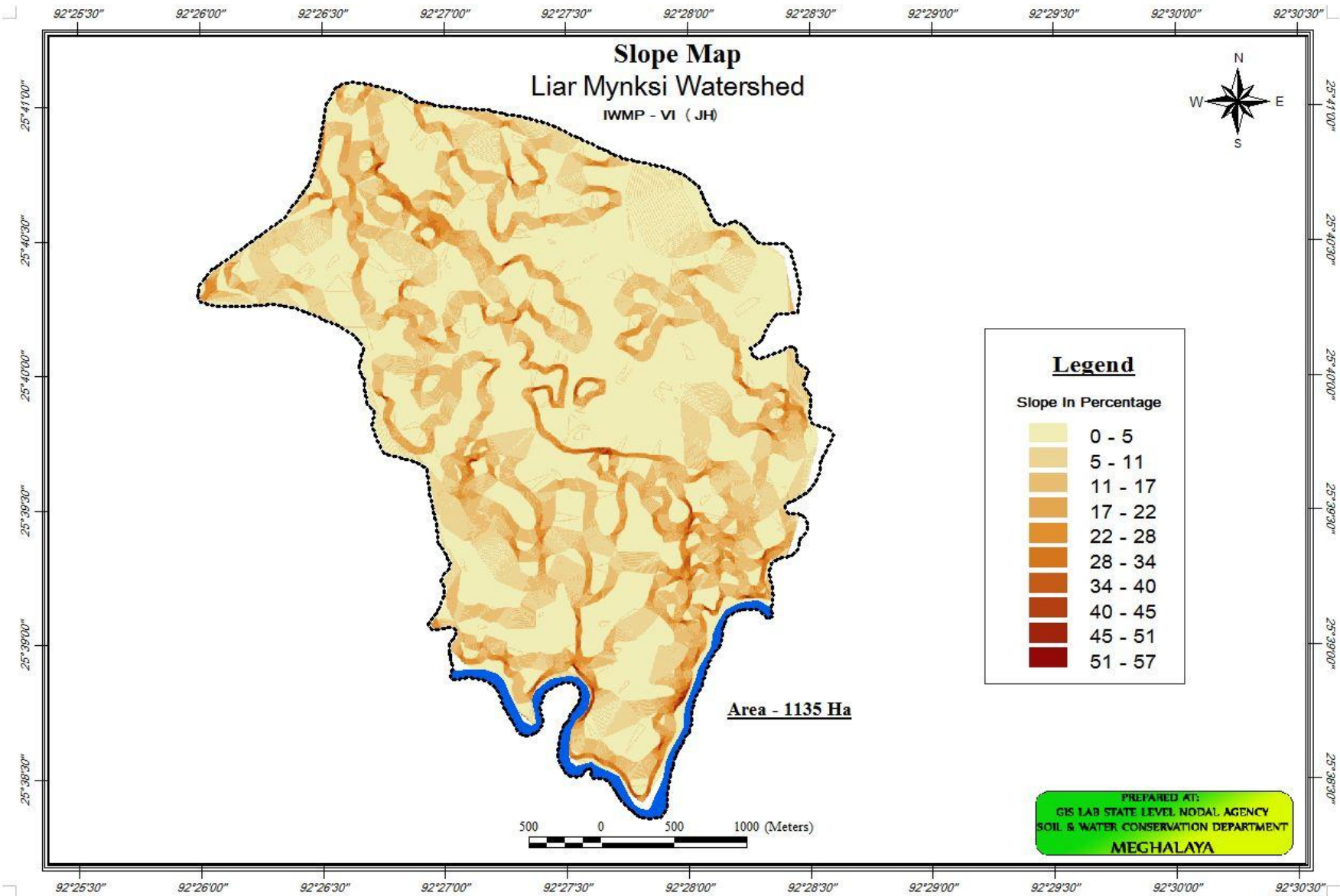
Area - 1135 Ha

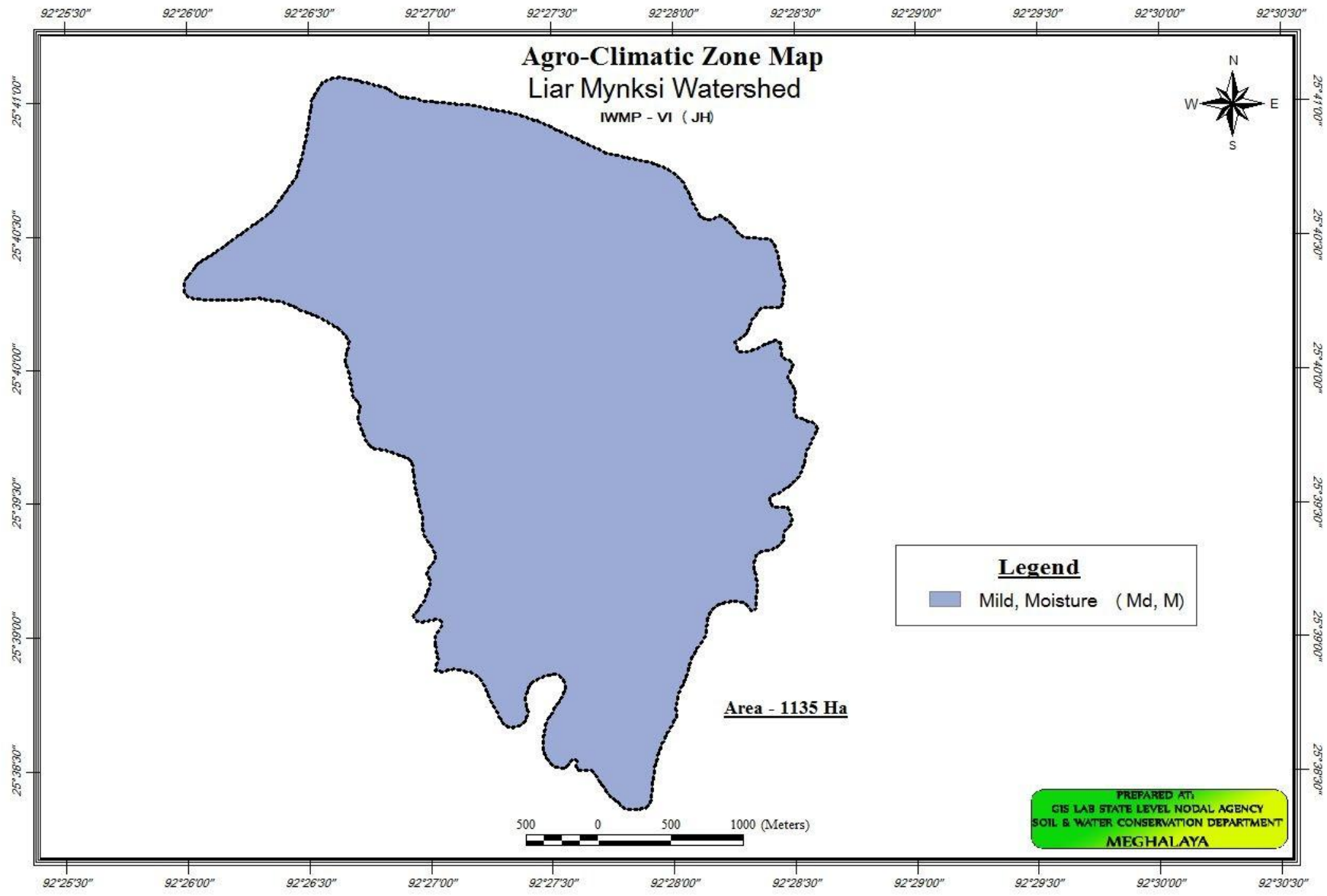
PREPARED AT:
 GIS LAB STATE LEVEL NODAL AGENCY
 SOIL & WATER CONSERVATION DEPARTMENT
 MEGHALAYA

