

**GOVERNMENT OF MEGHALAYA**



**SOIL & WATER CONSERVATION DEPARTMENT  
RI-BHOI DISTRICT**

**DETAILED PROJECT REPORT  
OF  
UMSUKUN & UMLANGLUT  
INTEGRATED WATERSHED MANAGEMENT PROJECT - III  
UNDER  
UMLING C&RD BLOCK  
2009-2010  
RI-BHOI DISTRICT**

GLIMSES OF THE PROJECT

1.

Name of the State

~ Meghalaya
2.

Name of the District

~ Ri-Bhoi District
3.

Name of the C&RD Block

~ Umling C&RD Block
4.

Name of the villages

~ (i) Umsukun

~ (ii) Pahamrioh Lum

~ (iii) Mawiong

~ (iv) Mawryngkang

~ (v) Umsekhklieng
5.

Name of the Project

~ Ri-Bhoi District I.W.M.P – III
6.

Total Geographical Area

~ 1632.00 Ha.
7.

Total Treatment Area

~ 1000.00 Ha.
8.

Total Project Cost

~ 150.00 Lakhs
9.

Project Duration

~ 5 years
- 10

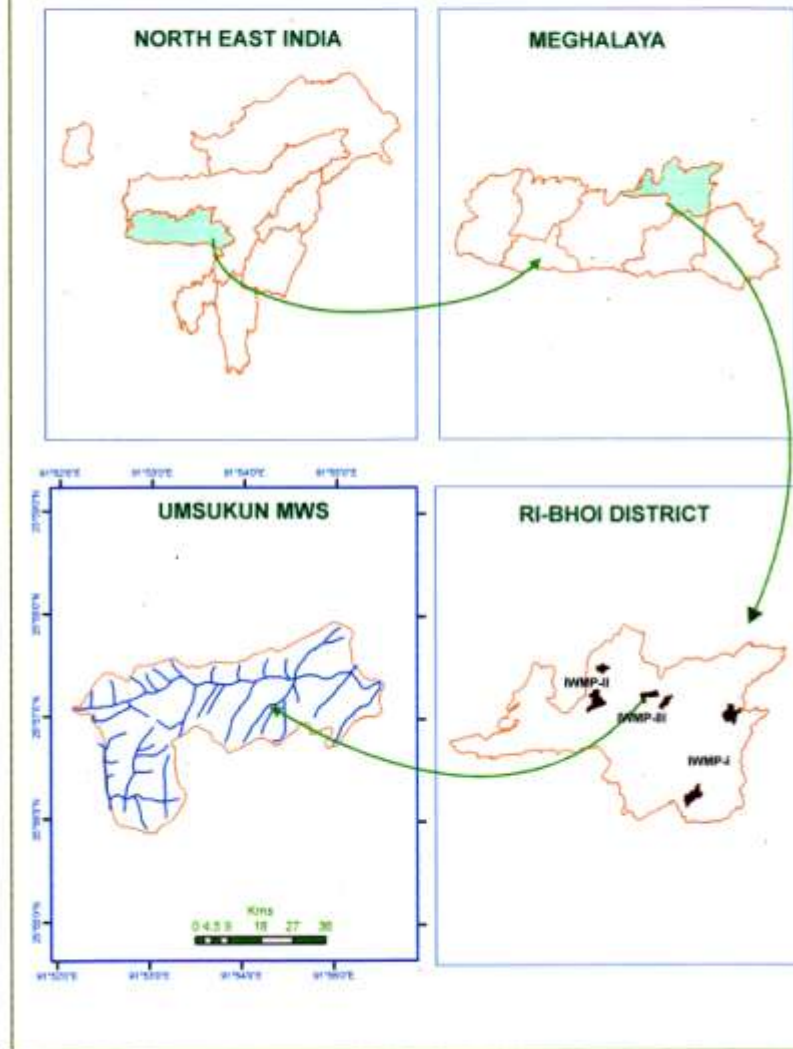
Project Implementing Agency~ Soil & Water Conservation

Ri-Bhoi Division, Nongpoh

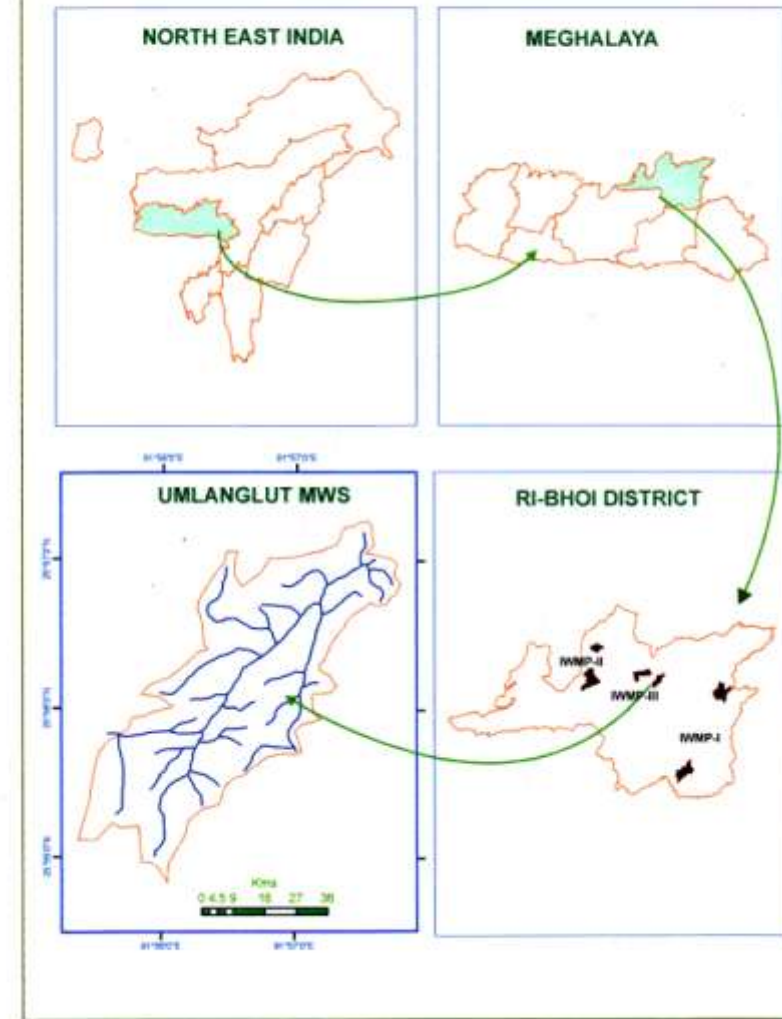
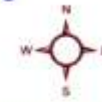
## CONTENTS

1. CHAPTER I	INTRODUCTION AND BACKGROUND
2. CHAPTER II	GENERAL DESCRIPTION OF THE PROJECT AREA
3. CHAPTER III	PROJECT PLANNING & INSTITUTION BUILDING
4. CHAPTER IV	PROJECT ACTIVITIES
5. CHAPTER V	PROJECT PHASING & BUDGETING
6. CHAPTER VI	CAPACITY BUILDING
7. CHAPTER VII	EXPECTED OUTCOME
8. ANNEXURE I	MAPS
9. ANNEXURE II	SOCIO – ECONOMIC ABSTRACT
10. ANNEXURE III	MoA

**MAP - 1: LOCATION OF UMSUKUN MWS  
UNDER IWMP - III, RIBHOI DISTRICT**



**MAP - 1: LOCATION OF UMLANGLUT MWS  
UNDER IWMP - III, RIBHOI DISTRICT**



CHAPTER I

**INTRODUCTION AND BACKGROUND**

**1.1 Project Background:**

The Umsukun & Umlanglut (IWMP-III) project is located in Umling C&RD Block, RiBhoi District of Meghalaya. Consisting of a two micro-watershed, the Umsukun project area is drained to the Umsukun Sream and its tributaries flowing in a southwest to east direction and the Umlanglut project area is drained to the Umlanglut Sream and its tributaries flowing in a southeast to southwest direction. The total area is 1632 Ha. with 1000 Ha to be treated under the Integrated Watershed Management Programme (IWMP).

Both the Umsukun & Umlanglut (IWMP-III) Project area are located at a distance of about 12 km and 20 km from Nongpoh the District Head Quarter and about 62 km and 70 km from Shillong the State Capital respectively. A total of five (5) villages are covered under the project. These are –

- i) Umsukun village
- ii) Pahamrioh Lum village
- iii) Mawiong village
- iv) Umsekhlieng village
- v) Mawryngkang village

**(a) Micro-watershed Informmation:**

The micro-watersheds codes are **3B2A1a2h** and **3B2A2b1a** , as codified by the North East Space Application Centre (NESAC). The total area of the micro-watershed is 1632 Ha. with 1000 Ha to be treated under the Integrated Watershed Management Programme (IWMP).

**Need and Scope for Watershed Development:**

The micro-watersheds codes are **3B2A1a2h** and **3B2A2b1a** falls under the Medium Priority category as per the prioritization of watersheds by the North East Space Application Centre (NESAC). Out of the 5 villages, only Pahamrioh Lum village have all weather road connectivity. The farmers are all small and 66 households are below the poverty line, which is 31% of the total households..

Even though the area receives ample rainfall during the monsoons, there is acute shortage of water during the dry seasons and the villagers have to travel long distances for fetching water even for domestic use.

**(b) Other developmental projects/schemes running in the Project Area:**

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

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

**CHAPTER II**  
**GENERAL DESCRIPTION OF THE PROJECT AREA**

GENERAL DESCRIPTION OF THE PROJECT AREA

2. **Name of the Project:-** The Project nomenclature is derived from the Wah Umsukun river and hence it is named as Umsukun Integrated Watershed Management Project and also from the Wah Umlanglut river and named as Umlanglut Integrated Management Project.

3. **Location:-** Both the Project are located within the area of Raid Nongkhrah and Raid Lyngdoh under Umling C&RD Block of Ri-Bhoi District, Nongpoh. Umsukun Watershed is situated about 12 kms. From the District Headquarter, Nongpoh and Umlanglut Watershed is situated about 20 kms. From the District Headquarter, Nongpoh. The geographical location of Umsukun is between 91<sup>0</sup>52'E to 91<sup>0</sup>55'E Longitude and 25<sup>0</sup>55'N to 25<sup>0</sup>59'N Latitude and 91<sup>0</sup>56'E to 91<sup>0</sup>57'E Longitude and 25<sup>0</sup>55'N to 25<sup>0</sup>58'N Latitude of Umlanglut Watershed. There are 5 (five) villages within the Watershed as follows:-

- (i) Umsukun village
- (ii) Pahamrioh Lum village
- (iii) Mawiong village
- (iv) Mawryngkang village
- (v) Umsekhlieng village

4. **Area and Physiography:-** The geographical area of the project is 1632.00 Ha. of which 1000.00 Ha. is proposed for treatment under different Soil & Water Conservation activities. Physiographically, the area is undulating with an altitude ranging from 420 m to 820 m above mean sea level.

1	2	3	4	5	6	7	8	9
Sl. No.	Names of States	Name of District	Names of Projects	Elevation (metres)	Slope range (%)	Order of watershed Sub/Micro-watershed	Major streams	Toposequence (Soil series)
1	Meghalaya	Ri-Bhoi District	Ri-Bhoi IWMP - III	420 m to 820 m	< 1% to > 50%	Micro-Watershed	Umlanglut Stream	

5.           **Drainage:-** The Watersheds are drained by a network of tributaries of which Umsukun river and Umlanglut river are the main drainage to which all the streams and rivulets drained.

6.           **Soil:-** The soil is deep, excessively drained, fine soil on moderately steep side slopes of hills having clayey surface with moderate to slight erosion hazard.

6 (A):-DETAILS OF SOIL EROSION IN THE PROJECT AREAS:

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

7. **Climate:-** The area is hot in summer and remain warm throughout the year. The average rainfall annually is 1274 mm (Source: Statistical Hand book, Ri-Bhoi)

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

1	2	3	4	5	6	7		8	9	
Sl. No.	Name of State	Name of the Agro-climatic zone	Area (in ha)	Names of the districts	Names of the Projects	Major soil types		Average rainfall in mm (preceding 5 years' average)	Major crops	
						a) Type	b) Area (ha)		a) Name	b) Area (ha)
1	Meghalaya	Humid and warm	500 ha.	Ri-Bhoi District	Ri-Bhoi IWMP - III	Deep excessively drained fine soils and moderately steep slope of hills having loamy and clayey surface with moderate and slight erosion hazard	1632 ha.	Below 2000 mm	Paddy,	96 ha.
									Ginger	35 ha.
									Turmeric	20 ha.
									Yam	20 ha.
									Chilli	6 ha.
Total										177 ha.

8. **Agricultural Activities:-** Agriculture is the main occupation of the people of the watershed areas. The principal agricultural crops are paddy, ginger, yam, chillies, turmeric etc. However few horticultural crops like pineapple, arecanut, banana etc. are cultivated in the Watershed area.

9. **Natural vegetation:-** Most of the forest species were extinct or not seen in the areas due to repeated jhumming. However some forest species like Shorea robusta, Artocarpus heterophyllus, Albizzia species, Bahaunia variegetta etc. are seen in the Watershed Area.

10. **Socio-economic Status:-** Economically, the area is still backward in nature. The main reason is due to the primitive way of agricultural practices like jhumming and the absence of basic infrastructural facilities like good roads, drinking water, sanitation etc.

**11. Demographic structure:-** The total population within the watershed area is 1293 number of which 651 are males and 642 are females. The member of household village are as follows:-

- (i) Umsukun – 39 nos.
- (ii) Pahamrioh Lum – 45 nos.
- (iii) Mawiong – 46 nos.
- (iv) Mawryngkang – 51 nos.
- (v) Umsekhlieng – 32 nos.

**12. Livestock:** There are 4 (four) kind of livestock farming being farmed in the Watershed area namely, Poultry, Piggery, Goatery and Cattle.

**13. Infrastructural facilities:-**

- (a) **Roads:-** The villages in the project area are connected by Katcha Road only which can be used during winter season only except Pahamrioh Lum village.
- (b) **School:-** There are only 4 (four) Lower Primary and 1 Upper Primary school within the project area of which 1 (one) Lower Primary School at Pahamrioh Lum run by the Government and the rest run by the Mission. The Upper Primary School is located at Umsukun village.
- (c) **Electricity:-** Electricity connections to all villages in the Watershed area have been provided by the MeSEB
- (d) **Health:-** No Public Health Centre is available in the Watershed area. However, the villagers of Umsukun, Mawiong and Pahamrioh Lum depend their health facilities at Nongpoh Civil Hospital which is about 10 to 15 kms and the villagers of Mawryngkang and Umsekhlieng depend their health facilities at Umden PHC which is about 12 to 20 kms.
- (e) **Water supply:-** Drinking water supply have been provided by the PHE Department. However, during the lean season, the villagers have to depend upon the natural springs available in the area.
- (f) **Marketing:-** The villagers of Umsukun Watershed depend their marketing at Nongpoh market while the villagers of Umlanglut Watershed depend their marketing at Umden market.

13.1:- DETAILS OF INFRASTRUCTURE IN THE PROJECT AREA:

1	2	3		4			
Name of District	Name of Project	Parameters:		Status			
Ri-Bhoi District	Ri-Bhoi IWMP - III	(i)	No. of villages connected to the main road by an all-weather road.	Nil			
		(ii)	No. of village provided with electricity	2 nos.			
		(iii)	No. of households without access to drinking water	Nil			
		(iv)	No. of educational institutions: Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	(P) 2 nos.	(S) -	(HS) -	(VI) -
		(v)	No. of village with access to Primary Health Centre	2 nos. – 12-20 kms to Umden PHC			
		(vi)	No. of village with access Veterinary Dispensary	2 nos. – 12-20 kms to Umden			
		(vii)	No. of village with access Post Office	- do -			
		(viii)	No. of village with access Banks	- do -			
		(ix)	No. of village with access Markets/ mandis	- do -			
		(x)	No. of village with access Agro-Industries	Nil			
		(xi)	Total quantity of surplus milk	Nil			
		(xii)	No. of milk collection centres (e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	(U)	(S)	(PA)	(O)
		(xiii)	No. of villages with access to Aganwadi Centres	2 nos.			
		(xiv)	Any other facilities with no. of villages (please specify)				

**14:- Land ownership:** There are primarily two types of land holding system, namely private lands (Ri Kynti i.e. individually owned land) and community lands (Ri Kur i.e. clan land and Ri Raid i.e. village community land).

**14.1:- DETAILS OF LAND HOLDING PATTERN IN THE PROJECT AREA:**  
**A.UMSUKUN MWS**

1	2	3	4	5	6			
Name of District	Name of the Projects	Types of Farmer	No. of households	No. of BPL households	Land holding (ha)			
					Irrigated	Rainfed	Others	Total
Ri-Bhoi District	Ri-Bhoi IWMP - III	(i) Large						
		(ii) Small	128	24	Nil	53 ha.	128.18 ha	180.48 ha.
		(iii) Marginal	2		Nil	.7 ha		.7 ha
		(iv) Landless	Nil					
		Sub - Total	130	24		53 ha.	128.18 ha.	181.18 ha.

**B. UMLANGLUT MWS**

1	2	3	4	5	6			
Name of District	Name of the Projects	Types of Farmer	No. of households	No. of BPL households	Land holding (ha)			
					Irrigated	Rainfed	Others	Total
Ri-Bhoi District	Ri-Bhoi IWMP - III	(i) Large						
		(ii) Small	83	42	Nil	124 ha.	Nil.	124 ha.
		(iii) Marginal			Nil			
		(iv) Landless	Nil					
		Sub - Total	83	42		124 ha.	Nil.	124 ha.

14.2:-DETAILS OF COMMON PROPERTY RESOURCES OF THE PROJECT AREAS:

1	2	3	4				5			
Name of District	Name of the Projects	CPR Particulars	Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
			Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)
Ri-Bhoi District	IWMP - III	(i) Wasteland/ degraded land	113 ha.				295 ha.			705 ha.
		(ii) Agricultural land	177 ha.							
		(iii) Pastures								
		(iv) Orchards	5 ha.							
		(v) Village woodlot								
		(vi) Forest	30 ha.			58 ha.				
		(vii) Village Ponds/ Tanks	5 nos.							
		(viii) Community Buildings								
		(ix) Weekly Markets				Nongpoh				
		(x) Permanent Markets				Nongpoh				
		(xi) Temples/ Places of worship				Church 5 nos.				
		(xii) Others (Pl. specify)				1249 ha.				
Total			325 ha.			1307 nos.	295 ha.			705 ha.

