DETAILED PROJECT REPORT
CHIRANG-I (CHAMPABATI UPPER)/2021-22
WDC-PMKSY 2.0

Prepared by

Project Manager
WCDC, WDC-PMKSY 2.0, Chirang
&
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PREFACE

The detailed project report for Chirang-I (Champabati Upper)/2021-22 WDC-PMKSY 2.0 has been prepared with an objective to optimally harness the natural resources available in order to achieve sustainable development in the region.

Emphasis has been laid on environmental management practices (EMPs) an potential tools for successful watershed management keeping in view the vulnerability of the natural elements subjected to major changes. Traditional natural resources management practices amalgamated with the understanding of soil science and hydro-meteorology have been applied in order to achieve the objectives of integrated watershed management programme.

The planning process has been participatory in nature. The active participation of the rural inhabitants within the project area and proper guidance of the PIA has been reflected in the DPRs.

The staff of our soil conservation department with their profound experience in executing development projects of similar nature has been the guiding force in the entire process of DPR preparation.

The Project Manager, WCDC, WDC-PMKSY 2.0, Chirang acknowledges the effort to the WDT Leader cum Range Officer Basugaon, Staff of Basugaon Soil Conservation Range under WCDC, WDC-PMKSY 2.0, Chirang & Dealing Assistant WDC-PMKSY 2.0 for their support and hard work. They have provided for successful completion of the Detailed Project Report.

Project Manager
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DETAILED PROJECT REPORT OF
WDC-PMKSY 2.0
Chirang-I (Champabati Upper)/ 2021-22 WDC-PMKSY 2.0

Micro Watershed	Dologaon MWC	Athiabari MWC	MWS-3 MWC	MWS-4 MWC	MWS-5 MWC
Micro Watershed Code No	3A1F9c1	3A1F9b7	3A1F9p5	3A1F9d2	3A1F9b4
WDC-PMKSY 2.0 project	**Chirang-I (Champabati Upper)/ 2021-22**				
Block	Sidli-Chirang				
District	Chirang				
Name of the PIA	Divisional Officer, Chirang Soil Conservation Division, Kajalgaon				

Contents

Executive Summary

Introduction-

The New Generation Watershed Development Project (WDC-PMKSY 2.0) has been designed to address two main issues namely- sustainable rural economy and preservation of environmental assets through development and sustainable extraction of their benefits, in a comprehensive and holistic manner. The endeavor ends at proactive people's participation through productive activities generating rural employment and agricultural productivity which ultimately leads to food security and all-round improvement of rural livelihood. The other issue of extreme relevance is the emerging threats of depleting fresh water resources, depleting ground water resources and global climate change which are aimed to be addressed through implementation of New Generation Watershed Development Project(WDC-PMKSY 2.0).

Briefly about the Project area: -

The project area is located in Sidli Block, Chirang District of Assam state. The total project area of the watershed is about 5122 Ha, of which 4000 Ha has been undertaken to be treated under New Generation Watershed Development Project (WDC-PMKSY 2.0) starting year 2021-22. The watershed includes Thirty-one Villages namely Amguri, Goragaon, Laoripara, Dologaon, Moja Bari, Shyamsing Killa, Deolguri, Balapara, Athiabari, Shyamthai Bari, Jaolia Bari, Bamungaon, Gender Gaon, Choto Mojabari, Pret Gaon, Kashikotra No.2, Kashikotra No.1, Dhopguri, Thunkhobari, Dipu, Kolobari Kashibari, Kumguri (Dipu), Bairajhora, Dangshi Bari, Salbari, Namalpur, Nimagaon, Rajajan, Soalmari, Krishnapur, Palashbari are the primary inhabitants of the village. The livelihood of these people is primarily based on rainfed agriculture, animal husbandry and wage labour. The Champabati Upper Project area faces flood and seasonal water logging that frequently inundate vicinity of the watershed area. This has resulted in low Productivity of Agriculture Land in comparison to other villages of nearby block.

The Champabati Upper watershed is endowed with high intensity rainfall, the average rainfall of the five preceding years being 2663mm. It causes severe flood during rainy season because of heavy rainfall in the catchments, sudden change in gradient from steeper slope to the flat slope, deforestation, higher river bed, inadequate carrying capacity of stream and breach of embankments in the lower portion causing heavy soil erosion and siltation. The Channel capacity of the streams has been adversely affected by the vigorous silting cause by the sediment laden runoff from the agricultural fields. The agricultural productivity of the area is adversely affected by the flood and the seasonal waterlog. The inhabitants who are mostly dependent on agriculture watershed development works subjected to the mitigation of flood, measures for productivity enhancements and generation of alternative livelihoods will alleviate the poverty that exists in the villages in the Watershed area.

Institutional arrangements: -

The Government initiatives in investment for development of common property resources creates a healthy environment for private investment with investment support by financial institute for activities of economic and environmental sustainability such as plantation, food processing, animal husbandry, agriculture etc. Subsidies are also available under various national schemes and missions including financial support for development of human resources, Institutional finance may also be available through SHG financed by the Commercial banks. However, in view of the fact that the credit worthiness of the villagers cannot be ascertained at this stage, Institutional Finance has not been considered for the investment plan so suggested.

Photographs of PRA Exercises (MWS-3)

Photographs of PRA Exercises (MWS-5)

Photographs of PRA Exercises (MWS-2)

Photographs of PRA Exercises (MWS-1)

Photographs of PRA Exercises (MWS-4)

Salient Project activities

Based on the context, secondary data, baseline data, PRA exercises and net planning etc.; activities under Entry Point Activity (EPA) are Box Culvert, Solar Light, Earth Filling in Crematorium, Renovation of Fishery Pond etc. which would cost 2% of the whole budget.

Other major activities are Soil and Moisture Conservation structures like Agril Bund, Boulder Pitching, Earthen Channel, Graded Bund, Embankment etc. Water Harvesting Structures like Brick Canal, Reclamation of Marshy Land /Community Pond, Drainage Channel, Pond, RCC Check Dam, Slab Culvert etc. Vegetative Covers like, Horticulture Plantation etc. Crop production and value addition, livestock development, micro irrigation development and micro enterprise development etc.

A comprehensive training and capacity building plan for all sectors micro enterprise, livelihood system, crop production, ridge line treatment etc. covering all families (with overlaps) would be capacitated during the project period. The entire proposed plans would be implemented by Watershed Committee in close coordination with SHGs and UGs under the facilitation of PIA.

Administrative Overhead (Management Cost):

This Administrative Overhead is the integral part of the Project. To overcome all problems as well as smooth functioning of the project, the item is major head and essential also. It includes (i) the cost of stationery items like paper, pencil, ink and other accessories. (ii) Computer & Printer accessories, (iii) Cost for T.A. for the smooth running in the project area (iv) Fuel/PoL cost.

Another Major Cost of the administrative overhead is cost of Salary i.e., salary for all contractual staff -Computer Assistant, WDT Technical, Village level worker, salary for President & Secretary of Micro Watershed Committee.

Capacity Building Strategy

Capacity building support is a crucial component in achieving desired results from watershed development projects. Programme Guidelines broadly define the contours of capacity building strategy for watershed development projects in the country.

The DoLR and NLNA may use the services of NRAA as knowledge partner for capacity building activities. NRAA will have an MoU with DoLR for undertaking activities enumerated under para 24.2 and 25 as described in Guideline. NRAA could help developing operational strategies for capacity building for States/UTs in consultation with SLNA and other relevant organizations.

Key Elements of Capacity Building Strategy:

NRAA will collaborate with reputed national resource organizations for developing National and State/UT specific capacity building strategies. Following may be the key components of capacity building strategies:

a) Dedicated and decentralised institutional support and delivery mechanism.

b) Annual Action Plan for capacity building.

c) Pool of resource persons.

d) Well prepared training modules and text materials.

e) Mechanism for effective monitoring and follow-up.

f) E-resources and self-learning modules in the web.

Preparatory phase :: Entry Point Activities

The Entry Point Activities (E.P.A.) is perceived as the focal point of all micro-watershed region which aims to promote sustainable growth and development. it also forms the focal point in promoting awareness to technology, information and better environment more specifically to emerging trends in land-water management. The activities are considered on a long term economic sustainability through revenue generation. The Entry Point Activities was selected in Gram Sabha through Perticipatary Rural Apprisal (PRA) and it is implemented by Project Implementing Agency (PIA). The Action Plan of E.P.A. have been already prepared and mentioned as following below:

Sl. No	Name of Work	MWS	Location	GPS POINT	Target		Family Benefitted in Nos.
					Physical (in No./Ha.)	Financial (Rs.in Lakh)	
1	2	3	4	5	6	7	8
1	Box Culvert	1	Vill: Dologaon VCDC: Shyamthaibari Block: Sidli Chirang	26.547296 90.402126	1 No.	3.00	41
2	Box Culvert	2	Vill: Jaoliabari VCDC: Bamungaon Block: Sidli Chirang	26.5767 90.41885	1 No.	2.50	38
3	Earth Filling in Crematorium	3	Vill: Dhupguri VCDC: Kashikotra Block: Sidli Chirang	26.547916 90.426021	1 No.	3.00	126
4	Solar Light	3	Vill: Kashikotra VCDC: Kashikotra Block: Sidli Chirang	26.541613 90.434999	10 Nos.	2.60	46
5	Box Culvert	4	Vill: Dangsibari VCDC: Bamungaon Block: Sidli Chirang	26.288429 90.45102	1 No.	3.00	51
6	Renovation of Fishery Pond	5	Vill: Namalpur VCDC: Sidli Block: Sidli Chirang	26.544792 90.451946	1 No.	3.50	67
Total					**15 Nos.**	**17.60**	**369**

WATERSHED WORK PHASE:

1. Natural Resource Management (NRM):

Watershed Development Program has emerged as a major platform for participatory, community based natural resource management. The river Champabati has significant impact on the human activities of the Champabati Upper Watershed starting with Bank Erosion, Drought, Seasonal Flood etc.

Major problems faced by the villagers of the watershed are –

1. River Bank Erosion
2. Low Agricultural productivity
3. Low upliftment of socio-economic condition
4. Lack of Irrigation Facility
5. Degeneration of Natural Water Bodies
6. Drought during winter season
7. Unemployment
8. Lack of safe Drinking water facility
9. Lack of proper Electricity
10. Poor Road communication
11. Seasonal water logged.

With a broad objective considering the above problems, the proposed plan is to lead the way to an approach to build a large-scale people's initiative towards managing water, land and biomass resources, enhancing the productivity of these resources and the promote an equitable distribution of their benefits. The main focus of this approach is to develop a sustainable raifed farming systems on the foundation of a sound soil and water conservation effort. The following are the activities identified through conducting participatory rural appraisal survey in the villages of Champabati Upper WDC-PMKSY 2.0.

1. RCC Check dams
2. Gully Control Project
3. Farm ponds
4. Horticulture- Banana Plantation
5. Earthen Drainage Channel
6. Renovation of Earthen Drainage Channel
7. Agri Bund
8. Earthen Guide Bund
9. Brick Channel
10. Loose bolder / Boulder Revetment & Pitching
11. Horticulture- Pineapple Plantation
12. Horticulture- Rubber Plantation
13. Nursery Raising
14. Pasture development
15. Home Stead Kitchen Garden

16. Roadside Plantation (Brick Khasa)
17. Roadside Plantation (Bamboo Khasa)
18. Bio gas
19. Solar lamps
20. Afforestation
21. Boundary fencing (Goat Proof of the Desilting/Restoration of old pond).
22. Earthen Platform
23. Box Culvert
24. Horticulture –Battle Nut

Photographs for Base Line Survey before Implementation of NRM works

Boulder Revetment Work at Dologaon MWS-1

Water Harvesting Structure at Deolguri MWS-1

Water Harvesting Structure at Dologaon MWS-1

Photographs for Base Line Survey before Implementation of NRM works

Gully Control Project at Balapara MWS-2

Boulder Pitching Project at Laoripara MWS-2

Gully Control Project at Jaolibari MWS-2

Photographs for Base Line Survey before Implementation of NRM works

Gully Control Project at Dhupguri MWS-3

Boulder Pitching Project at Dhupguri MWS-3

Boulder Pitching Project at Kashikotra MWS-3

Photographs for Base Line Survey before Implementation of NRM works

Boulder Pitching at Dangsibari village MWS-4

Water Harvesting Structure at Thunkhobari village MWS-4

Gully Control Project at Bairajhora village MWS-4

Photographsfor Base Line Survey before Implementation of NRM works

Gully Control Project at Nimagaon MWS-5

Renovation of Pond at Choton Mozabari MWS-5

Const. Brick Channel at Solmari MWS-5

2. Livelihood Activities for Asset less poor:

Livelihood comprises the capabilities, asset and activities required for means of living and educated stock and flow of food & cash. To need the basic needs. In order to strengthen the income generating sources for the asset less persons, both women & men, the following activities are proposed. Moreover, appropriate technologist which are relevant to the local agro-eco system, technology transfer, skill building, credit access and assured forward linkage with the market are all mandatory for the sustainability of an enterprise which are proposed for asset less persons. Considering agro-ecological condition of the watershed the following activities are identified through Participatory Rural Appraisal and survey conducted in the villages in the watershed.

i. Handloom

ii. Agarwatti Making

iii. Carpenter

iv. Bicycle Repairing

v. Food Processing

vi. Piggery

vii. Duckery

vii. Poultry

viii. Goattery

ix. Dairy

x. Rajmistry (Masson)

xi. Sewing Machine

xii. Weaving

xiii. Fisheries

xiv. Battle Nut Plantation

xv. Turmeric / Ginger Cultivation

xvi. Computer Repairing

xvii. Cycle Repairing

xviii. Mobile Repairing

xix. Fish Net Making

xx. Candle Industry

xxi. Dhup Industry

xxii. Soap Industry

3. Production System & Micro-Enterprises:

Considering the agro-ecological as well as socio-economic conditions of the watershed, the following activities are proposed through the observations made and recorded during the field visits as well as by PRA survey. In view of the physical as well as socio-economic settings, the production techniques and technologies, the products, quality of raw material and market availability. The following activities are identified for allied and livelihood activities for farmers by conducting PRA in the village

of the watershed.

i. Food Processing

ii. Horticulture Plantation

iii. Poultry (Vanaraja, giriraja, etc)

iv. Goattery

v. Milching Cow

vi. Piggery

vii. Duck Rearing

viii. Fisheries

ix. Nursery

4. Natural Resources Management and Governance Plans

These plans will have three parts as discussed below:

a) Maintenance of natural resources related assets

Natural resources related physical works need maintenance, and the bio works such as plantation require strong protection measures and care. The watershed committee responsible for undertaking treatment works and asset creation should maintain a Watershed Assets Register, and the list of completed works recorded and updated continuously. The completed assets should be transferred to the Gram Panchayat for their continued maintenance at the end of each year of implementation.

A system of annual audit of natural resource assets should be taken up by the GP to assess their status and maintenance needs. These can be integrated into the MGNREGS by a resolution of the Gram Panchayats. The WDT should ensure that these processes are institutionalized into the functioning of Gram Panchayat and followed regularly from 2nd year onwards. The activities planned to achieve this should be submitted as a part of the overall Project development plan.

b) Water Budgeting, Management/Regulatory Norms and Governance

It is crucial for the community to establish reference sites of wells/ bore wells, and regularly monitor groundwater along with local rainfall, so as to arrive at 49 regulatory norms on water extraction, type of crops to be grown and area coverage.

The groundwater monitoring exercise may be taken up twice a year (April-May & September-October / before the crop season), and results be placed after analysis, before the Gram Sabha. The purpose should be to build a common understanding and consensus in the project community for sustainable use of groundwater. The community should be brought to agree on potential restrictions on new extraction structures, reducing area under water intensive crops and other such norms that economies on water use. These exercises are to be taken up twice a year and activities proposed should be part of the watershed development plan.

A suitable arrangement for carrying out this exercise should be made by PIA in consultation with Watershed Committee and also provide requisite training for the same.

c) Protection and Regulation/Regeneration of Common Lands

Common lands that are typically in the upper reaches of the watershed slopes, including forests, pastures etc. should receive focused attention, along with identification of users, their needs and organizing them into user groups. The plan for regeneration and development should also enlist various products, usufructs arising out of the planned regeneration process, and their benefit sharing norms. Protection measures, norms and their enforcement mechanisms need to be arrived at and must have sanction of the Gram Panchayat.

5. Monitoring & Review, Evaluation, Learning and Documentation

Monitoring & Review

Regular monitoring of project status may be undertaken at all levels – WC, PIA, WCDC, SLNA and NLNA. The national and State Level Nodal Departments may also take up reviews from time to time. Online monitoring must become a feature of the MIS. This will enable monitoring at all levels on same set of real time data. An IT enabled dashboard with access to all responsible for the monitoring may be developed for this purpose. Monitoring should include process, performance and outcomes.

The PIA shall upload progress reports countersigned by the WC Chairman on real time basis to enable monitoring at various levels.

The WC and PIA should adopt an internal system of review and monitoring, for which the PIA may design its own MIS format. Review meetings at fixed intervals are also necessary – monthly meetings with all the PIAs in the district by the WCDC; and quarterly reviews by the SLNA; six monthly reviews by the NLNA.

The National and State Nodal Departments may also undertake reviews at their levels at suitable intervals. To facilitate a qualitative monitoring & review system, NLNA and SLNA may design and develop suitable MIS.

6. Evaluation

In order to support timely evaluation of projects, both National level and State level Panel of Agencies shall be maintained by NLNA and SLNA respectively.

A minimum percentage of evaluations and impact studies will be carried out by national level agencies which may help in deriving strategic lessons for course correction, if any, in the approach and designs of the project and its implementation, and assess whether vision of economy, equity and ecology is being realized at ground level.

The SLNA, by utilizing the services of State panel of evaluators, may also take up evaluation studies with focus on State/UT-specific issues. The findings should help effecting necessary changes in implementation strategy and reorienting focus on different components of the project development plans, if required.

The project-wise evaluation may be undertaken by the WCDC by deploying the State empaneled evaluators.

The purpose of project-wise evaluation would be to identify process gaps and assess performance and quality of outcomes. The evaluation will be on physical, technical and financial aspects of the project.

Each project will be subject to two evaluations, namely, "mid-term" and "end-of-term". While mid-term evaluation shall be taken up at the end of 2nd year, the end- of- term evaluation shall be taken up at the end of the project completion.

A separate set of Guidelines on evaluation may be evolved for this purpose by NLNA in consultation with States / UTs.

Assessment co-benefits:

In addition to direct benefits from watershed/spring shed development projects, there accrue a number of co-benefits over the project period which support the ecosystems and benefit the society at large. Hence, they are valuable data points for reporting the national achievements vis-à-vis its international commitments, on United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention to Combat Desertification (UNCCD), Sustainable Development Goals

(SDGs), NDCs platform etc. An appropriate methodology and template may be developed to collect data points on definite periodicity and on a defined metrix so as to assess the progress on co-benefits accrued to the communities.

DoLR with the help of a specialist group of experts and in consultation with States /UTs, may facilitate development of the framework and modalities of such an assessment. These methodologies will be incorporated into the regular monitoring mechanism of the watershed projects.

7. Consolidation:

The consolidation of the project implementation is envisaged to be attained within five years from the date of investment when the result of the input efforts are expected to be bear returns in economic terms. Although initially the output is expected to be economically sustainable within the next two years of time which is likely to increase nonlinearly upto optimum productivity. The activities for timber based aforestation however has far longer gestation period. Such activities are therefore primarily aimed for preservation of sustainable environment. It is therefore expected that the beneficiaries/stakeholders shall also attain the competence to attain self-reliance by the end of seven years when complete withdrawal is to be achieved. Any investment thereafter is expected to be met by the beneficiaries/ stakeholders individually or collectively. Nevertheless, the environmental sustainability (including biodiversity) must be observed and monitored by the regulatory bodies (Government) all the time even after withdrawal. Needless to state that the consolidation and withdrawal must be made gradually while imparting not awareness and training but also in creating the infrastructure for technical services such as monitoring of water quality, soil quality, processing and warehousing facilities, for value addition of the rural product, marketing etc. the investment in consolidation an withdrawal shall be made soley for common benefits which shall be shared by all beneficiaries of the watershed areas.