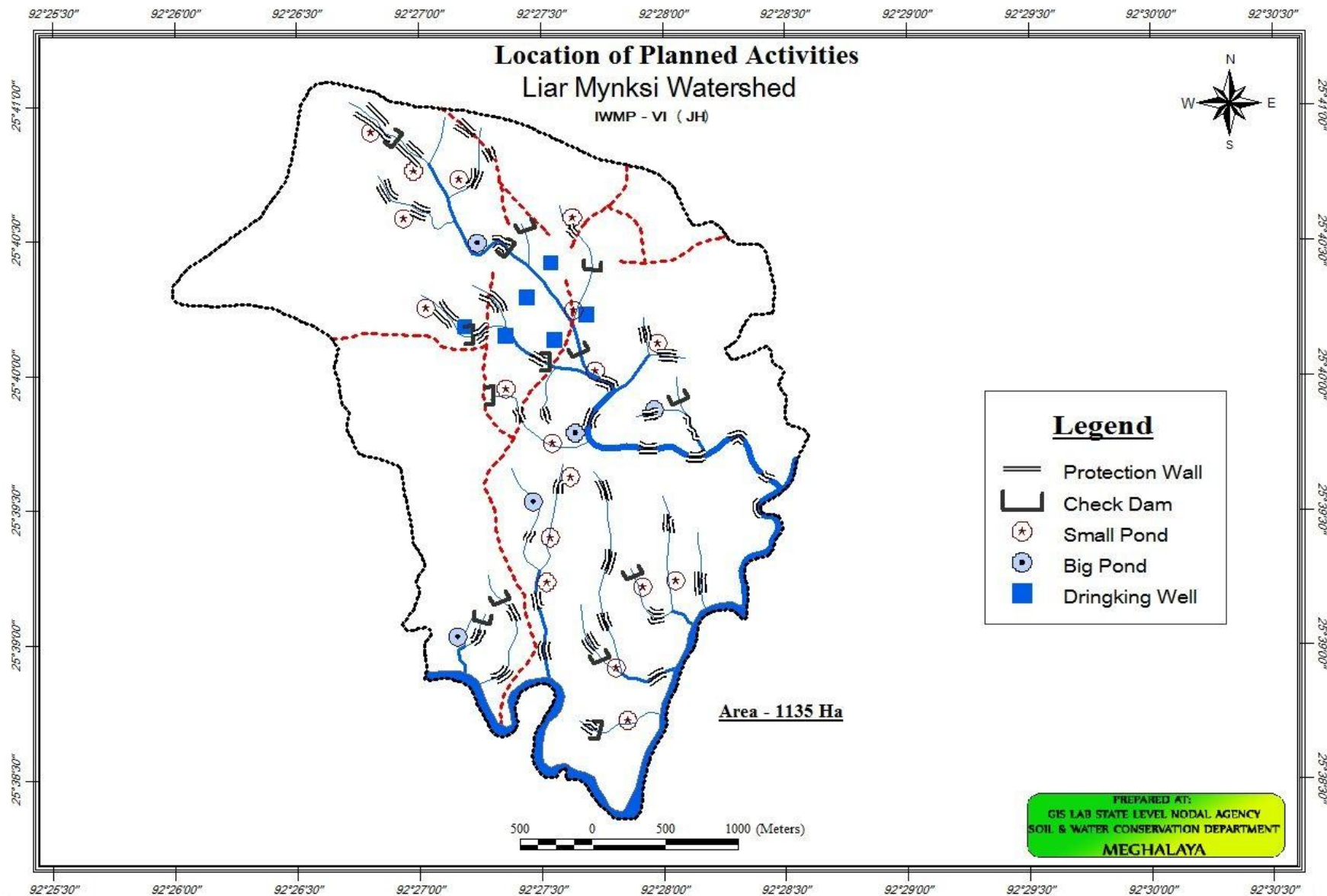


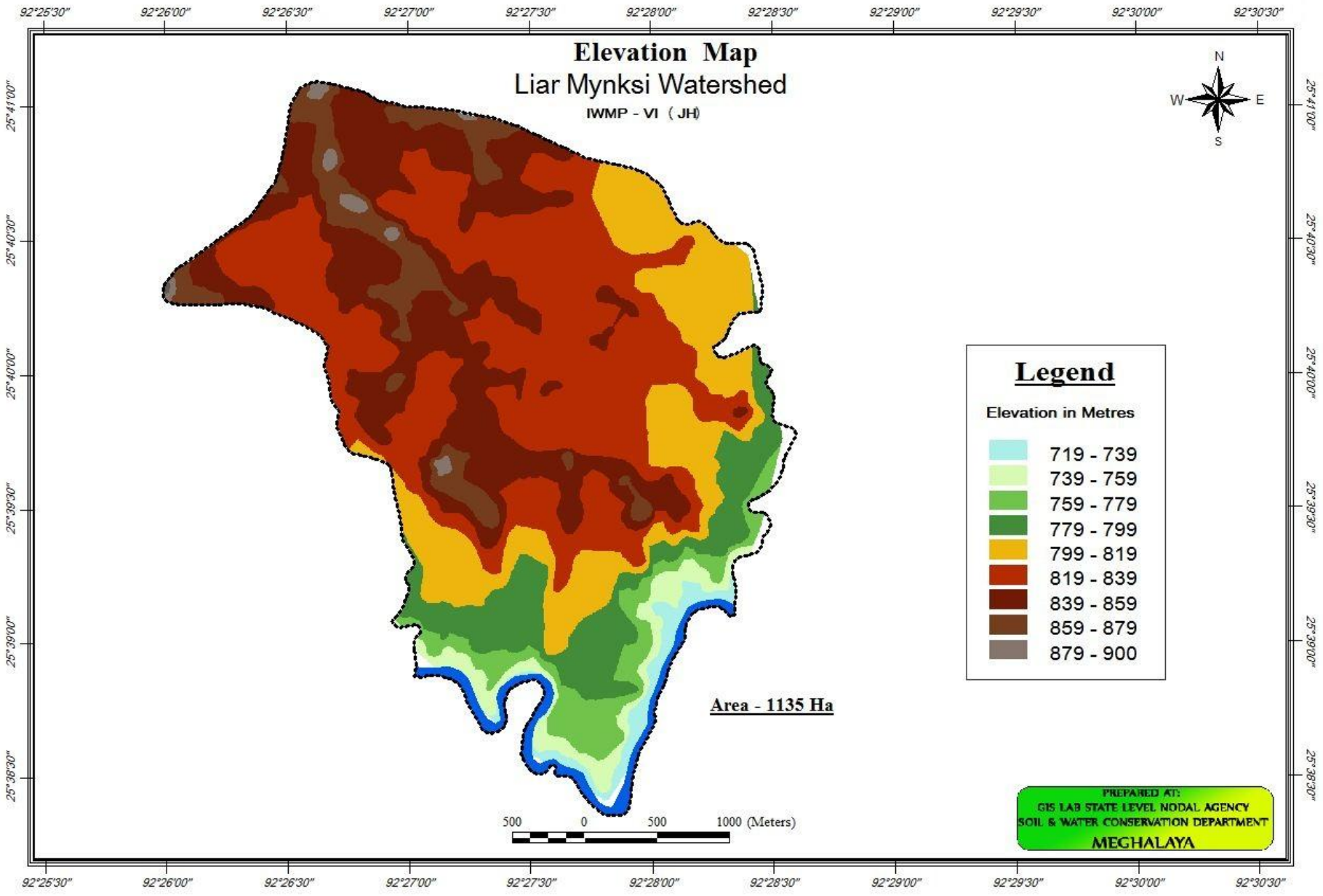
Source : Meghalaya Natural Resource Information System
 North Eastern Space Application System, Umiam