## **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.

3.2:-DETAILS OF SCIENTIFIC PLANNING AND INPUTS IN IWMP PROJECTS:

1	2	2
Total no. of projects sanctioned	Scientific criteria/ inputs used	No. of projects in which scientific criteria were used
	(A) Planning	
	Cluster approach	
	Whether technical back-stopping for the project has been arranged? If yes, mention the name of the Institute.	Yes, NIRD, Guwahati
	Baseline survey	Yes
	Hydro-geological survey	Ni
	Contour mapping	Yes
	Participatory Net Planning (PNP)	PRA
	Remote sensing data-especially soil/ crop/run-off cover	Yes
	Ridge to Valley treatment	Yes
	Online IT connectivity between	
	(1) Project and DRDA cell/ZP	Yes
	(2) DRDA and SLNA	
	(3) SLNA and DoLR	Yes
	Availability of GIS layers	
	1. Cadastral map	No
	2. Village boundaries	Yes
	3. Drainage	Yes
	4. Soil (Soil nutrient status)	Yes
	5. Land use	Yes
	6. Ground water status	Yes
	7. Watershed boundaries	Yes
	8. Activity	Yes
	Crop simulation models#	No
	Integrated coupled analyzer/ near infrared visible spectroscopy/ medium spectroscopy for high speed soil nutrient analysis	

	Normalized difference vegetation index (NDVI)#	
	Weather Stations	
	<b>(B) Inputs</b>	
	1. Bio-pesticides	Yes
	2. Organic manures	Yes
	3. Vermicompost	
	4. Bio-fertilizer	Yes
	5. Water saving devices	
	6. Mechanized tools/ implements	Yes
	7. Bio-fencing	Yes
	8. Nutrient budgeting	
	9. Automatic water level recorders & sediment samplers	Yes
	Any other (please specify)	

3.3:-PROJECT LEVEL IMPLEMENTING AGENCIES (PIAS):

Watershed project-wise functionaries:

1	2	3	
Names of Districts	Names of projects	Details of PIA	
Ri-Bhoi District	Ri-Bhoi IWMP - III	(i) Type of organization#	Government
		(ii) Name of organization	Soil & Water Conservation Ri-Bhoi Division
		(iii) Designation & Address	DS&WCO, Soil & Water Conservation Ri-Bhoi Division
		(iv) Telephone	0363 8232257
		(v) Fax	0363 8232257
		(vi) E-mail	No

3.4:-DETAILS OF WATERSHED DEVELOPMENT TEAMS (WDTs) IN THE PROJECT AREAS OF THE COUNTRY: STATE-WISE:

1	2	3	4	5	6	7	8
Names of Districts	Names of projects	Names of WDT members	M/F#	Age	Qualification / Experience	Description of professional training	Role/ Function##
Ri-Bhoi District	Ri-Bhoi IWMP - III	Smti. V. Papang, DS&WCO, (Leader)	F		BSc Agri.	Agriculture & Soil Conservation	A to I
		Shri. A.B.S. Swer, AS&WCO, (Agronomy)	M		BSc Agri.	Agriculture & Soil Conservation	A to I
		Shri. S.S. Kharsyntiew, AS&WCO, (Forestry)	M		Dip. in Forestry	Agriculture & Soil Conservation	A to I
		Shri. A.B. Bhattacharjee, AS&WCO, (Engineer)	M		Dip. in Engineering	Civil Engineering	A to I
		Shri. B.P. Marwein, R.O. (Member)	M		Dip. in Forestry	Agriculture & Soil Conservation	A to I
		Shri. A.M. Kharmutee, R.O. (Member)	M		P.U.	Agriculture & Soil Conservation	A to I
		Shri. E. Kharbhih, R.O. (Member)	M		H.S.L.C.	Agriculture & Soil Conservation	A to I
		Shri. K. lawphniaw, B.O. (Member)	M		H.S.L.C.	Agriculture & Soil Conservation	A to I

# M – Male, F - Female

## In column 10, only the letter, assigned as below, needs to be typed, except for 'J', where the type may be specifically mentioned.

- A. Participatory Net Planning (PNP) and Participatory Rural Approach (PRA), Training and Capacity Building

B. Planning

D. Signing of cheques and making payments

F. Engineering surveys, drawings and cost estimations

H. Record of labour employed

J. Post project operation, maintenance of assets
- C. Maintenance of Accounts

E. Social audit

G. Physical verification & measurement

I. Livelihood opportunities for landless

K. Any other (please specify)

3.5:-VILLAGE LEVEL INSTITUTIONS:

Details of Watershed Committees (WC):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Names of the Districts	Names of projects	Names of WCs	Date of Registration as a Society (dd/mm/ yyyy)	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educational qualification	Function/s assigned#
Ri-Bhoi District	Ri-Bhoi IWMP - III	Umalnglut WC	Not yet	President, Shri. T. Makri	M		ST										A to I
				Secretary, Shri. A.M. Kharmutee	M		ST										A to I
				Member, Shri. L. Lyngdoh	M		ST										A to I
				Member, Shri. B. Khymdeit	M		ST										A to I
				Member, Shri. K. Lyngdoh	M		ST										A to I
				Member, Smti. A. Lyngdoh	F		ST										A to I
				Member, Shri. S. Makri	M		ST										A to I
				Member, Shri. B. Manih	M		ST										A to I
				Member, Smti. S. Lyngdoh	F		ST										A to I
		Umsukun WC &	Not yet	President, Shri. Bilson Nongrum	M		ST										A to I
				Secretary, Shri. S.S. Kharsyntiew	M		ST										A to I
				Member, Shri. Stephan Syiem	M		ST										A to I
				Member, Shri. Rang Khngkai	M		ST										A to I
				Member, Shri. Das Khongkai	M		ST										A to I
				Member, Shri. Swon Maring	M		ST										A to I
				Member Shri. John Nongrum	M		ST										A to I
				Member Shri. Ambros Maring	M		ST										A to I
				Member, Smti. Lily Syngkli	F		ST										A to I
				Member, Smti. Ping Makri	F		ST										A to I
				Member, Smti. Trina maring	F		ST										A to I

\* From column no.2, the total number of States, from column no.3, the total number of Districts; from column no.4, the total number of projects; from column no.5, the total number of watershed committees; from column no.6, the total number of registered watershed committees; from column no.7, the total number of members, and WCs without a President and/or without a Secretary, may be mentioned for the State as a whole. From column no.8, the total no. of male and female members may be mentioned separately. The totals of columns 9 to 18, for the entire country, may be mentioned at the end of the table.

## In column 20 only the letter assigned, as below, needs to be typed, except for `J`, where the type may be specifically mentioned.

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 sp

3.6 :- DETAILS OF SELF HELP GROUPS (SHGs) IN THE PROJECT AREAS:

1	2	3				4				5			6		
Names of the Districts	Names of projects	Total no. of registered SHGs				No. of members				No. of SC/ST in each category			No. of BPL in each category		
		With only Men	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
Ri-Bhoi District	Ri-Bhoi IWMP – III	Nil	4 nos.	Nil	4 nos.	(i) Landless	Nil								
						(ii) SF					100% ST	100% ST	Nil		Nil
						(iii) MF		40	40						
						(iv) LF									

(M – Male, F – Female)

\* From Column no. 2, 3 and 4, total no. of States, Districts and projects, respectively, from column 5 to 8, category-wise grand totals, may be given for the entire country at the end of the table.

3.7:- DETAILS OF UGs IN THE PROJECT AREAS:

1	2	3				4				5			6		
Name of District	Names of Projects	Total no. of UGs				No. of members				No. of SC/ST in each category			No. of BPL in each category		
		Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
Ri-Bhoi District	Ri-Bhoi IWMP – III	1 no.	Nil	1 no.	2 nos.	(i)Landless									
						(ii) SF	23 nos.	5 nos.	28 nos.	1 no. ST	1 no. ST	2 nos. ST	Nil	Nil	Nil
						(iii) MF									
						(iv) LF									

(M – Male, F – Female)

\* From Column no. 2, 3 and 4, total no. of States, Districts and projects, respectively, from columns 5 to 8, category-wise grand totals, for the entire country may be given at the end of the table.

**CHAPTER IV**  
**PROJECT ACTIVITIES**

**PREPARATORY PHASE:**

**Entry Point Activities (EPA)**  
(All financial figures in lakh Rs.)

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	State	District	Names of Project	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Meghalaya	Ri-Bhoi District	Ri-Bhoi IWMP - III	6.00 lakhs	Washing place and drinking water	5.00	5.00	Nil	Nil	Nil
					Footpath	1.00	1.00	Nil	Nil	Nil

**OTHER ACTIVITIES OF PREPARATORY PHASE:**

1	2	3	4	5	6	7	8	9	10	11	12	13
District	Name of Projects	Initiation of village level institution	Capacity building	IEC activities	Baseline survey	Hydro-geological survey	Identifying technical support agencies	Resource agree-ments	Preparation of DPR	Evaluation of DPR	Any other (please specify)	Cost incurred (Rs. In lakh)
Ri-Bhoi District	Ri-Bhoi IWMP – III	2 nos. Watershed Committee and 5 nos. Sub-Watershed Committee at each benefiting village	3 nos.	2 nos.	Participatory Rural Appraisal	NA	Done	Done	Done	Done	Entry point activities	15.00

WATERSHED WORKS PHASE:

1	2	3	4	5	6			7											
Sl. No	Name of States	Name of Districts	Name of Projects	Type of structures	Pre Project			Proposed Project											
					No.	Area irrigated (ha)	Storage capacity	Augmentation/ repair of existing structures				Construction of new structures				Total target			
								No	Area to be treated (ha)	Storage capacity	Estimated cost	No.	Area to be treated (ha)	Storage capacity (m³)	Estimated cost (in lakhs)	No.	Area to be treated (ha)	Storage capacity (m³)	Estimated cost (in lakhs)
1	Meghalaya	Ri-Bhoi District	Ri-BHoi IWMP - III	(i) Tank								2 nos.		6.5 m³	0.48	2 nos.		6.5 m³	0.48
				(ii) Pond								23 nos.	48 ha.	48000 m³	11.89	23 nos.	48 ha.	48000 m³	11.89
				(iii) Lake															
				(iv) Check Dam								31 nos.	119 ha.	62000 m³	9.61	31 nos.	119 ha.	62000 m³	9.61
				(v) Percolation Tank															
				(vi) Channel								13 nos.	69 ha.	13000 m³	5.88	13 nos.	69 ha.	13000 m³	5.88
				(vii) Any others (Protection wall)								4 nos.	8 ha.		2.94	4 nos.	8 ha.		2.94
Total											73 nos.	244 ha.	1,23,006.5 m³	30.8	73 nos.	244 ha.	1,23,006.5 m³	30.8	

ACTIVITIES RELATED TO SURFACE WATER RESOURCES IN THE PROJECT AREAS:

8											9	10
Achievement due to project											Change in storage capacity (col. 8-6)	Change in irrigated area (ha) Col. (8-6)
Augmentation/ repair of existing structures				Construction of new structures				Total achievement				
No	Area irrigated (ha)	Storage capacity	Expenditure incurred	No	Area irrigated (ha)	Storage capacity	Expenditure incurred (Rs. in lakhs)	Area irrigated (ha)	Storage capacity	Estimated incurred (Rs. in lakhs)		
				2 nos.		6.5 m³	0.48		6.5 m³	0.48	6.5 m³	
				23 nos.	48 ha.	48000 m³	11.89	48 ha.	48000 m³	11.89	48000 m³	48 ha.
				31 nos.	119 ha.	62000 m³	9.61	119 ha.	62000 m³	9.61	62000 m³	119 ha.
				13 nos.	69 ha.	13000 m³	5.88	69 ha.	13000 m³	5.88	13000 m³	69 ha.
				4 nos.	8 ha.		4.31	8 ha.		4.31		8 ha.
					244 ha.	1,23,006.5 m³	32.17 lakhs	244 ha.	1,23,006.5 m³	32.17 lakhs	1,23,006.5 m³	244 ha.

## ACTIVITIES RELATED TO RECHARGING GROUND WATER RESOURCES IN THE PROJECT AREAS:

[illegible]

### ACTIVITIES EXECUTED BY USER GROUPS IN THE PROJECT AREAS.

1	2	3						
Names of Districts	Names of Projects	Major activities of the UGs –Targets				No. of UGs involved	Estimated Cost	Amount of WDF to be collected (Rs.)
		Structure/ activity proposed						
		Sl. No.	Type	No.#	Treatment (ha)			

### ACTIVITIES EXECUTED BY USER GROUPS IN THE PROJECT AREAS:

[illegible]

**ACTIVITIES RELATED TO LIVELIHOODS BY SELF HELP GROUPS (SHGs) IN THE PROJECT AREAS:**

1	2	3		
Names of the Districts	Names of projects	Major activities of the SHGs		
		Name of activity	No. of SHGs involved	Average annual income from activity per SHG
		Rearing of Milch cow	1 no.	NA
		Grocery shops	3 nos.	NA
		Ginger cultivation	11 nos.	NA
		Piggery	10 nos.	NA

**ACTIVITIES RELATED TO LIVELIHOODS BY SELF HELP GROUPS (SHGs) IN THE PROJECT AREAS:**

[illegible]

### OTHER ACTIVITIES OF WATERSHED WORKS PHASE:

[illegible]

### DETAILS OF ENGINEERING STRUCTURES IN WATERSHED WORKS:

[illegible]

## DETAILS OF ENGINEERING STRUCTURES IN WATERSHED WORKS.

[illegible]

DETAILS OF ACTIVITIES CONNECTED WITH VEGETATIVE COVER IN WATERSHED WORKS:

1	2	3	4			5			6	7				8			
District	Project	Name of structure/ work	Type of treatment			Type of land			Executing agency	Target				Achievement			
			(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	Area (ha)	No. of plants	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/ yyyy)	Area # (ha)	No. of plants	Expenditure incurred (Rs. in lakh)	Actual month & year of completion (mm/ yyyy)
Ri-Bhoi District	Ri-Bhoi IWMP - III	Afforestation	R				Community		Watershed Committee	28 ha.		2.82	3 years				
		Regeneration															
		Agro-forestry															
		Fuel wood															
		Fodder															
		Horticulture	R			Private			WC and Beneficiary	50 ha.		4.30	3 years				
		Pasture dev.															
		Nursery raising															
		Others – Betel leaf	R			Private			WC and Beneficiary	72 ha.		5.82	3 years				
		Banana	R			Private			Beneficiary	30 ha.		2.22	3 years				
		Arecanut	R			Private			Beneficiary	60 ha.		7.60	3 years				
		Imp. Of Scrub Forest	R				Community		Watershed Committee	240 ha.		8.64	3 years				

# 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.

**DETAILS OF VEGETATIVE STRUCTURES IN WATERSHED WORKS: PHASE – II (CONTD.):**

9														
Outcomes														
Reduction in run off (cu.m)	Production (quintal)		Income (Rs.)		Mandays generated					No. of beneficiaries				
	Pre- project	Post project	Pre- project	Post project	SC	S T	Others	Women	Total	SC	ST	Others	Women	Total

**DETAILS OF ALLIED / OTHER ACTIVITIES:**

1	2	3	4			5	6		7	
District	Project	Name of activity@	Type of land			Executing agency	Target		Achievement	
			(i) Private	(ii) Communit y	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/yyyy)	Expendi-ture incurred (Rs. in lakh)	Actual month & year of completion (mm/yyyy)
Ri-Bhoi District	Ri-Bhoi IWMP - III	Tailoring			31 units	Individual	3.10	3 year		
		Carpentry			25 units	Individual	1.25	3 year		
		Kitchen gardening			213 units	Individual	5.325	3 year		
		Agriculture implement			213 units	Individual	5.325	3 year		
		Rearing of milch cow			1 unit	SHG	0.80	3 year		
		Grocery shop			3 units	SHGs	1.20	3 year		
		Ginger cultivation			11 units	SHGs	5.50	3 year		
		Piggery farming			10 units	SHGs	5.00	3 year		
		Fishery			22 units	SHGs & individual	5.50	3 year		
		Poultry			6 units	SHGs & individual	1.50	3 year		
Total						34.50				

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

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

DETAILS OF ALLIED / OTHER ACTIVITIES:

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

CONSOLIDATION AND WITHDRAWAL PHASE

Details of activities in the CPRs in the project areas:

1	2	3	4	5	6				7						
Names of the Districts	Names of projects	Name(s) of the villages	CPR particulars	Activity proposed	Target				Achievement						
					Target area under the activity (ha)	Estimated expenditure (Rs.)	Expected no. of beneficiaries	Estimated contribution to WDF (Rs.)	Area treated under the activity (ha)	Expenditure incurred (Rs.)	Actual no. of beneficiaries	No. of mandays			WDF collected (Rs.)
												SC	ST	F	
Ri-Bhoi District	Ri-Bhoi IWMP – III	Umsukun	D/Water		Nil	50,000	39	2500							
		Mawiong	D/Water		Nil	50,000	46	2500							
		Pahamrioh Lum	D/Water		Nil	50,000	45	2500							
		Umsiekhklieng	D/Water		Nil	75,000	32	3750							
		Mawryngkang	D/Water		Nil	75,000	51	3750							
Total						3,00,000		15,000							

**CHAPTER V**  
**PROJECT PHASING & BUDGETING**

# WATERSHED ACTION PLAN FOR PROJECT – III UNDER INTEGRATED WATERSHED MANAGEMENT PROGRAMME RI BHOI DISTRICT – MEGHALAYA

**NAME OF DISTRICT** ~ Ri-Bhoi District  
**NAME OF C&RD BLOCK** ~ Umling C&RD Block  
**TREATABLE AREA** ~ 1000 Ha.  
**TOTAL PROJECT COST** ~ 150.00 Lakhs

**NAME OF VILLAGE** ~ Mawiong  
~ Umsukun  
~ Pahamrioh Lum  
~ Mawryngkang  
~ Umsekhklieng

Sl. No.	Activities	First year 2009-10		Second year 2010-11		Third year 2011-12		Fourth year 2012-13		Fifth year 2013-14		Total	
		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		6%		14%		50%		25%		5%		100%	
1	<b>ADMINISTRATION</b>												
	<b>A. ADMINISTRATIVE COST</b>												
i	Honorarium to Watershed Development Team – 2 Nos. @ Rs. 5000/- per month			0.4%	0.60	1.8%	2.34	0.6%	1.26			2.8%	4.20
ii	Honorarium to Watershed volunteer 6 Nos. @ Rs. 1500/- per month each			0.36%	0.54	1.5%	2.106	0.66%	1.134			2.52%	3.78
iii	Honorarium to Chairman Watershed Committee 2 Nos. @ Rs. 1000/- per month			0.08%	0.12	0.40%	0.468	0.08%	0.252			0.56%	0.84
iv	Honorarium to Watershed Committee members for attending Watershed Committee meeting @ Rs. 100/- per month each			0.09%	0.14	0.42%	0.504	0.10%	0.276			0.61%	0.92
v	Fees to chartered Accountant			0.13%	0.20	0.30%	0.36	0.10%	0.24			0.53%	0.80
vi	Office Expenses – Purchase of Computer, Digital Camera, Printing of Booklets for SHGs, cost of P.O.L., survey instruments, equipment for monitoring station and hydrological studies, equipment for metrological stations etc.			0.94%	1.40	0.58%	1.122	1.46%	1.938			2.98%	4.46
<b>Total of A</b>				<b>2.0%</b>	<b>3.0</b>	<b>5.00%</b>	<b>6.0</b>	<b>3.0%</b>	<b>5.1</b>			<b>10.0%</b>	<b>15.0</b>
B.	Monitoring			0.20%	0.30	0.50%	0.75	0.30%	0.45			1.00%	1.50
C.	Evaluation			0.30%	0.45	0.50%	0.60	0.20%	0.45			1.00%	1.50
<b>TOTAL OF ADMINISTRATION</b>				<b>2.50%</b>	<b>3.75</b>	<b>6.00%</b>	<b>8.25</b>	<b>3.50%</b>	<b>6.0</b>			<b>12.00%</b>	<b>18.0</b>
2	<b>PREPARATORY PHASE</b>												
	<b>a. Entry point Activities</b>												
	Mawiong village		1.00										1.00
	Umsukun village		1.00										1.00
	Pahamrioh lum village		1.00										1.00
	Mawryngkang		1.50										1.50
	Umsekhklieng		1.50										1.50
<b>Total of a.</b>		<b>4.0%</b>	<b>6.00</b>									<b>4.0%</b>	<b>6.00</b>