Physical Target and Financial Outlays:

Major Head	Sub Heads	Total %	1st year		2nd year		3rd year		4th year		5th year		Total
			%	Fin (Rs.)	%	Fin (Rs.)	%	Fin (Rs.)	%	Fin (Rs.)	%	Fin (Rs.)	
Administrative	Management Cost	10	2	17.60	2	17.60	2	17.60	2	17.60	2	17.60	88.00
	Monitoring & Evaluation	2	-	-	0.5	4.40	0.5	4.40	0.5	4.40	0.5	4.40	17.60
Preparatory Phase	Entry Point Activity	2	2	17.60	-	-	-	-	-	-	-	-	17.60
	DPR Preparation	1	1	8.80	-	-	-	-	-	-	-	-	8.80
	Institution &Capacity Building	3	1.5	13.20	0.5	4.40	0.50	4.40	0.25	2.20	0.25	2.20	26.40
Works Phase	Natural Resource Management	47	16	140.80	16	140.80	9.5	83.60	6	26.40	2.5	22.00	413.60
	Production System	15	1	8.80	3	26.40	6	52.80	4.25	37.40	0.75	6.60	132.00
	Natural Resource Management & Governance	2	0.5	4.40	0.5	4.40	0.5	4.40	0.5	4.40	-	-	17.60
	Livelihood Activities for the asset less persons, Micro Enterprises & Business Development	15	1	8.80	2.5	22.00	6	52.80	4.5	39.60	1	8.80	132.00
Consolidation & Withdrawal Phase		3	-	-	-	-	-	-	-	-	3	26.40	26.40
Total		**100**	**25**	**220.00**	**25**	**220.00**	**25**	**220.00**	**15**	**132.00**	**10**	**88.00**	**880.00**

CHAPTER 1

Introduction and Background

INTRODUCTION

- Name of the State : Assam
- Name of the District : Chirang
- Names of the Blocks : Sidli Chirang
- Name of the project : Chirang-I (Champabati Upper)
- Financial Year of sanction : 2021-22
- Project duration : From 2021-22 to 2025-26

Background Note of the District of Chirang

Chirang is one of the four districts of Bodoland Territorial Area District (BTAD) created within the Assam under clauses 6 of Article 332 by the 90th Amendment Act 2003 of the Constitution of India. The entire BTAD area is Autonomous District Council under the provision of Sixth Schedule and the Council is known as Bodoland Territorial Council (BTC). The Chirang District in which the Champabati Upper WDC PMKSY 2.0 Project (Chirang -I/2021-22) falls in the North east corner of the state on the Lower side of the river Brahmaputra under jurisdiction of the Chirang district. The Chirang district is a Council district of Assam. The soil of the district is mostly fertile Alluvial soil and this adjoining with the river Brahmaputra are composed sand and clay in varying proportion.

II). PROFILE OF THE WATERSHED PROJECT:

Table No.1.1 Project at a Glance

1	Name of the State	Assam				
2	Name of the project	Chirang-I (Champabati Upper)				
3	Name of the District	Chirang				
4	Names of the Blocks	Sidli Chirang				
5	Names of Gram Panchayats	1. Sidli 2. Kashikotra 3. Shyamthaibari 4. Bamungaon 5. Kajalgaon 6. Subaijhar				
6	Names & Census Code of Villages covered	MWS	Census Code	Name of Village	Block Name	VCDC Name
		Dologaon 3A1F9c1	395400	Amguri	Sidli Chirang	Shyamthaibari
			395000	Laoripara	Sidli Chirang	Shyamthaibari
			96100	Deolguri	Sidli Chirang	Shyamthaibari
			395200	Goragaon	Sidli Chirang	Shyamthaibari
			395300	Dologaon	Sidli Chirang	Shyamthaibari

			396600	Moja Bari	Sidli Chirang	Shyamthaibari
			396700	Shyamsing Killa	Sidli Chirang	Shyamthaibari
		Athiabari 3A1F9b7	396200	Shyamthai Bari	Sidli Chirang	Shyamthaibari
			394900	Balapara	Sidli Chirang	Shyamthaibari
			395500	Athiabari	Sidli Chirang	Kashikotra
			394800	Jaolia Bari	Sidli Chirang	Bamungaon
			395600	Bamungaon	Sidli Chirang	Bamungaon
		Dhopguri 3A1F9p5	396800	Choto Mojabari	Sidli Chirang	Shyamthaibari
			396500	Pret Gaon	Sidli Chirang	Shyamthaibari
			396400	Gender Gaon	Sidli Chirang	Kashikotra
			397100	Kashikotra No.1	Sidli Chirang	Kashikotra
			396300	Kashikotra No.2	Sidli Chirang	Kashikotra
			396100	Dhopguri	Sidli Chirang	Kashikotra
			396000	Dipu	Sidli Chirang	Kashikotra

		Thunkhobari 3A1F9d2	397000	Kumguri (Dipu)	Sidli Chirang	Kashikotra
			397200	Kolobari Kashibari	Sidli Chirang	Sidli
			396900	Thunkhobari	Sidli Chirang	Sidli
			395700	Dangshi Bari	Sidli Chirang	Bamungaon
			395800	Bairajhora	Sidli Chirang	Bamungaon
			397800	Soalmari	Sidli Chirang	Sidli
		Nimagaon 3A1F9b4	397400	Nimagaon	Sidli Chirang	Sidli
			397600	Rajajan	Sidli Chirang	Sidli
			397300	Namalpur	Sidli Chirang	Sidli
			397700	Krishnapur	Sidli Chirang	Kajalgaon
			399900	Palashbari	Sidli Chirang	Kajalgaon
			92500	Salbari	Sidli Chirang	Subaijhar
7	Four major reasons for selection of watershed	1. The area preponderance of degraded land. 2. The area is dominated by SC and ST population 3. There is acute problem of drinking water 4. The major area of agriculture is rain fed and most it is susceptible to soilerosion due to over exploitation of ground cover.				
8	Name, Address, Phone No and Reg. No. of the PIA(s)	Divisional Officer, Chirang Soil Conservation Division, Kajalgaon. Phone No. 7002722946				

9	Date of approval of Watershed Development Plan by the DPC	-
10	Area of the Project (ha.)	**5122.00**
11	Area proposed to be treated (ha.)	**4000.00**
12	Financial Year of sanction	2021-22
13	Project duration	From 2021-22 to 2025-26
14	Project Cost (Rs. in Lakhs)	**880.00**
15	Date of Sanction by State authority	**04-01-2022**
16	Date of Release of 1st Installment of Central Assistance (To be filled by DoLR)	**23-02-2022**
17	Any other, please specify	**-**

Table No. 1.2 Need and Scope for Watershed Development

About 60-75% of the total population of the area is totally dependent on agriculture. The area has been facing many problems right from low ground water table to perennial flesh flood. Due to erratic climatic character, the project area has to face occasional drought like situation also. Adverse climatic conditions, poor mobilization of the resources and inadequate agriculture infrastructure are some of the factors responsible for the underdeveloped condition of the area. Hence, it is anticipated that the project area of over 4000 Ha. would undoubtedly boost the living standards of the people of the area through the improvement in agriculture and allied activities. The degradation of the natural wet land & drainages has also created the problem of water logging in the catchment areas.

Degradation of soil & water resources is considered not only as an extreme constraint to sustainable agricultural development but also a peril to the society. Poor ecosystem management results in poor functioning of watershed, hence there is a need to protect and preserve the quality of the ecosystem.

Watershed Management is the implementation of management system that guarantees the preservation, conservation and sustainable use of all land and water resources. Watershed management also integrates various aspects of Forestry, Agriculture, Hydrology, Ecology, Pedology etc. for choosing acceptable management alternative within the specific social & economic context. As mentioned above, the area of Champabati Upper WDC-PMKSY 2.0 watershed suffers from degradation of natural resources, soil erosion, situation & therefore there is a tremendous scope of executing watershed development activities in the watershed area.

The Weightage of the watershed selected for treatment are analyzed as per criteria and scores delineated by the Department of Land Resources Government of India is given below in the table herewith

Project Name	Project Type	Weightage													
		i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii	xiii	Total
Chirang-I (Champabati Upper) WDC PMKSY 2.0	Others	7.5	10	5	5	3	0	10	7.5	15	10	15	10	0	98

*As per PPR

Sl.no	Criteria	Max Score	Ranges and Scores			
i	Poverty index(%of poor to population)	10	Above 80% (10)	80 to 50 % (7.5)	50 to 20 % (5)	Below 20% (2.5)
ii	% of SC/ST population	10	More than 40% (10)	20 to 40 % (5)	Less than 20% (3)	
iii	Actual wages	5	Actual wages are significantly lower than minimum wages (5)	Actual wages are equal to or higher than minimum wages (0)		
iv	% of small and marginal farmers	10	More than 80% (10)	50 to 80% (5)	Less than 50 (3)	
v	Ground water status	15	Over exploited (15)	Critical (10)	Sub critical (5)	Safe (0)
vi	Moisture index/ DPAP/DDP Block	10	-66.7 & below (10) DDP Block	-33.3 to -66.6 (5) DPAP Block	0 to -33.2 (0) Non DPAP/DDP Block	
vii	Area under assured irrigation	15	Less than 10% (15)	10 to 20% (10)	20 to 30% (5)	Above 30% (Reject)
viii	Drinking water	10	No source (10)	Problematic village (7.5)	Partially covered (5)	Fully covered (0)
ix	Degraded land	15	High – above 20% (15)	Medium – 10 to 20 % (10)	Low – less than 10 % of TGA (5)	

x	Productivity potential of the land	10	Lands with low production & where productivity can be significantly enhanced with reasonable efforts (10)	Land with moderate production & where productivity can be enhanced with reasonable efforts (5)	Lands with high production & where productivity can be marginally enhanced with reasonable efforts (0)	
xi	Contiguity to another watershed that has already been developed/treated	10	Contiguous to previously treated watershed & contiguity within the micro watersheds in the project (10)	Contiguity with in the micro watersheds in the project but non contiguous to previously treated watershed (5)	Neither contiguous to previously treated watershed nor contiguity within the micro watersheds in the project (0)	
xii	Cluster approach in the plains (more than one contiguous micro-watersheds in the project)	15	Above 6 micro-watersheds in cluster (15)	4 to 6 micro watersheds in cluster (10)	2 to 4 micro watersheds in cluster (5)	
xiii	Cluster approach in the hills (More than one contiguous micro- watersheds in the project)	15	Above 5 micro-watersheds in cluster (15)	3 to 5 micro watersheds in cluster (10)	2 to 3 micro watersheds in cluster (5)	
	Total	**150**	**150**	**90**	**41**	**2.5**

Table no.1.3: Watershed information

Out of the total Geographical area of 5122 Ha of the Champabati Upper watershed, 4000 Hectare has been considered under cultivable land and 1122 Hectare has been considered as under uncultivable land. Out of the total cultivable land 3350 Hectare is rainfed and 650 Hectare is cultivable Wasteland.

Sl. No	Name of Project	Watershed Code	Villages to be Treated	Geographical Area (Ha)	Treatable Area (Ha)	Approval Year
1	Chirang-I (Champabati Upper) WDC PMKSY 2.0	3A1F9	Amguri	149.92	117	2021-22
2			Goragaon	74.05	50	2021-22
3			Laoripara	159.79	124	2021-22
4			Dologaon	144.06	112	2021-22
5			Moja Bari	141.75	109	2021-22
6			Shyamsing Killa	106.15	79	2021-22
7			Deolguri	186.52	147	2021-22
8			Balapara	165.79	125	2021-22
9			Athiabari	210.71	166	2021-22
10			ShyamthaiBari	115.83	88	2021-22
11			Jaolia Bari	254.00	206	2021-22
12			Bamungaon	267.13	219	2021-22
13			Gender Gaon	141.16	109	2021-22
14			Choto Mojabari	78.00	52	2021-22
15			Pret Gaon	97.88	70	2021-22
16			Kashikotra No.2	114.76	86	2021-22

17			Kashikotra No.1	205.39	163	2021-22
18			Dhopguri	320.68	264	2021-22
19			Thunkhobari	198.64	158	2021-22
20			Dipu	261.83	215	2021-22
21			Kolobari Kashibari	127.07	99	2021-22
22			Kumguri (Dipu)	86.05	58	2021-22
23			Bairajhora	132.13	103	2021-22
24			Dangshi Bari	157.70	125	2021-22
25			Salbari	145.99	106	2021-22
26			Namalpur	226.57	181	2021-22
27			Nimagaon	174.33	136	2021-22
28			Rajajan	178.22	140	2021-22
29			Soalmari	145.49	114	2021-22
30			Krishnapur	197.68	157	2021-22
31			Palashbari	156.73	122	2021-22
Total				**5122.00**	**4000**	**-**

Data source: GIS Data, Field Survey

Table No.1.4: Status of other development project in the area

S no	Name of the programme/scheme	Sponsoring agency	Objectives of the programme/scheme	Year of commencement	Villages covered	Estimated number of beneficiaries
No other watershed programme was taken up in the project area.						

Table No. 1.5: Status of previous watershed programme-

S. No	Project name	Year started	Name of villages	No. Of micro watershed	Watershed codes	Area under treatment	Funding source	Nodal agency	PIA	Total cost	Expenditure incurred up to start of IWMP	% financial completion	% physical completion
No previous Watershed Programme													

CHAPTER 2

General Description of Project Area

Location of Watershed:

The Champabati Upper Watershed is located in Southern part of the district Chirang and near the river Champabari. The geographically project area is located between 26°28' N to 26°54' N longitude and 89°42' E to 90°06' E latitude. The watershed are covered 31 numbers of revenue villages under Sidli-Chirang Development Block. The total project area of the watershed is about 5122 Ha.

Climatic condition of the area:

The climate is sub-tropical in nature with warm and humid summer followed by dry and cool winter. The average annual rainfall is about 2663 mm per annum of which 75% is received during monsoon month (June to September). The monsoon months are wet and winter is dry. Both pre and post monsoon months have unpredicted and erratic rainfall. The mean maximum and minimum temperature varies from 33 to 380 C and 9 to 100C, respectively. The average radiation is the highest during March - April, while overcast sky reduces the solar radiation to the least during July. The climatic season is classified as follows

(a) winter (b) pre-monsoon, (c) monsoon and (d) retreating monsoon

Soil:

The four orders of soils are found in the district namely (i) Entisols (recent alluvium), (ii) Inceptisols (old alluvium), (iii) Alfisols (Mountain Valley) and (iv) Ultisols (Laterised red). The soil of zone is mostly acidic nature and PH increases near the river track. The organic carbon and available Nitrogen of the soil mostly varies from medium to high, low in available P2O5 and medium in K2 O status). Mild micronutrient deficiency specially of Boron has been observed in some areas throughout the district. However in general, soil of the district is acidic in reaction. Soil of major areas are mildly acidic (5.5-6.5 PH), while soil in high land old alluvial is severely acidic. There is a problem of riverbank erosion in the riverine tracts, specially during flood season.

Ground water potentiality:

The depth of ground water table plays an important role in determining the risk due to contamination to groundwater. Like the surface water bodies, the pressure on the ground water is increasing in the watershed area. Ground water occurs under phreatic condition in the shallow aquifer zone and under semi-confined condition in the deeper aquifer. Flow of ground water is from north to south. Pre-monsoon water level varies from 0.01 to 9.40 mbgl and during post-monsoon period, water level varies from 0.56 to 8.26 mgbl. Other than higher arsenic (As) and iron (Fe) concentration in ground water, most of the chemical constituents are within the permissible limit.

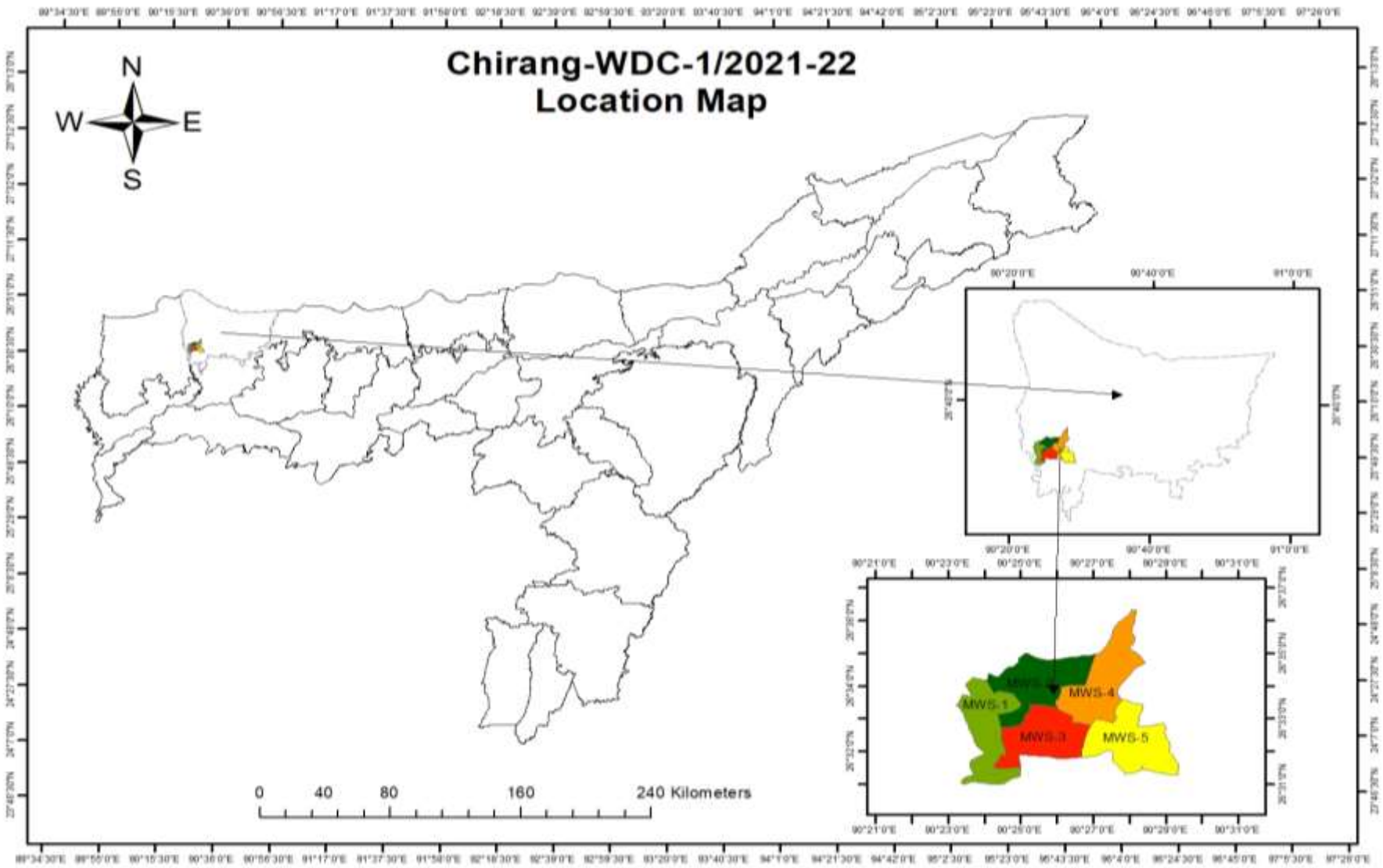
Table 2.1: Location

Longitude	$26^0 30'$ N to $26^0 36'$ N		
Latitude	$90^0 24'$ E to $91^0 27'$ E		
State	Assam		
District	Chirang		
Subdivision	Chirang		
Block	Sidli Chirang		
Panchayat	1. Sidli 2. Kashikotra 3. Shyamthaibari 4. Bamungaon 5. Kajalgaon 6. Subaijhar		
Villages List	Village name	MWS	VCDC
	Amguri	Dologaon	Shyamthaibari
	Laoripara		Shyamthaibari
	Deolguri		Shyamthaibari
	Goragaon		Shyamthaibari
	Dologaon		Shyamthaibari
	Moja Bari		Shyamthaibari
	Shyamsing Killa		Shyamthaibari

	Shyamthai Bari	Athiabari	Shyamthaibari
	Balapara		Shyamthaibari
	Athiabari		Kashikotra
	Jaolia Bari		Bamungaon
	Bamungaon		Bamungaon
	Choto Mojabari	Dhopguri	Shyamthaibari
	Pret Gaon		Shyamthaibari
	Gender Gaon		Kashikotra
	Kashikotra No.1		Kashikotra
	Kashikotra No.2		Kashikotra
	Dhopguri		Kashikotra
	Dipu	Thunkhobari	Kashikotra
	Kumguri (Dipu)		Kashikotra
	Kolobari Kashibari		Sidli
	Thunkhobari		Sidli
	Dangshi Bari		Bamungaon
	Bairajhora		Bamungaon
	Soalmari		Sidli
	Nimagaon	Nimagaon	Sidli
	Rajajan		Sidli
	Namalpur		Sidli

	Krishnapur		Kajalgaon
	Palashbari		Kajalgaon
	Salbari		Subaijhar
Approach Road	NH-27		

LOCATION MAP OF CHAMPABATI UPPER WATERSHED



Details of the types of areas covered under the project:

Area under Major Land Uses (Area in Ha.)