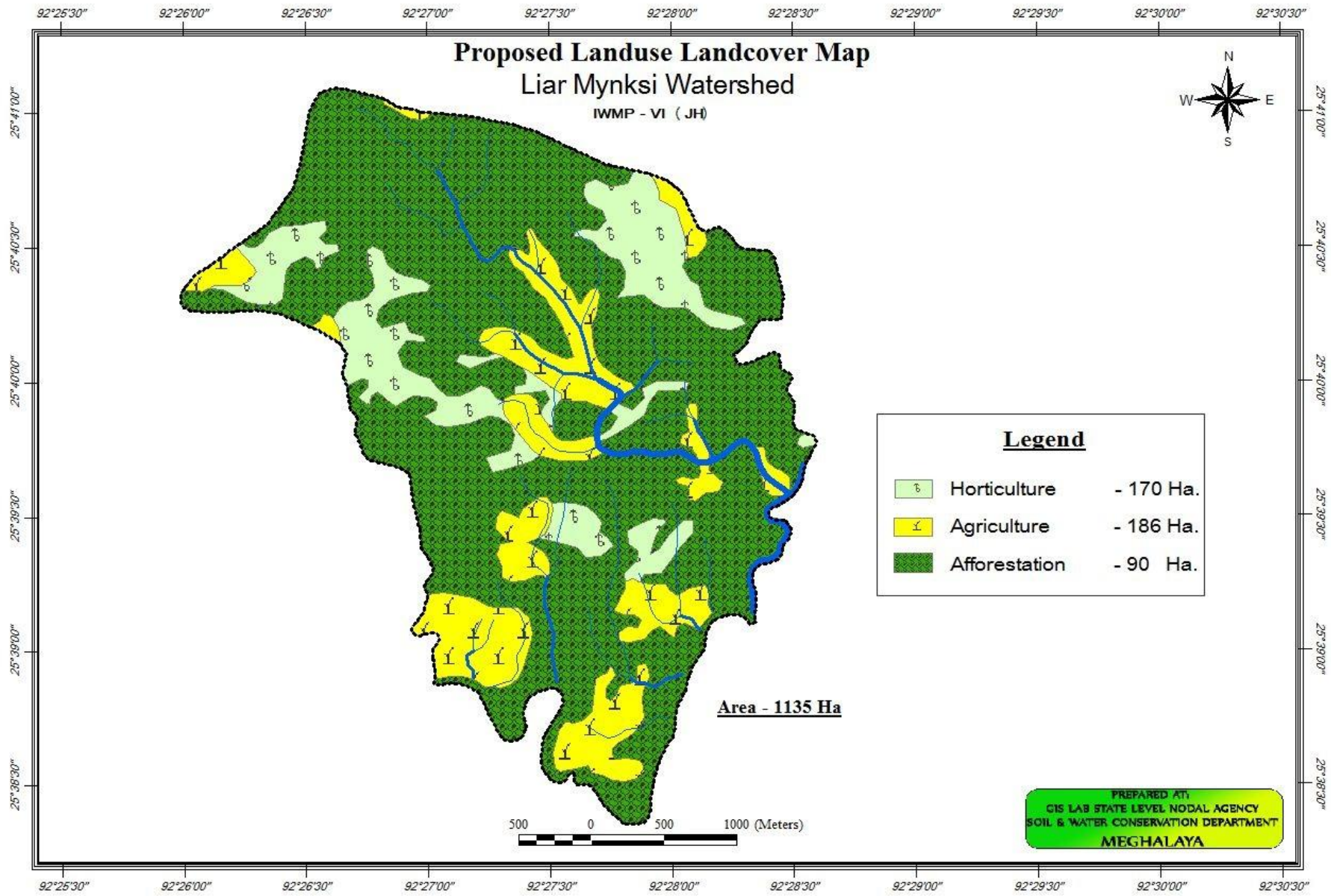


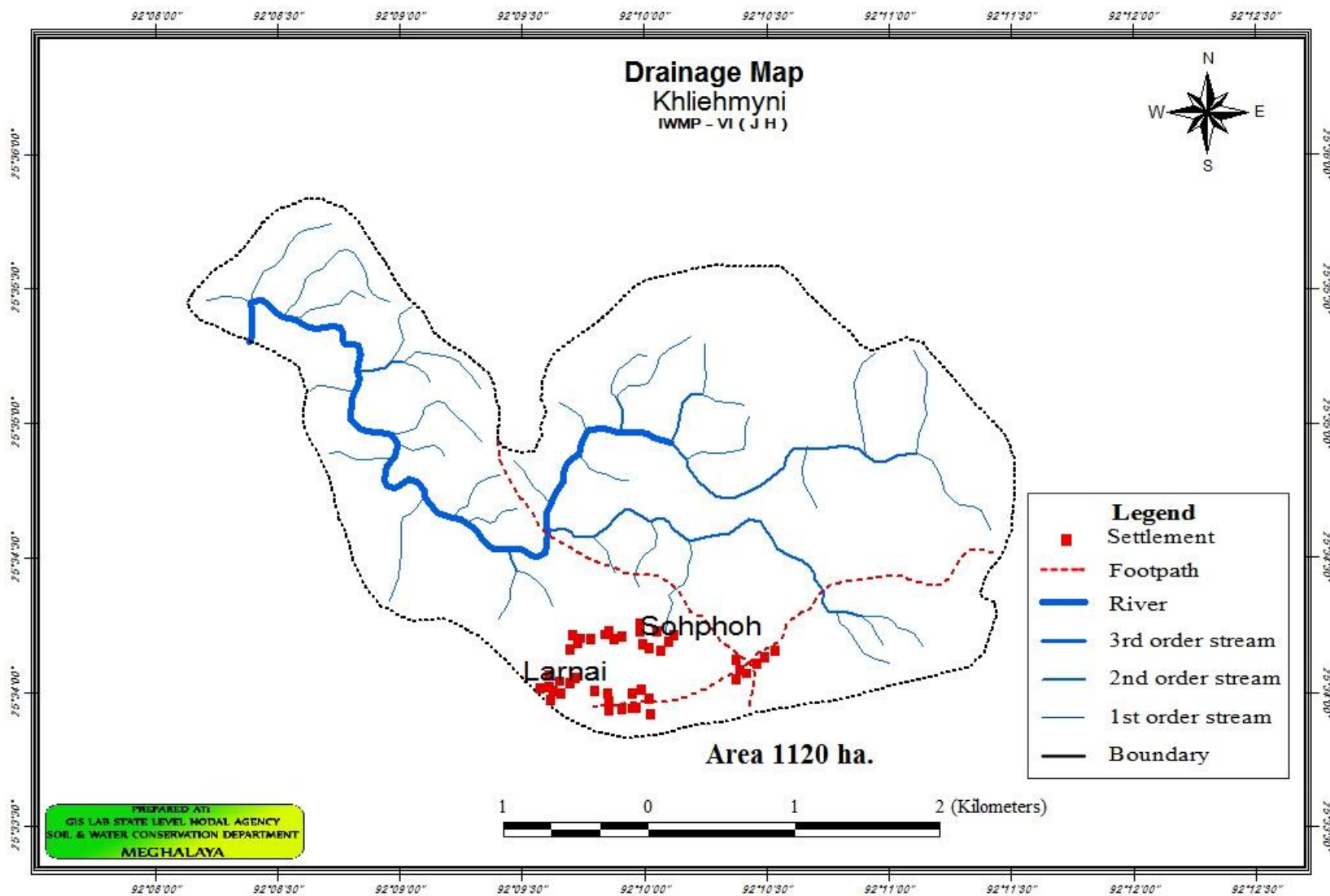


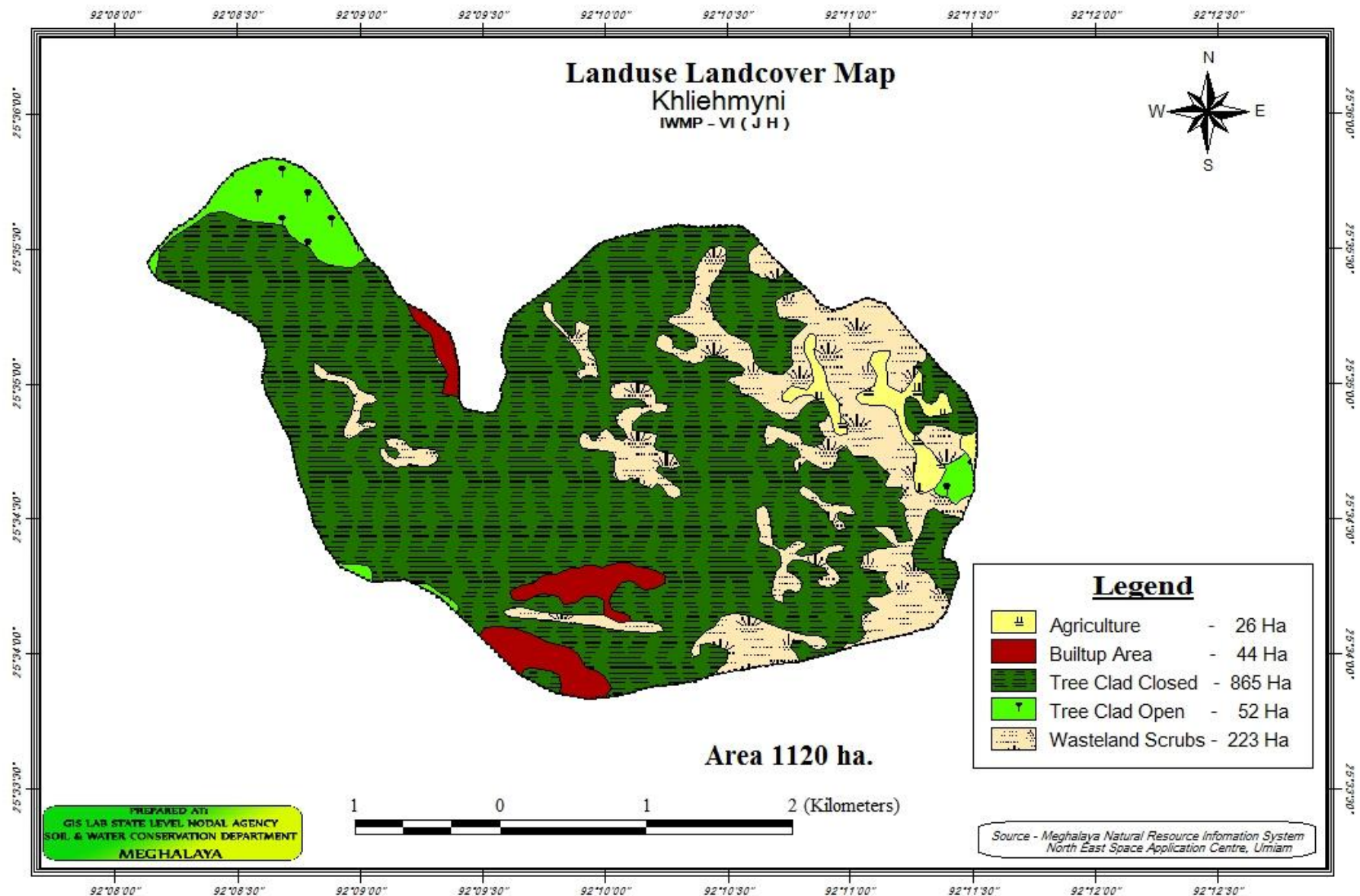


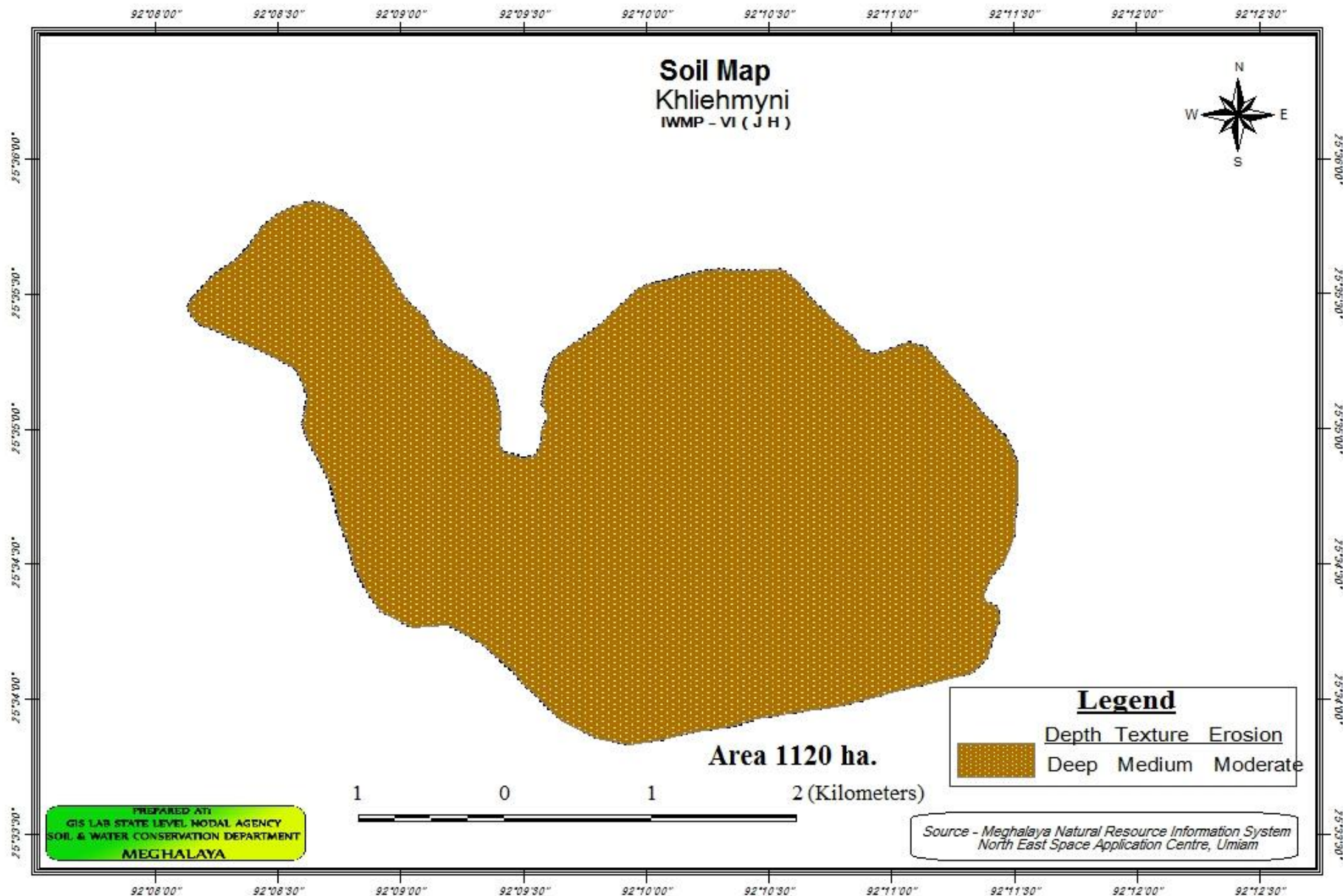