Sl. No.	Activities	First year 2009-10		Second year 2010-11		Third year 2011-12		Fourth year 2012-13		Fifth year 2013-14		Total	
		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>b</b>	<b>Institutional, capacity Building, Training and IEC Activities</b>												
i	Awareness campaign on IWMP Project, Health and sanitations, Training for preparation of MPR, QPR, online Reporting, printing of Booklets, cover guidelines etc.			5 nos. 0.67%	1.00							5 nos. 0.67%	1.0
ii	State level workshop			2 nos. 0.23%	0.35							2 nos. 0.23%	0.35
iii	Capacity Building for WDT, WC,WV and field functionaries	2 nos. 0.20%	0.30	2 nos. 0.20%	0.30							4 nos. 0.40%	0.6
iv	Capacity Building for SHGs, UGs	2 nos. 0.20%	0.30	5 nos. 0.90%	1.35	3 nos. 0.30%	0.45	1 no. 0.10%	0.15			11 nos. 1.50%	2.25
v	Field visit cum Exposure trips of WC, SHGs, UGs, WDT	4 nos. 0.40%	0.60			6 nos. 0.60%	0.90	2 nos. 0.20%	0.30			12 nos. 1.20%	1.8
vi	Vocational training of SHGs for different livelihood Activities and Micro-enterprises	2 nos. 0.20%	0.30			12 nos. 0.60%	0.90	4 nos. 0.20%	0.30			18 nos. 1.00%	1.5
<b>Total of b</b>		<b>10 nos. 1.00%</b>	<b>1.50</b>	<b>14 nos. 2.00%</b>	<b>3.0</b>	<b>21 nos. 1.50%</b>	<b>2.25</b>	<b>7 nos. 0.50%</b>	<b>0.75</b>			<b>52 nos. 5.00%</b>	<b>7.50</b>
<b>c</b>	<b>Preparation of Detailed Project Report (DPR)</b>												
	Survey projectisation, PRA Exercises etc.	1.0%	1.50									1.0%	1.50
<b>Total of c</b>		<b>1.0%</b>	<b>1.50</b>									<b>1.0%</b>	<b>1.50</b>
<b>Total of Preparatory Phase</b>		<b>10 nos. 6.0%</b>	<b>9.0</b>	<b>14 nos. 2.00%</b>	<b>3.0</b>	<b>21 nos. 1.50%</b>	<b>2.25</b>	<b>7 nos. 0.50%</b>	<b>0.75</b>			<b>52 nos. 10.00%</b>	<b>15.0</b>
<b>3</b>	<b>WATERSHED WORK PHASE</b>												
<b>I</b>	<b>A. Watershed Development Work</b>												
<b>i</b>	<b>Land Development</b>												
	Box terracing 40 Ha. @ Rs. 7500/- per Ha.												
	Mawiong village 10.0 Ha. @ Rs. 7500/- per Ha.			5 ha.	0.375			5 ha.	0.375			10 ha.	0.75
	Umsukun village 6.00 Ha. @ Rs. 7500/- per Ha.			3 ha.	0.225			3 ha.	0.225			6 ha.	0.45
	Pahamrioh Lum village 4.00 Ha. @ Rs. 7500/- per Ha.			2 ha.	0.15			2 ha.	0.15			4 ha.	0.3
	Mawryngkang village – 13 ha. @ Rs. 7500/- per Ha.			7 ha.	0.525			6 ha.	0.45			13 ha.	0.975
	Umsekhlieng village – 7 ha. @ Rs. 7500/- per Ha.			3 ha.	0.225			4 ha.	0.30			7 ha.	0.525
<b>ii</b>	<b>Improvement of Existing Paddy field 96.0 ha. @ Rs. 4300/- per ha.</b>												
	Mawiong village – 12.00 ha.					12 ha.	0.516					16 ha.	0.516
	Umsukun village – 20.00 ha.					20 ha.	0.86					20 ha.	0.86
	Pahamrioh lum village – 8.00 ha.					8 ha.	0.344					8 ha.	0.344
	Mawryngkang village – 42 ha.					42 ha.	1.86					42 ha.	1.806
	Umsekhlieng village – 14 ha.					14 ha.	0.602					14 ha.	0.602

[illegible]







Sl. No.	Activities	First year 2009-10		Second year 2010-11		Third year 2011-12		Fourth year 2012-13		Fifth year 2013-14		Total	
		Phy	Fin	Phy	6	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5		7	8	9	10	11	12	13	14
B	LIVELIHOOD ACTIVITIES												
a	Tailoring @ 10,000/- per unit												
	Mawiong village – 3 units					3 units	0.3					3 units	0.3
	Umsukun village – 2 units.					1 unit	0.1	1 unit	0.1			2 units	0.2
	Pahamrioh lum village – 2 units.					1 unit	0.1	1 unit	0.1			2 units	0.2
	Mawryngkang village – 15 units					5 units	0.50	10 units	1.0			15 units	1.5
	Umsekhlieng village – 9 units					3 units	0.3	6 units	0.6			9 units	0.9
b	Carpentry @ 5000/- per unit												
	Mawiong village – 2 units					1 unit	0.05	1 unit	0.05			2 units	0.1
	Umsukun village – 2 units					1 unit	0.05	1 unit	0.05			2 units	0.1
	Pahamrioh lum village – 2 units					1 unit	0.05	1 unit	0.05			2 units	0.1
	Mawryngkang village – 12 units					3 units	0.15	9 units	0.45			12 units	0.60
	Umsekhlieng village – 7 units					3 units	0.15	4 units	0.20			7 units	0.35
c	Kitchen Garden/growing of Rabi crops @ 2500/- per unit												
	Mawiong village – 46 units/20 ha. @ Rs. 2500/- per unit.					20 units/ 10 ha.	0.50	26 units/ 10 ha.	0.65			46 units/ 20 ha.	1.15
	Umsukun village – 39 units/17 ha. @ Rs. 2500/- per unit.					20 units/ 7 ha.	0.50	19 units/10 ha.	0.475			39 units/ 17 ha.	0.975
	Pahamrioh lum village – 45 units/15 ha. @ Rs. 2500/- per unit.					20 units/ 6 ha.	0.50	25 units/9 ha.	0.625			45 units/ 15 ha.	1.125
	Mawryngkang village – 51 units/26 ha. @ Rs. 2500/- per unit.					15units/ 10 ha.	0.375	36 units/16 ha.	0.90			51 units/ 26 ha.	1.275
	Umsekhlieng village – 32 units/17 ha. @ Rs. 2500/- per unit.					10 units/ 9 ha.	0.25	22 units/8 ha.	0.55			32 units/ 17 ha.	0.80

[illegible]

Sl. No.	Activities	First year 2009-10		Second year 2010-11		Third year 2011-12		Fourth year 2012-13		Fifth year 2013-14		Total	
		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14
e	<b>Fishery @ Rs. 25,000/- per unit</b>												
	Umsukun village – 3 units @ Rs. 25,000/- per unit			1 unit	0.5	1 unit	0.25	1 unit	0.25			3 units	0.75
	Mawryngkang village – 7 units @ Rs. 25,000/- per unit			2 units	0.5	2 units	0.5	3 units	0.75			7 units	1.75
	Umsekhlieng village – 8 units @ Rs. 25,000/- per unit			2 units		2 units	0.5	4 units	1.0			8 units	2.0
F	<b>Poultry @ Rs. 25,000/- per unit</b>												
	Pahamrioh Lum village – 2 units @ Rs. 25,000/- per unit							2 units	0.5			2 units	0.5
	Mawryngkang village – 2 units @ Rs. 25,000/- per unit							2 units	0.5			2 units	0.5
	Umsekhlieng village – 2 units @ Rs. 25,000/- per unit				17 units			2 units	0.5			2 units	0.5
<b>Total of 3 (C)</b>				6 units	1.5	663.3 ha.	7.5	30 units	10.5			53 units	19.5
<b>Total of Watershed work phase</b>		5 units	6.0	93.7 ha.	14.25		64.50	243 ha.	30.75			1000	115.5
4	<b>CONSOLIDATION AND WITHDRAWAL PHASE</b>												
a	Preparation of project completion Report with details the status of each intervention									1.33%	2.0	1.33%	2.0
b	Documentation of Success Stories									1.33%	2.0	1.33%	2.0
c	Repair, maintenance and protection of CPRs									2.01%	3.0	2.01%	3.0
d	Capacity Building for WC, SHGs, UGs for post project management									0.33%	0.5	0.33%	0.5
<b>Total of consolidation and withdrawal phase</b>										5%	7.5	5%	7.5
					6.0%								
<b>Total Administration</b>				2.50%	3.75	1.50%	8.25	3.5%	6.0			12.00%	18.0
<b>Total Preparatory phase</b>		6.0%	9.0	2.0%	3.0	663.3 ha.	2.25	0.50%	0.75			10.00%	15.0
<b>Total of Watershed work phase</b>				93.7 ha.	14.25		64.50	248 ha.	30.75			1005	109.5
<b>Total of consolidation and withdrawal phase</b>						663.3 ha				5%	7.5	5%	7.5
<b>Grand Total</b>		6.0%	9.0	93.7 ha.		663.3 ha	75.00	243 ha.	37.50	5%	7.5	1000 ha.	150

### DETAILS OF THE TYPES OF AREAS COVERED UNDER THE IWMP PROGRAMME:

[illegible]

**FUND PROVISION FOR THE IWMP PROJECTS FROM ALL SOURCES:**

[illegible]

### DETAILS OF PROJECT FUND ACCOUNTS OF DISTT. AGENCY AND WATERSHED COMMITTEES:

[illegible]

**DETAILS OF CONVERGENCE OF IWMP WITH OTHER SCHEMES:**

1	2	3	4	5	6	7
District	Names of projects	Names of Departments with Schemes converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakh)	Name of activity/task/structure undertaken with converged funds	Reference no. of activity/ task/ structure in DPR <sup>@</sup>	Level at which decision for convergence was taken <sup>\$</sup>
				(a) Structures (b) livelihoods (c ) Any other (pl. specify) <sup>#</sup>		

**PUBLIC-PRIVATE PARTNERSHIP IN THE IWMP PROJECTS:**

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

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

MAP SHOWING AGRO-CLIMATIC ZONES OF THE COUNTRY, SOIL TYPES, AVERAGE RAINFALL, TEMPERATURE, HUMIDITY AND PROJECT LOCATION.

DETAILS OF FLOOD AND DROUGHT IN THE PROJECT AREAS OF THE COUNTRY DURING LAST 5 YEARS:

1	2	3	4	5	6	7		8
Sl. No .	Names of States	Names of Districts	Names of Projects	Particulars	Villages	Periodicity		Not affected
						Annual	Any other (please specify)	
1	Meghalaya	Ri-Bhoi District	Ri-Bhoi IWMP - III	Flood	No. of villages	Nil	Nil	Nil
					Name (s) of villages	Nil	Nil	Nil
				Drought	No. of villages	Nil	Nil	Nil
					Name (s) of village	Nil	Nil	Nil

## **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.

**List of approved Training Institutes<sup>@</sup> for Capacity Building:**

1	2	3	4	5	6	7	8	9				
Sl. No.	State	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designation of the Head of Institute	Type of Institute <sup>#</sup>	Area(s) of speciali- zation <sup>\$</sup>	Accredita- tion details	Performance				
								Reference Year	No. of trainings assigned	No. of trainees to be trained	No. of trainings conducted	No. of trainees trained
1	Meghalaya	NIRD (NER)	Guwahati	Director	Central Govt.	Rural Developme nt Remote Sensing	NA					
2	Meghalaya	SIRD	Nongsder	Director	State Govt.	Capacity Building	NA					
3	Meghalaya	RRTC	Umran	Director	Don Bosco	Agri-Horti, Animal Husbandry Entreprene urship	NA					
4	Meghalaya	ICAR	Barapani	Director	Central Govt.	- do -	NA					
5	Meghalaya	VTC	Kyrdemkulai	Director	State Govt.	Animal husbandry	NA					
6	Meghalaya	Fruit Garden	Shillong	Director	State Govt.	Fruit processing	NA					

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

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

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

<sup>@</sup> 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

CAPACITY BUILDING ACTIVITIES FOR THE YEAR 2009-2010 AS ON 31<sup>ST</sup> MARCH 2010 (DD/MM/YYYY)\*

1	2	3	4	5	6		7	
Project Stakeholders	Total no. of persons	No. of persons trained so far	No. of persons to be trained during current financial year	No. of persons trained during current financial year	Sources of funding for training		Funds utilised	
					a) DoLR	b)Any other (pl. specify)	a) DoLR	b)Any other (pl. specify)
SLNA			20 nos.		1.50 lakhs		1.50 lakhs	
DRDA/ZP cell								
PIAs			25 nos.					
WDTs			10 nos.					
UGs			50 nos.					
SHGs			100 nos.					
WCs			15 nos.					
GPs			10 nos.					
Community			213 nos.					
Others (Pl. specify)								

INFORMATION, EDUCATION & COMMUNICATION (IEC) ACTIVITIES FOR THE YEAR ..... AS ON ..... (DD/MM/YYYY)\*

1	2	3	4	5
Activity	Executing agency	Estimated expenditure (Rs.)	Expenditure incurred (Rs.)	Outcome (may quantify, wherever possible)
Awareness	S&WC Ri-Bhoi District	60,000	60,000	
PRA Exercise	- do -	40,000	40,000	
Capacity Building		50,000	50,000	
Total		1,50,000	1,50,000	

**CHAPTER VII**  
**EXPECTED OUTCOME**

CHAPTER VII  
EXPECTED OUTCOME

Employment related outcomes:

Employment generation:

Sl. No.	Name of village	1										2				
		Wage employment										Self employment				
		No. of mandays					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1	Umsiekhklieng		100%	11100	11300	22400		100%	28	4	32		100%	8	7	15
2	Mawryngkang		100%	11537	15864	27401		100%	40	11	51		100%	8	6	14
	Total			22637	27164	49801			68	15	83			16	13	29

DETAILS OF SEASONAL MIGRATION FROM PROJECT AREA:

1	2	3	4	5	6	7	8	
Names of the Districts	Names of Projects	Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)

\* 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 from column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

DETAILS OF SEASONAL MIGRATION FROM PROJECT AREAS:

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

\* 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 from column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

Operational flexibility in norms to suit varying local conditions.

ECONOMIC BENEFITS ACCRUED TO WOMEN:

1		2		3		4
Wages		Training		Livelihoods		Total (Rs. in lakh)
Woman days	Amount (Rs. in lakh)	No. of women participants	Amount (Rs. in lakh)	No. of women beneficiaries	Value of assistance provided (Rs. in lakh)	
38500	38.50	300	0.70	47 nos.	25.84	26.55

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

**DETAILS OF RIGHTS CONFERRED IN THE CPRs OF THE PROJECT AREAS:**

1	2	3	4	5	6	7				8
Names of the Districts	Names of the projects	Names of the villages	Particular of CPR	Nature of right	Period of right	Beneficiary details (no. of families)				User Charges (Rs.)
						SC	ST	Others	Total	
		Umsiekhlieng	Community forest	FW			32		32	Nil
		Mawryngkang	- do -	FW			51		51	Nil
Total							83		83	

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

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

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

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

WATER RELATED OUTCOMES:

Details of average ground water table depth in the project areas of the Country: State-wise \* (in meters)

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

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

STATUS OF DRINKING WATER:

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

\* from column no. 2, total no. 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.

**WATER USE EFFICIENCY:**

1	2	3	4			
District	Name of the project	Name of major crop	Water savings in cu.m.			
			through water saving devices <sup>\$</sup>	through water conserving agronomic practices <sup>#</sup>	Any other (pl. specify)	Total

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

<sup>\$</sup> Sprinkler, Drip, PVC pipe, etc.

<sup>#</sup> Vermi-compost, organic manuring, Mulching, Check basin, Alternate furrow, Ridges & furrow & other scientific practices

**VEGETATION/ CROP RELATED OUTCOMES:**

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

1	2	3	4						5						6					
Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
			Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)	
			Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
Ri-Bhoi District	Ri-Bhoi IWMP – III	Paddy		96		12		1152	10	96	20	15	300	1440	96		25		2400	
		Ginger		35		50		1750	5	30	78	60	390	1800	35		78		2730	
		Turmeric		20		60		1200	5	15	75	60	375	900	20		89		1780	
		Yam		20		40		800	5	15	50	45	250	675	20		60		1200	
		Chilli		6		9		54		6		13		78	6		15		80	

\* 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. – IrrigatedRf. - Rainfed

**DETAILS OF RABI CROP AREA AND YIELD IN THE PROJECT AREAS:**

1	2	3	4	5	6						7						8					
Sl. No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
					Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)	
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
1	Meghalaya	Ri-Bhoi District	Ri-Bhoi IWMP - III	Potato							10		60		600		40		80		3260	
				Tomato							5		30		150		27		40		1080	
			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

**DETAILS OF ZAIID CROP AREA AND YIELD IN THE PROJECT AREAS OF THE COUNTRY: STATE-WISE:**

1	2	3	4	5	6						7						8					
Sl. No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
					Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)		Area (ha)		Average Yield per ha (qtl)		Total production (qtl)	
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
			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

INCREASE/ DECREASE IN AREA UNDER HORTICULTURE/CASH CROP:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under horticulture (ha)			Achievement (ha)		
			Source/ Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Area under horticulture actually covered through IWMP	Change in area under horticulture
Ri-Bhoi District	Ri-Bhoi IWMP - III	5 years	NA	NA	NA	212 ha.	212 ha.	212 ha.

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

INCREASE/ DECREASE IN AREA UNDER FUEL-WOOD:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under fuel-wood (ha)			Achievement (ha)		
			Source/ Name of report	Year of reference	Area already under fuel-wood	Area under fuel-wood proposed to be covered through IWMP	Area under fuel-wood actually covered through IWMP	Change in area under fuel-wood
Ri-Bhoi District	Ri-Bhoi IWMP - III	5 years	NA	NA	NA	140 ha.	140 ha.	140 ha.

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

**INCREASE/ DECREASE IN AREA UNDER FODDER:**

3	4	5	6			7		
District	Name of project	Duration of Project	Existing area under fodder (ha)			Achievement (ha)		
			Source/ Name of report	Year of reference	Area already under fodder	Area under fodder proposed to be covered through IWMP	Area under fodder actually covered through IWMP	Change in area under fodder
Ri-Bhoi District	Ri-Bhoi IWMP - III	5 years	NA	NA	NA	Nil	Nil	Nil

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

**INCREASE/ DECREASE IN FOREST/VEGETATIVE COVER:**

1	2	3	4			5		
District	Name of project	Duration of Project	Existing tree cover (ha)			Achievement (ha)		
			Source/ Name of report	Year of reference	Area already under forest/vegetative cover	forest/vegetative cover area proposed to be covered under IWMP	forest/vegetative cover area actually covered under IWMP	Change in forest/vegetative cover area
Ri-Bhoi District	Ri-Bhoi IWMP - III	5 years	NA	NA	NA	128 ha.	128 ha.	128 ha.