The total Geographical area of the Champabati Upper DWC-PMKSY 2.0 Project is 5122 hectares, out of which 4121 hectares of area under agricultural use which comprises 80.45% of the project area. The total wasteland in the project area is about 871 hectares out of which 650 hectares are cultivable wasteland. There is no irrigation facility in the project area and thus the entire area of 3350 hectares is under rainfed condition. There is no Forest land in the project area. A total of 4000 Ha area has been determined as treatable area out of the total area. The details of land use pattern are shown below in table No. 2.2.

Table no: 2.2 Land Details

S. No.	Names of villages	Geographical Area of the village (ha)	Forest Area (ha)	Land under agricultural use (ha)	Rain-fed area (ha)	Irrigated Area	Permanent pastures (ha)	Wasteland	
								Cultivable (ha)	Non-cultivable (ha)
1	Amguri	149.92	0	122.92	98	0	3	19	5
2	Goragaon	74.05	0	55.05	36	0	1	14	4
3	Laoripara	159.79	0	130.79	104	0	3	20	6
4	Dologaon	144.06	0	119.06	95	0	3	17	5
5	Moja Bari	141.75	0	116.75	92	0	3	17	5
6	Shyamsing Killa	106.15	0	85.15	64	0	2	15	4

7	Deolguri	186.52	0	147.52	122	0	5	25	9
8	Balapara	165.79	0	136.79	105	0	3	20	6
9	Athiabari	210.71	0	166.71	139	0	7	27	10
10	ShyamthaiBari	115.83	0	94.83	73	0	2	15	4
11	Jaolia Bari	254.00	0	204	176	0	8	30	12
12	Bamungaon	267.13	0	212.13	186	0	10	33	12
13	Gender Gaon	141.16	0	116.16	92	0	3	17	5
14	Choto Mojabari	78.00	0	59	38	0	1	14	4
15	Pret Gaon	97.88	0	78.88	56	0	1	14	4
16	Kashikotra No.2	114.76	0	93.76	71	0	2	15	4
17	Kashikotra No.1	205.39	0	162.39	136	0	6	27	10
18	Dhopguri	320.68	0	255.68	228	0	12	36	17
19	Thunkhobari	198.64	0	156.64	132	0	6	26	10
20	Dipu	261.83	0	208.83	183	0	9	32	12
21	Kolobari Kashibari	127.07	0	105.07	83	0	2	16	4
22	Kumguri (Dipu)	86.05	0	65.05	43	0	2	15	4
23	Bairajhora	132.13	0	110.13	87	0	2	16	4
24	Dangshi Bari	157.70	0	128.7	105	0	3	20	6
25	Salbari	145.99	0	120.99	95	0	5	11	9

26	Namalpur	226.57	0	183.57	154	0	6	27	10
27	Nimagaon	174.33	0	140.33	113	0	4	23	7
28	Rajajan	178.22	0	142.22	116	0	4	24	8
29	Soalmari	145.49	0	118.49	95	0	3	19	5
30	Krishnapur	197.68	0	155.68	131	0	6	26	10
31	Palashbari	156.73	0	127.73	102	0	3	20	6
	Total	**5122**	**0**	**4121**	**3350**	**0**	**130**	**650**	**221**

Source: PPR Chirang

Table No. 2.3: Details of the types of areas covered under the project

1	2	3				
S. No.	Name of village	No. of beneficiaries covered				
		MF	SF	LF	Landless	Total
1	Amguri	22	15	14	24	76
2	Goragaon	46	32	29	50	157
3	Laoripara	49	34	32	53	168
4	Dologaon	29	20	19	32	100
5	Moja Bari	68	47	44	74	233
6	Shyamsing Killa	40	28	26	44	138
7	Deolguri	47	33	30	51	161
8	Balapara	22	15	14	24	75

9	Athiabari	31	22	20	34	108
10	ShyamthaiBari	25	18	16	28	87
11	Jaolia Bari	35	25	23	39	122
12	Bamungaon	45	32	29	49	155
13	Gender Gaon	29	20	19	31	99
14	Choto Mojabari	39	27	25	43	135
15	Pret Gaon	25	18	16	28	87
16	Kashikotra No.2	35	24	22	38	119
17	Kashikotra No.1	86	60	56	94	296
18	Dhopguri	49	34	32	53	168
19	Thunkhobari	47	33	30	52	162
20	Dipu	55	38	35	60	188
21	Kolobari Kashibari	4	3	2	4	12
22	Kumguri (Dipu)	13	9	8	14	43
23	Bairajhora	21	15	14	23	73
24	Dangshi Bari	28	20	18	31	97
25	Salbari	15	11	10	17	52
26	Namalpur	78	55	50	85	268
27	Nimagaon	31	22	20	34	107
28	Rajajan	59	41	38	64	202
29	Soalmari	30	21	19	32	102
30	Krishnapur	30	21	20	33	105
31	Palashbari	26	18	17	29	90
	Total	**1160**	**812**	**749**	**1266**	**3987**

Data source: From field survey

Table No. 2.4: Details of Agro-climatic condition

1	2	3	4	5	6		7	
Sl. No.	Name of the Project	Name of the Agro-climatic zone covers project area	Area in ha	Names of the villages	Major soil types		Major crops	
					a) Type	b) Area in ha	a) Name	b) Area in ha
1	Chirang-I (Champabati Upper) WDC PMKSY 2.0	Lower Brahmaputra valley zone No 4	149.92	Amguri	Alfi Sol Sandy loan	149.92	Wet Cultivation	98
2			74.05	Goragaon		74.05		36
3			159.79	Laoripara		159.79		104
4			144.06	Dologaon		144.06		95
5			141.75	Moja Bari		141.75		92
6			106.15	Shyamsing Killa		106.15		64
7			186.52	Deolguri		186.52		122
8			165.79	Balapara		165.79		105
9			210.71	Athiabari		210.71		139
10			115.83	ShyamthaiBari		115.83		73
11			254.00	Jaolia Bari		254.00		176
12			267.13	Bamungaon		267.13		186
13			141.16	Gender Gaon		141.16		92
14			78.00	Choto Mojabari		78.00		38
15			97.88	Pret Gaon		97.88		56
16			114.76	Kashikotra No.2		114.76		71
17			205.39	Kashikotra No.1		205.39		136
18			320.68	Dhopguri		320.68		228
19			198.64	Thunkhobari		198.64		132

20			261.83	Dipu		261.83		183
21			127.07	Kolobari Kashibari		127.07		83
22			86.05	Kumguri (Dipu)		86.05		43
23			132.13	Bairajhora		132.13		87
24			157.70	Dangshi Bari		157.70		105
25			145.99	Salbari		145.99		95
26			226.57	Namalpur		226.57		154
27			174.33	Nimagaon		174.33		113
28			178.22	Rajajan		178.22		116
29			145.49	Soalmari		145.49		95
30			197.68	Krishnapur		197.68		131
31			156.73	Palashbari		156.73		102
Total			**5122.00**			**5122.00**		**3350**

Source: PPR Chirang

Table No. 2.5 Details of flood and drought in the project area

The area faces acute problems of flood and frequent submergence. The discharge in the Champabati Upper River which is primarily responsible to drain the excess runoff from the project area is very high during the peak season and in addition to that the channel capacity of the rivers is often questioned. Moreover, the flow in the major natural waterways has been obstructed by Ipomoea outgrowth and sedimentation.

1	2	3	4		5
Sl. No.	Particulars	Villages	Periodicity		Not affected
			Annual	Any other (please specify)	
1	Flood	No. of villages			
		Name (s) of villages			Occasional flash flood occurs during high rain fall in upper catchment in Bhutan and cause heavy loss to standing crops and silt/sand deposition takes place on cultivable land on river bank. Also bank cutting and shifting of river course are common in project area.
2	Drought	No. of villages			
		Name(s) of villages			Scanty and uneven rainfall causes drought during certain monsoon season.

Data source: From field survey

Table No. 2.6: Details of soil erosion in the project area

The area being endowed with high intensity rainfall and a considerable loss in vegetative cover has increased the runoff generation in the project area. As a result of the High runoff intensity sheet erosion is vigorously experienced in the region.

1	2	3	4	5
Cause	Type of erosion	Area affected (ha)	Run off (mm/ year)	Average soil loss (Tonnes/ ha/ year)
Water erosion				
a	Sheet	3046.26	1329 cumec/Yr.	16.3 Mt/ha/yr.
b	Rill	941.32		
c	Gully	634.42		
Sub-Total		4622.00		
Wind erosion		-		
Total		4622.00		

Source: PPR Chirang

Soil type-A brief overview

The four orders of soils are found in the district namely (i) Entisols (recent alluvium), (ii) Inceptisols (old alluvium), (iii) Alfisols (Mountain Valley) and (iv) Ultisols (Laterised red). The soil of zone is mostly acidic nature and PH increases near the river track. The organic carbon and available Nitrogen of the soil mostly varies from medium to high, low in available P2O5 and medium in K2 O status). Mild micronutrient deficiency specially of Boron has been observed in some areas throughout the district. However in general, soil of the district is acidic in reaction. Soil of major areas are mildly acidic (5.5-6.5 PH), while soil in high land old alluvial is severely acidic. There is a problem of riverbank erosion in the riverine tracts, specially during flood season. The soil type is generally deep imperfectly drained fine loamy soil occurring on level to nearly level plain having loamy

surface with moderate flooding ground water table between 1-2 m below the surface & with slight erosion associated with deep moderately well drained fine silty soils with slight erosion.

Table No. 2.7 Details of the Soil pH

Name of the Villages	Sample no	Soil Ph	Soil Type
Amguri	1	pH 3.5- pH 4.0	Coarse silty, Aeric, Fluvaquents
Goragaon	1	pH 3.5- pH 4.0	Fine loamy, Hapaquepts
Laoripara	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Dologaon	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Moja Bari	2	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Shyamsing Killa	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Deolguri	1	pH 6.5 - pH 7.10	Coarse silty, Aeric, Fluvaquents
Balapara	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Athiabari	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
ShyamthaiBari	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Jaolia Bari	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Bamungaon	2	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Gender Gaon	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Choto Mojabari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Pret Gaon	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Kashikotra No.2	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Kashikotra No.1	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Dhopguri	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Thunkhobari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Dipu	2	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Kolobari Kashibari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents

Kumguri (Dipu)	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Bairajhora	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Dangshi Bari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Salbari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Namalpur	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Nimagaon	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Rajajan	1	pH 6.5 - pH 7.10	Fine loamy, Hapaquepts
Soalmari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Krishnapur	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents
Palashbari	1	pH 4.5- pH 5.0	Coarse silty, Aeric, Fluvaquents

Table No.2.7.1 Climatic Condition

Sl. No	Year	Average Monthly Rain fall (in mm)	Average Annual rainfall (in mm) preceding 5 years	Temp(^{0}C)		Wind Velocity	Open pan evaporation (mm per day)	Relative Humidity (RH)	Average Annual run off(mm/year)
				Max	Min				
1	2017	2884.50	2812.7	33.3	11.4	NA	NA	73-88	870
2	2018	1905.00		33	12	NA	NA	54-88	
3	2019	3753.90		31.4	13.5	NA	NA	63-89	
4	2020	2151.60		31.9	14	NA	NA	56-90	
5	2021	2621.30		31.9	12.1	NA	NA	58-86	

(Data source: Guwahati Airport: Barjhar)

Table No.-2.8 Physiographic Features

Elevation (MSL)	Slope Range (%)	Order of Watershed	Major Stream	Toposequence (Soil series)	Average annual soil loss (Ton / hectare/year)
70-100 m	0-5%	2nd	Champabati	Alfisol-Sandy Loan Coarse silty, Aeric, Fluvaquents Fine loamy, Hapaquepts	16.3 Mt/ha/yr.

Table No. 2.9 Watershed characteristics

Shape index of the watershed	Length of main stream	Drainage density	Average slope	Watershed relief	Perimeter of the watershed
Oval	30 KM	2 to 2.5 Km	0 - 3 %	70 - 100 M	4532000 M

CHAPTER – 3

BASE LINE INFORMATION OF WATERSHED

To access the impact of any watershed development programme a detailed baseline survey has to be conducted. This acts a benchmark for any intervention during and post implementation of any development programme. A detailed baseline survey was undertaken which involved household census survey, Bio-physical survey and Village level data collection. Household census survey includes a detailed questionnaire which was been filled by visiting each and every household in the village. This gave in the details of the demographic profile of the village, the literacy percentage, SC/ST population, number of BPL household, cattle population, net consumption.

Bio-physical survey was undertaken to identify various natural resources available in the village. It included the soil typology, well in the area, crop taken in the field, cropping pattern, fertilizer used and various sources of irrigation in the field.

Table No. 3.1: Demographic features:

1	2	3	4	5
S. No.	Feature	Male	Female	Total
1	Population	9911	9148	19059
	SC	-	-	2859
	ST	-	-	9530
	BC	-	-	
	Others	-	-	6670
2	Children (0-14 years)	-	-	2269
3	Sex Ratio	1000	931	1000:931
4	Literacy	-	-	72.37%
	Literates	6056	3696	8752
	Illiterates	922	2801	3723
5	Work Force	-	-	
	Agriculture	-	-	2185
	Industrial/Business	-	-	
	Service	-	-	
6	Birth Rate	-	-	NA
7	Death Rate	-	-	NA

Data source: From Field Survey, Census Data 2011

Table No. 3.2: Livestock details:

1	2	3
S. No	**Feature**	**No./ quantity)**
1	**Milch Animals**	
	Cows	1756
	Buffaloes	68
	Goat, sheep	650
2	**Draft Animals**	
	Ox	2800
	He Buffalo	450
3	**Others**	
	Poultry	30215
	Piggery	24351
	Duckery	4563
4	**Total Milk production** from milch animals (ltrs/day)	
5	**Fodder Availability**	
	Dry (Abundant/Sufficient/ Scarce)	Sufficient
	Green (Abundant/Sufficient/ Scarce)	Scarce
6	**Fuel wood Availability** (Abundant/Sufficient/Scarce)	Scarce

Data source: From field survey

Table No.3.3: Socio- economic status:

1	2	3	4	5						6			
S. No	Type	Total HHs	No. of BPL HHs	Land Holding (Ha)						Annual Gross Income (Rs.)			
				Rain fed			Irrigated			SC	ST	Others	Total
				SC	ST	Others	SC	ST	Others				
1	Marginal	1160	160	160	625	375	5	6	8	320000	1250000	750000	2320000
2	Small Farmers	812	0	120	312	380	4	5	7	240000	624000	760000	1624000
3	Big farmers	749	0	110	527	112	2	3	5	220000	1054000	224000	1498000
4	Landless	1266	1266	130	994	142	3	4	6	260000	1988000	284000	2532000
	Total	**3987**	**2426**	**520**	**2458**	**1009**	**14**	**18**	**26**	**1040000**	**4916000**	**2018000**	**7974000**

Data source: From field survey

Table No. 3.4: Migration Details:

1	2			3	4	5	6	7
Sl. No.	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.)
	M	F	Total					
1			78	180	To get regular wages etc. during180 lean period of the year and after completing of cultivation practice and get subsidiary income for upliftment of the family member.	10-12 Km	Daily wage	6000-8000

Data source: From field survey

Table No. 3.5: Details of Community Based Organizations existing in the watershed village:

1	2	3				4				5			6			7			8			9	
S. No.	**Type of Group**	**Total no. of CBOs**				**No. of members**				**No. of ST in each category**			**No. of SC in each category**			**No. of Others in each category**			**No. of BPL in each category**			**Bank linkage**	
		With only Men	**With only Women**	**With both**	**Total**		**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**No. of SHGs**	**Bank Loan Amount (Rs.)**
1	SHG	8	7	0	15	(i) Landless	11	24	35	4	8	12	4	8	12	-	-	-	11	24	35	-	Nil
						(ii) MF	40	40	80	11	13	24	11	13	24	-	-	-	2	4	6	-	Nil
						(iii) SF	41	63	104	16	28	44	18	31	49				13	16	29	-	Nil
						(iv) LF	11	15	26	2	3	5	2	3	5				-	-	-	-	Nil
	Total						**103**	**14**	**245**	**33**	**52**	**85**	**35**	**55**	**90**				**26**	**44**	**70**		**Nil**

2	UGs					(i) Landless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						(ii) MF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						(iii) SF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						(iv) LF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Other related Groups (Specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

VSS: Van Suraksha Samiti, FG: Farmer's Group/ Farmer's Club, WUA: Water User Association, F-SHG: Federation of SHGs (C: at Cluster, B: at Block), PG: Producer's Group, PC: Producer's Cooperative.

Table No. 3.6: Infrastructure Facilities:

1	2	3	4	5
S. No	Infrastructure type	No./Quantity	Distance (km)	Status (description)
1	Educational Institutions			
	Anganwadi	28	In the Project Area	Under ICDS of State Social Welfare Department
	Primary School	27		In all villages
	Secondary school	20		-
	Govt. College	1		-
	Vocational Institutions	Nil		-
2	Service Institutions			
	Bank	Nil	Nearest bank at Sidli	
	Post office	1	-	
	Primary Health Care Center	1	Sidli	
	Veterinary Center	3	-	-
	Markets/ Village Haat	3	-	-
3	No. of bore wells/pump sets (Functional)	110	-	-
4	No. of Milk collection centers (Union/ Society/ Pvt. Agency/Others)	Nil	-	-
	Total Quantity of surplus milk	Nil	-	-

5	Road Connectivity (to main road by an all-weather road) (Yes/No)	Yes	-	Most of the villages are connected with graveled village roads
6	Bus facility (Yes/No)	Yes	-	State transport Corporation and Private Buses
7	No. of HHs provided electricity	1074	-	-
8	No. of HHs with access to drinking water	-	-	-
9	Access to Agro Industries (Yes/No)	No	-	-
10	Any other facilities (specify----------)	-	-	-

Source: Baseline survey.

Table No.3.7 Land use pattern (in Hectares)

1	2	3	4	5	6	7	8	9		10		11	12	13*
S. No	Village	Geographical Area#	Forest Area	Community Land	Land under Non Agriculture Use	Permanent Pastures	Land Under miscellaneous use	Uncultivated Private land		Cultivated area		Net Sown Area	Net Area sown more than once	Gross Cropped Area
								Temporary fallow	Permanent Fallow	Cultivated Rainfed	Cultivated Irrigated			
1	Amguri	149.92	0	0	5	3	0	19	5	98	0	117	0	117
2	Goragaon	74.05	0	0	4	1	0	14	4	36	0	50	0	50
3	Laoripara	159.79	0	0	6	3	0	20	6	104	0	124	0	124
4	Dologaon	144.06	0	0	5	3	0	17	5	95	0	112	0	112
5	Moja Bari	141.75	0	0	5	3	0	17	5	92	0	109	0	109
6	Shyamsing Killa	106.15	0	0	4	2	0	15	4	64	0	79	0	79
7	Deolguri	186.52	0	0	9	5	0	25	9	122	0	147	0	147
8	Balapara	165.79	0	0	6	3	0	20	6	105	0	125	0	125
9	Athiabari	210.71	0	0	10	7	0	27	10	139	0	166	0	166
10	ShyamthaiBari	115.83	0	0	4	2	0	15	4	73	0	88	0	88
11	Jaolia Bari	254.00	0	0	12	8	0	30	12	176	0	206	0	206
12	Bamungaon	267.13	0	0	12	10	0	33	12	186	0	219	0	219
13	Gender Gaon	141.16	0	0	5	3	0	17	5	92	0	109	0	109
14	Choto Mojabari	78.00	0	0	4	1	0	14	4	38	0	52	0	52
15	Pret Gaon	97.88	0	0	4	1	0	14	4	56	0	70	0	70
16	Kashikotra No.2	114.76	0	0	4	2	0	15	4	71	0	86	0	86
17	Kashikotra No.1	205.39	0	0	10	6	0	27	10	136	0	163	0	163
18	Dhopguri	320.68	0	0	17	12	0	36	17	228	0	264	0	264
19	Thunkhobari	198.64	0	0	10	6	0	26	10	132	0	158	0	158
20	Dipu	261.83	0	0	12	9	0	32	12	183	0	215	0	215
21	Kolobari Kashibari	127.07	0	0	4	2	0	16	4	83	0	99	0	99
22	Kumguri (Dipu)	86.05	0	0	4	2	0	15	4	43	0	58	0	58
23	Bairajhora	132.13	0	0	4	2	0	16	4	87	0	103	0	103
24	Dangshi Bari	157.70	0	0	6	3	0	20	6	105	0	125	0	125
25	Salbari	145.99	0	0	9	5	0	11	9	95	0	106	0	106

26	Namalpur	226.57	0	0	10	6	0	27	10	154	0	181	0	181
27	Nimagaon	174.33	0	0	7	4	0	23	7	113	0	136	0	136
28	Rajajan	178.22	0	0	8	4	0	24	8	116	0	140	0	140
29	Soalmari	145.49	0	0	5	3	0	19	5	95	0	114	0	114
30	Krishnapur	197.68	0	0	10	6	0	26	10	131	0	157	0	157
31	Palashbari	156.73	0	0	6	3	0	20	6	102	0	122	0	122
		5122.00	**0**	**0**	**221**	**130**	**0**	**650**	**221**	**3350**	**0**	**4000**	**0**	**4000**

Source: PPR Chirang

#geographical area here is the area covered under the watershed.