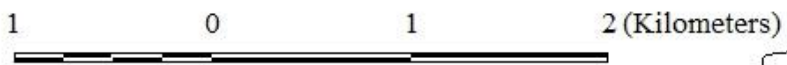
Soil Map
Khliehmyni
 IWMP - VI (J H)



Legend

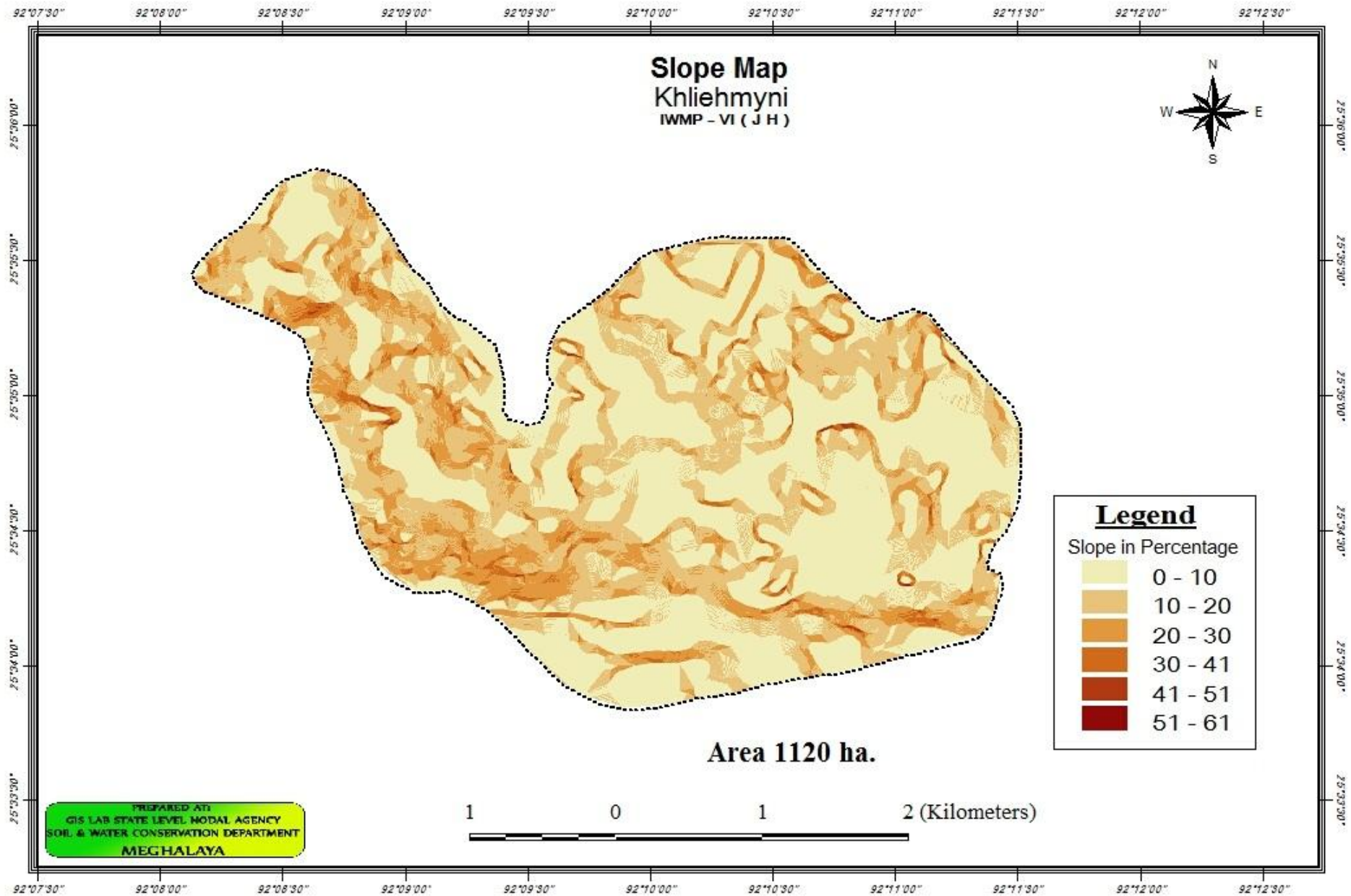
Depth	Texture	Erosion
	Deep	Medium Moderate