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

**LIVELIHOOD RELATED OUTCOMES:**

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

1	2	3	4			5			6			7
Names of the Districts	Names of Projects	Type of Animal	Pre-Project			Mid-term			Post-project			Remarks
			No.	Yield (Kg/Ltr)	Income	No.	Yield	Income	No.	Yield (Kg/ltr)	Income	
Ri-Bhoi District	Ri-Bhoi IWMP - III	Milch-animals				2			2 nos.	10.8 ltr.	1,94,400	
		Piggery	50 nos.	600 kg.	96,000	130 nos.	1500 kg	2,40,000	200 nos.	2300 kg	3,68,000	
		Poultry	1440 nos.	800 kg.	1,20,000	2000 nos.	1100 kg	1,65,000	2500 nos.	1400 kg	2,10,000	
		Fishery				44,000 nos.			44,000 nos.	17,000 kg	8,50,000	
	Total for all projects		1490 nos.	1400 kg	2,16,000	46130 nos.	2600 kg	4,05,000	46,702 nos.	20,700 kg/10.8 ltr	16,22,400	
Total for all Districts												

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

**DETAILS OF OTHER LIVELIHOODS CREATED FOR LANDLESS PEOPLE:**

1	2	3	4	5				6	7					8				
District	Project	Name of activity	Funds required for the activity (Rs.)	Sources of funding (Rs.)				Actual Expenditure incurred on activity (Rs.)	No. of beneficiaries trained					No. of beneficiaries taking up activity				
				Project Fund	Benefi-ciary	Others (pl. specify)	Total		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total

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

**DETAILS OF OTHER LIVELIHOODS CREATED FOR LANDLESS PEOPLE:**

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

**DETAILS OF OTHER LIVELIHOODS CREATED FOR FARMERS:**

1	2	3	4	5				6	7				8			
District	Project	Name of activity	Funds required for the activity (Rs.)	Sources of funding (Rs.)				Actual Expenditure incurred on activity (Rs.)	No. of farmers trained				No. of farmers taking up activity			
				Project Fund	Beneficiary	Others (please specify)	Total		SF	MF	LF	Total	SF	MF	LF	Total
Ri-Bhoi District	Ri-Bhoi IWMP – III	Kitchen gardening	5.855	5.325	0.53		5.855	5.855					198	15		213
		Tailoring	3.41	3.10	0.31		3.41	3.41					31			31
		Agriculture implement	5.325	5.325			5.325	5.325					198	15		213
		Carpentry	1.56	1.25	0.31		1.56	1.56					25			25

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

**DETAILS OF OTHER LIVELIHOODS CREATED FOR FARMERS\* (CONTD.)**

9		10	11				12
No. of persons employed indirectly in the activity		Annual increase in income due to activity (Rs.)	Impact of livelihoods programme				Any other information (Pl. Specify)
			Migration (No. of beneficiaries)		Development of backward-forward linkages		
Total	Grand total (8+9)		Pre-project	Post-project	Pre-project	Post-project	
7	220	18,000					
	31	30,000					
	213	40,000					
10	35	50,000					

**MARKETING RELATED OUTCOMES:**

**Backward-Forward linkages \***

1	2	3	4	5	6
District	Project	Type of Marketing Facility	Pre-project (no.)	During the project (no.)	Post-project (no.)
Ri-Bhoi District	Ri-Bhoi IWMP - III	(A) Backward linkages			
		(i) Seed certification			
		(ii) Seed supply system			
		(iii) Fertilizer supply system			
		(iv) Pesticide supply system			
		(v) Credit institutions		3 nos.	4 nos.
		(vi) Water supply			5 nos.
		(vii) Extension services		3 nos.	7 nos.
		(viii) Nurseries			
		(ix) Tools/machinery suppliers			
		(x) Price Support system			
		(xi) Labour			
		(xii) Any other (please specify)			
		(B) Forward linkages			
		(i) Harvesting/threshing machinery			
		(ii) Storage (including cold storage)			
		(iii) Road network			
		(iv) Transport facilities			
		(v) Markets / Mandis		2 nos.	2 nos.
		(vi) Agro and other Industries			
		(vii) Milk and other collection centres			
		(viii) Labour			
		(ix) Any other (please specify)			

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

**ABSTRACT OF OUTCOMES:**

1	2	3	4	5	6	7
S. No.	State	Item	Unit	Pre-project Status	Post-project Status	Remarks
		Status of water table		Poor	Good	
		Ground water structures repaired/ rejuvenated				
		Quality of drinking water		Moderate portable	Improved	
		Availability of drinking water		Insufficient	Sufficient	
		Increase in irrigation potential		Nil	244 ha.	
		Change in cropping/ land use pattern				
		Area under agricultural crop				
		i Area under single crop		96 ha.		
		ii Area under double crop		Nil	67 ha.	
		iii Area under multiple crop		81 ha.	140 ha.	
		Net increase in crop production area		177 ha.	244 ha.	
		Increase in area under vegetation		88 ha.	128 ha.	
		Increase in area under horticulture/Cash crop		20 ha.	212 ha.	
		Increase in area under fuel & fodder		40 ha.	140 ha.	
		Increase in milk production				
		No. of SHGs		4 nos.	26 nos.	
		Increase in no. of livelihoods			9 nos.	
		Increase in income			Rs. 35,000/-	
		Migration		Nil	Nil	
		No. of school going children		433 nos.	578 nos.	
		SHG Federations formed		Nil	Nil	
		Credit linkage with banks		2 nos.	4 nos.	
		Resource use agreements			5 nos.	
		WDF collection & management			2 nos.	
		Summary of lessons learnt	May be attached as a separate file			

**COST EFFECTIVENESS OF STRUCTURES/ ACTIVITIES\***

1	2	3	4	5	6	7	8	9	10
District	Name of project	Name of WC	Name of structure/ activity	Estimated cost (Rs.)	Expected quantifiable benefits (Rs.)	Expenditure incurred (Rs.)	Actual quantifiable benefit (Rs.)	Benefit: Cost ratio#	IRR
Ri-Bhoi District	Ri-Bhoi IWMP – III	1. Umsukun WC 2. Umlanglut WC	As per treatment Plan	115.50 lakhs	173.25 lakhs	115.50 lakhs	174.41 lakhs	1:1.51	

\* 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

**BENEFIT ACCRUED FROM GINGER CULTIVATION UNDER PRDUCTION SYSTEM PER UNIT**

<b>Year</b>	<b>Project cost</b>	<b>Cultivation cost per Ha.</b>	<b>Area in Ha.</b>	<b>Total cultivation cost</b>	<b>Yield per Ha. in Qtl.</b>	<b>Total yield in Qtl.</b>	<b>Rate of produce per Qtl.</b>	<b>Benefits (Rs. in lakhs)</b>
1 <sup>st</sup> year	50,000	-	-		-	-	-	-
2 <sup>nd</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
3 <sup>rd</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
4 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
5 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
6 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
7 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
8 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
9 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
10 <sup>th</sup> year	-	97,480	1.00	97,480	78	78	2000	1,56,000
<b>Total</b>				<b>8,77,320</b>				<b>14,04,000</b>

COST BENEFIT RATIO

Year	Project cost	Total cultivation cost	Total benefits	Discount factor	Discounted cost	Discounted Benefits
1 <sup>st</sup> year	50,000	-	-	0.870	43,500	-
2 <sup>nd</sup> year	-	97,480	1,56,000	0.756	73,695	1,17,936
3 <sup>rd</sup> year	-	97,480	1,56,000	0.658	64,142	1,02,648
4 <sup>th</sup> year	-	97,480	1,56,000	0.572	55,759	89,232
5 <sup>th</sup> year	-	97,480	1,56,000	0.497	48,448	77,532
6 <sup>th</sup> year	-	97,480	1,56,000	0.432	42,111	67,392
7 <sup>th</sup> year	-	97,480	1,56,000	0.376	36,652	58,656
8 <sup>th</sup> year	-	97,480	1,56,000	0.327	31,876	51,012
9 <sup>th</sup> year	-	97,480	1,56,000	0.284	27,684	44,304
10 <sup>th</sup> year	-	97,480	1,56,000	0.247	24,078	38,532
Total					4,47,945	6,47,244

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Cost Benefit Ratio =  $\frac{\text{Benefits}}{\text{Costs}}$  = Rs.  $\frac{6,47,244}{4,47,945}$  = 1:1.44

**BENEFIT ACCRUED FROM PIGGERY FARMING UNDER PRODUCTION SYSTEM PER UNIT**

<b>Year</b>	<b>No. of piglets tobe provided</b>	<b>Cost of 1 no. piglets</b>	<b>Total cost of piglets</b>	<b>Cost of construction of pigsty (material)</b>	<b>Cost of feed, medicine etc.</b>	<b>Labour cost</b>	<b>Total expenditure</b>	<b>Selling price of piglets</b>	<b>Selling price of adult pig</b>	<b>Total selling price</b>
1 <sup>st</sup> year	8 nos.	1500	12,000	10,000	15,000	12,000	49,000	-	-	-
2 <sup>nd</sup> year	-	-	-	-	15,000	6000	21,000	20,000	16,000	36,000
3 <sup>rd</sup> year	-	-	-	-	15,000	6000	21,000	30,000	20,000	50,000
4 <sup>th</sup> year	-	-	-	-	15,000	6000	21,000	32,000	25,000	57,000
5 <sup>th</sup> year	-	-	-	-	15,000	6000	21,000	36,000	30,000	66,000
<b>Total</b>							<b>1,33,000</b>			<b>2,09,000</b>

Cost Benefit Ratio =  $\frac{\text{Total Selling price}}{\text{Total Expenditure}}$  = Rs.  $\frac{2,09,000}{1,33,000}$  = 1:1.57

### BENEFIT ACCRUED FROM PISCICULTURE PER UNIT UNDER PRODUCTION SYSTEM

Year	No. of fingerlings to be provided	Cost of fingerlings	Cost of construction of pond	Cost of feed, medicine etc.	Labour cost	Total expenditure	Quantity of fish harvested in Kg.	Selling price per Kg.	Total selling price
1 <sup>st</sup> year	3000 nos.	3000	16,000	6000	9000	34,000	-	-	-
2 <sup>nd</sup> year	-	-	-	7500	10,000	17,500	-	-	-
3 <sup>rd</sup> year	5000 nos.	5000	-	7500	10,000	22,500	1500	50	75,000
4 <sup>th</sup> year	-	-	-	7500	10,000	17,500	800	50	40,000
5 <sup>th</sup> year	-	-	-	7500	10,000	17,500	1300	50	65,000
<b>Total</b>						<b>1,09,000</b>			<b>1,80,000</b>

$$\text{Cost Benefit Ratio} = \frac{\text{Total Selling price}}{\text{Total Expenditure}} = \text{Rs. } \frac{1,80,000}{1,09,000} = 1:1.65$$

**BENEFIT ACCRUED FROM REARING OF MILCH COWS UNDER PRODUCTION SYSTEM PER UNIT**

Year	No. of milch cows to be provided	Cost price of 2 nos. milch cow	Cost of construction of shed (material)	Cost of feed, medicine etc. annually	Labour cost annually	Total expenditure	Yield of milk annually in M.T.	Selling price of milk per M.T.	Total selling price of milk
1 <sup>st</sup> year	2 nos.	50,000	20,000	36,000	18,000	1,24,000	-	-	-
2 <sup>nd</sup> year	-	-	-	36,000	13,000	49,000	-	-	-
3 <sup>rd</sup> year	-	-	-	36,000	13,000	49,000	7.2	18,000	1,29,600
4 <sup>th</sup> year	-	-	-	36,000	13,000	49,000	10.8	18,000	1,94,400
5 <sup>th</sup> year	-	-	-	36,000	13,000	49,000	10.8	18,000	1,94,400
Total						3,20,000			5,18,400

Cost Benefit Ratio =  $\frac{\text{Total Selling price}}{\text{Total Expenditure}}$  = Rs.  $\frac{5,18,400}{3,20,000}$  = 1:1.62

**COST BENEFIT RATIO FROM DIFFERENT CROPS**

Year	Project cost i. Improvement of existing Paddy field Rs. 4.13 ii. Crop Demonstration Rs. 1.50 iii. Drainage line Treatment Rs. 32.17 (Rs. in lakhs)	Total cultivation cost (Rs. in lakhs)	Total Benefits (Rs. in lakhs)	Discount factor (15%)	Discounted cost (Rs. in lakhs)	Discounted Benefits (Rs. in lakhs)
1 <sup>st</sup> year	37.80	-	-	0.870	32.89	-
2 <sup>nd</sup> year	-	110.23	160.91	0.756	83.33	121.65
3 <sup>rd</sup> year	-	110.23	160.91	0.658	72.53	105.88
4 <sup>th</sup> year	-	110.23	160.91	0.572	63.05	92.04
5 <sup>th</sup> year	-	110.23	160.91	0.497	54.78	79.97
6 <sup>th</sup> year	-	110.23	160.91	0.432	47.62	69.51
7 <sup>th</sup> year	-	110.23	160.91	0.376	41.45	60.50
8 <sup>th</sup> year	-	110.23	160.91	0.327	36.05	52.62
9 <sup>th</sup> year	-	110.23	160.91	0.284	31.31	45.70
10 <sup>th</sup> year	-	110.23	160.91	0.247	27.23	39.74
Total					490.24	667.61

Cost Benefit Ratio =  $\frac{\text{Benefits}}{\text{Costs}}$  = Rs.  $\frac{667.61}{490.24}$  = 1:1.36

STATEMENT SHOWING THE TOTLA CULTIVATION COSTS AND RETURNS OF DIFFERENT CROPS (COST TOBE BORNED BY THE FARMERS)

Season	Crop	Cultivation cost per Ha.	Total Area in Ha.	Total cultivation cost in Ha. (Rs. in lakhs)	Yield per Ha. in Qtl.	Total yield per Ha. in Qtl.	Rate of product per Qtl. (Rs. in lakhs)	Returns (Rs. in lakhs)
K	Paddy	31843	96	30.57	25	2400	1200	28.80
K	Ginger	97480	35	34.12	78	2738	2000	54.76
K	Turmeric	75821	20	15.16	89	1780	1500	26.70
K	Yam	30500	20	6.10	60	1200	1000	12.00
K	Chilies	55540	6	3.33	15	90	2500	2.25
R	Potato	34290	40	13.72	80	3200	800	25.60
R	Tomato	26790	27	7.23	40	1080	1000	10.80
Total				110.23				160.91

**COST BENEFIT RATIO FROM BANANA AND BETEL LEAF**

<b>Year</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Total Benefits (Rs. in lakhs)</b>	<b>Discount Factor (15%)</b>	<b>Discounted cost (Rs. in lakhs)</b>	<b>Discounted Benefits (Rs. in lakhs)</b>
Preliminary work to 2 <sup>nd</sup> year maintenance	7.96	-	0.870	6.93	-
3 <sup>rd</sup> year	2.37	-	0.756	1.79	-
4 <sup>th</sup> year	3.03	4.08	0.658	1.99	2.68
5 <sup>th</sup> year	3.54	7.44	0.572	2.02	4.26
6 <sup>th</sup> year	4.02	10.80	0.497	2.00	5.37
7 <sup>th</sup> year	4.02	13.74	0.432	1.74	5.94
8 <sup>th</sup> year	4.02	13.74	0.376	1.51	5.17
9 <sup>th</sup> year	4.02	15.48	0.327	1.31	5.06
10 <sup>th</sup> year	4.02	15.48	0.284	1.14	4.40
<b>Total</b>				<b>20.43</b>	<b>32.88</b>

Cost Benefit Ratio =  $\frac{\text{Benefits}}{\text{Costs}}$  = Rs.  $\frac{32.88}{20.43}$  = 1:1.61

**STATEMENT SHOWING THE TOTAL CULTIVATION COSTS AND BENEFITS FROM BANANA (FROM PRELIMINARY WORK TO 2<sup>ND</sup> YEAR  
MAINTENACE FROM THE PROJECT FUND AND 3<sup>RD</sup> YEAR UPTO 10<sup>TH</sup> YEAR MAINTENANCE TO BE BORNED BY THE BENEFICIAIRES)**

<b>Year</b>	<b>Cultivation cost per Ha. (Rs.)</b>	<b>Total area in Ha.</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Yield per Ha. in Bundle</b>	<b>Total yield in Bundle</b>	<b>Rate of produce in Bundle</b>	<b>Benefits</b>
Preliminary work to 2 <sup>nd</sup> year maintenance	7400	30.00	2.22	-	-	-	-
3 <sup>rd</sup> year	2300	30.00	0.69	-	-	-	-
4 <sup>th</sup> year	3300	30.00	0.99	200	6000	20	1.20
5 <sup>th</sup> year	3800	30.00	1.14	400	12000	20	2.40
6 <sup>th</sup> year	4200	30.00	1.26	600	18000	20	3.60
7 <sup>th</sup> year	4200	30.00	1.26	850	25500	20	5.10
8 <sup>th</sup> year	4200	30.00	1.26	850	25500	20	5.10
9 <sup>th</sup> year	4200	30.00	1.26	900	27000	20	5.40
10 <sup>th</sup> year	4200	30.00	1.26	900	27000	20	5.40
<b>Total</b>			<b>11.34</b>				<b>28.20</b>

**STATEMENT SHOWING THE TOTAL CULTIVATION COSTS AND BENEFITS FROM BETEL LEAF (FROM PRELIMINARY WORK TO 2<sup>ND</sup> YEAR  
MAINTENACE FROM THE PROJECT FUND AND 3<sup>RD</sup> YEAR UPTO 10<sup>TH</sup> YEAR MAINTENANCE TO BE BORNED BY THE FARMERS)**

<b>Year</b>	<b>Cultivation cost per Ha. (Rs.)</b>	<b>Total area in Ha.</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Yield per Ha. in Bundle</b>	<b>Total yield in Bundle</b>	<b>Rate of produce in Bundle</b>	<b>Benefits</b>
Preliminary work to 2 <sup>nd</sup> year maintenance	7970	72.00	5.74	-	-	-	-
3 <sup>rd</sup> year	2337	72.00	1.68	-	-	-	-
4 <sup>th</sup> year	2837	72.00	2.04	400	28800	10	2.88
5 <sup>th</sup> year	3337	72.00	2.40	700	50400	10	5.04
6 <sup>th</sup> year	3837	72.00	2.76	1000	72000	10	7.20
7 <sup>th</sup> year	3837	72.00	2.76	1200	86400	10	8.64
8 <sup>th</sup> year	3837	72.00	2.76	1200	86400	10	8.64
9 <sup>th</sup> year	3837	72.00	2.76	1400	100800	10	10.08
10 <sup>th</sup> year	3837	72.00	2.76	1400	100800	10	10.08
<b>Total</b>			<b>25.66</b>				<b>52.56</b>

**COST BENEFIT RATIO FROM ARECANUT AND ORANGE**

<b>Year</b>	<b>Project cost construction of Box Terrace</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Total Benefits (Rs. in lakhs)</b>	<b>Discount factor (15%)</b>	<b>Discounted cost (Rs. in lakhs)</b>	<b>Discounted Benefits (Rs. in lakhs)</b>
1 <sup>st</sup> – 2 <sup>nd</sup> year	3	11.90	-	0.870	12.96	-
3 <sup>rd</sup> – 8 <sup>th</sup> year	-	17.19	-	0.756	13.00	-
9 <sup>th</sup> year	-	3.72	7.60	0.658	2.45	5.00
10 <sup>th</sup> year	-	4.27	15.04	0.572	2.44	8.60
11 <sup>th</sup> year	-	4.82	20.64	0.497	2.40	10.26
12 <sup>th</sup> year	-	5.07	26.80	0.432	2.19	11.58
13 <sup>th</sup> year	-	5.07	30.96	0.376	1.91	11.64
14 <sup>th</sup> year	-	5.07	32.40	0.327	1.66	10.59
15 <sup>th</sup> year	-	5.07	32.40	0.284	1.44	9.20
<b>Total</b>					<b>40.45</b>	<b>66.87</b>

Cost Benefit Ratio =  $\frac{\text{Benefits}}{\text{Costs}}$  = Rs.  $\frac{66.87}{40.45}$  = 1: 1.65

**STATEMENT SHOWING THE TOTAL CULTIVATION COSTS AND BENEFITS FROM ARECANUT (FROM PRELIMINARY WORK TO 2<sup>ND</sup> YEAR  
MAINTENACE FROM THE PROJECT FUND AND 3<sup>RD</sup> YEAR UPTO 15<sup>TH</sup> YEAR MAINTENANCE TO BE BORNED BY THE FARMERS)**

<b>Year</b>	<b>Cultivation cost per Ha. (Rs.)</b>	<b>Total area in Ha.</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Yield per Ha. in Qtl.</b>	<b>Total yield in Qtl.</b>	<b>Rate produce per Qtl.</b>	<b>Benefits</b>
Preliminary work to 2 <sup>nd</sup> year maintenance	12680	60.00	7.61	-	-	-	-
3 <sup>rd</sup> year to 8 <sup>th</sup> year maintenance	15156	60.00	9.09	-	-	-	-
9 <sup>th</sup> year	3526	60.00	2.12	5	300	1200	3.60
10 <sup>th</sup> year	4026	60.00	2.42	7	420	1200	5.04
11 <sup>th</sup> year	4526	60.00	2.72	12	720	1200	8.64
12 <sup>th</sup> year	4526	60.00	2.72	15	900	1200	10.80
13 <sup>th</sup> year	4526	60.00	2.72	18	1080	1200	12.96
14 <sup>th</sup> year	4526	60.00	2.72	20	1200	1200	14.40
15 <sup>th</sup> year	4526	60.00	2.72	20	1200	1200	14.40
<b>Total</b>			<b>34.84</b>				<b>69.84</b>

**STATEMENT SHOWING THE TOTAL CULTIVATION COSTS AND BENEFITS FROM ORANGE (FROM PRELIMINARY WORK TO 2<sup>ND</sup> YEAR  
MAINTENACE FROM THE PROJECT FUND AND 3<sup>RD</sup> YEAR UPTO 15<sup>TH</sup> YEAR MAINTENANCE TO BE BORNED BY THE FARMERS)**