* Coloumn 13 is the summation of coloumn 11 & 12.

Table No. 3.8: Details of Common Property Resources:

1	2		3				4			
S. No	CPR Particulars		Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
			Pvt. persons	Govt. (specify dept.)	PRI	Any other (Pl. Specify)	Pvt. persons	Govt. (specify deptt.)	PRI	Any other (Pl. Specify)
	Wasteland/ degraded land		472	Not specified	0	-	472	0	0	-
	Pastures		-	162	0	-	0	0	0	-
	Orchards		12	0	0	-	12	0	0	-
	Village Forest		0	0	0	-	0	0	0	-
	Forest		0	0	0	-	0	0	0	-
	Village Ponds/ Tanks		75	8	0	-	75	8	0	-
	Community Buildings		0	14	5	-	0	0	0	-

	Weekly Markets		-	-	-	-	-	-	-	-
	Permanent markets		-	-	-	-	-	-	-	-
	Temples/ Places of worship		-	-	-	-	-	-	-	-
	Others (Pl. specify)		-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-

Source: Baseline survey.

Table No. 3.9: Agriculture implements:

1	2	3
S. No	**Implements**	**Nos.**
1	Tractor	3
2	Sprayers-manual/ power	210
3	Cultivators/Harrows	11
4	Seed drill	Nil

Source: Baseline survey.

Table No. 3.10: Crop Classification

1	2	3
S. No	**Crop classification**	**Area (Ac)**
1	Single crop	3350
2	Double crop	440
3	Multiple crop	Nil

Source: Baseline survey.

Table No. 3.11: Crops & Cropping pattern:

1	2	3	4				5				6			
S. No	Season	Crop sown	Rain fed Production (Ton/yr)				Irrigated				Total			
			Area (ha)	Production (Ton/yr)	Productivity (Kgs/ha)	Cost of cultivation (Rs. /ha)	Area (ha)	Production (Ton/yr)	Productivity (Kgs/ha)	Cost of cultivation (Rs. /ha)	Area (ha)	Production (Ton/yr)	Productivity (Kgs/ha)	Cost of cultivation (Rs. /ha)
1	Kharif	Paddy	3350	0.201	2.017	0.24	-	-	-	-	0.201	2.017	0.240	0.201
2	Rabi	Mustered	265	0.12	1.200	0.26	-	-	-	-	0.12	1.200	0.26	0.12
		Vegetable	175	2.1	2.100	0.18	-	-	-		175	2.1	2100	0.18
3	Summer	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total		**3790**	**2.421**	**5.317**	**0.68**	**-**	**-**	**-**	**-**	**3790**	**2.421**	**5.317**	**0.68**

Source: Baseline survey.

Table No. 3.12: Land capability Classification

1	2	3		4					5				6				Land class
S.No	**Land type**	**Total Area (ha)**	**Soil Texture***	**Based on Depth (cms)- (mention area in ha)**					**Based on Slope (%) (mention area in ha)**				**Erosion (mention area in ha)**				
				V. Shallow (0.75)	**Shallow (7.5-22.5)**	**Moderate deep (22.5-45.00)**	**Deep (45.0-90.0)**	**Very. Deep (>90)**	**Nearly Level (0-2)**	**Moderate slope (2-6)**	**Strong slope (6-15)**	**Steep (>15)**	**Water**			**Wind**	
													Sheet	**Rill**	**Gully**		
I	Agricultural	4121	Fine loamy, Hapaquepts	--	--	3156	965		823	2427	871	--	3046.26	941.32	634.42	--	
Ii	Agricultural (including fallow & Cultivable Waste Land)	780	Coarse loamy, Aeric, Fluvaquents	--	585	335	--	--	--	295	485	--	330	232	106	--	

* Soil texture (sandy-clay, clayey, loamy-clay, gravel)

Table No.3.13: Irrigation facilities:

1	2	3	4
S. No	**Type of the Source**	**Nos.**	**Command area (in ha)**
1	Ponds	145	For drinking and fish farming
2	Open wells	320	For drinking
3	Bore wells	Nil	
4	Canal irrigation	2	Need repairing
5	Natural spring head	Nil	

Source: Baseline survey.

Table No. 3.14: Status of water table:

1	2	3	4	5	6	7	8
S. No	**Source (open well) ****	**Plot No of the source**	**Name of the Owner***	**Date of recording**	**Depth of water table from ground level (in mts)**	**Source located at (ridge/middle/valley)**	**Remarks**
1	Open well at Amguri	-	**-**	April/14	12.25 m	Ridge	
2	Open well at Dologaon	-	**-**	April/14	13.12 m	Ridge	
3	Open well at Shyamsing Killa	-	**-**	April/14	10.45 m	Middle	
4	Open well at Jaolia Bari	-	**-**	April/14	13.29 m	Middle	
5	Open well at Kashikotra No. 2	-	**-**	April/14	10.35 m	Middle	

Source: Baseline survey.

Table No. 3.15: Assessment of drinking water facility*:

1	2	3	4	5
S. No	**Item**	**Units**	**Quantity**	**Source**
1	Drinking water requirement	Ltrs/day	3.5 lakh	Well/Pond/tube well
2	Present availability of drinking water	Ltrs/day	2.15 lakh	Pen well/tube well and ponds
3	No. of drinking water sources available	Nos	Open well-447	-
a)	Functional	Nos	320	-
b)	Need Repairing	Nos	90	-
c)	Defunct	Nos	7	-
4	Short fall if any	Ltrs/day	1.5 lakh	-
5	No. of families getting drinking water from outside the Micro watershed area	Nos	Nil	-
6	Requirement of new drinking water sources (if any)	Nos.	Open-30 Tube well-25 Pond-25	-

* Based on the observation from the field

Table No. 3.16: Surface water resources

1	2	3	4	5
S. No	**Type of water resource**	**Nos**	**Area irrigated (Ha)**	**Storage capacity (Cu.m)**
1	Tank	9 (In 9 Nos. of villages)	10	5000 m³
2	Pond	146 Nos. (20.28 Bigha)	For drinking purpose only Occasionally used in vegetable gardens	7889 m³
3	Lake	Nil	Nil	-
4	Check dam	1 No	Not functioning	Cannot be renovated require to be constructed new
5	Percolation tank	7	51	-

6	Channel/Canal	3 Nos	Not properly functioning	Needs repairing
7	Any others (specify-------)			

Data Source: From Field survey

Table No. 3.17 Ground Water Structures to be repaired.

S. No	Type of structure	No. available			
		No. to be Repaired	**No. to be rejuvenated**	**No. with no interventions required**	**Total**
1	Pond	15	24	3	42
2	Open well	20	10	-	30
3	Tank	2	2	-	4
Total		**37**	**36**	**3**	**76**

Source: From Field data

Table No. 3.18: Existing Water Saving Practices:

Name of the Major Crop	Area (Ha)				
	Under water saving devices[$]	Under water conserving agronomic practices#	Any other (Pl. Specify)	Total	Current water Saving status as against flood irrigation. (Cu.m)
Kharif	-	-	-	-	NA
Rice (Sali paddy)	Not in practice	Not in practice	Under rain fed condition	-	NA
Jute	-	-	Under rainfed condition	-	-
Ravi	-	-		-	-
Rape & Mustard	-	Organic farming	Do	-	-
Gram	-	-	Do	-	-
Potato	-	-	Do	-	-
Zaid/ other crops	-	-		-	NA
Brinjal	-	Organic manuring	Rainfed with Supplementary irrigation	-	NA
Maize	-	-	Rainfed	-	
Chilly	-	Organic manuring	Rainfed	-	NA
Turmeric	-	-	Rainfed	-	

$: Sprinklers, Drip, PVC Pipe, etc.,

#: Vermi compost, organic manuring, check basin, alternate furrow, Ridges and furrow & specific practices

Table No. 3.19: Details of existing livelihoods

1	2	3					4
S. No.	Name of activity	No. of beneficiaries					Pre-project average income per HH (Rs.)
		SC	ST	Others	Total	Women	
1	Cultivation of Agriculture Crops	87	17657	0	17744	4092	6859
2	Service	-	-	-	659	-	-
3	Fish Production	-	-	-	112	-	2400
4	House hold industry	-	-	-	99	-	12000
5	Livestock rearing	-	-	-	516	-	5000
6	Wage earner under MGNREGA	-	-	-	1860	-	11000

Source: Baseline survey.

Table No. 3.20: Existing functional assets (Works already completed under different schemes including works undertaken by farmers independently)

1	2	3	4	5	6
S. No	**Name of the work**	**Plot No.**	**Quantity (No./RMTs)**	**Amount spent (Rs.)**	**Programme**
No significant works undertaken					

Table No.3.21 PROBLEM TYPOLOGY OF THE WATERSHED

1	2	3	4
S. No	**Problem area**	**Problem analysis**	**Proposed interventions to overcome problems**
1	**Soil Conservation** (slope, erosion, soil loss, rainfall, productivity, etc)	Sheet, rill and gully erosion, Bank erosion, excessive surface Runoff	Field bunding, on erosible drainage channel, check bund, earthen bund, plantation, horticulture, afforestation, River training
2	**Water conservation** (Water budget, Ground water norms, productivity)	Less rate of percolation, flood during rainy season and draught like situation during late winter, less growing period for crops	Water harvesting structure, check dam Recharge of ground water, storage of surface water
3	**Crop coverage** – {80% of w/s area should be with canopy}	mono culture, no proper drainage	Farm forestry, plantation, afforestation, horticulture, Fodder cultivation
4	**Agriculture productivity** (crop wise compare with dist. average)	There is existence of relative differences in the availability of materials and supports in respect of input, infrastructure, market linkage, credit flow, post harvest management. Lack of processing unit	To use advanced package of agronomic practices, improved seeds and inputs, credit linkage, market linkage, improved post-harvest management practices. Pest and disease management etc.
5	**Livestock productivity** (Milk Yield, Meat yield, Eggs, Wool Yield, Kidding etc.)	Gradual delineation of grazing land, Lack of scientific package of practices, lack of artificial insemination, Poor transport system, on availability and higher rate of quality feed. Lack of knowledge, financial hardship, improper housing	To boost up activities of Animal Husbandry and veterinary Dept so that farmers can avail better packages, to take up fodder plantations, To organize farmers through by forming S.H.G to take micro enterprises.
6	**Existing Livelihood activities for Asset less persons**	Lack of motivation towards organized micro enterprises, lack financial support, lack of advanced skill	To organize S.H.G. with Financial support and skill up gradation and required guidance. Assistance in Forward and Backward linkages and Marketing etc.

7	**Community Based Organizations & Social capital base**	No properly organized Self Help Groups, Users Groups etc. Financial crisis	To form organized S.H.G and U.G etc. Give financial support, Facilitate credit linkage
8	**Capacity Building** (participation, training,awareness of watershed community	Lack of knowledge, unaware of the schemes	To impart training on skill development, participation, Community organization, Awareness camping, to adopt all possible ways for capacity building of the stake holders
9	**Others (specify) Fish Production**	Poor quality seeds, Inadequate use of lime and fertilizers, Lack of knowledge on water analysis, stocking density etc, Improper feeding	Skill development, support of supply of improved seeds, market linkage, credit linkage etc.

CHAPTER – 4

Institutional Building and Project Management

Table No. 4.1 Details of SHGs & UGs newly formed under IWMP:

1	2	3				4				5			6			7			8			9	
Sl. No.	Type of Group	Total no. of CBOs				No. of members				No. of ST in each category			No. of SC in each category			No. of Others in each category			No. of BPL in each category			Bank linkage	
		With only Men	With only Women	With both	Total		M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	No. of SHGs	Amount (Rs)
1	SHG	-	-	-	-	(i) Landless	80	120	200	72	88	160	8	32	40	-	-	-	80	120	200	-	-
						(ii) MF	12	24	36	5	7	12	7	17	24	-	-	-	-	-	-	-	-
						(iii) SF	24	40	64	12	8	24	12	32	40	-	-	-	-	-	-	-	-
						(iv) LF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total						116	184	300	93	103	196	22	82	104	-	-	-	80	120	200	-	-
2	UGs	-	-	140	140	(i) Landless	1764	756	2520	1411	605	2016	1764	756	2520	-	-	-	1764	756	2520	-	-
						(ii) MF	1323	567	1890	1058	454	1512	1323	567	1890	-	-	-	-	-	-	-	-
						(iii) SF	1103	473	1575	882	378	1260	1103	473	1575	-	-	-	-	-	-	-	-
						(iv) LF	221	95	315	176	76	252	221	95	315	-	-	-	-	-	-	-	-
	Total			140	140		4410	1890	6300	3528	1512	5040	4410	1890	6300	-	-	-	1764	756	2520	-	-

*Account no. of Watershed Committee, PIA.

4.2: Details of Watershed Committees (WC)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Name of WCs	Date of Registration as a Society (dd/mm/ yyyy)	No. of members in WC	Designation	Name	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educl qualifi-cation	Function/s assigned#
						Write **"Yes"** if applicable											
Dologaon	Under Process	12	Chairman	Birkhang Muchahary	M		Yes		Yes							B.A.	NRM Works
			Co-Chairman	Maloti Hembrom	F				Yes							H.S.	
			Secretary	Biswajit Wary	M		Yes		Yes							H.S.	Accounts Keeping
			Member	Mwkthang Basumatary	M		Yes	Yes								HSLC	NRM Works
			Member	Bhagyaswari Wary	F		Yes		Yes				Yes			H.S.	
			Member	Chandan Wary	M		Yes		Yes							10^{th}	
			Member	Bimal Wary	M		Yes		Yes							10^{th}	
			Member	Pronoy Basumatary	M		Yes				Yes			Yes		10^{th}	
			Member	Tasiron Nessa	F						Yes					10^{th}	
			Member	Subhajit Basumatary	M		Yes		Yes			Yes				10^{th}	
			Member	Biswanath Murmu	M						Yes					8^{th}	
			Member	Royal Murmu	M						Yes					8^{th}	
Athiabari	Under Process	11	Chairman	Geremsha Basumatary	M		Yes		Yes							B.A.	NRM Works
			Co-Chairman	Anita Soren	F				Yes							HSLC	
			Secretary	Sujay Singh Islary	M		Yes	Yes								H.S.	Accounts Keeping
			Member	Sangrang Basumatary	M		Yes		Yes					Yes		H.S.	NRM Works
			Member	Paulush Tudu	M						Yes					10^{th}	

			Member	Durjoy Islary	M		Yes		Yes			Yes		Yes		10th	
			Member	Somai Hembrom							Yes					10th	
			Member	Anjali Islary	F		Yes		Yes							10th	
			Member	Dulurani Basumatary	F		Yes		Yes				Yes			10th	
			Member	Shivram Kisku	M						Yes	Yes				8th	
			Member	Priskela Hasda	F						Yes					8th	
Dhupguri	Under Process	11	Chairman	Nabin Mushahary	M		Yes		Yes							H.S.	NRM Works
			Co-Chairman	Puja Das	F			Yes								B.A.	
			Secretary	Prasen Muchahary	M		Yes		Yes							H.S.	Accounts Keeping
			Member	Anilal Basumatary	M		Yes		Yes							10th	NRM Works
			Member	Pulish Wary	M		Yes	Yes				Yes				10th	
			Member	Minu Barman	F						Yes		Yes			10th	
			Member	Minati Brahma	F		Yes		Yes							10th	
			Member	Anima Basumatary	F		Yes		Yes					Yes		8th	
			Member	Mahini Basumatary	F		Yes		Yes							8th	
			Member	Ramola Khatun	F						Yes					8th	
			Member	Jyotish Barman	M				Yes							8th	
Thunkubari	Under Process	11	Chairman	Bishnu Basumatary	M		Yes		Yes							B.A.	NRM Works
			Co-Chairman	Drupodi Barman	F				Yes							H.S.	
			Secretary	Eliash Basumatary	M		Yes	Yes								H.S.	Accounts Keeping
			Member	Jwngsar Borgayary	M		Yes		Yes					Yes		10th	NRM Works
			Member	Tarun Biswas	M						Yes					8th	
			Member	Swmkwr Basumatary	M		Yes		Yes			Yes				10th	
			Member	Karuna Basumatary	M		Yes		Yes							10th	
			Member	Sansuma Muchahary	M		Yes		Yes							8th	
			Member	Prabha Kaklary	F		Yes	Yes					Yes			10th	

			Member	Sumitra Barman	F						Yes					8th	
			Member	Jayshri Borgoyary	F		Yes		Yes							8th	
Nimagaon		11	Chairman	Jatindra Basumatary	M		Yes	Yes								H.S.	NRM Works
			Co-Chairman	Sampa Muchahary	F		Yes		Yes							B.A.	
			Secretary	Konosh Bodosa Muchahary	M		Yes		Yes							H.S.	Accounts Keeping
			Member	Dhruba Sutradhar	M	Yes					Yes					10^{th}	NRM Works
			Member	Narayan Soren	M				Yes							10^{th}	
			Member	Sambaru Sutradhar	M	Yes			Yes			Yes				8th	
			Member	Karuna Singha	M				Yes							8th	
			Member	Bilion Hembrom	M						Yes					10^{th}	
			Member	Babu Basumatary	M		Yes		Yes					Yes		8th	
			Member	Minati Choudhury	F				Yes							10^{th}	
			Member	Pridi Narzary	F		Yes		Yes				Yes			8th	

(NOTE- Member wise details of SHGs, UGs & Watershed Committee has to be enclosed as annexures. The details includes the Name, Husband name and Caste).

In column 18 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 specify).

Table No 4.3: WDT Particulars:

1	2	3	4	5	6	7
S. No	Names of WDT members	M/F#	Age	Qualification / Experience	Description of professional training	Role/ Function*
1	Sri Madhab Das Range Officer	Male	50	Diploma in Civil Eng.	-	A, B, C, D, E, G
2	Dr. Upendra Nath Kalita District A.H. & Vety. Officer	Male	45	B. Veterinary Science	Training on Watershed Management	B & E
3	Sri Haradev Brahma A.D.O. Sidli	Male	33	B. Sc, Agri.	-do-	B & E
4	Miss Madhusmita Kalita F.D.O.	Female	32	Degree B. Fishery Science	-do-	B & E

*In column 7 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 specify).

Table No. 4.4: PIA particulars

1	2	3
S. No	**Particulars**	**Details of PIA**
1	Type of organization#	Nodal Department, Department of Soil Conservation, Govt. of Assam
2	Name of organization	Department of Soil Conservation, Assam
3	Designation & Address	Divisional Soil Conservation Officer, Chirang Soil Conservation Division, Kajalgaon, Assam
4	Telephone	7002722946
5	Fax	NA
6	E-mail	chirangdwdu@gmail.com

In column no. 8.1.6 (1), only the letter assigned to each type, as given below, needs to be typed.