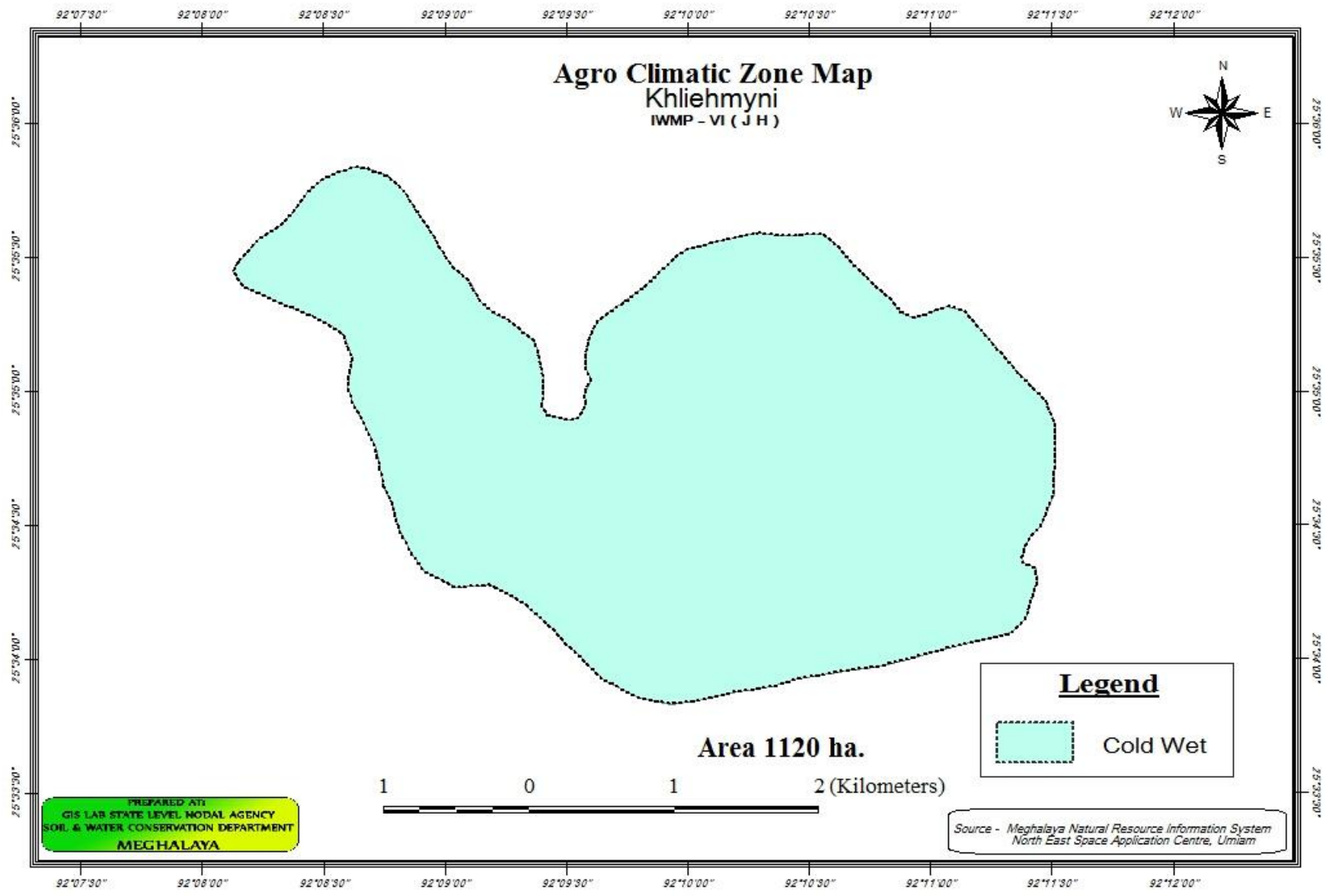
Area 1120 ha.

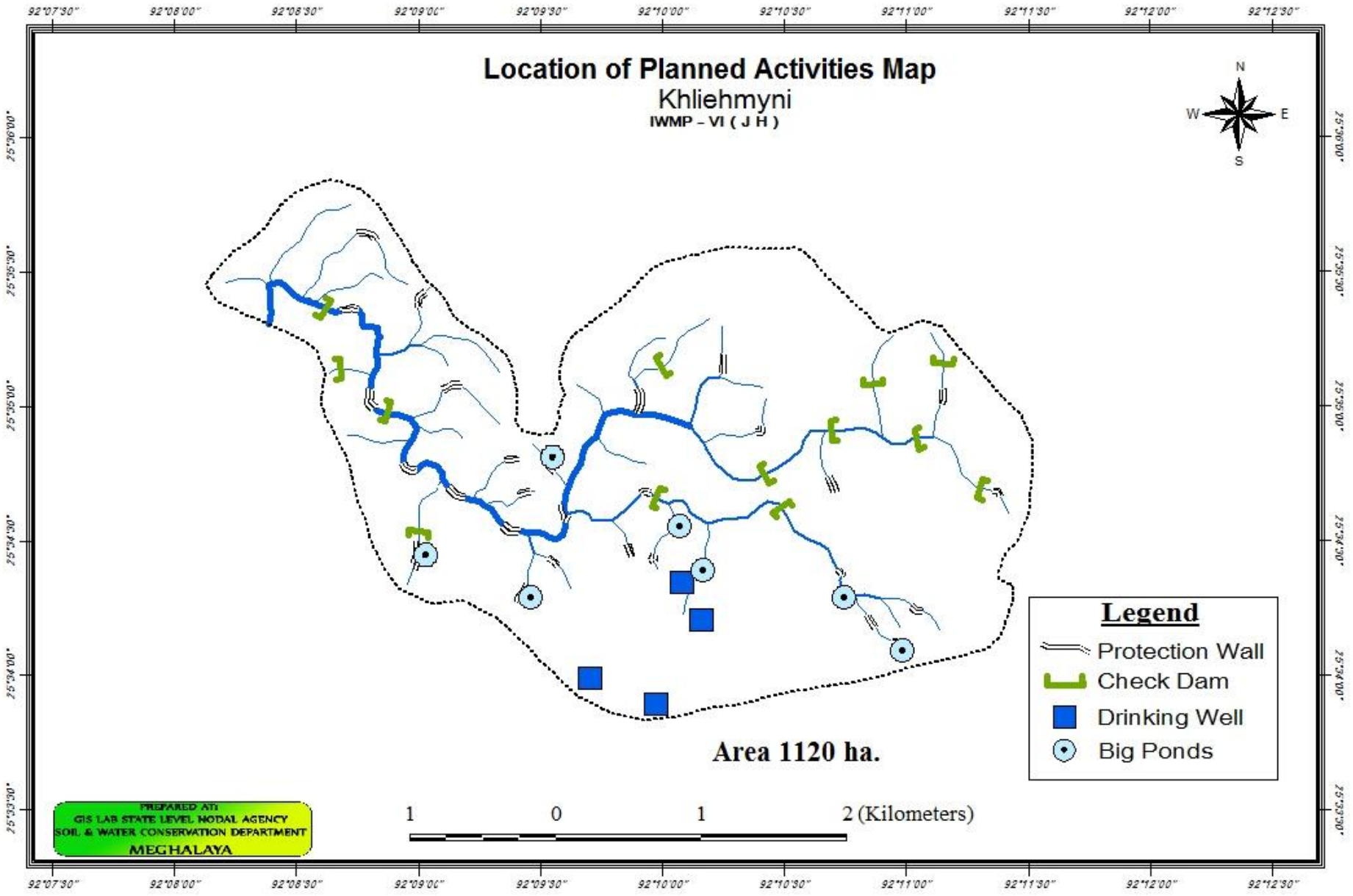


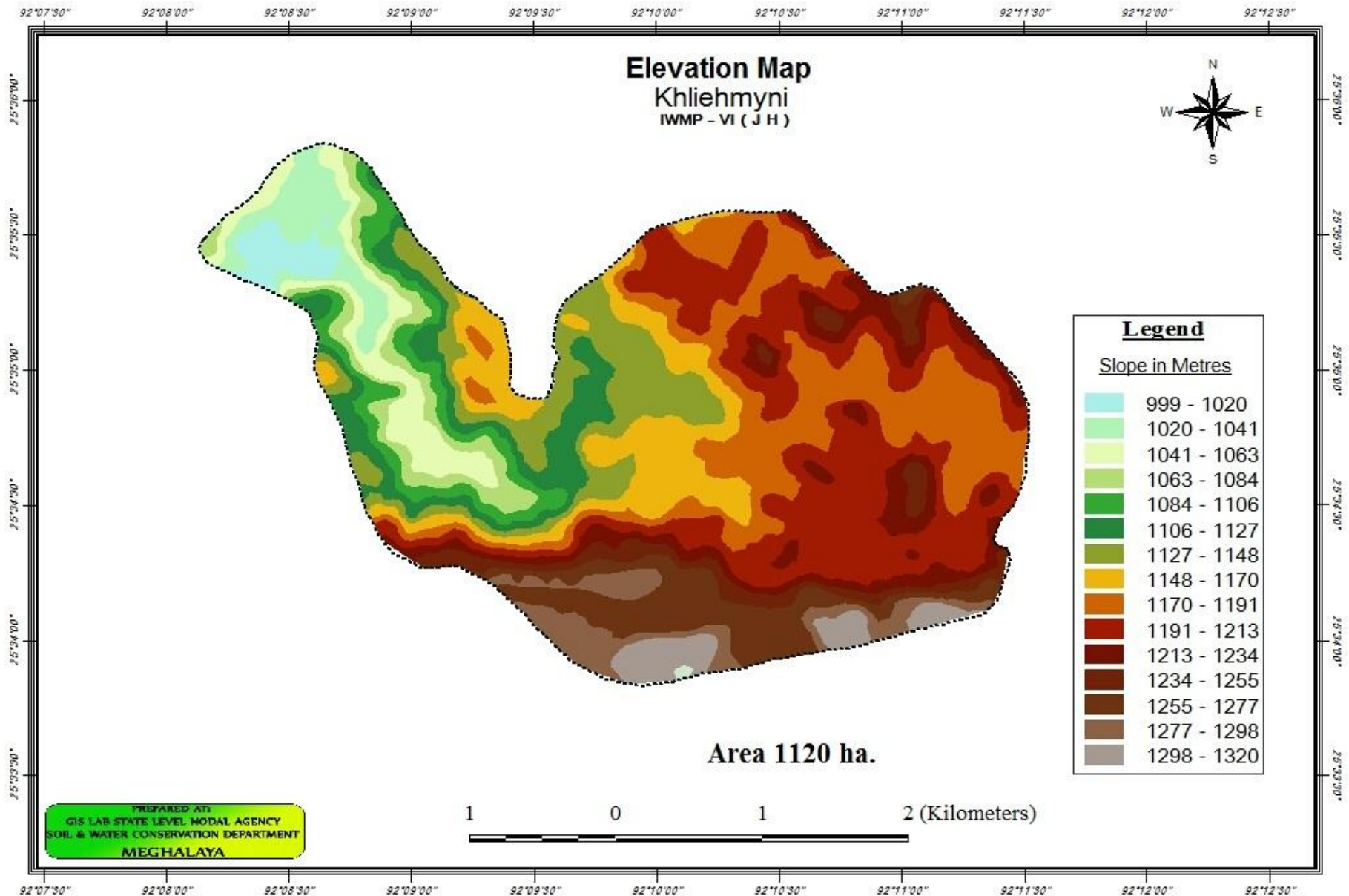
PREPARED AT:
 GIS LAB STATE LEVEL MODAL AGENCY
 SOIL & WATER CONSERVATION DEPARTMENT
 MEGHALAYA