<b>Year</b>	<b>Cultivation cost per Ha. (Rs.)</b>	<b>Total area in Ha.</b>	<b>Total cultivation cost (Rs. in lakhs)</b>	<b>Yield per Ha. in Qtl.</b>	<b>Total yield in Qtl.</b>	<b>Rate produce per Qtl.</b>	<b>Benefits</b>
Preliminary work to 2 <sup>nd</sup> year maintenance	8600	50.00	4.30	-	-	-	-
3 <sup>rd</sup> year to 8 <sup>th</sup> year maintenance	16200	50.00	8.10	-	-	-	-
9 <sup>th</sup> year	3200	50.00	1.60	8.00	200	2000	4.00
10 <sup>th</sup> year	3700	50.00	1.85	10.00	500	2000	10.00
11 <sup>th</sup> year	4200	50.00	2.10	15.00	600	2000	12.00
12 <sup>th</sup> year	4700	50.00	2.35	18.00	800	2000	16.00
13 <sup>th</sup> year	4700	50.00	2.35	20.00	900	2000	18.00
14 <sup>th</sup> year	4700	50.00	2.35	20.00	900	2000	18.00
15 <sup>th</sup> year	4700	50.00	2.35	20.00	900	2000	18.00
<b>Total</b>			<b>27.35</b>				<b>96.00</b>

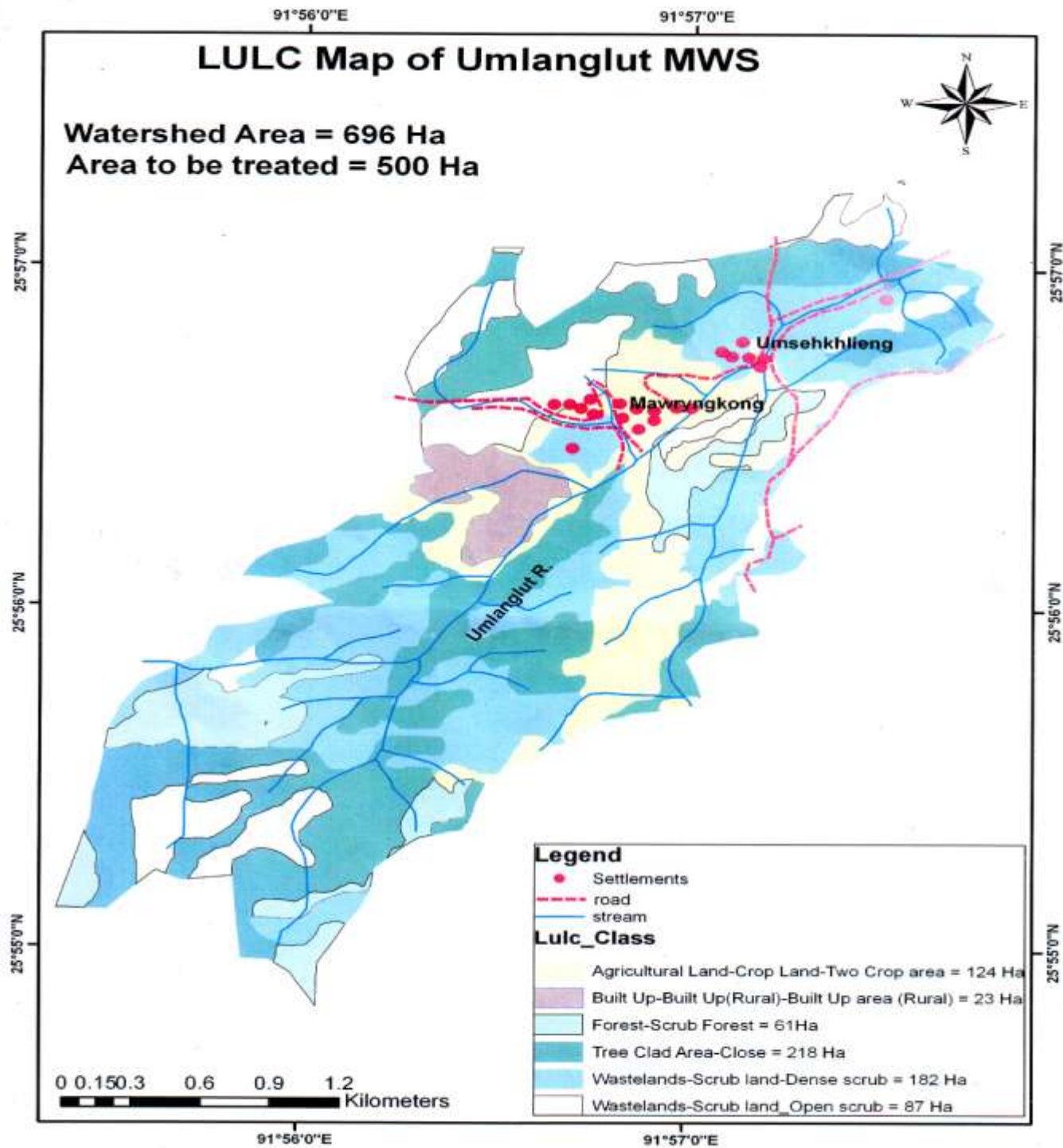
**BENEFIT ACCRUED FROM GROCERY SHOP PER UNIT UNDER PRUDUCTION SYSTEM**

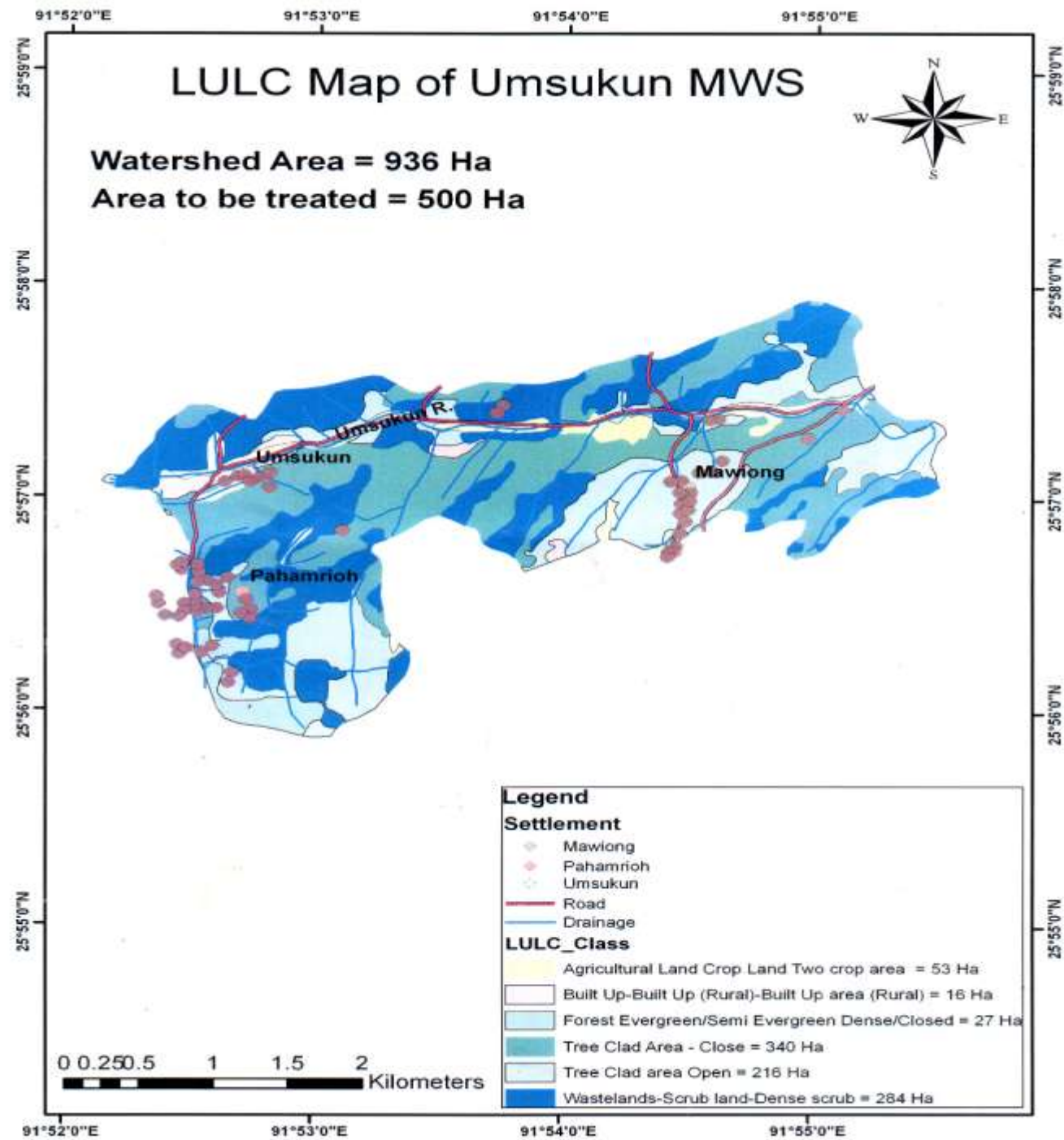
Month	Cost of essential commodities months	Cost of construction of house (material)	Labour cost per month	Total expenditure per month	Selling price of essential commodities per month
1 <sup>st</sup> year	30,000	10,000	7600	47,600	37,500
2 <sup>nd</sup> year	40,000	-	2600	42,600	50,000
3 <sup>rd</sup> year	40,000	-	2600	42,600	50,000
4 <sup>th</sup> year	40,000	-	2600	42,600	50,000
5 <sup>th</sup> year	40,000	-	2600	42,600	50,000
6 <sup>th</sup> year	40,000	-	2600	42,600	50,000
7 <sup>th</sup> year	40,000	-	2600	42,600	50,000
8 <sup>th</sup> year	40,000	-	2600	42,600	50,000
9 <sup>th</sup> year	40,000	-	2600	42,600	50,000
10 <sup>th</sup> year	40,000	-	2600	42,600	50,000
11 <sup>th</sup> year	40,000	-	2600	42,600	50,000
12 <sup>th</sup> year	40,000	-	2600	42,600	50,000
<b>Total</b>				<b>5,16,200</b>	<b>5,87,500</b>

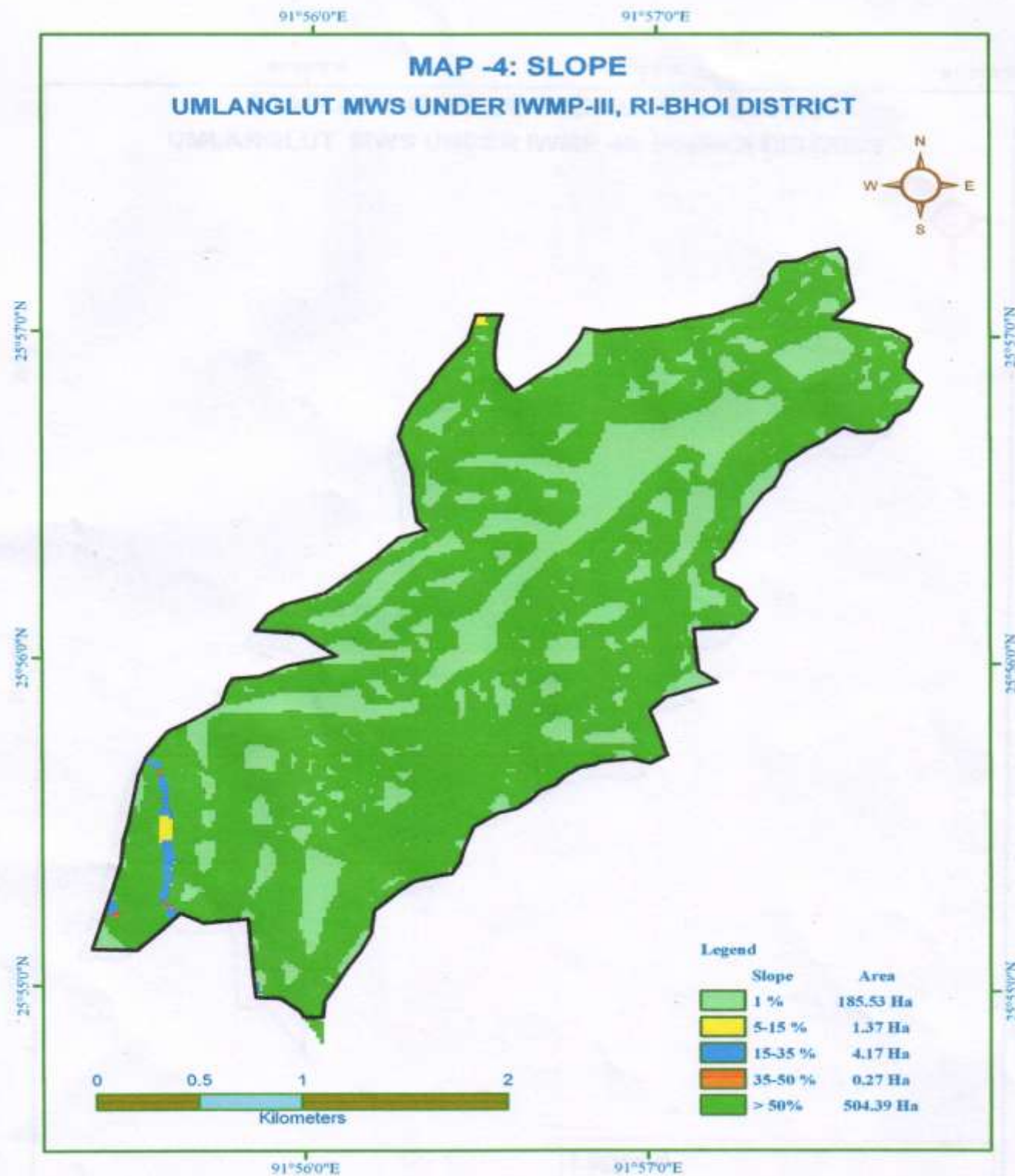
Cost Benefit Ratio =  $\frac{\text{Selling price}}{\text{Total expenditure}}$  = Rs.  $\frac{5,87,500}{5,16,200}$  = 1:1.14