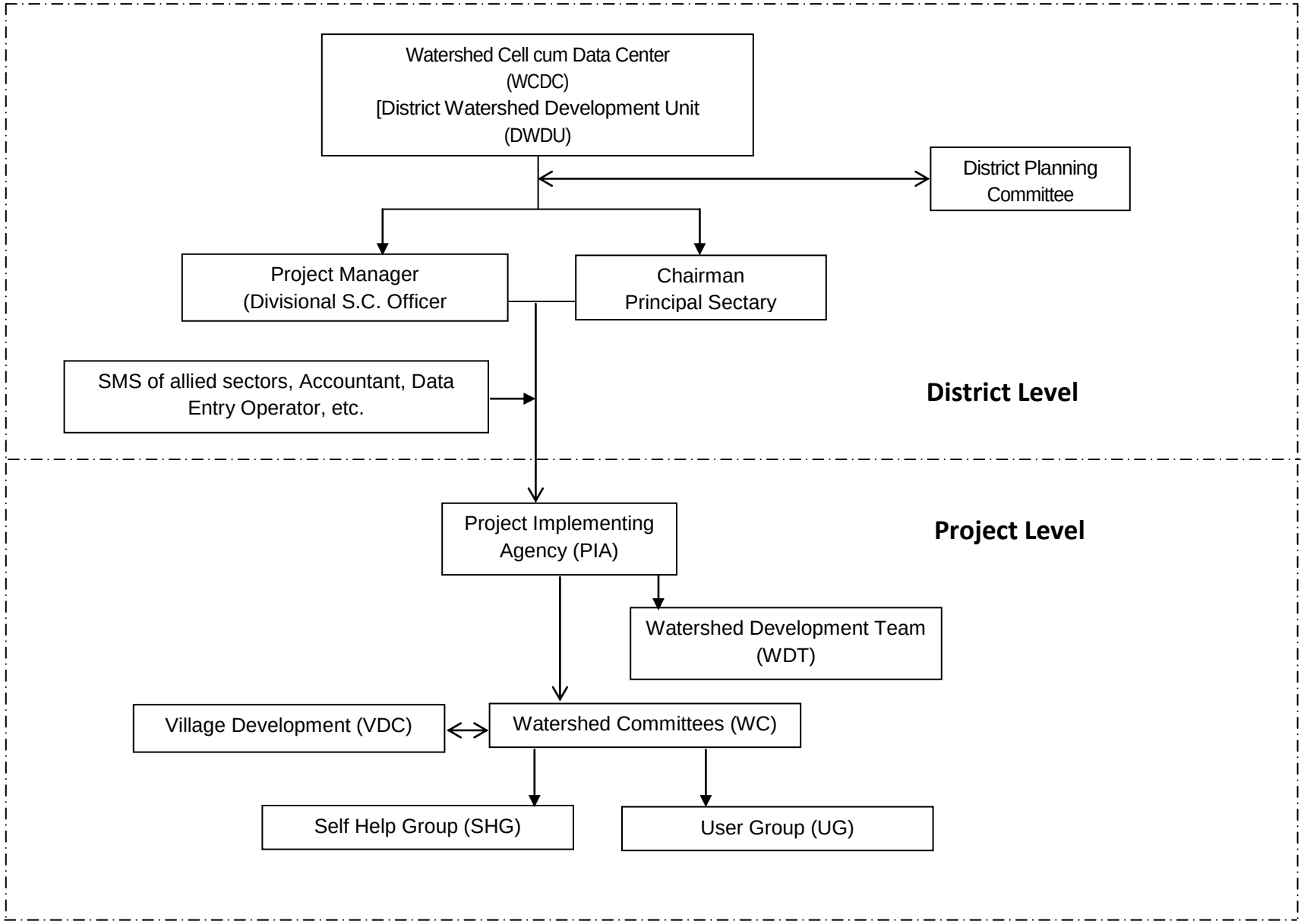
A	Line Dept.	B	Autonomous organization
C	Govt. Institute	D	Research Bodies
E	Zila Parishad	F	Intermediate Panchayat
G	Voluntary Organisations	H	Any other (please specify).

Table No. 4.5 Bank Account Details

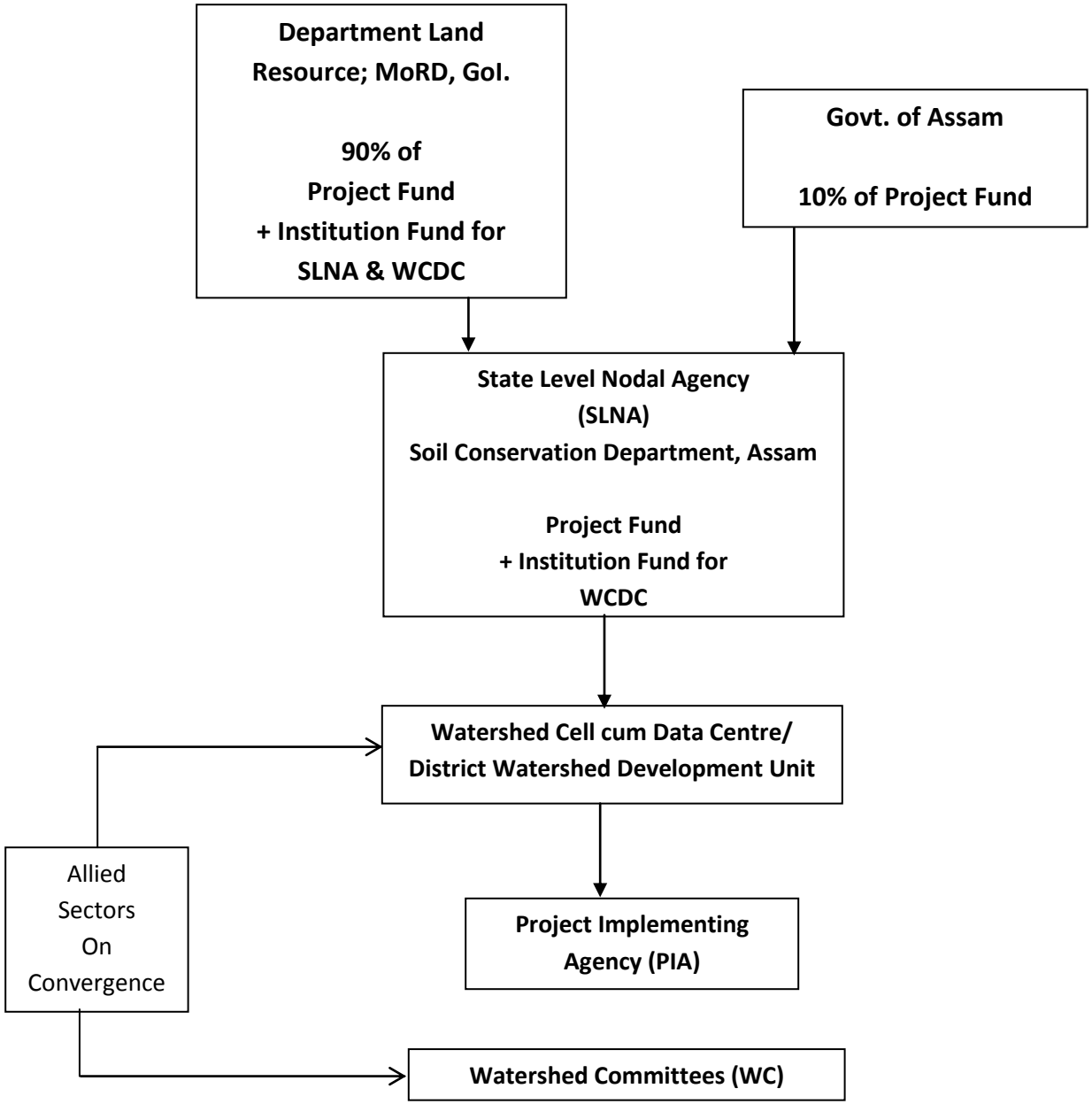
Name of WC/PIA	Name of the Bank/Place	Account No.	Name of the Signatory	Address
Divisional Officer, Chirang Soil Conservation PIA-Chirang-WDC-I/2021-22	State Bank of India, Dhaligaon Bazar	40754231001	PIA	Divisional Officer, Chirang Soil Conservation Division, Kajalgaon
Watershed Committee:				
Dologaon	State Bank of India, Dhaligaon Bazar	40969359540	Project Leader & Chairperson	-
Athiabari		40969359551		
Dhupguri		40969359562		
Thunkubari		40969359573		
Nimagaon		40969359607		

Institutional Mechanisms: (Enclose the following documents)

4.6.1 Flow Chart of Institutional Arrangement from District to watershed level



4.6.2 Fund Flow mechanisms – flow chart,



4.6.3 List of Watershed Records to be maintained

A) At Watershed Committee Level

- Registration Certificate
- Bylaws
- Detail Project Report
- Annual Action Plan
- Cash Copy
- Cash Book
- Project Fund Passbook
- Watershed Development Fund Pass book
- Ledger Book
- Plantation Journal
- Asset/Store Register
- Vouchers
- Cash Memo/Challan/Bill/Vat Certificate/T.P.
- Land Details
- Measurement Book

- Audit Report/Social Audit Report
- Photo Documents
- Project Completion Report
- Common Guidelines
- MoU between Watershed Committee and Project Implementing Agency
- Revenue Records.
- Labour Records Book

B) AT PROJECT IMPLEMENTING AGENCY LEVEL

- Preliminary Project Report
- Detail Project Report
- Annual Action Plan
- Cash Copy
- Cash Book
- Vouchers
- Cash Memo/Challan/Bill/Vat Certificate/T.P.
- Project Fund Passbook

- Watershed Development Fund Pass book
- Ledger Book
- Plantation Journal
- Measurement Book
- Asset/Store Register
- Land Details
- Audit Report/Social Audit Report
- Photo Documents
- Project Completion Report
- Common Guidelines
- MoU between WCDC and Project Implementing Agency
- MoU between Watershed Committee and Project Implementing Agency
- Revenue Records.
- Labour Records Book
- Computerized Accounting System

Documents of Agreements:

4.7.1 Watershed Committee Registration certificate - (under process)

4.7.2 MoU – PIA – WCDC, PIA – WC - (under process)

4.7.3 Resolution of Gram Sabha, Aam Sabha, WC approving action plan#

#the resolution should be done village wise and needs to be approved in Gram/Aam Sabha

4.8 Project Implementation

Project Implementation Strategy including coordination and monitoring of implementation process, WCDC and other coordination mechanism.

Project Implementation involves a number of activities. Among them, the major activities are – securing community participation, co-ordination of activities and project management & Controlling, Monitoring.

Co-ordination is the process whereby more people or organizations work together to deal collectively with a shared objective. The rationale for co-ordination shall be –

1. To take immediate corrective action for problems encountered in implementation of the project.
2. To promote better relationship among organizations, institution, departments and individuals connected with the project and to harmonies resources and activities for the achievements of the project objectives.
3. To establish cordial relationship between the target population of the project and all the other section of the society.
4. Team building which include recruiting people with appropriate qualification for positions in the organization, orienting new people to their position to help them learn their responsibilities and providing training when necessary to upgrade people's skills.

Project Management & Controlling means managing activities to ensure progress towards the projects objectives:

1. Measuring progress of project by comparing the current situation with established goals and objectives.
2. Submitting reports to account for project activities and finance
3. Monitoring performance to document the way people carry out their responsibilities.
4. Providing feedback to people on a regular, informal basis including positive feedback and constructive criticism.
5. Adjusting plans to respond to changes in the internal and external organizational environment.

Monitoring:

It is an important part of project implementation which is a process of routinely gathering information on all aspects of the project. The monitoring shall be continuous and it should be in place before start-up.

The first monitoring shall be done by the project staff. The WCDC and PIA shall be responsible for monitoring the staff and task under them and Project Manager shall be responsible for monitoring all aspects of the project. The second level monitoring shall be done by third party. The monitoring team shall be collected the report through field visit, progress and measures performance including financial reporting.

Step for Monitoring Process:

- Defining the objectives of the monitoring system;
- Designing a programme to systematically monitor achievement;
- Selection of indicators/parameters to be monitored, the location, method/processes and frequency of observations and the information processing and reporting procedure and important; and
- Organizing, motivation and training people to obtain, convey and use the information.

Monitoring tools:

- Semi-structured interviews;
- Community workshops to evaluate the extent of adaption and resulting achievement for conservation practices
- Observation and measurement of easily quantifiable field indicators.
- Farmer's own records can be prepared which provides vital information to great details.
- Ground photographs taken from the same place depicting before and after remedial measures, details concerning

landscape CPR's change in the status of natural resources.

- Community evaluation of certain simple technical, ecological, economical, social and essential services indicators.
- Remote sensing satellite imageries and aerial photographs taken at the start of the plan are repeated periodically.
- Geographical Information Systems (GIS)
- Video monitoring.
- Comparison with demonstration and research plots/farms.
- Comparison with demonstration and research micro-watersheds.
- Hydro-meteorological measuring.
- Using the information gathered by other institutional and private enterprises.
- Combination of above-mentioned tools.

Table No. 4.8 Convergence plan with WDC-PMKSY 2.0:

1	2	3	4	5	6	7
S. No.	Names of Departments with Schemes converging with IWMP	Name of activity/task/structure proposed under convergence (a) Structures (b) livelihoods (c) Capacity Building (d) Any other (pl. specify)	Period of Support (Years)	Reference no. of activity/ task/ structure in DPR	Estimated Fund Proposed Under Convergence (in Rs.)	Level of decision taken for convergence Block/district
1	DRDA-Activities relating to Surface Runoff management and Vegetative cover	1.Water Distribution Channel 2. Drainage Channel 3. Guide bunds 4. Block/ Road side plantation	3	a) Structures d). Plantation Scheme	Necessary fund will be provided/implemented by DRDA	District Level
2	Agriculture	Improved Agronomical practices, Horticulture Plantation, STW, Agril Implements. Seeds, Pesticides, Fertillizers, Marketing	2	(d) Horticulture STW Seeds, Pesticides, Fertillizers, Marketing	Necessary fund will be provided/implemented by Agriculture Deptt.	
3	AH & Veterinary	Artificial insemination, Improved Breed, Marketing	1	(c) Capacity building on Artificial insemination, Dairy, Goatery, Pigery	Necessary fund will be provided/implemented by AH & Veterinary Deptt.	
4	Fishery	Renovation of Fishery Tank and Piscicultue activities	2	d) Renovation of Fishery tank and supplying of fish seeds and food.	Necessary fund will be provided/implemented by Fishery Deptt.	
5	Irrigation	Minor and Sprinkler irrigation	1	(d) Minor Irrigation	Necessary fund will be provided/implemented by Irrigation Deptt.	
6	Soil Conservation	Water Harvesting Structure and Switch gate etc.	1	(d)Structure	Necessary fund will be provided/implemented by Soil ConservationDeptt.	
7	PHE-	Drinking water and sanitation	4	(d) Drinking water sanitation	Necessary fund will be provided/implemented by PHE Deptt.	
8	Social Foresty-	Block Plantation, Road side plantation	3	(d) Road Side Plantation	Necessary fund will be provided/implemented by Forest (Social Foresty) Deptt.	
9	PRI	Post project maintenance	-	-	-	
	Total		**-**	**-**	**-**	**-**

CHAPTER – 5

Management/Action Plan

Description on methodology of plan adopted

a) **Awareness generation interventions:** 1. Mass meeting s and awareness meetings were organized covering each and every village under the project area by the Project Implementing Agency.

b) **Initial Orientation program:** Initial orientation on concept of the watershed, concept of Integrated watershed management programme of the government of India importance of peoples participation in planning, execution and social monitoring of the programme as well in post project maintenance of the project interventions were clarified to the people of the watershed, Panchayati Raj Institution members, village headman and other peoples Representatives.

c) Formation process UGs & Watershed Committee:

1. Watershed Committees are formed as per Common Guidelines for Watershed Development 2008 issued by the Government of India by the Project Implementing Agency.
2. Users groups (UGs) were identified during Participatory Rural Exercises, gram sabhas, from amongst the stakeholders of the intervention identified.

d) DPR preparation process:

1. **Data Collection –**Secondary Data Collection, SE Survey, PRA tools (Social map, matrix ranking wealth ranking, seasonality of labour, migration, crop, disease, Resource map, Transect walk) , sample collection & testing
2. **Planning Process –** Socio Economic Survey was conducted in each and every house hold. Detailed Participatory Rural Appraisal exercises were conducted in each village under the project area with the farmers, Watershed Development Team members, Project Implementing Agency, Panchayati Raj Institution members, Public Representatives and thread bares discussions were held, social mappings were done and problems and resources of the villages were analyzed, recorded the needs and suggestions of the stake holders and accordingly interventions suitable to meet the problem typology were identified. Global Positioning System (GPS) was used to identify each and every water conservation structures, other interventions existing and proposed in the project areas and interventions and intervention map is prepared accordingly.
3. **Mapping-** Social mapping were done in the PRA exercises. Detailed maps were prepared in GIS environment on watershed delineation, Village boundaries, Land use Land cover maps, Drainage maps, Slope maps, contour maps, Treatment maps etc. were prepared. GPS locations of identified interventions were marked in maps.
4. **Hydro-geological Survey-** Hydro geological survey prepared by the central ground water board was consulted.
5. **Public-Private partnership-** The intervention would be implemented by watershed committee through the users groups. Special attention was given on the weaker section of the society such as land less, women and People below poverty line.

6. **Consolidation & preparation of DPR document-** The Detailed Project Report has been prepared comprising the three phases namely preparatory phase-one year, Work phase three years and the Consolidation phase in one year. Thus the implementation of project would be completed in five years. The year wise phasing of detailed in the chapter of Budgeting and Programme implementation.

7. **Approval by Aam Sabha/Gram Sabha-** Activities proposed by villagers/stakeholders during PRA exercises are proposed in the DPR on priority basis and availability of fund.