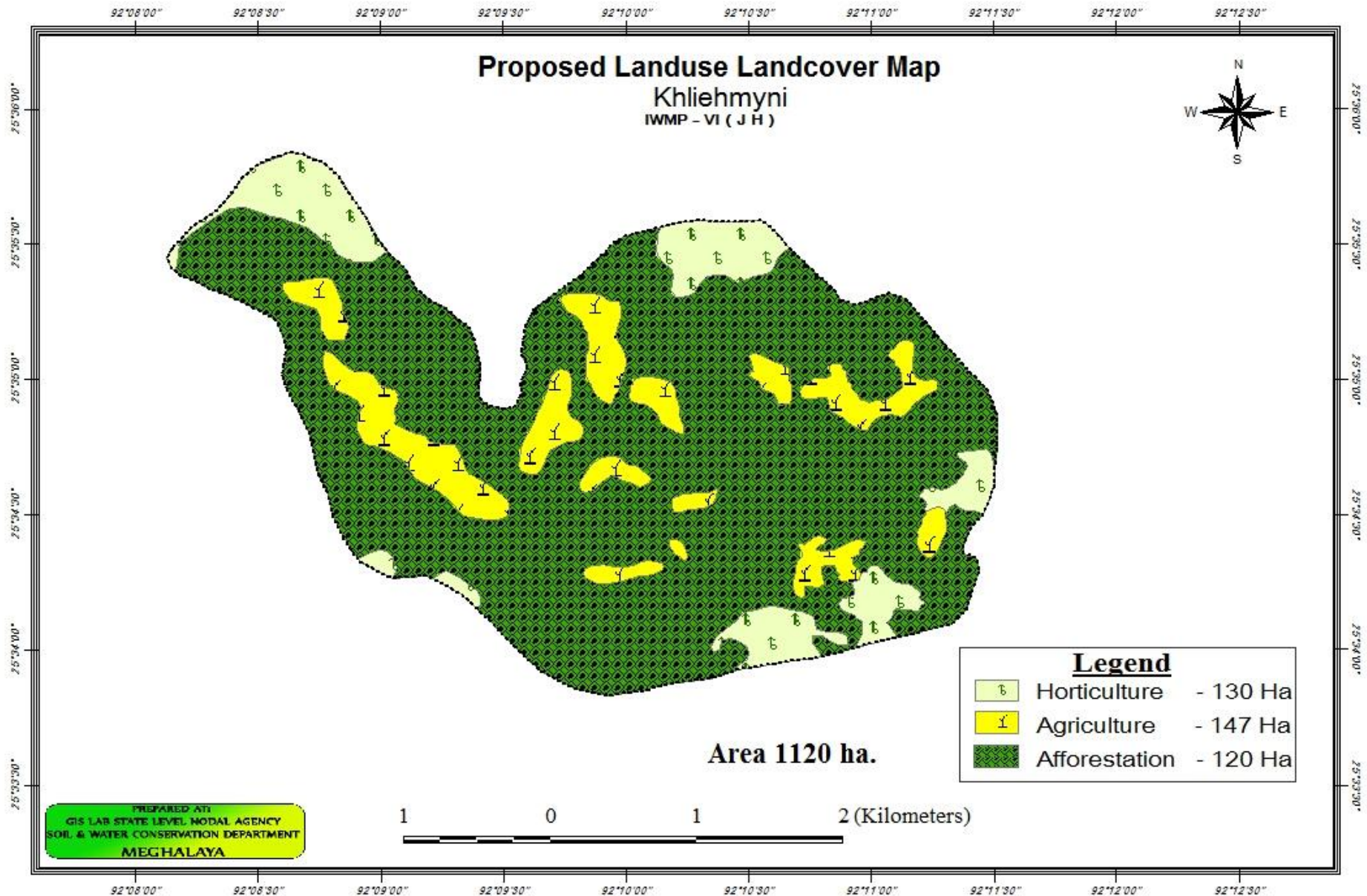
Source - Meghalaya Natural Resource Information System
 North East Space Application Centre, Umiam











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 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 – 300Nos.

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

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

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

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

TOTAL Rs. 7,500.00

(Rupees Seven thousand five hundred) only.

COST NORMS FOR IMPROVEMENT OF EXISTING PADDY FIELD
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

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

.....

A. MARGINAL BUNDS

$$50 \times \frac{0.40 + 0.70}{2} \times 0.60 = 16.5 \text{ m}^3$$

B. SHOULDER BUND

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

$$10\text{Nos.} \times 50 \times \frac{0.50 + 0.30}{2} \times 0.50 = 100.00 \text{ m}^3$$

$$\text{Land leveling L.S} \quad = \frac{50.00 \text{ m}^3}{166.5 \text{ m}^3}$$

$$\text{@Rs.26.00/-per m}^3 \quad \quad \quad \underline{\quad \quad \quad \text{Rs.4,329.00}}$$

TOTAL: Rs.4,329.00

Say Rs.4,300.00

(Rupees Four thousand three hundred) only.

COST NORMS FOR LOOSE BOULDER 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.

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

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.

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

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.

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

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

(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.

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 (ii) Cutting road side drain including dressing, grading 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)

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 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 m^3 @ Rs. 124.00/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. $1 \times 5.80 \times 1.00 \times 0.10 = 0.58 \text{ m}^3$ @ Rs. 2136.00/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 m^2 @ Rs. 295.00/m ²	= Rs. 7876.35
4/28	Providing cement concrete work in abutments, wing walls etc complete $1 \times 5.80 \times 1.00 \times 0.40 = 2.32 \text{ m}^2$ $1 \times 5.80 \times \frac{1.00 + 0.50}{2} \times 1.10 = 4.78 \text{ m}^3$ $2 \times 1.50 \times 0.50 \times 0.40 = 0.60 \text{ m}^3$ $1 \times 4.85 \times 1.50 \times 0.10 = 0.73 \text{ m}^3$ $= 8.43 \text{ m}^3$ @ Rs. 2344.00/m ³	= Rs. 19759.92

5/24 Providing stone pitching with one man size boulder not less than 25cm× 30cm etc complete
 $1 \times 4.85 \times 1.50 \times 0.25 = 1.82\text{m}^3$
 @ Rs. 512.00/m³ =Rs. 931.84

6/27 Providing 12mm thick cement plastering including cleaning surface etc complete
 $1 \times 5.80 \times 1.10 = 6.38\text{m}^2$
 $1 \times 5.80 \times 1.20 = 6.96\text{m}^2$
 $2 \times 3.50 \times 0.40 = 2.80\text{m}^2$
 $1 \times 5.80 \times 0.50 = 2.90\text{m}^2$
 $1 \times 4.85 \times 1.50 = \underline{7.28\text{m}^2}$
 $= 26.32\text{m}^2$
 @ Rs. 93.00/m² = Rs. 2447.76
 TOTAL = Rs. 29884.67

Say Rs. 29,900.00

(Rupees twenty Nine thousand nine 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
	<u>TOTAL Rs. 10,575.00</u>

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 (40Kgx17.50=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 (90Kgx17.50=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 (270Kgx17.50=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
	<u>TOTAL Rs. 14,425.00</u>

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
	<u>TOTAL Rs.37,790.00</u>

(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. LYNG
 A.P. & Veterinary
 ...