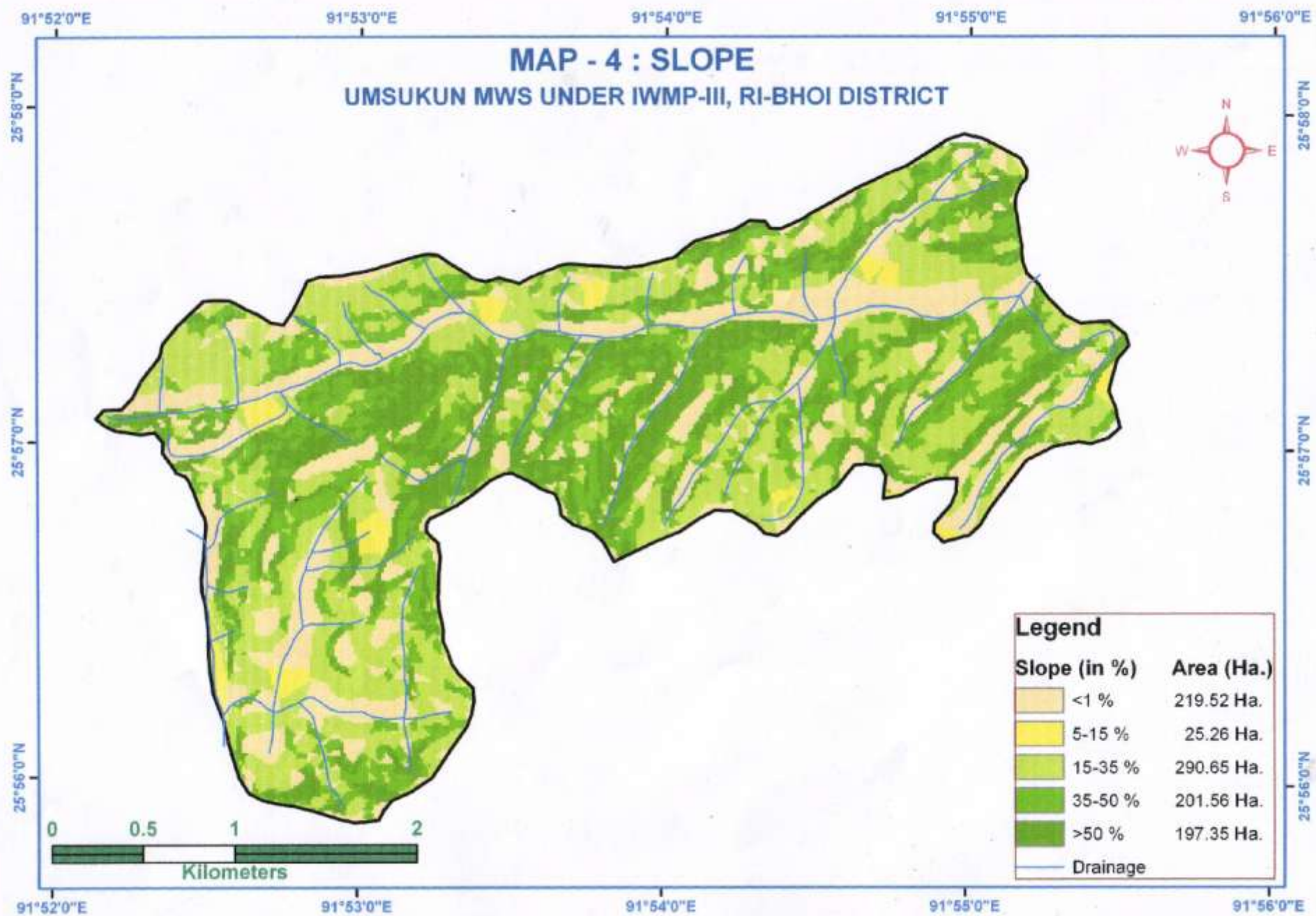
# **ANNEXURE I**

## **MAPS**

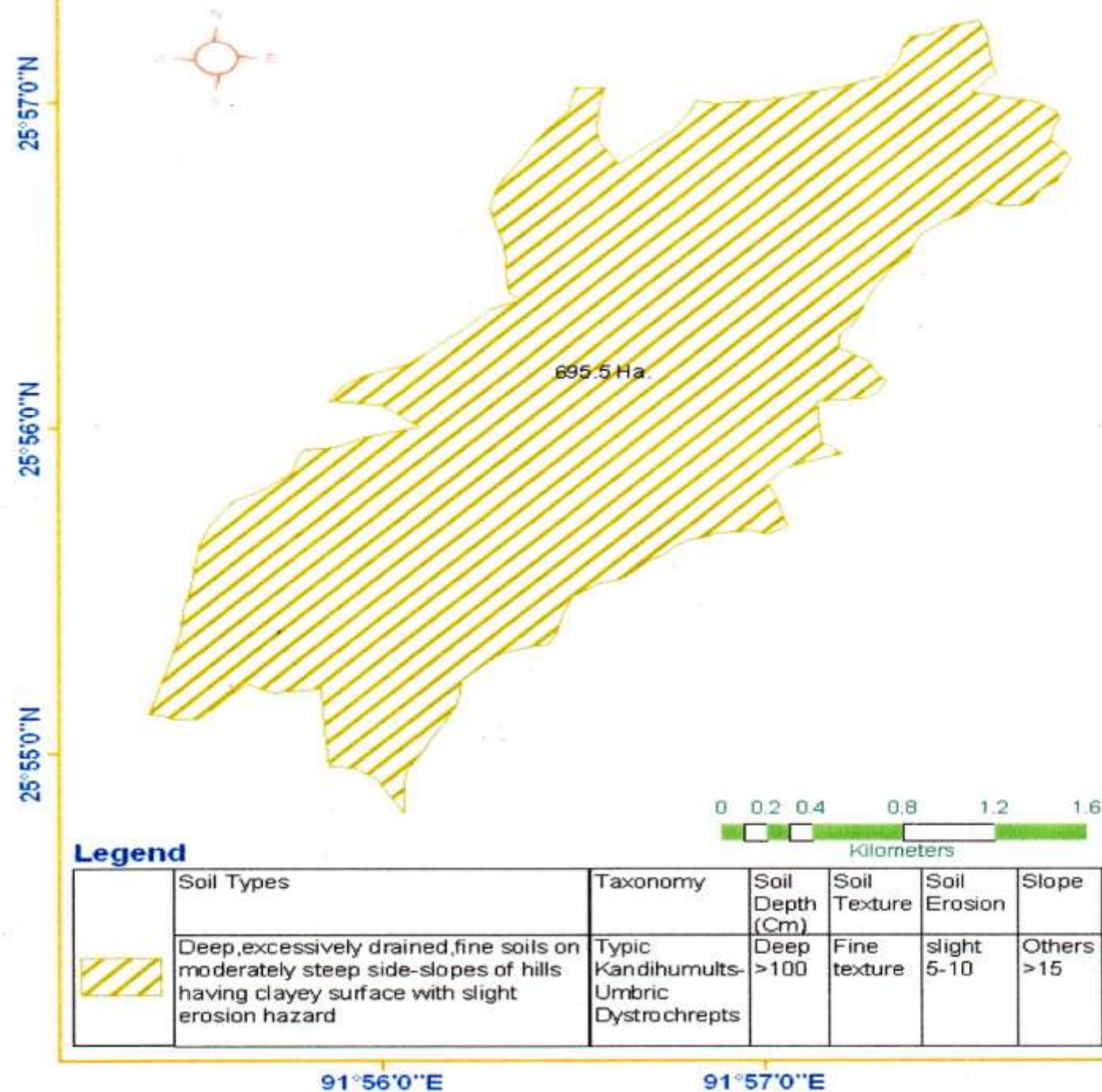


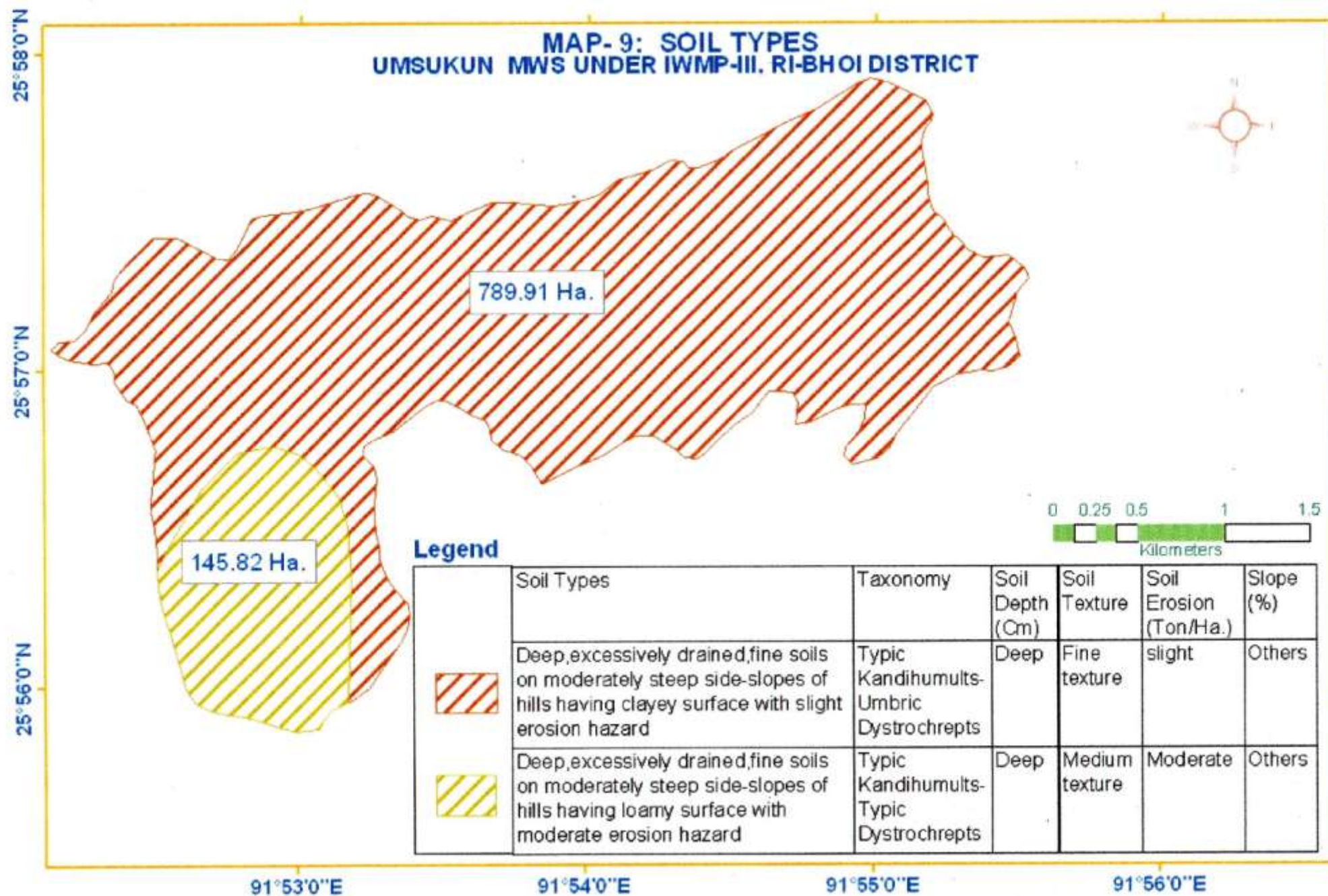


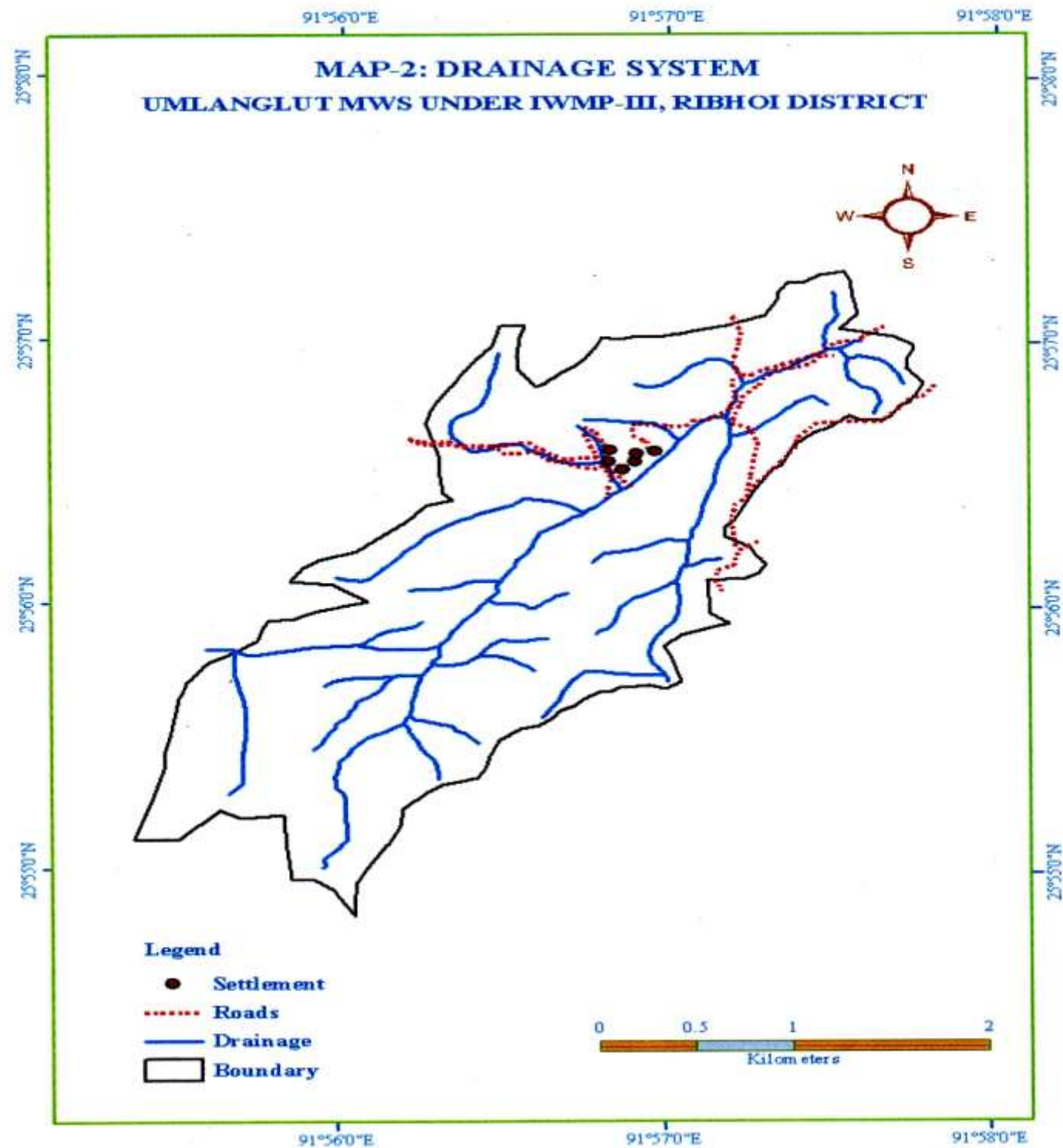


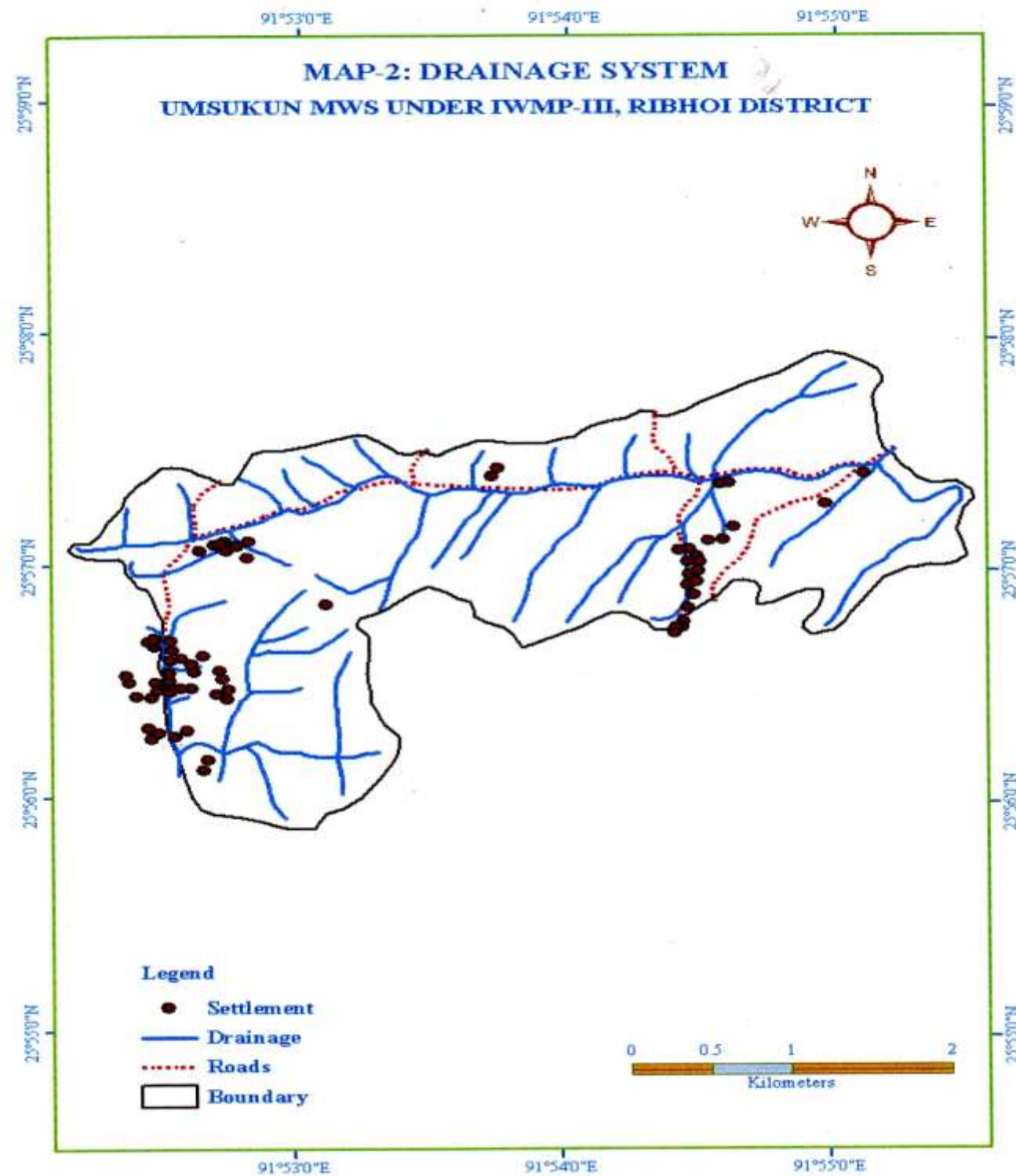


**MAP-9: SOIL TYPES**  
**UMLANGLUT MWS UNDER IWMP-III, RI-BHOI DISTRICT**

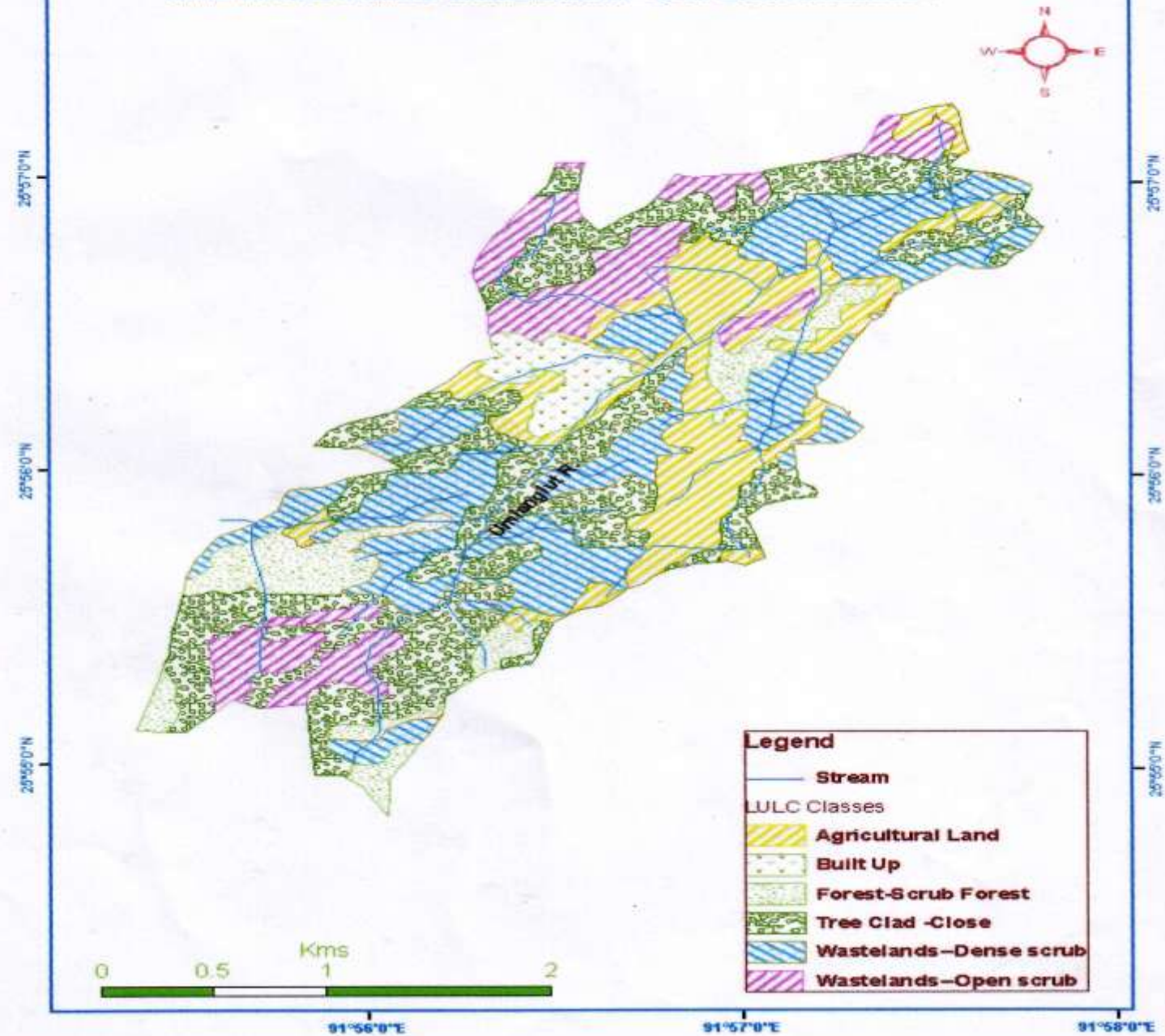