Map:

The following Maps for the study shall be prepared using GIS –

a) Location Map

b) Watershed Map

c) Village Map

d) Drainage Map

e) Infrastructure Map

f) Contour Map

g) Flow Accumulation Map

h) Flow Direction Map

i) Land Use Land Cover Map

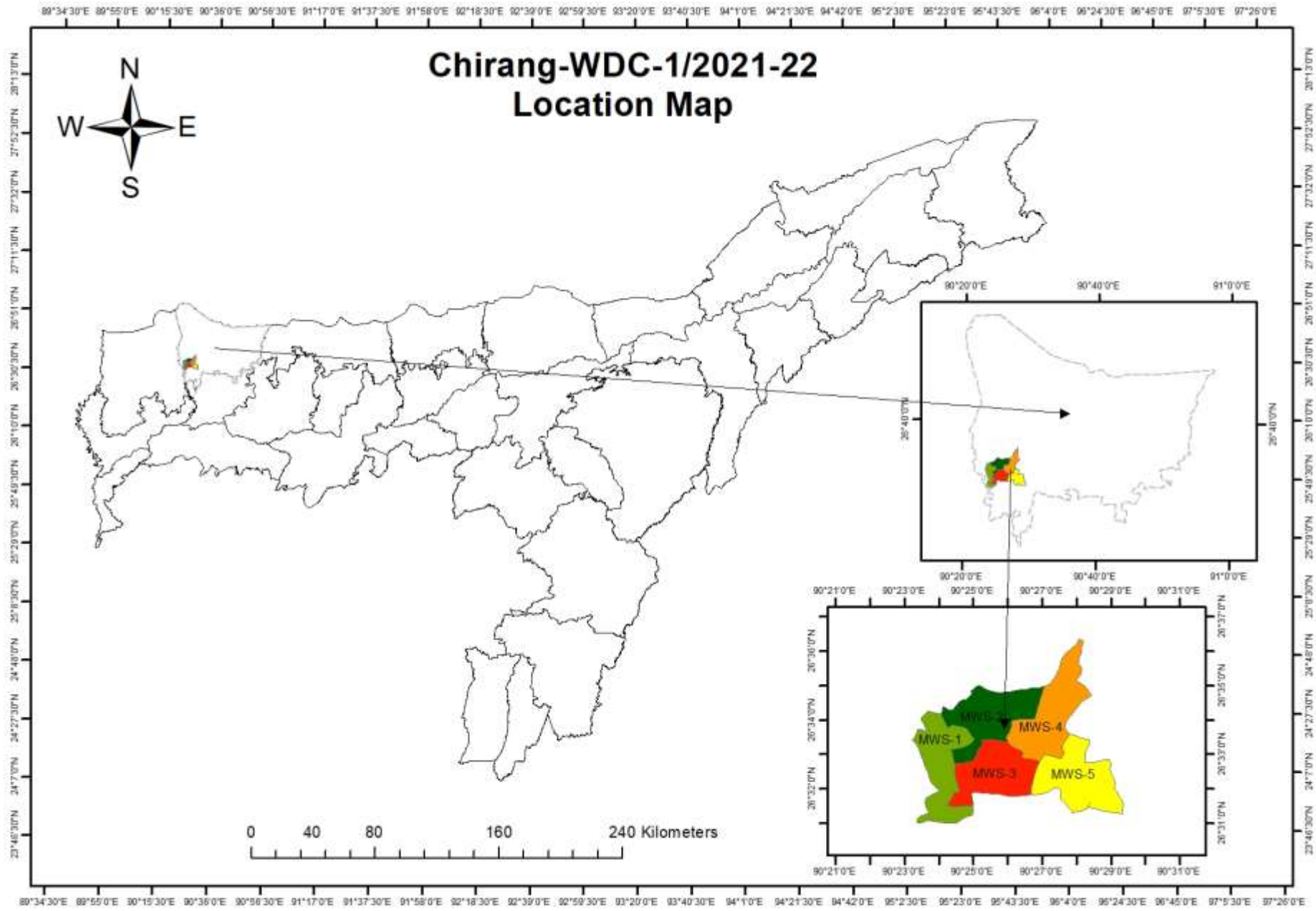
j) Slope Map

k) Soil Map

l) Imagery Map

m) DEM Map

n) Map showing Proposed Intervention in Different phase


Chirang-WDC-1/2021-22
Location Map
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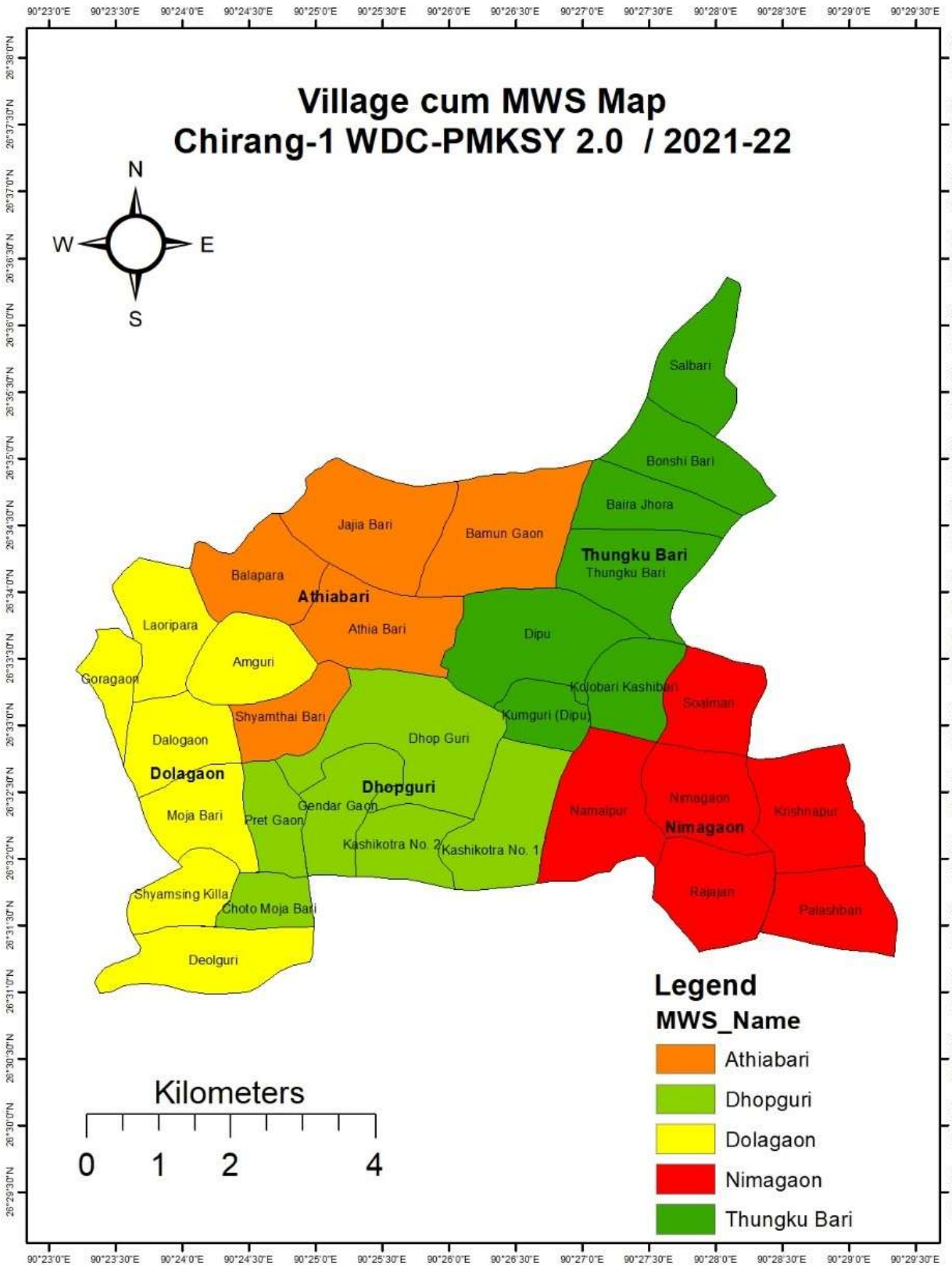
MWS-1
MWS-2
MWS-3
MWS-4
MWS-5