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. Singh
 Director & Vety. Officer
 J. S. P. Puram C&RD, Bikaner

**Model Estimate for construction of cc dam at _____,
Under _____, for the year 20_____.**

(Rates as per PWD SOR for R,B & E&D Works, for Jowai circle, 2007-08)

1/4 (a)	Earthwork exca. for foundation:			
	Dam	8.00 x 0.60 x 0.60	=	2.88 m ³
	Apron	4.00 x 1.10 x 0.30	=	1.32 m ³
	Walls	8.00 x 0.30 x 0.40	=	<u>0.96</u> m ³
				5.16 m ³ @ Rs. 166.9 /m ³ = Rs. 861.20
2/6(b)	Earthwork exca. for foundation for drains:			
	Canal	6 x 0.60 x 0.60	=	2.16 m ³ @ Rs. 166.9 /m ³ = Rs. 360.50
3/38	Providing shuttering with dress planks:			
		8.00 x 1.50 x 2	=	24.00 m ² @ Rs. 232 /m ² = Rs. 5568.00
4/24	Providing c.c. 1:3:6:			
	Dam	8.00 x 0.60 x 0.60	=	2.88 m ³
		8.00 x 0.45 x 1.50	=	5.40 m ³
	Apron	4.30 x 0.80 x 1.50	=	5.16 m ³
		1.80 x 0.30 x 0.15 x 2	=	0.16 m ³
	Walls	8.00 x 0.30 x 1.50	=	3.60 m ³
	Canal	6 x 1.80 x 0.10	=	1.08 m ³
	Deduct	4.00 x 0.30 x 0.30	=	<u>0.36</u> m ³
				17.92 m ³ @ Rs. 2724.8 /m ³ = Rs. 48833.87
5/39(a)	12mm plastering 1:3 :			
	Dam	8.00 x 2.625	=	21.00 m ²
	Walls	8.00 x 1.65	=	13.20 m ²
	Canal	6 x 1.70	=	<u>10.20</u> m ²
				44.40 m ² @ Rs. 78 /m ² = Rs. 3463.20
6/21	Providing stone pitching:			
		6.00 x 1.00 x 0.30	=	1.80 m ³ @ Rs. 405 /m ³ = Rs. <u>729.00</u>
				(T) = Rs. 59815.77

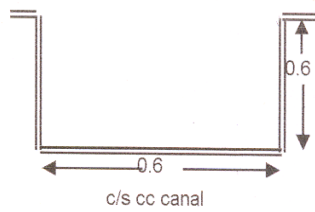
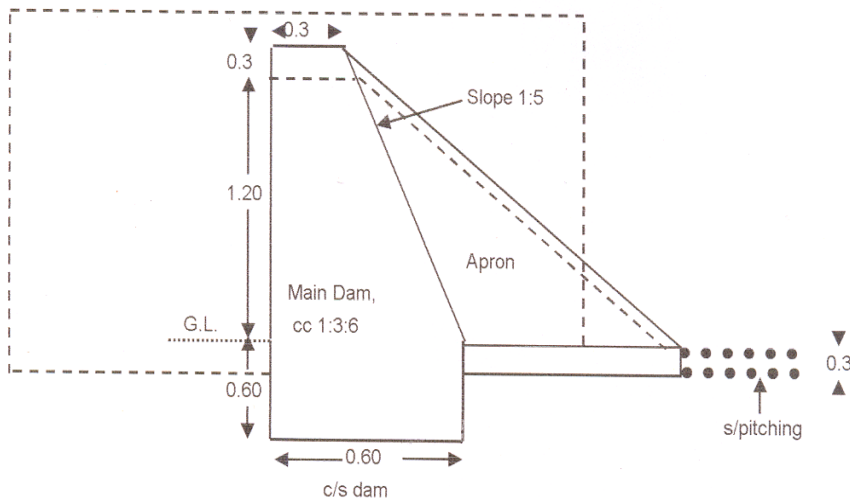
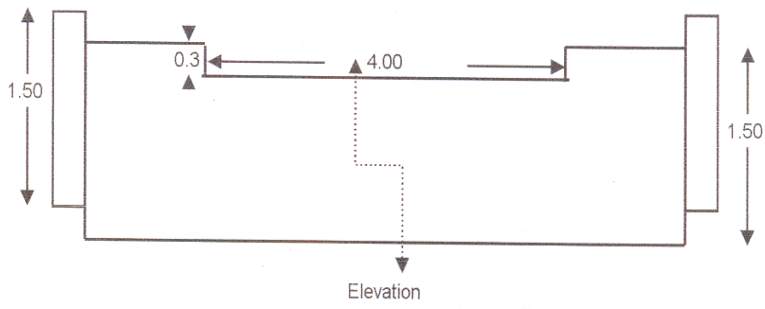
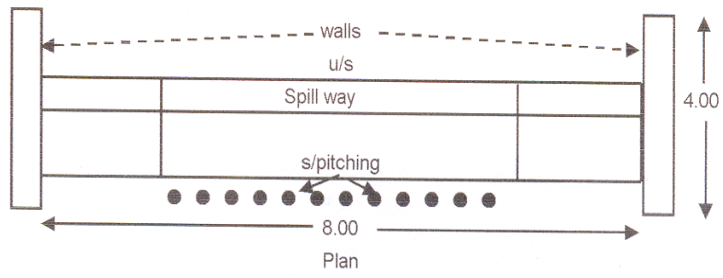
Say . **59,800/-**

Rupees(Fiftynine thousand eight hundred)only

Construction of CC Dam

(All dimensions in metres)

(Not to scale)



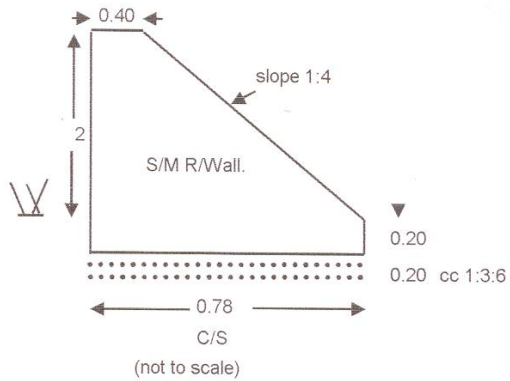
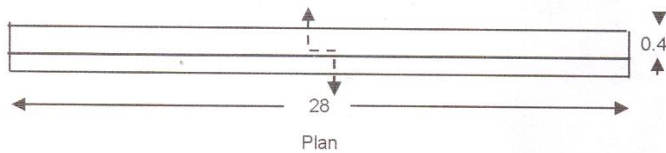
Model Estimate for construction of Protection wall at _____,
Under _____, for the year _____.
 (Rates as per PWD SOR roads 2007-08)

1/6a Earthwork in excavation for foundations:
 $28 \times 0.78 \times 0.40 = 8.68 \text{ m}^3$ @ Rs. 85.80 /m³ = Rs. 744.74

2/18(a) Stone masonry in retaining walls:
 $28 \times 0.78 \times 0.20 = 4.34 \text{ m}^3$
 $28 \times \frac{0.4 + 0.78 \times 1.50}{2} = 24.68 \text{ m}^3$
 29.02 m³ @ Rs. 1140.30 /m³ = Rs. 33085.80

4/24 Providing cc work in prop. 1:3:6.
 $28 \times 0.78 \times 0.20 = 4.34 \text{ m}^3$ @ Rs. 2724.80 /m³ = Rs. 11825.63
 Rs. 45656.18
 Say **Rs. 45,660/-**

Rupees(Fourtyfive thousand six hundred sixty)only.



Estimates for construction of Dug-out farm pond of _____ at _____
under _____ Watershed, for the year 201 _____
(Rates as per PWD SOR for Roads-2007-08)

1/3(a) Earthwork in excavation to the proper grade...

$$2 \times \frac{30 \times 26 + 4 \left(\frac{28 \times 24}{6} \right) + 26 \times 22}{6} = 1346.67 \text{ m}^3$$

$$\text{@ Rs. 23.25 /m}^3 = \text{Rs. 31310.00}$$

2/14(a) Cutting side drain incl. dressing grading & removal of spoils...
30 Rm

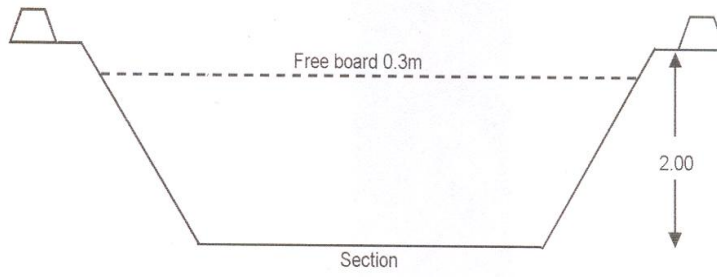
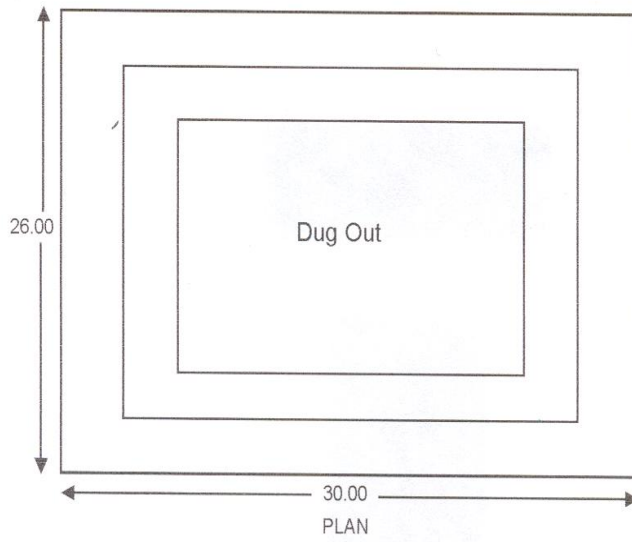
$$\text{@ Rs. 23.25 /m}^3 = \text{Rs. 697.50}$$

(T)Rs. 32007.50

Say Rs. 32,000/-

Rupees(Thirtytwo thousand)only

Dug out pond
(not to scale)
(All dimension in metres)