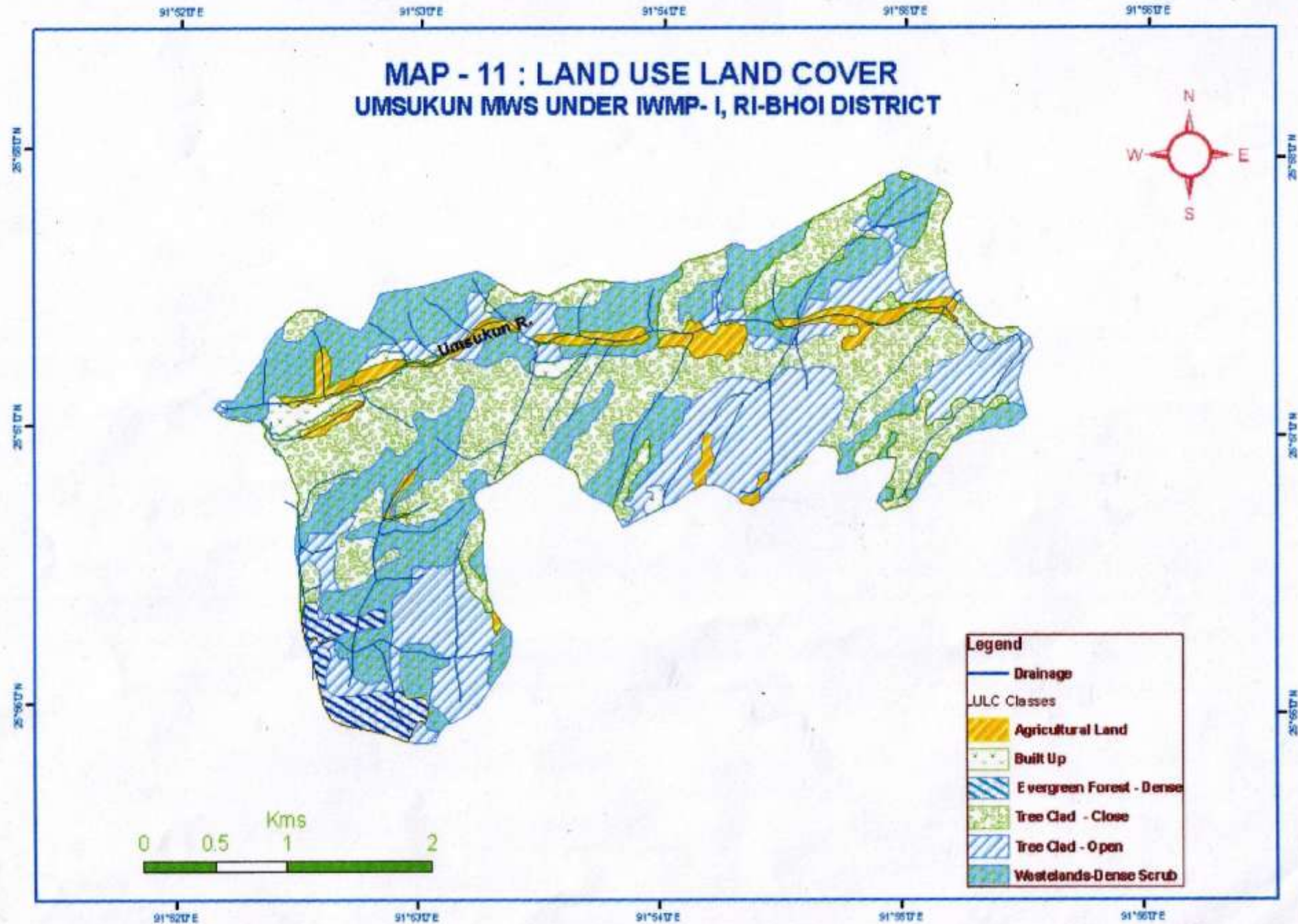


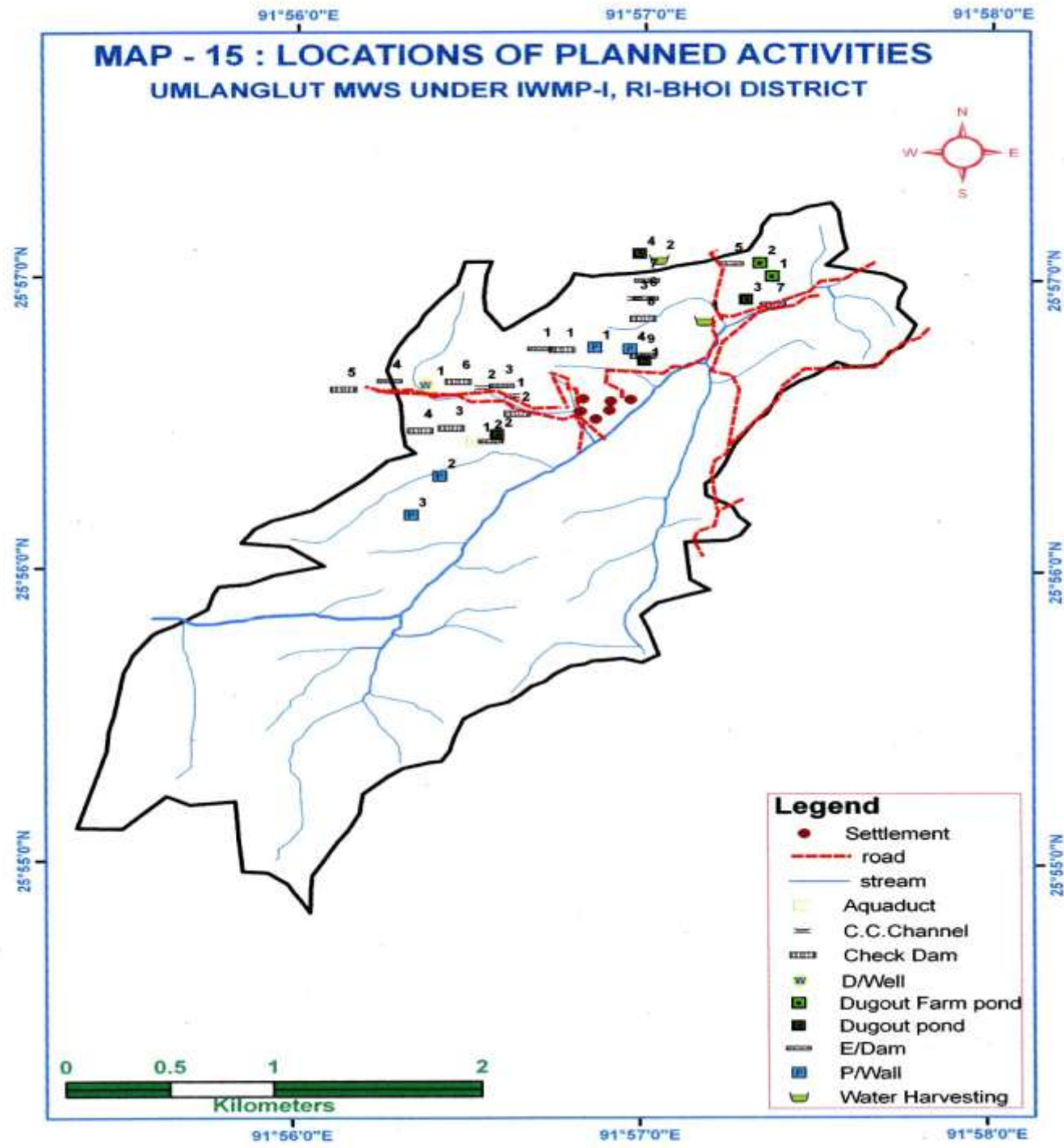


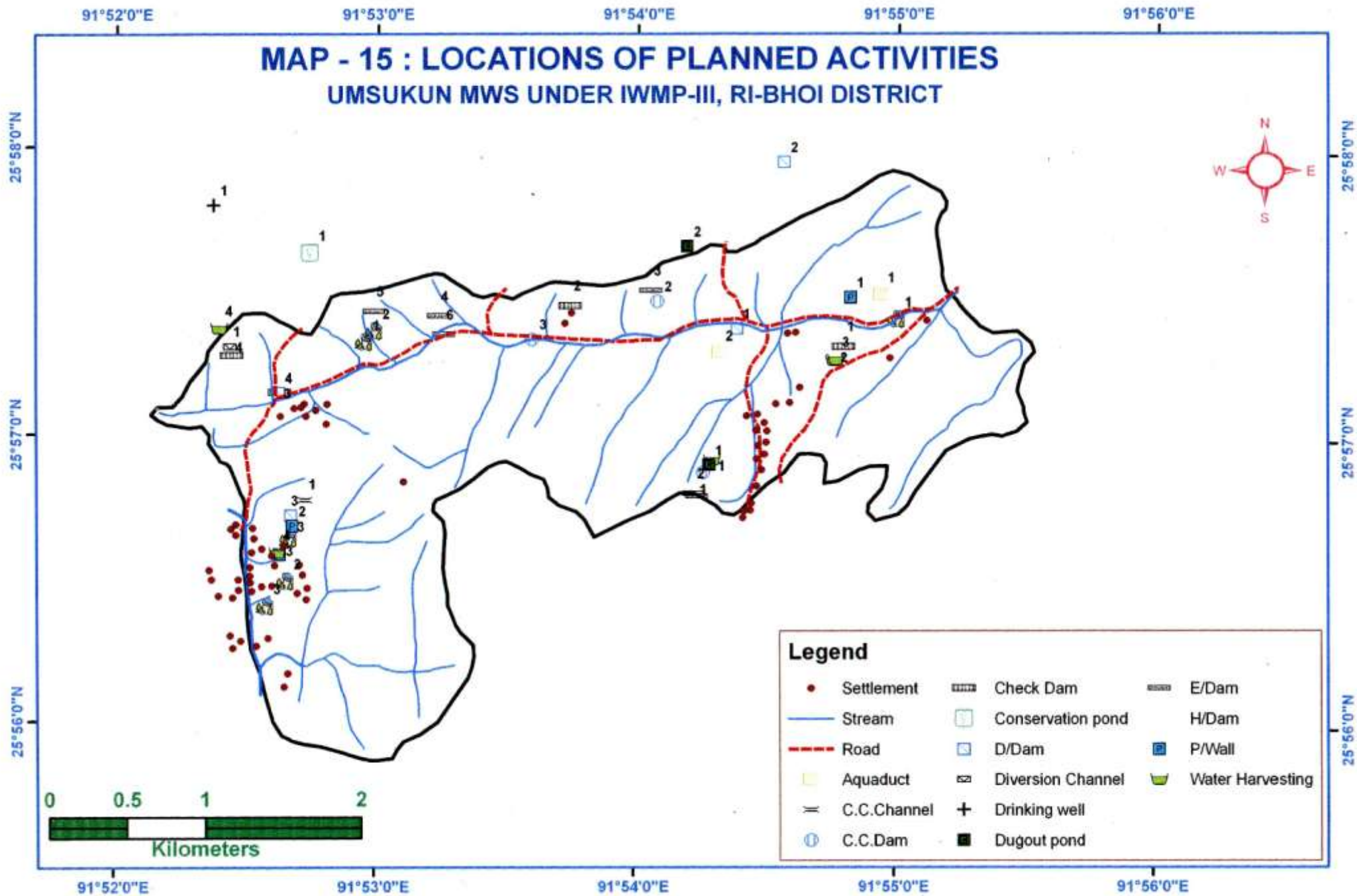
**MAP - 11 : LAND USE LAND COVER**  
**UMLANGLUT MWS UNDER IWMP-I, RI-BHOI DISTRICT**

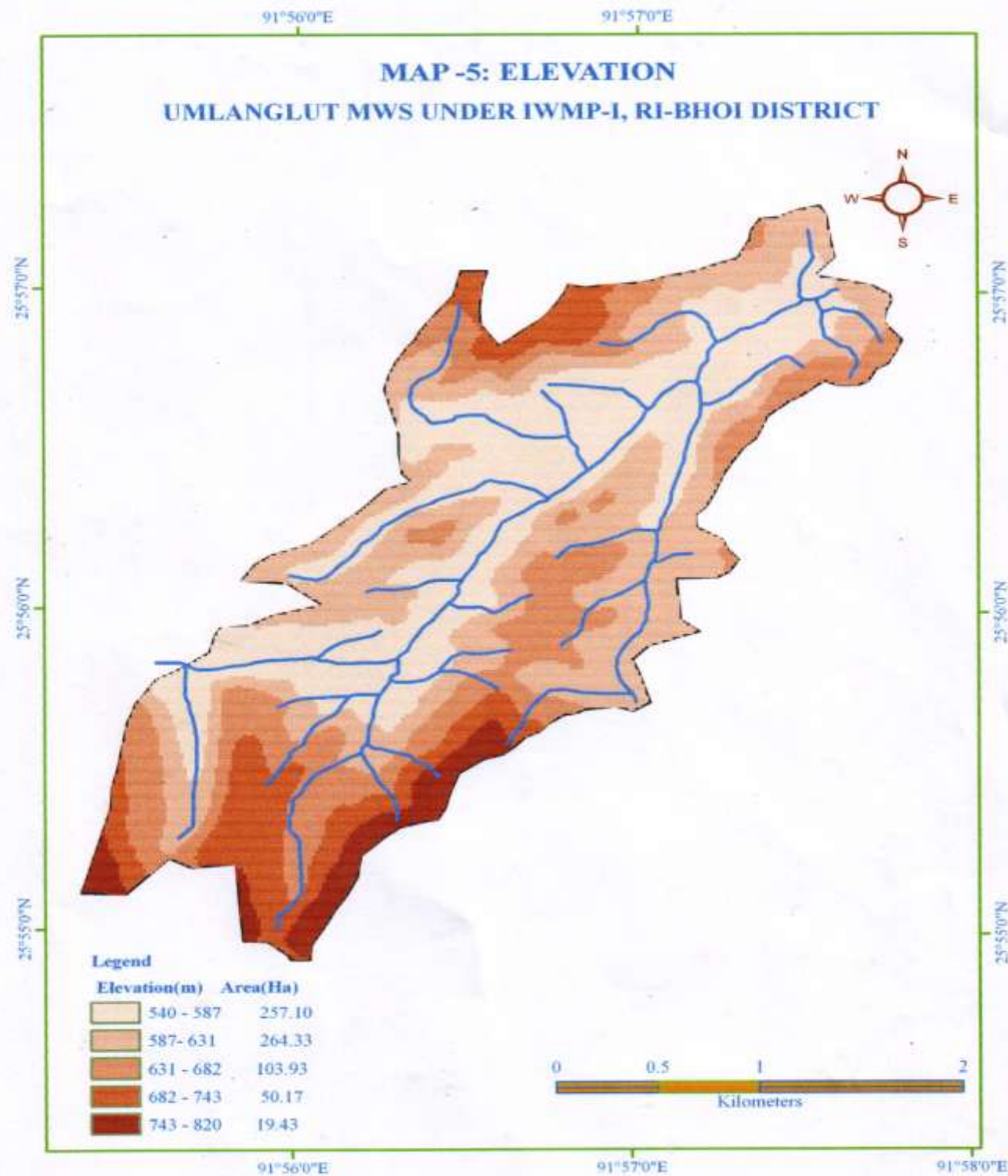


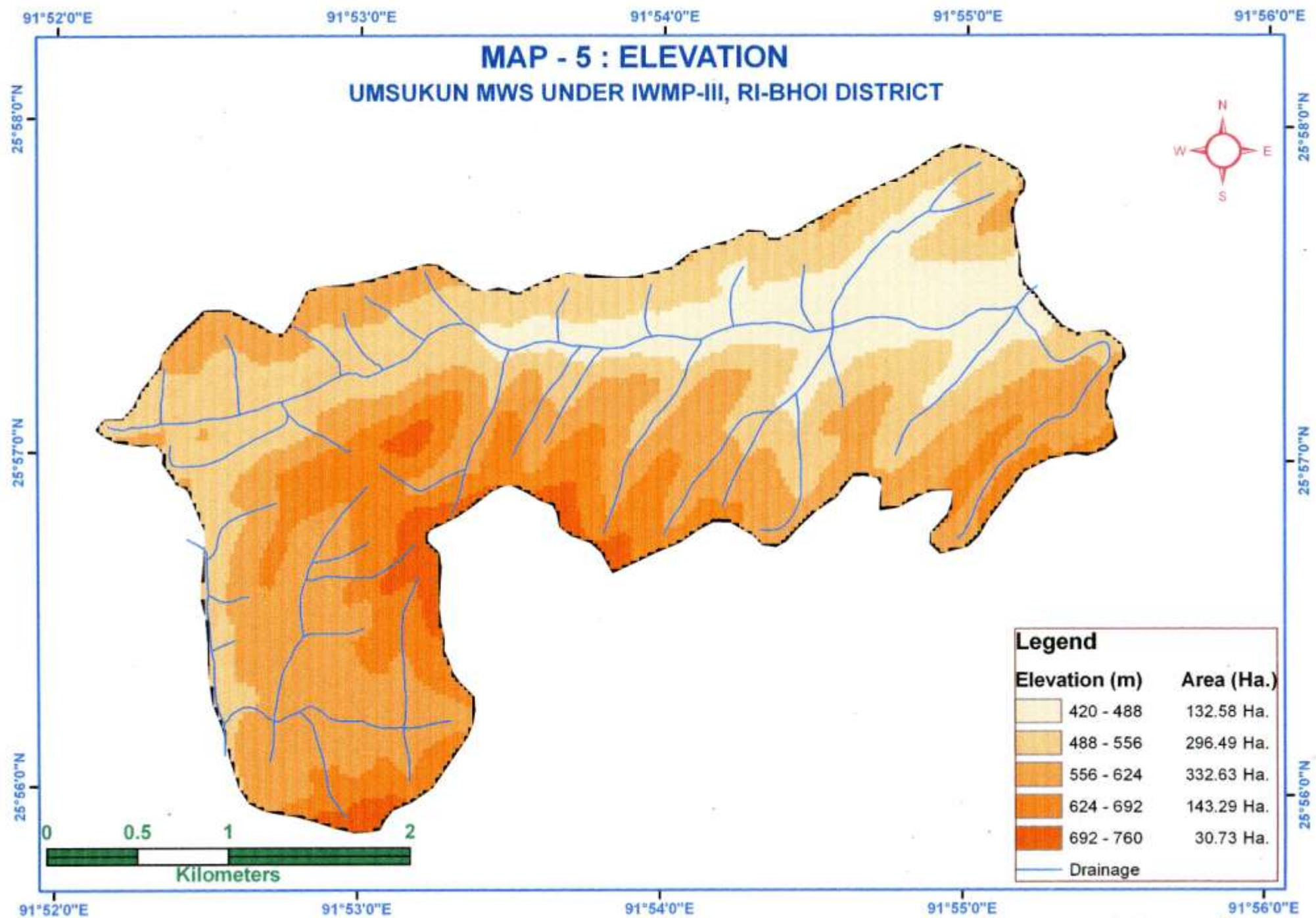
**MAP - 11 : LAND USE LAND COVER  
UMSUKUN MWS UNDER IWMP- I, RI-BHOI DISTRICT**