Village cum MWS Map
Chirang-1 WDC-PMKSY 2.0 / 2021-22
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Salbari
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Baira Jhora
Thungku Bari
Thungku Bari
Jajia Bari
Bamun Gaon
Balapara
Athiabari
Athia Bari
Laoripara
Amguri
Goragaon
Dipu
Kujobari Kashibari
Soalman
Kumguri (Dipu)
Shyamthai Bari
Dhop Guri
Dalogaon
Dolagaon
Dhopguri
Gendar Gaon
Moja Bari
Pret Gaon
Kashikotra No. 2
Kashikotra No. 1
Namalpur
Nimagaon
Nimagaon
Krishnapur
Rajajan
Palashbari
Shyamsing Killa
Choto Moja Bari
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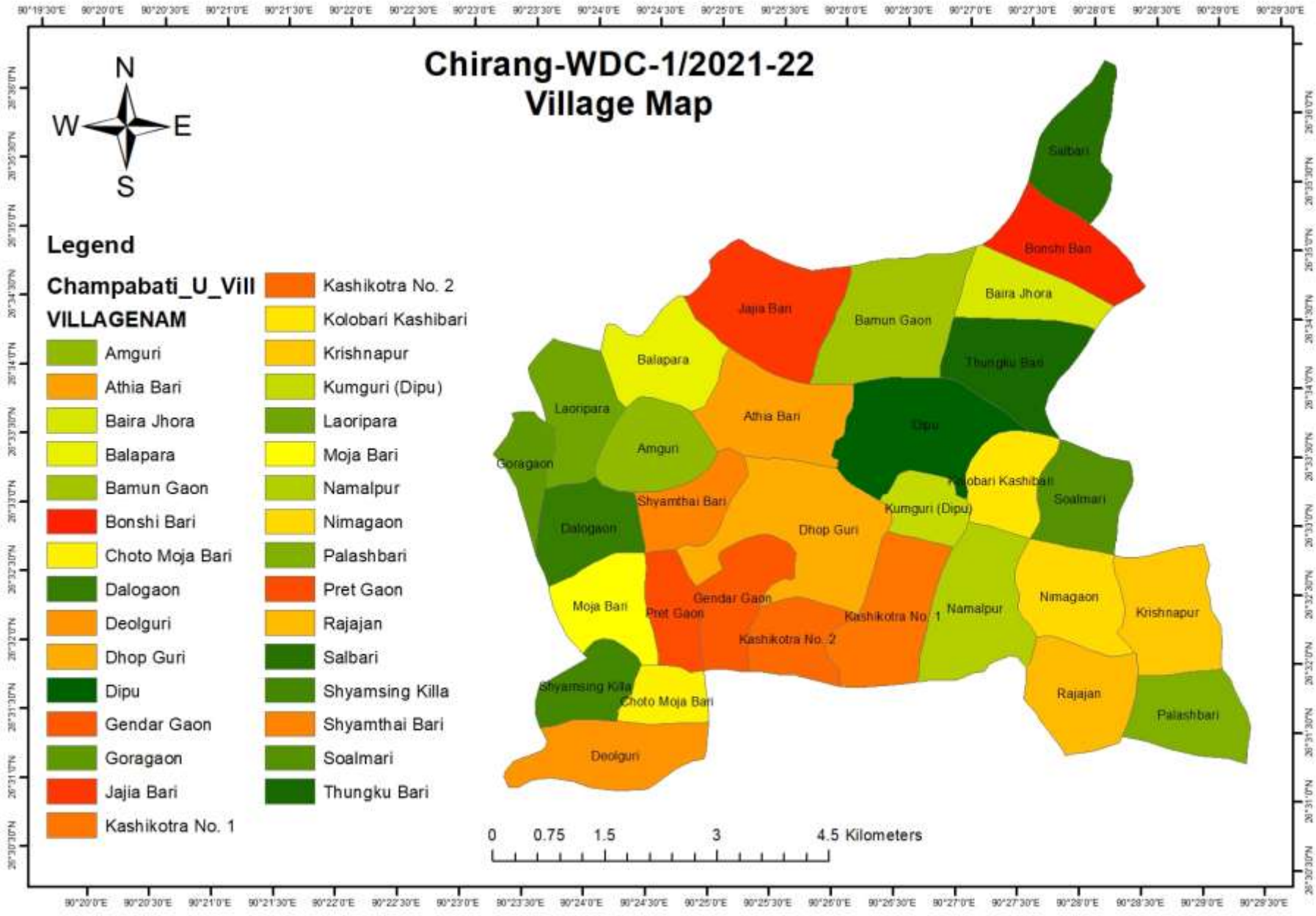
Chirang-WDC-1/2021-22
Village Map
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VILLAGENAM
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Athia Bari
Baira Jhora
Balapara
Bamun Gaon
Bonshi Bari
Choto Moja Bari
Dalogaon
Deolguri
Dhop Guri
Dipu
Gendar Gaon
Goragaon
Jajia Bari
Kashikotra No. 1
Kashikotra No. 2
Kolobari Kashibari
Krishnapur
Kumguri (Dipu)
Laoripara
Moja Bari
Namalpur
Nimagaon
Palashbari
Pret Gaon
Rajajan
Salbari
Shyamsing Killa
Shyamthai Bari
Soalmari
Thungku Bari
Salbari
Bonshi Bari
Baira Jhora
Jajia Bari
Bamun Gaon
Thungku Bari
Balapara
Laoripara
Athia Bari
Amguri
Goragaon
Dipu
Kolobari Kashibari
Soalmari
Shyamthai Bari
Kumguri (Dipu)
Dalogaon
Dhop Guri
Moja Bari
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Kashikotra No. 1
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Nimagaon
Krishnapur
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Rajajan
Palashbari
Deolguri
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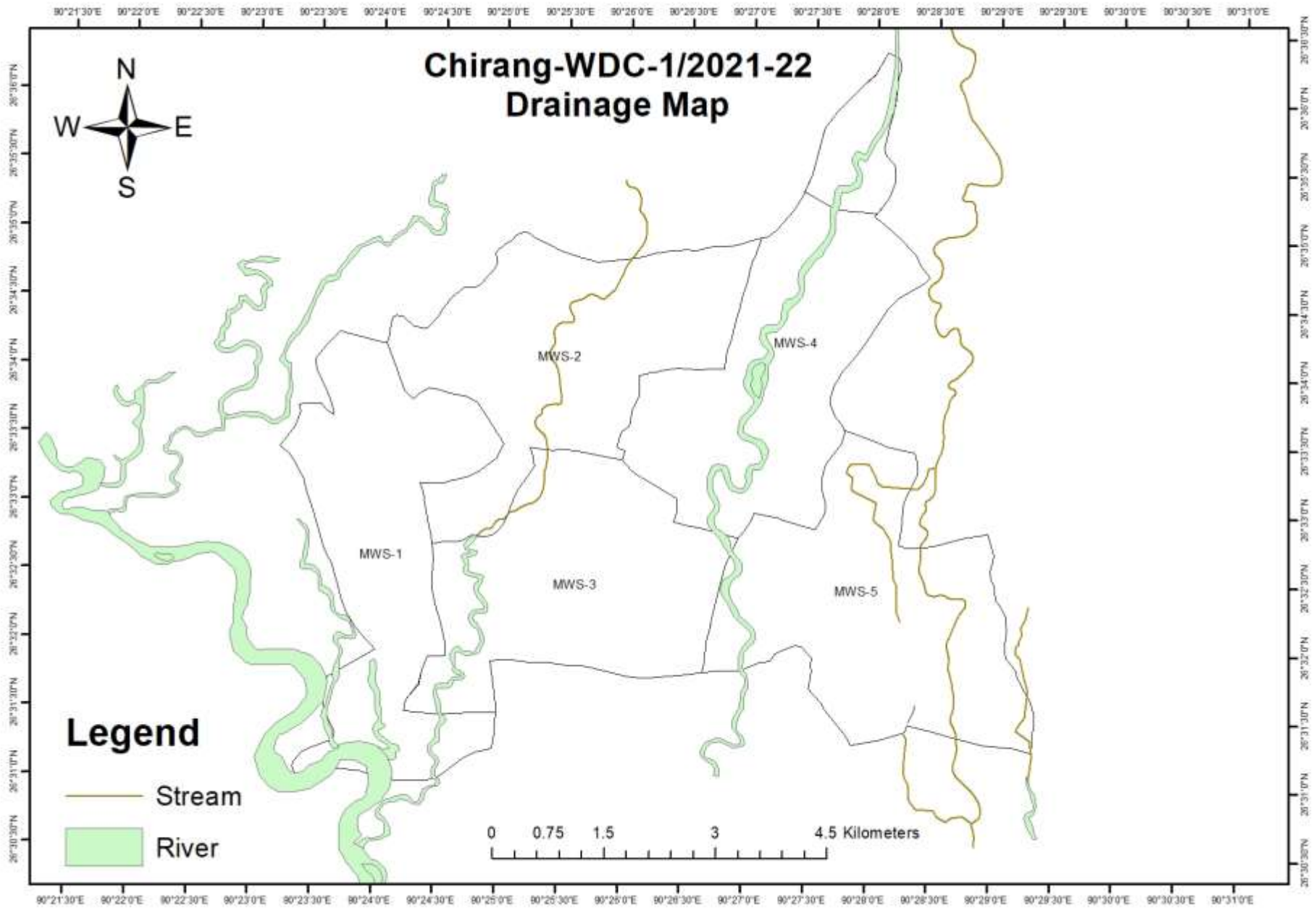
Chirang-WDC-1/2021-22
Drainage Map
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Stream
River
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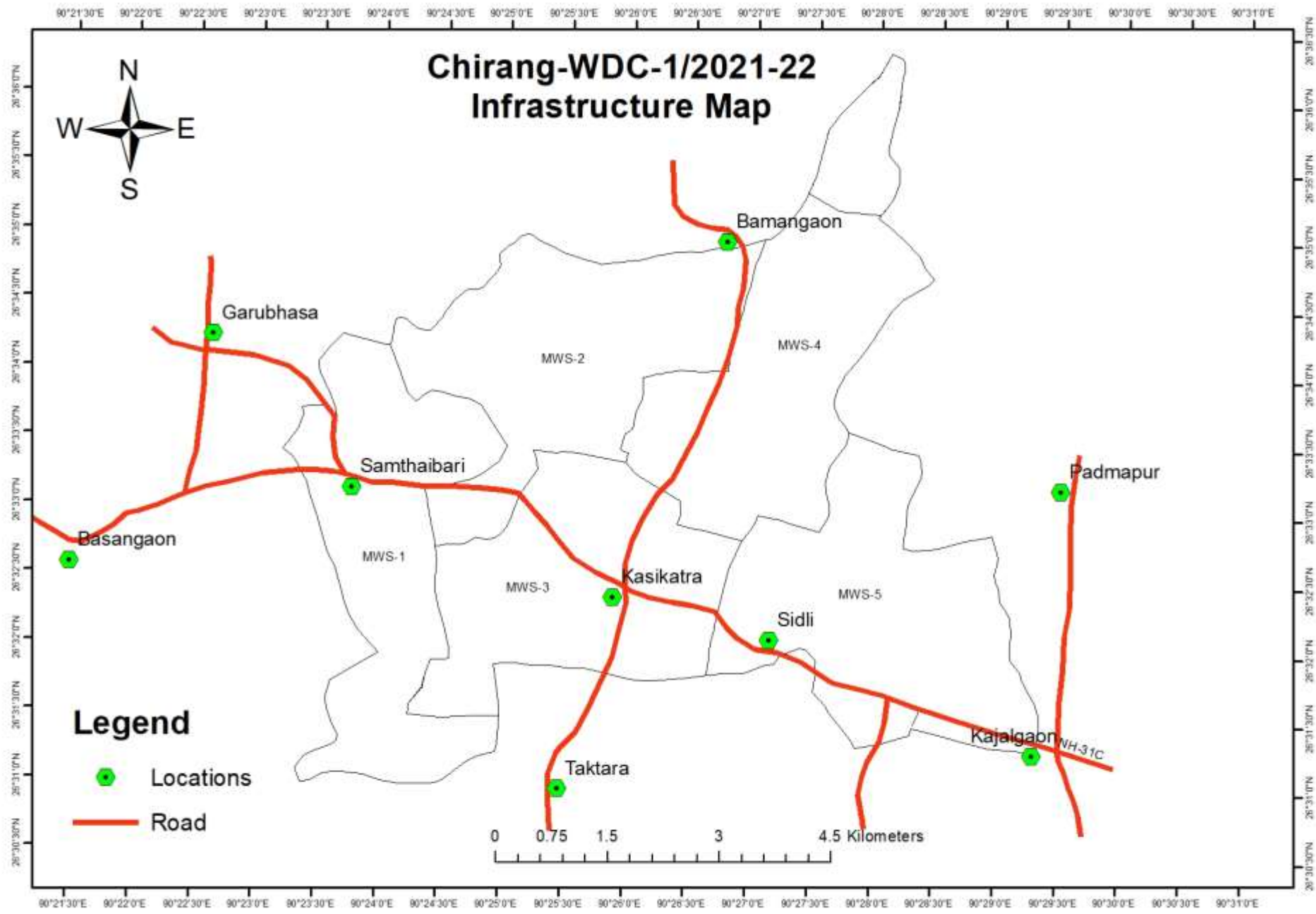
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Infrastructure Map
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Bamangaon
Garubhasa
MWS-2
MWS-4
Samthaibari
Padmapur
Basangaon
MWS-1
MWS-3
Kasikatra
MWS-5
Sidli
Kajalgaon
NH-31C
Taktara
Legend
Locations
Road
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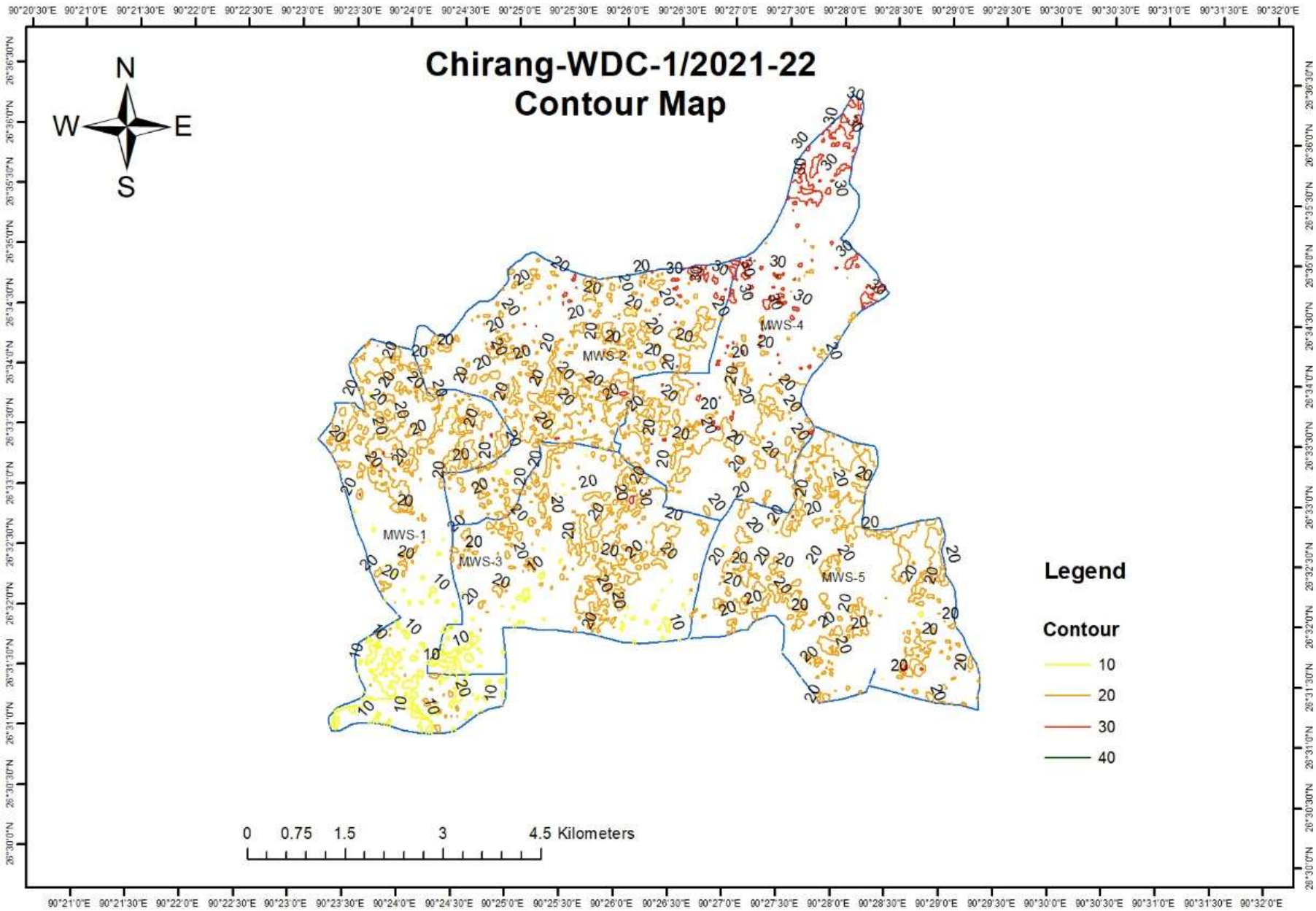
Chirang-WDC-1/2021-22
Contour Map
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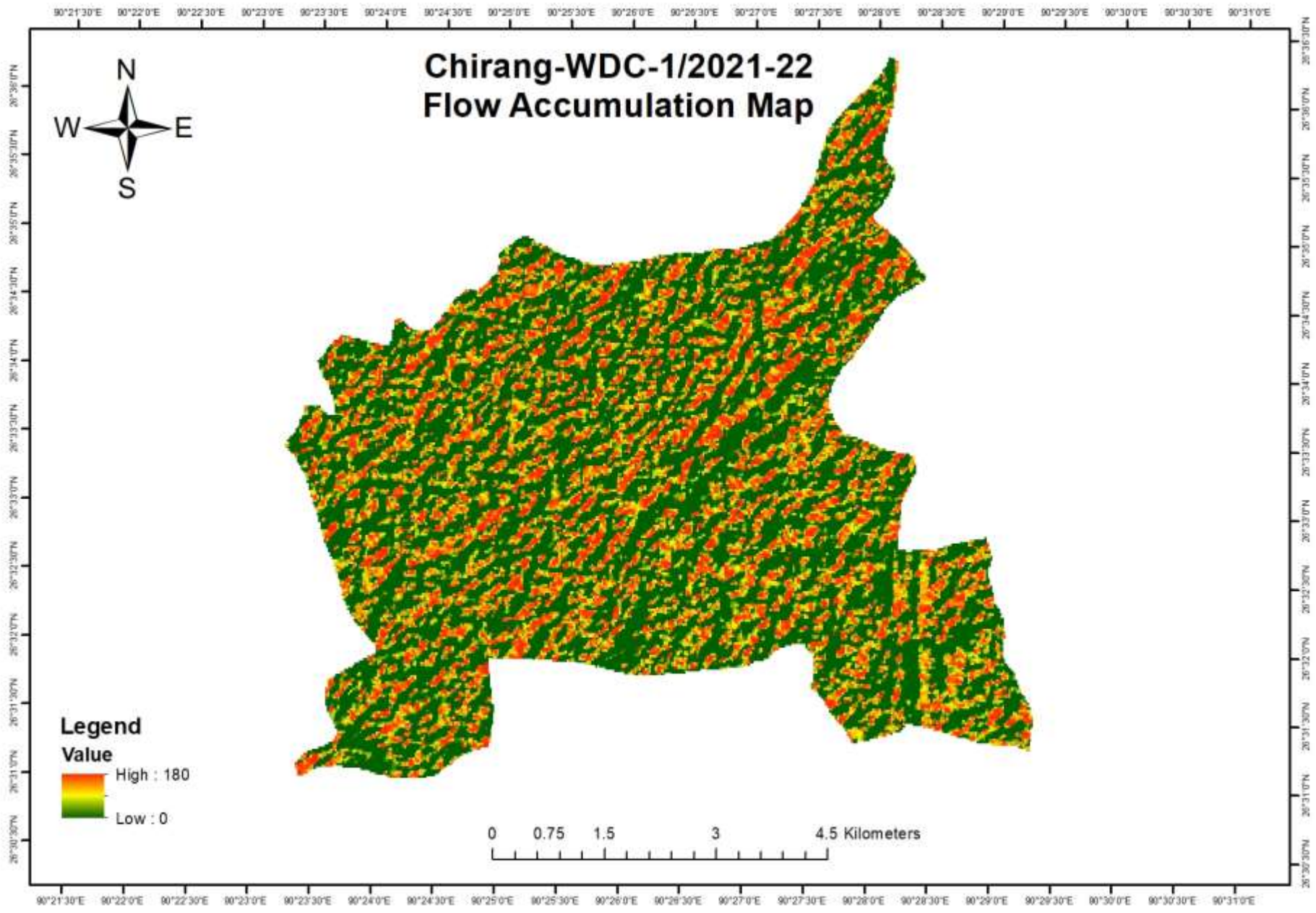
Chirang-WDC-1/2021-22
Flow Accumulation Map
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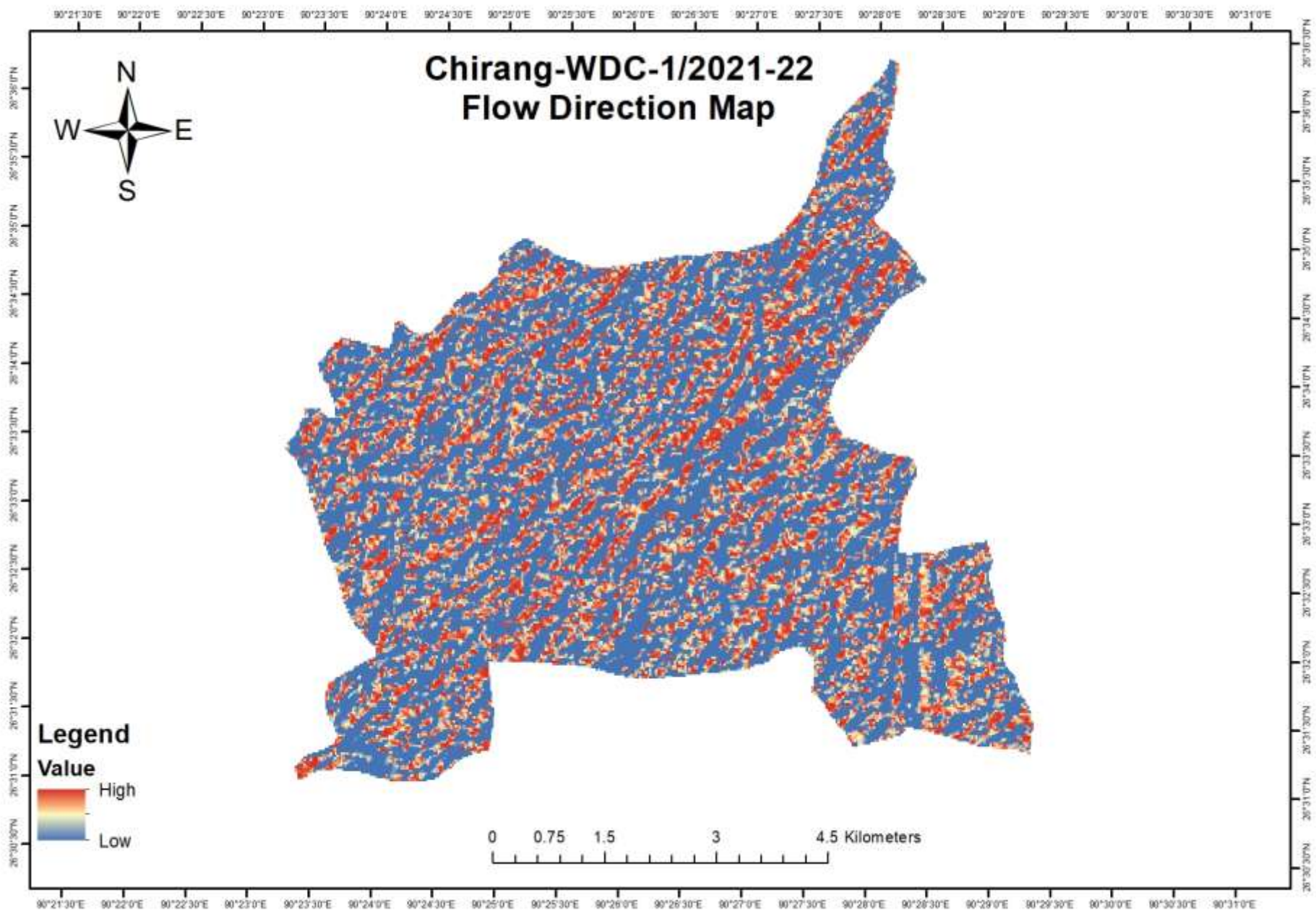
Chirang-WDC-1/2021-22
Flow Direction Map
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Low
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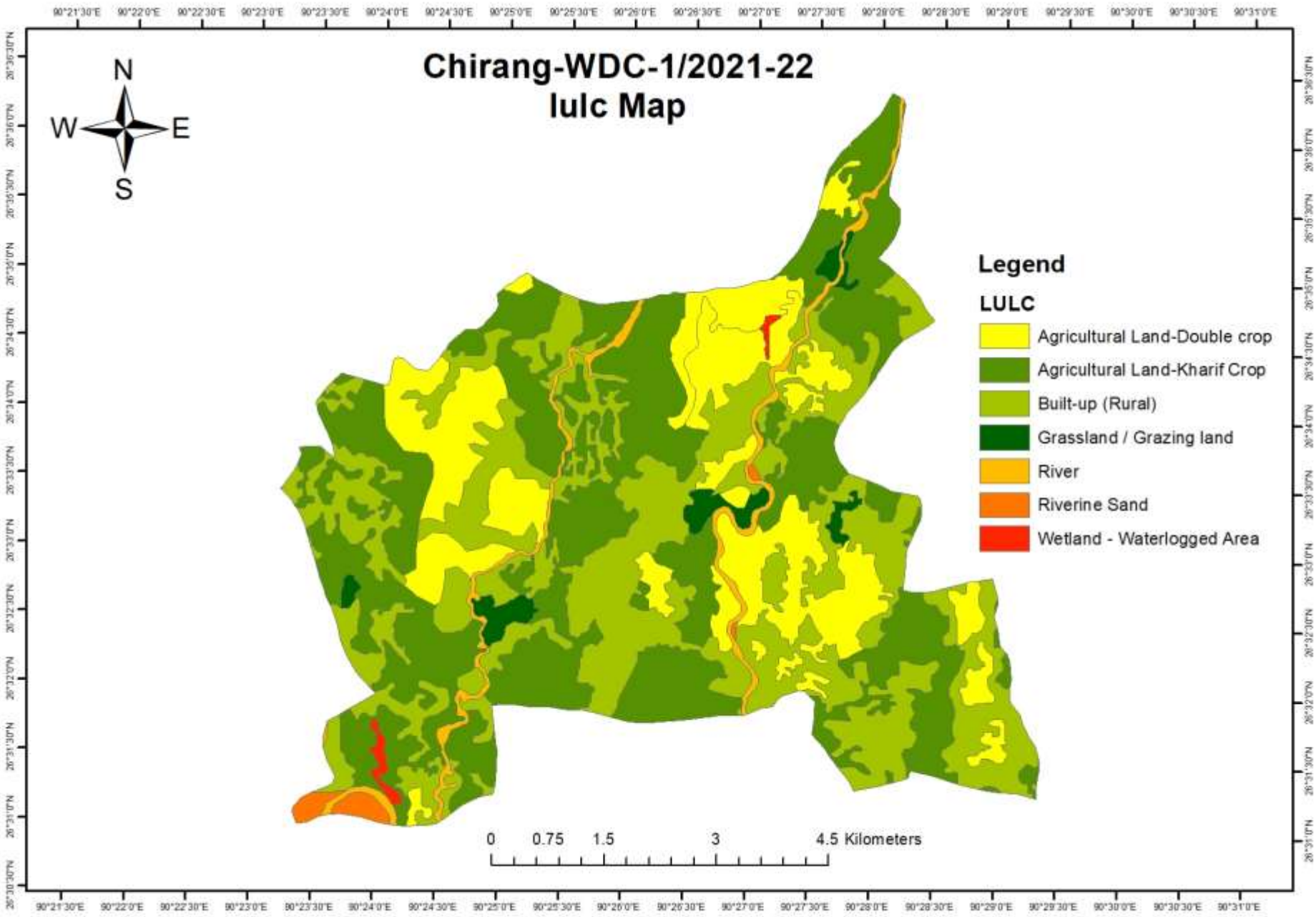
Chirang-WDC-1/2021-22
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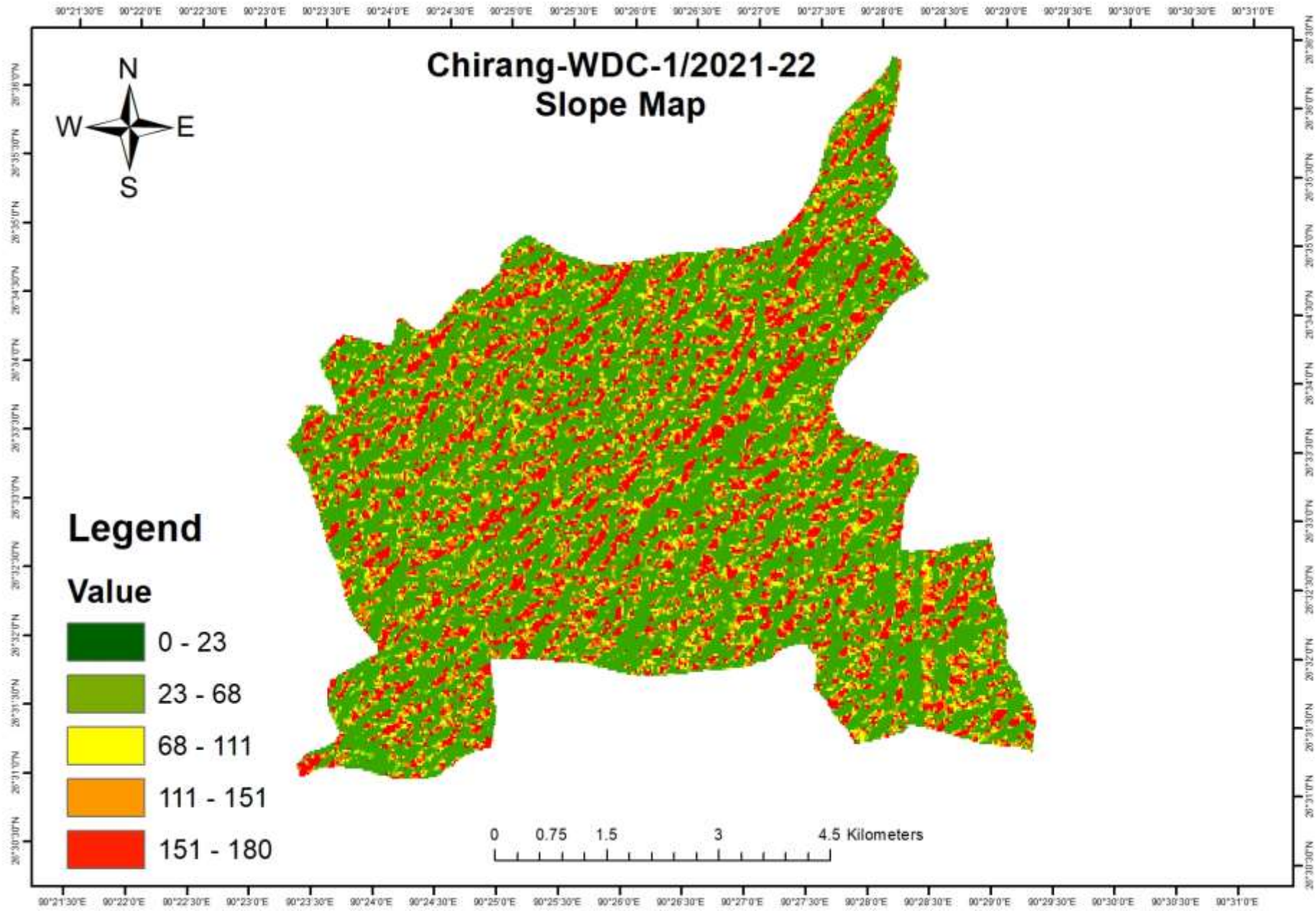
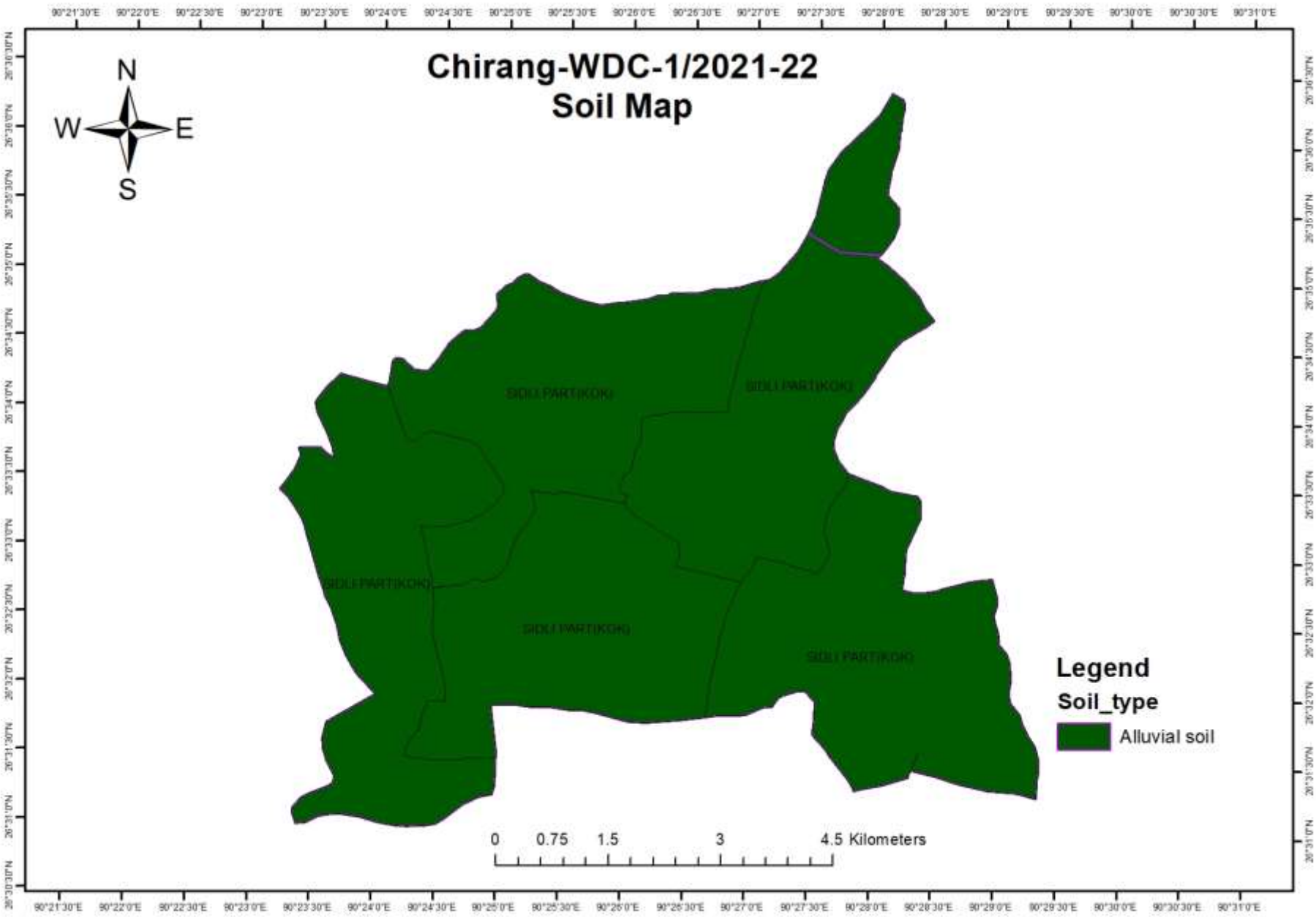
LULC
Agricultural Land-Double crop
Agricultural Land-Kharif Crop
Built-up (Rural)
Grassland / Grazing land
River
Riverine Sand
Wetland - Waterlogged Area
0 0.75 1.5 3 4.5 Kilometers