Model Estimate for construction of water harvesting pond at _____,

Under _____, for the year _____

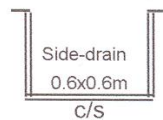
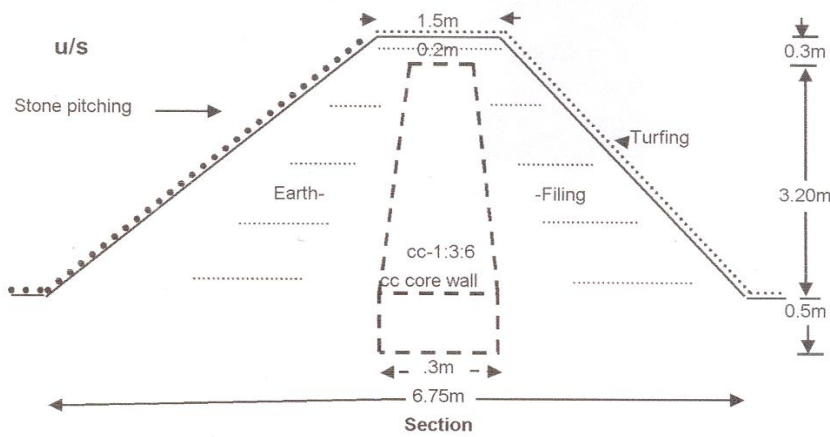
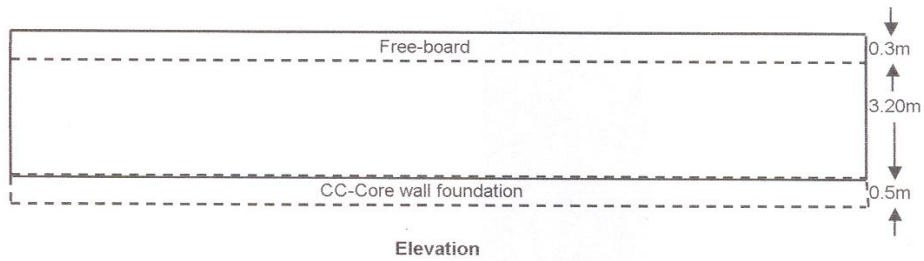
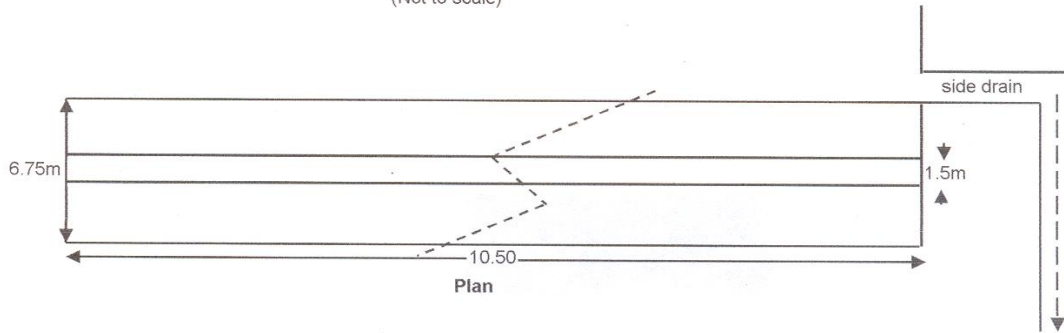
(Rates as per PWD SOR Roads 2007-2008)

1/4a	Earthwork in excavation for foundation:						
	CC core wall:	$10.50 \times 0.3 \times 0.50 =$	1.58 m^3	@	Rs. 166.90	=	Rs 262.87
2/10	Earthwork in filling:						
	Main dam:	$10.50 \times \frac{1.5+6.75}{2.0} \times 3.50 =$	59.72 m^3				
	Deduct core wall:		(-) 8.40 m^3				
			51.32 m^3	@	Rs. 196.80	=	Rs 10099.53
3/14a	Earthwork in cutting drains:						
	Side drain:		14.00 m	@	Rs. 35.20	=	Rs 492.80
4/23	Providing cc work in prop. 1:3:6						
	Corewall- foundation:	$10.50 \times 0.3 \times 0.50 =$	1.58 m^3				
	Corewall:	$10.50 \times \frac{0.3+0.2}{2.0} \times 3.20 =$	8.40 m^3				
	CC drain:	$14.00 \times 1.8 \times 0.10 =$	2.52 m^3				
			12.50 m^3	@	Rs. 2724.8	=	Rs 34046.38
5/38	Providing shutterings:						
	Corewall:	$10.50 \times 6.7 =$	69.83 m^2	@	Rs. 232.0	=	Rs 16199.40
6/21	Providing stone pitching:						
	U/S Dam:	$10.50 \times 4.0 \times 0.25 =$	10.50 m^3	@	Rs. 405.50	=	Rs 4257.75
7/12	Turfing after dressing the slope & bed with good grass sods:						
	Core-wall d/s:	$10.50 \times 6.0 \times 0.15 =$	9.45 m^3	@	Rs. 28.00	=	Rs 264.60
							(T) Rs 65623.32

Say Rs 65,600/-

Rupees(Sixtyfive thousand six hundred)only

CONSTRUCTION OF WATER HARVESTING POND
(Not to scale)



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. LING
 & Vety. Officer
 Mysuram C&RD, D.D.S.

ANNEXURE IV

MoA, SUB COMMITTEE DETAILS ETC.

To, The Divisional Soil and water conservation (1)
Jauntia Hills Dist. (Jaintia)

Sub- no- objection certificate

Sahab Badonbarom.
Ketei ka phang da la kdeu hanong- ngi
ka Darbar shrong Japangap ka ba la
long ha ka 22-11-2011. nga la skim ia
hai baroh lang. Ba ngim don eiei awh em
ban dauma ne khang led ia ka ophis jong
phi ban pyntrei ia ki skim ha poh shre
no ha poh ka area jong ka shrong jongongi.
Lada don kino kino ki jing ch. ka shrong
kan skim hi ka jup kit khlich ha baroh
ki liang. ngi kyrapat iaphi. Devom basi
jongphi. ban ia kaba don kam.

Khublei shibun iaphi.
Hiba Devom iaphi.

Dated
Japangap
22/11/2011

G. Siang Shai
Secretary
Shrong
Lapangap
22.11.2011

Stollytkhar
Rangbari Shrong
Pylun Lapangap Eika
Shiliang Myntang Jaintia Hills
22-11-2011

OFFICE OF THE
DURBAR SHNONG LARNAI ELAKA NARTIANG P.O - UMMULONG
JAINTIA HILLS DISTRICT: MEGHALAYA

Ref. No.....

Dated: Larnai, the.....

NO OBJECTION CERTIFICATE

Da kane nga u Rangbah Shnong jong ka Shnong Larnai nga pynshisha ba kam don kano kano ka objection lane ka jingujbr ei ei'ha ka ban pyntrei ia ka Project jong ka Soil Water Conservation na ka Shnong jong ngi na ka Scheme IWMPJH-VI.

Nongpynshisha

Rangbah Shnong
Larnai.


Rangbah Shnong
Larnai Ilak
Wartiane J. Hill

OFFICE OF THE DURBAR SHNONG PDENGTALU
JAINTIA HILLS DISTRICT MEGHALAYA.

"No. Objection Certificate"

Da kane la pynshisha ba ka office jong ka Soil (Watershed) Jaintia Hills District kan pyntrei ia shibun ki Scheme hapoh u pud u sam jong ka Shnong Pdenktalu. Khamtam ha ka jingiadei bad ki nongrep bad kiwei kiwei de ki kam pynroi ha ki thain nongkyndong.

Te kumta na ka liang jongka Durbar Shnong Pdenktalu ka pdiang sngewbha ia kine ki jingiarap na ka office Soil (Watershed) bad kam don jingdawa ei ei ruh em halor ki jingpyntrei hapoh shnong poh thaw ryngkat ka jingiatiplang ka Durbar Shnong ne dkhot shnong.

Ngi kyrmen skhem ba kane ka jing wanrah scheme ka Soil ha ka shnong jongngi kan long kaba jop bad ka ba ai jingmyntoi ia ki paid nongshong shnong jong ngi.

Khublei Shibun.

Dated.

22/9/2011

M. Dkhar
Kangbah Shnong
Pdenktalu.

OFFICE OF THE DURBAR SHNONG UMLADANG ,ELAKA NARTIANG,
P.O. THADLASKEIN
JAINTIA HILLS DISTRICT, MEGHALAYA

No- Objection Certificate

Da kane la pynshisha ba ka Office jong ka Soil (Water shed) Jaintia Hills District kan pyntrei ia shibun ki shceme hapoh ka pud ka sam jong ka Shnong Umladang, khamtam ha ka jingiadei bad ki nongrep bad kiwei kiwei de ki kam pynroi ha ki thain nongkyndong.

Te kumta na ka liang jong ka Durbar shnong Umladang ka Pdiang sngewbha ia kine ki jing iarap na ka Office Soil (Water Shed) bad kam don jing dawa ei ei ruh em halor ki jing pyntrei hapoh shnong poh thaw ryngkat da ka jing iatip lang ka Durbar shnong ne ki Dkhot shnong.

Nga kyrmen shkem ba kane ka jing wan rah schem ka Soil ha shnong jong ngi kan long kaba jop bad kaba ai jing myntoi ia ki paid nong shong shnong jong ngi

Dated Umladang

The 18. 11. 2011

Khublei


Headman
Umladang Village
Elaka Nartiang