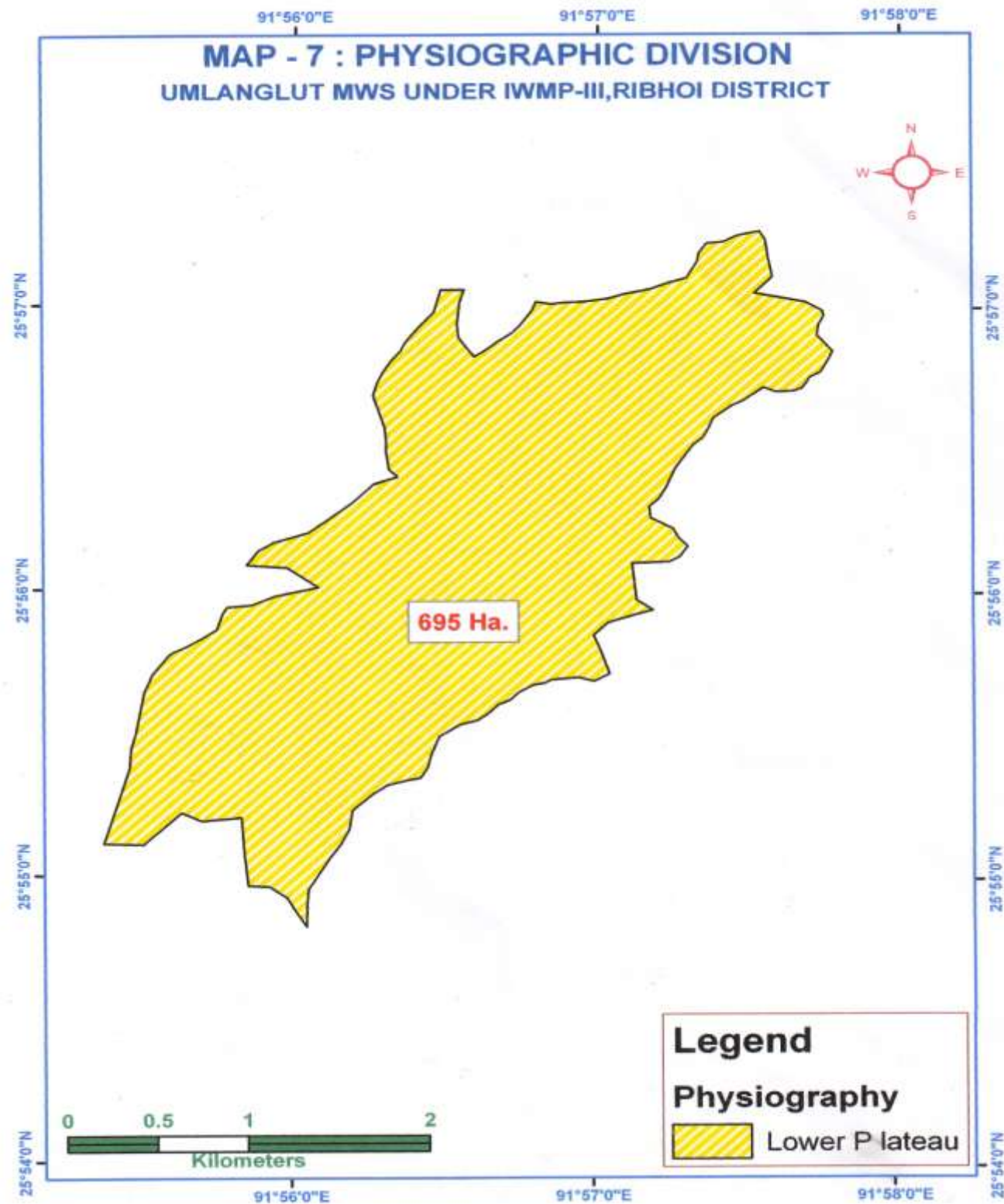


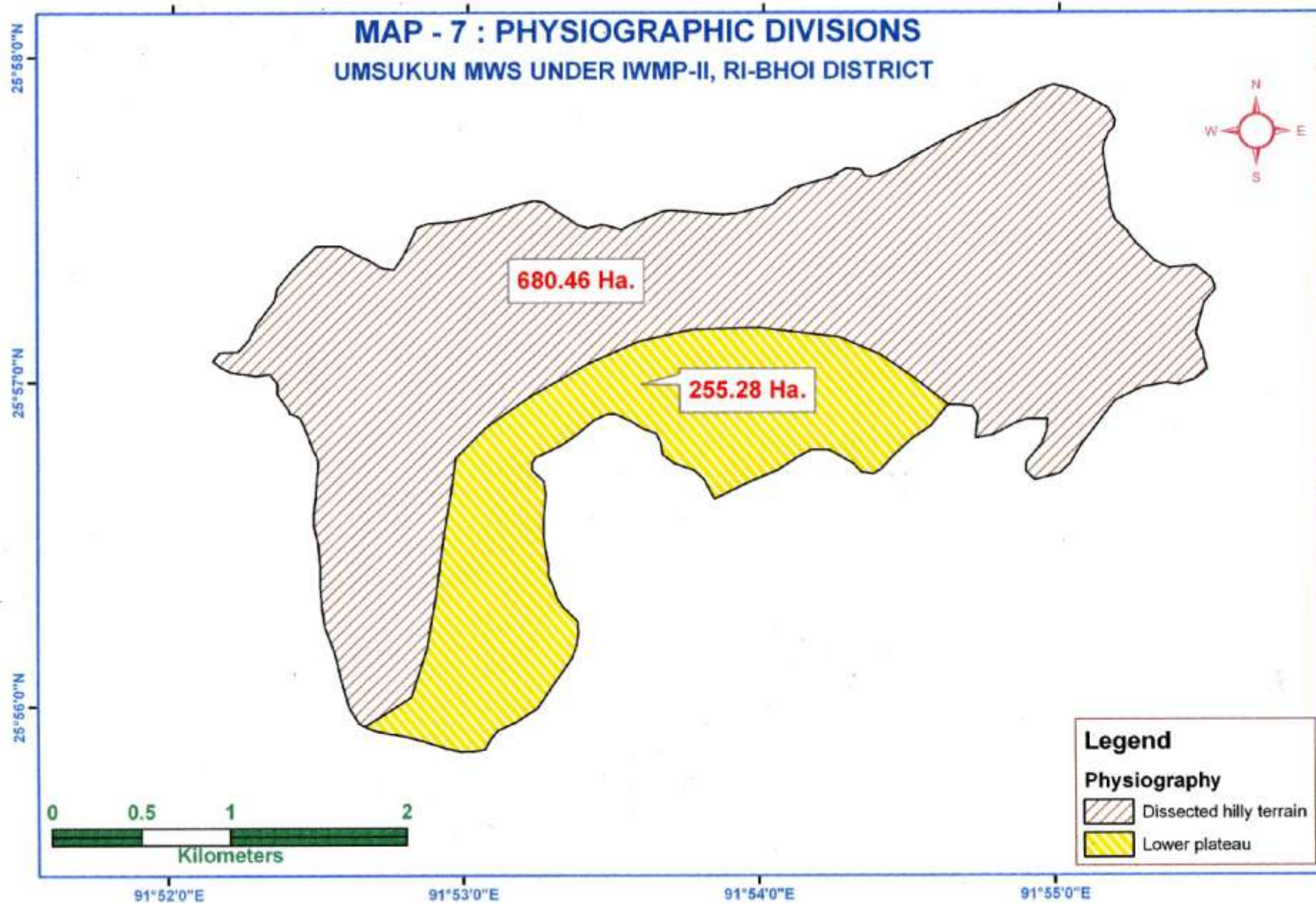






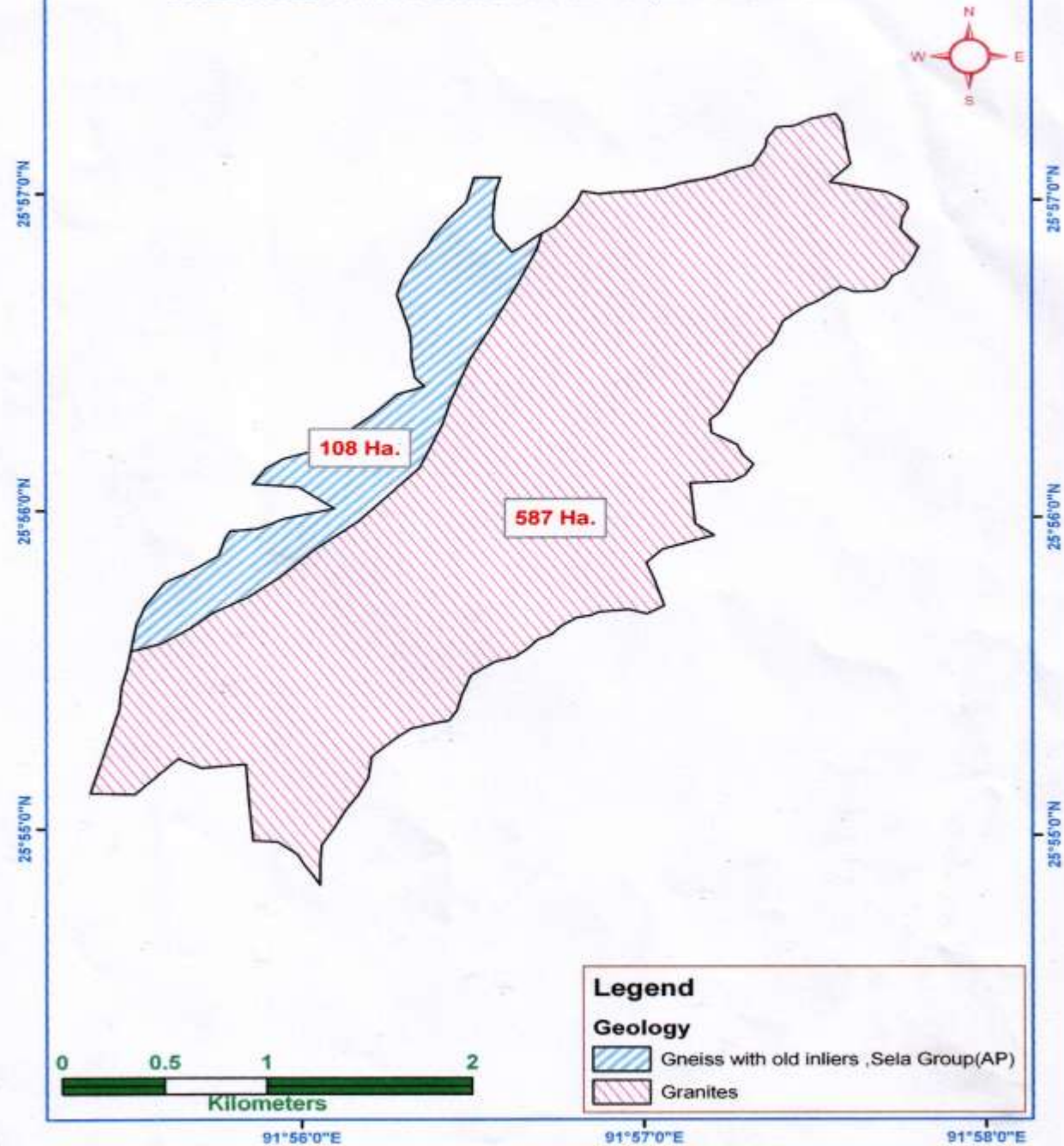


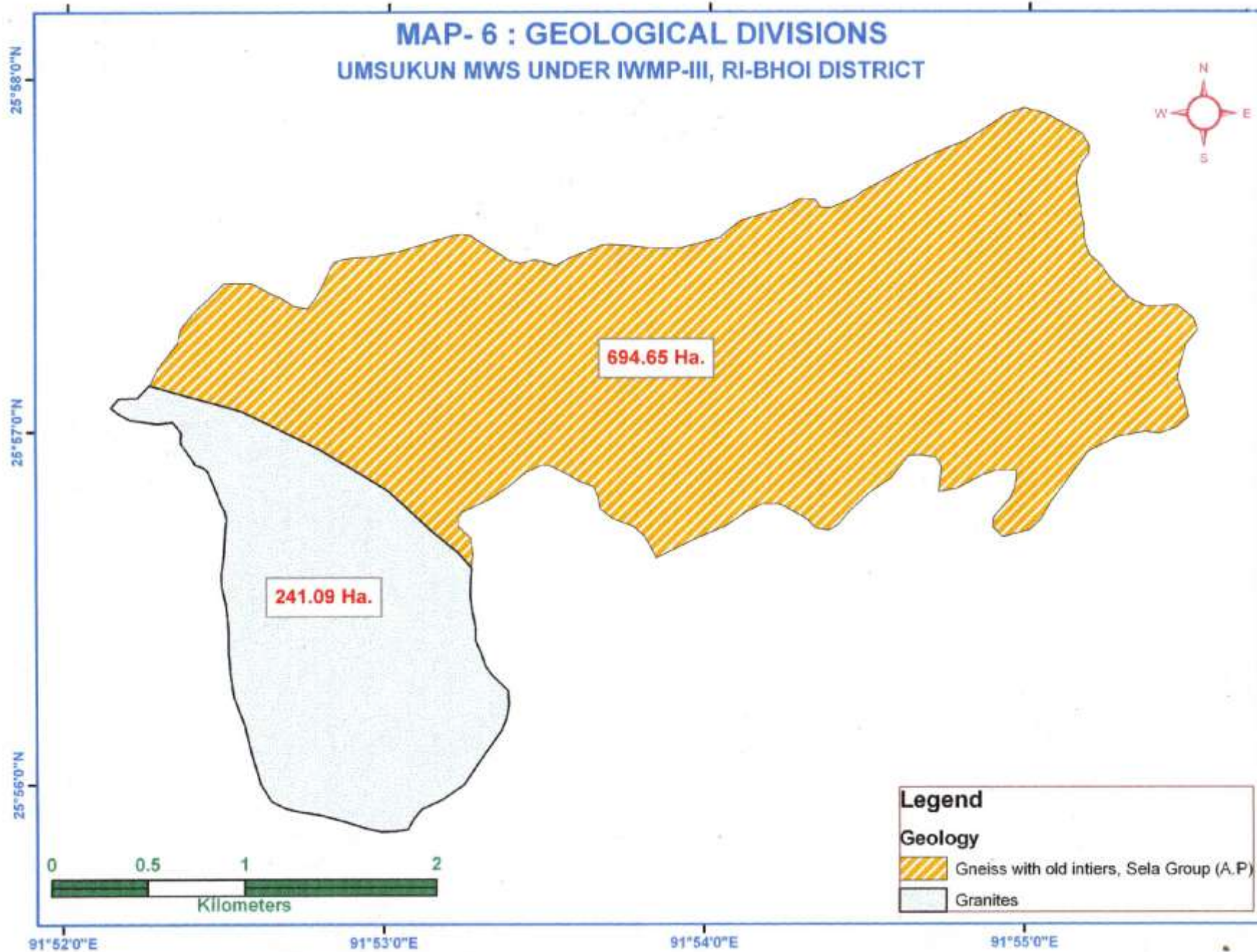




91°56'0"E 91°57'0"E 91°58'0"E

**MAP - 6 : GEOLOGICAL DIVISIONS**  
**UMLANGLUT MWS UNDER IWMP -III, RI-BHOI DISTRICT**





## **ANNEXURE II**

### **SOCIO - ECONOMIC ABSTRACT**

SOIL & WATER CONSERVATION DEPARTMENT: RI-BHOI DISTRICT, MEGHALAYA

SOCIO-ECONOMIC SURVEY FOR UMSIKUN & UMLANGLUT WATERSHED UNDER I.W.M.P - III, RI-BHOI DISTRICT

Sl. No.	Village	Population of family						Total	Land holding			Total	Livestock/Nos.				
		Male			female				Irrigated (Ha)	Rainfed (Ha)	Others		Poultry	Piggery	Goat	Cattle	Total
		Adult	Minor	Total	Adult	Minor	Total										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Umsukun village	49	71	120	48	48	96	216	-	14.6	34.3	48.9	320	13	-	-	333
2	Pahamrioh Lum village	53	67	120	47	57	104	224	-	19.8	46.28	66.08	160	13	-	4	177
3	Mawiong village	73	86	159	73	101	174	333	-	18.6	47.6	66.2	360	24	4	55	443
4	Umsekhlieng village	42	58	100	44	67	321	211	-	39	-	39	200	-	20	3	223
5	Mawryngkang village	66	86	152	76	81	157	309	-	85	-	85	400	-	8	4	412

## **ANNEXURE III**

**MoA**

# OFFICE OF THE DORBAR SHNONG UMSUKUN

RI-BHOI DISTRICT, NONGPOH

Ref:

Date

"NO-OBJECTION CERTIFICATE"

Ka Dorbar Shnong conducted Raid  
Nongshrah, Ri Bhoi District Kam den jingjor  
ne pyndrah halor ka jingpyntrei ne wamrah  
ie kind kind ki shim ne project da  
ka office jing ka Soil & Water Conservation  
Department, Nongpoh haph ka Shnong.

Nga Kam a Rangrah Shnong,  
nga jynstirida da kaba sai bad  
seal harom:-

D. Khogher  
(Shri. D. Khogher)  
Rangrah Shnong Umukun  
Ri-Bhoi District, Nongpoh  
Date \_\_\_\_\_

OFFICE OF THE DORBAR SHNONG MAWLONG

DAID MONGLYNGDOH, RI BHOI

NO-OBJECTION-CERTIFICATE

ka Dorbar Shnong Mawlong daid Monglyngdoh, Ri Bhoi District, kam don jing ngor ne pyrethah ia ka Soi & kati Conservation Department ka kam pyntai ne wankah ia kimo kino ki skin pyntoi ne Project hafah ka Shuong gong ngi.

nga u hangbah Shuong nya pyntaiha  
dakaba soi bad pit hareu.

J. Nongum

Kangthab Shong  
Mawlong  
Ri Bhoi Dist. Jomang

**OFFICE OF THE DORBAR SHNONG PAHAMRIOH LUM**  
**RI-BHOI DISTRICT, NONGPOH**

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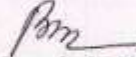
Ref:

Date

NO-OBJECTION CERTIFICATE

Ka Dorbar Shnong Pahamrioh Lum Raid Nongkhrah, Ri Bhoi District, kam don ka jing ujer ne pyrsah ia ka loit 7 water conservation department ban pyntrei ne wawrah ia kuno<sup>2</sup> ko skim pyntrei no project ka poh ka shong jing ngi.

Mga u Rangbah Shnong nga pyntshisho  
ka kaba loi kystey harun.

  
Rangbah Shnong  
Pahamrioh-Lum  
Ri-Bhoi Dist. Meghalaya  
Date.....

*Raid Nong Lyngdoh*

R. Bruce D. Smith, Jr., New Rochelle

Date 7<sup>th</sup>, 09, 2009

ngi kymmet bakare kaprosik  
Kam mong iaid sho phong.

1. Time. Hong Kueh. — T. Hong Kueh + 14  
2. Sil - maiong — S. Maiong  
3. Wak. makui' — O. Maiong  
4. do. dipngdot — L. Maiong  
5. Sof. makui'. — S. Maiong

WANG CHIH SHONG MAW BANG KANG  
DAID NONCATRUGH.

DORBAR SHNONG UMSEHKHLIENG  
RAID NONGLYNGDOH  
RI BHOI DISTRICT, MEGHALAYA

Ref. No. ....

Date .....

NO-OSECTION CERTIFICATE

Ka Dorbar Shnong Busehkhlieng  
Raid Nonglyngdoh, Ri Bhoi District  
kann don jing ugor me pyrshah ia  
ka Soil & Water Conservation  
Department ka han pyntrei me  
banchah ia kuno kuno lei project  
pyntroi ha poh ka Shnong.

Mga u Raybah-Shnong nya  
pyrshaha da ka Soil & Water Conservation.

**OFFICE OF THE DORBAR SHNONG UMSUKUN**  
**RI-BHOI DISTRICT, NONGPOH**

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Ref:

Resource Agreement.

Date

Ngi ki nongshong shnong jong ka Shnong Umsukun kaba hap hapoh ka Umsukun Micro-Watershed IWMP Scheme, da ka Dorbar hi baroh kawei ngi la ia mynjur lang ba ia ka Entry Point Activity yn pyntrei ia ka lynti iaaid kjat, ngi kular ba ngin sumar bha ia kine ki jingiarap jong ka Soil Department Ri-Bhoi District, Nongpoh ia ka Shnong jong ngi, bad kumjuh ruh ia kiwei de ki kam kiba dang sah.

*D. Khongka*  
(Shri. D. Khongka)  
Rangbah Shnong Umsukun  
Ri-Bhoi District, Nongpoh  
Date

# OFFICE OF THE DORBAR SHNONG MAWIONG

## RI-BHOI DISTRICT, NONGPOH

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Ref:

*Resource Agreement*

Date

Ngi ki nongshong shnong jong ka Shnong Mawiong kaba hap hapoh ka Umsukun Micro-Watershed IWMP Scheme, da ka Dorbar hi baroh kawei ngi la ia mynjur lang ba ia ka Entry Point Activity yn pyntrei ia ka pung umdih bad ka jaka sum jaka sait, ngi kular ba ngin sumar bha ia kine ki jingiarap jong ka Soil Department Ri-Bhoi District, Nongpoh ia ka Shnong jong ngi, bad kumjuh ruh ia kiwei de ki kam kiba dang sah.

*J. Nonglu*  
Dorbar Shnong  
Mawiong  
Ri Bhoi Dist. Nongpoh

**OFFICE OF THE DORBAR SHNONG PAHAMRIOH LUM**  
**RI-BHOI DISTRICT, NONGPOH**


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Ref:

*Resource Agreement*

Date

Ngi ki nongshong shnong jong ka Shnong Pahamrioh Lum kaba hap hapoh ka Umsukun Micro-Watershed IWMP Scheme, da ka Dorbar hi baroh kawei ngi ia ia mynjur lang ba ia ka Entry Point Activity yn pyntrei ia ka pung umdih bad ka jaka sum jaka sait, ngi kular ba ngin sumar bha ia kine ki jingiarap jong ka Soil Department Ri-Bhoi District, Nongpoh ia ka Shnong jong ngi, bad kumjuh ruh ia kiwei de ki kam kiba dang sah.

  
Rangbah Shnong  
Pahamrioh-Lum  
Ri-Bhoi Dist. Meghalaya  
Date.....

**OFFICE OF THE DORBAR SHNONG MAWRYNGKANG**  
**RI-BHOI DISTRICT, NONGPOH**

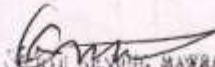
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Ref:

Resource Agreement

Date: 27/3

Ngi ki nongshong shnong jong ka Shnong Mawryngkang kaba hap hapoh ka Umlanglut Micro-Watershed IWMP Scheme, da ka Dorbar hi baroh kawei ngi la ia mynjur lang ba ia ka Entry Point Activity yn pyntrei ia ka lynti ia id kjat, ka pung umdih bad ka jaka sum jaka sait, ngi kular ba ngin sumar bha ia kine ki jingiarap jong ka Soil Department Ri-Bhoi District, Nongpoh ia ka Shnong jong ngi, bad kumjuh ruh ia kiwei de ki kam kiba dang sah.

  
OFFICE OF THE DORBAR SHNONG MAWRYNGKANG  
RI-BHOI DISTRICT, NONGPOH

**OFFICE OF THE DORBAR SHNONG UMSEHKHLIENG**  
**RI-BHOI DISTRICT, NONGPOH**

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Ref: *Resource Agreement*

Date: *21/11/2018*

Ngi ki nongshong shnong jong ka Shnong Umsekhklieng kaba hap hapoh ka Umlanglut Micro-Watershed IWMP Scheme, da ka Dorbar hi baroh kawei ngi la ia mynjur lang ba ia ka Entry Point Activity yn pyntrei ia ka Pung umdih bad ka jaka sum jaka sait, ngi kular ba ngin sumar bha ia kine ki jingiarap jong ka Soil Department Ri-Bhoi District, Nongpoh ia ka Shnong jong ngi, bad kumjuh ruh ia kiwei de ki kam kiba dang sah.

*Dorbar*  
DORBAR SHNONG UMSEHKHLIENG  
Vice-Chairman  
Ri-Bhoi District