Chirang-WDC-1/2021-22
Slope Map
N
W
E
S
Legend
Value
0 - 23
23 - 68
68 - 111
111 - 151
151 - 180
0 0.75 1.5 3 4.5 Kilometers


Chirang-WDC-1/2021-22
Soil Map
N
W
E
S
SIDLI PARTIKOKI
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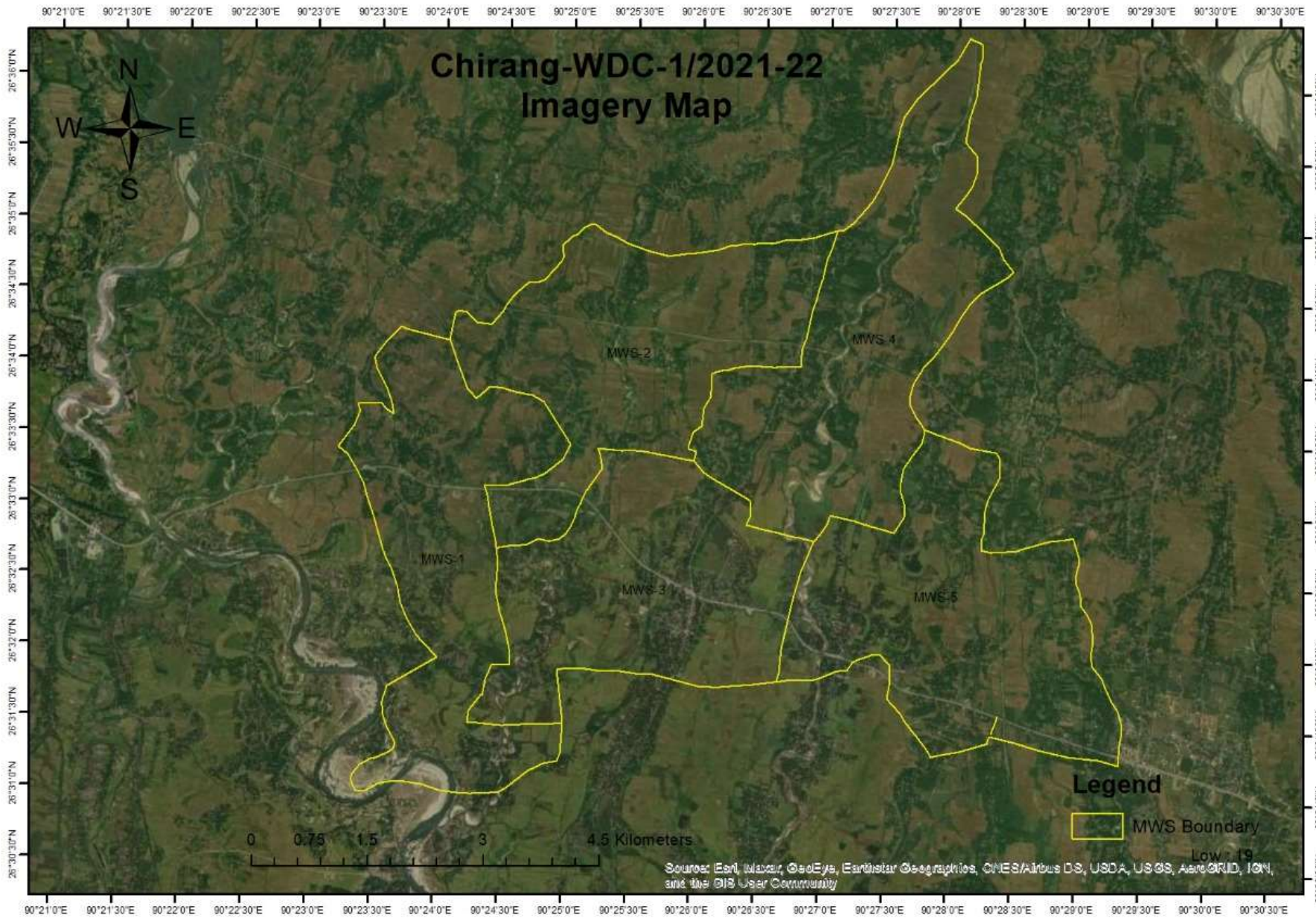
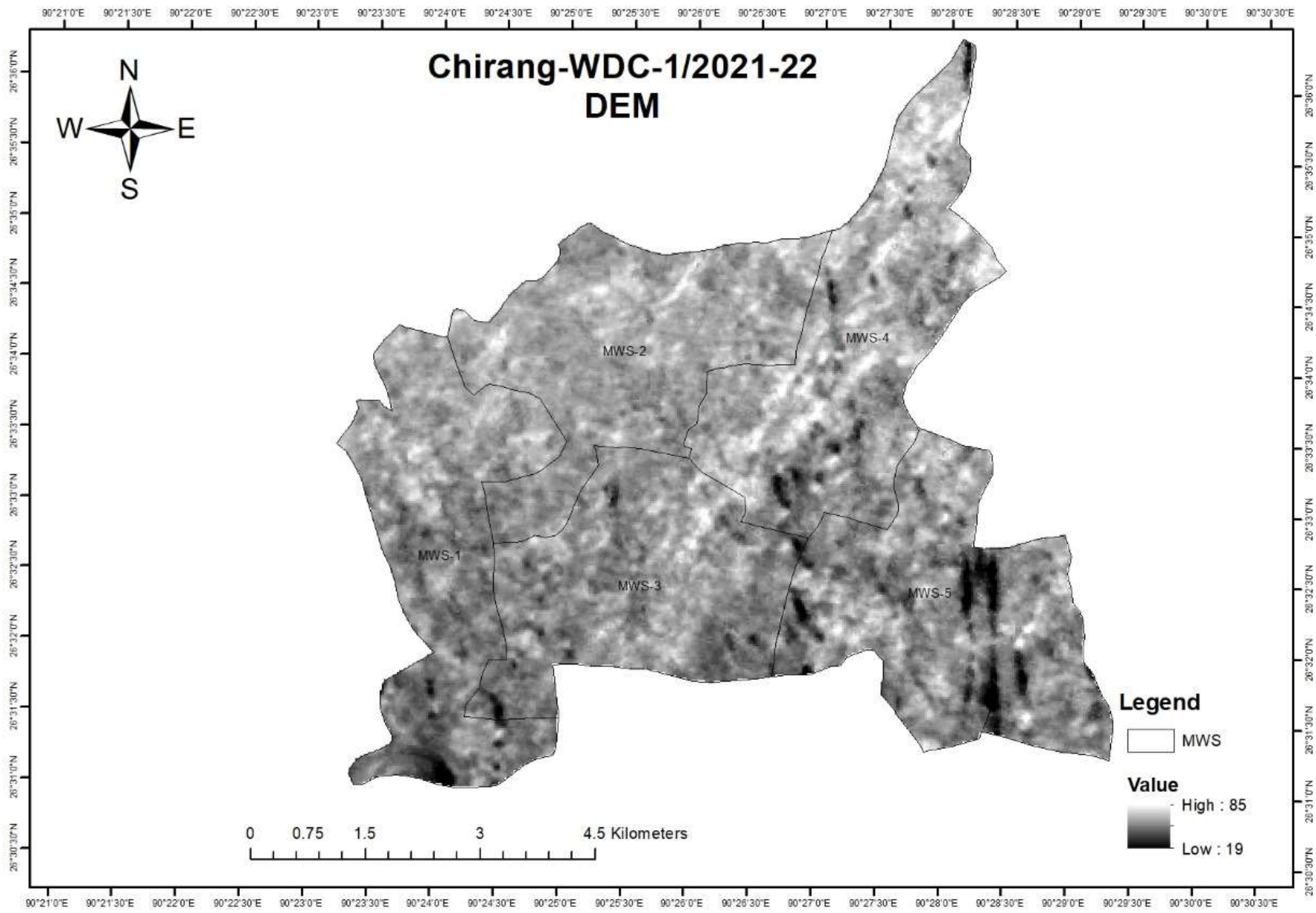
Legend
Soil_type
Alluvial soil
0 0.75 1.5 3 4.5 Kilometers


Chirang-WDC-1/2021-22
Imagery Map
N
W
E
S
MWS-1
MWS-2
MWS-3
MWS-4
MWS-5
0 0.75 1.5 3 4.5 Kilometers
Legend
MWS Boundary
Low : 19
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Chirang-WDC-1/2021-22
DEM
N
W
E
S
MWS-1
MWS-2
MWS-3
MWS-4
MWS-5
Legend
MWS
Value
High : 85
Low : 19
0 0.75 1.5 3 4.5 Kilometers

5.2 Details of Natural Resource Management Activities

Table No. 5.2.1 Soil and Moisture Conservation structures

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	**Name of the Activities (Structures)**	**Name of the Hamlet / Village**	**Plot Numbers (including Name of the local Patch)**	**Name of Beneficiaries**	**Area (in Ha)/ Dimension (in M/ Sq. M / CuM) of Structure**	**Unit Cost**	**Total Cost (in Rs.)**	**Contribution**	**Total Grant Amount (in Rs)**	**Year of Implementation (1st/2nd/3rd/4th/5th)**
1	Brick Channel	Kolobari Kashibari	Const. of Brick Channel	All villagers & farmers	560 Rm	0.02500	14.00000	0.70000	14.00000	1st Year
2		Solmari	Const. of Brick Channel	All villagers & farmers	612 Rm	0.02500	15.30000	0.76500	15.30000	1st Year
3		Krishnapur	Const. of Brick Channel	All villagers & farmers	600 Rm	0.02500	15.00000	0.75000	15.00000	2nd Year
4		Namalpur	Const. of Brick Channel	All villagers & farmers	288 Rm	0.02500	7.20000	0.36000	7.20000	2nd Year
Sub Total							**51.50000**	**2.75700**	**51.50000**	
5	RCC Channel	Kashikotra No. 1	Const. of RCC Channel	All villagers & farmers	170 Rm	0.04700	8.00000	0.40000	8.00000	2nd Year
Sub Total							**8.00000**	**0.40000**	**8.00000**	
6	Boulder Pitching	Dologaon	Const. of Boulder Pitching	All villagers & farmers	252.43 Cum	0.05150	13.00000	0.65000	13.00000	2nd Year
7		Laoripara	Const. of Boulder Pitching	All villagers & farmers	310.68 Cum	0.05150	16.00000	0.80000	16.00000	2nd Year
8		Dupguri	Const. of Boulder Pitching	All villagers & farmers	190.29 Cum	0.05150	9.80000	0.49000	9.80000	3rd Year
9		Bamungon	Const. of Boulder Pitching	All villagers & farmers	165.05 Cum	0.05150	8.50000	0.42500	8.50000	3rd Year
10		Dangishbari	Const. of Boulder Pitching	All villagers & farmers	184.47 Cum	0.05150	9.50000	0.47500	9.50000	3rd Year
Sub Total							**56.80000**	**2.84000**	**56.80000**	

11	Earthen Agri Bund	Namalpur	Const. of Agri Bund	All villagers & farmers	2100.84 Cum	0.00238	5.00000	0.25000	5.00000	1st Year
12		Amguri	Const. of Agri Bund	All villagers & farmers	1638.65 Cum	0.00238	3.90000	0.19500	3.90000	3rd Year
13		Kashikotra No. 2	Const. of Agri Bund	All villagers & farmers	1974.79 Cum	0.00238	4.70000	0.23500	4.70000	2nd Year
14		Goragaon	Const. of Agri Bund	All villagers & farmers	1680.67 Cum	0.00238	4.00000	0.20000	4.00000	4th Year
Sub Total							**17.60000**	**0.88000**	**17.60000**	
G. Total							**133.90000**	**6.87700**	**133.90000**	

Table No. 5.2.2 Water Harvesting Structures

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	**Name of the Activities (Structures)**	**Name of the Hamlet / Village**	**Plot Numbers (including Name of the local Patch)**	**Name of Beneficiaries**	**Area (in Ha)/ Dimension (in M/ Sq. M / CuM) of Structure**	**Unit Cost**	**Total Cost (in Rs.)**	**Contribution**	**Total Grant Amount (in Rs)**	**Year of Implementation (1st/2nd/3rd/4th /5th)**
1	Gully Control Project	Dologaon	Const. of Gully Control Project	All villagers & farmers	24.30 Sqm	0.53500	13.00000	0.65000	13.00000	1st Year
2		Deolguri	Const. of Gully Control Project	All villagers & farmers	28.00 Sqm	0.53500	15.00000	0.75000	15.00000	1st Year
3		Balapara	Const. of Gully Control Project	All villagers & farmers	29.90 Sqm	0.53500	16.00000	0.80000	16.00000	1st Year
4		Jaoliabari	Const. of Gully Control Project	All villagers & farmers	22.42 Sqm	0.53500	12.00000	0.60000	12.00000	1st Year
5		Dhupguri	Const. of Gully Control Project	All villagers & farmers	34.20 Sqm	0.53500	18.30000	0.91000	18.30000	1st Year
6		Dipu	Const. of Gully Control Project	All villagers & farmers	25.23 Sqm	0.53500	13.50000	0.67500	13.50000	1st Year
7		Nimagaon	Const. of Gully Control Project	All villagers & farmers	13.00 Sqm	0.53500	7.00000	0.35000	7.00000	1st Year
8		Jaoliabari	Const. of Gully Control Project	All villagers & farmers	22.42 Sqm	0.53500	12.00000	0.60000	12.00000	2nd Year
9		Bamungaon	Const. of Gully Control Project	All villagers & farmers	31.77 Sqm	0.53500	17.00000	0.85000	17.00000	2nd Year
10		Pretgaon	Const. of Gully Control Project	All villagers & farmers	26.17 Sqm	0.53500	14.00000	0.70000	14.00000	2nd Year
11		Bairajhora	Const. of Gully Control Project	All villagers & farmers	26.17 Sqm	0.53500	14.00000	0.70000	14.00000	2nd Year
12		Thunkhobari	Const. of Gully Control Project	All villagers & farmers	10.65 Sqm	0.53500	5.70000	0.28500	5.70000	2nd Year
13		Dipu	Const. of Gully Control Project	All villagers & farmers	13.46 Sqm	0.53500	7.20000	0.36000	7.20000	2nd Year
14		Shyamthaibari	Const. of Gully Control Project	All villagers & farmers	26.17 Sqm	0.53500	14.00000	0.70000	14.00000	3rd Year
15		Dhupguri	Const. of Gully Control Project	All villagers & farmers	8 Sqm	0.53500	4.70000	0.23500	4.70000	3rd Year

16		Rajajan	Const. of Gully Control Project	All villagers & farmers	12.15 Sqm	0.53500	6.50000	0.32500	6.50000	3rd Year
17		Palashbari	Const. of Gully Control Project	All villagers & farmers	11 Sqm	0.53500	7.00000	0.35000	7.00000	3rd Year
18		Athibari	Const. of Gully Control Project	All villagers & farmers	12.15 Sqm	0.53500	6.50000	0.32500	6.50000	4th Year
19		Choto Mozabari	Const. of Gully Control Project	All villagers & farmers	29.72 Sqm	0.53500	15.90000	0.79500	15.90000	4th Year
20		Salbari	Const. of Gully Control Project	All villagers & farmers	14.48 Sqm	0.53500	7.75000	0.38750	7.75000	5th Year
21		Namlapur	Const. of Gully Control Project	All villagers & farmers	14.95 Sqm	0.53500	8.00000	0.80000	8.00000	5th Year
Sub Total							**235.05000**	**12.14750**	**235.05000**	
22	Renovation of Pond	Choto Mazabari	Renovation of Pond	All villagers & farmers	3684.21 Cum	0.00190	7.00000	0.35000	7.00000	1st Year
Sub Total							**7.00000**	**0.35000**	**7.00000**	
G. Total							**242.05000**	**12.49750**	**242.05000**	

Table No. 5.2.2 Vegetative Covers

1	2	3	4	5	6		7	8	9	10
Sl. No.	**Name of the Activities**	**Name of the Hamlet / Village**	**Plot Numbers (including Name of the local Patch)**	**Name of Beneficiaries**	**Area (in Ha)**	**Unit Cost**	**Total Cost (in Rs.)**	**Contribution**	**Total Grant Amount (in Rs)**	**Year of Implementation (1st/2nd/3rd/4th /5th)**
1	Horticulture Plantation	North Gendergaon	North Gendergaon	All villagers & farmers	2.06 Ha	2.28000	4.70000	0.23500	4.70000	1st Year
2		Dipu Kumguri	Dipu Kumguri	All villagers & farmers	1.54 Ha	2.28000	3.50000	0.17500	3.50000	2nd Year
3		Thunkhobari	Thunkhobari	All villagers & farmers	1.54 Ha	2.28000	3.50000	0.17500	3.50000	2nd Year
4		North Deolguri	North Deolguri	All villagers & farmers	2.19 Ha	2.28000	5.00000	0.25000	5.00000	3rd Year
5		Dologaon	Dologaon	All villagers & farmers	1.97 Ha	2.28000	4.50000	0.22500	4.50000	3rd Year
6		Namalpur	Namalpur	All villagers & farmers	1.54 Ha	2.28000	3.50000	0.17500	3.50000	3rd Year
7		Solmari	Solmari	All villagers & farmers	0.92 Ha	2.28000	2.10000	0.10500	2.10000	3rd Year
8		Shyamthaibari	Shyamthaibari	All villagers & farmers	1.54 Ha	2.28000	3.50000	0.17500	3.50000	5th Year
9		Palashbari	Palashbari	All villagers & farmers	1.21 Ha	2.28000	2.75000	0.13750	2.75000	5th Year
10	Road side Plantation	Kashikotra No. 1	Kashikotra No. 1	All villagers & farmers	1.09 Ha (83 Nos)	0.03000	2.50000	0.12500	2.50000	3rd Year
11		Amguri	Amguri	All villagers & farmers	0.92 Ha (70 Nos)	0.03000	2.10000	0.10500	2.10000	3rd Year
G. Total							**37.65000**	**1.88250**	**37.65000**	

5.3: Structure or Activity Wise Details of Engineering Structure and Vegetative Measures

Table No.5.3.1 : Engineering structures for Soil Conservation Measures (SMC)

1	2	3	4	5		6					7
S. No.	Name of structures					Proposed plan					
		Area (ha)	Farmers	Total units (No./ cu.m./ rmt)	UNIT COST (Rs)	Estimated cost* (Rs. in lakh)				Farmers contribution (Rs. in lakh)	Grant Portion (Rs. in lakh)
						M	W	O	T		
A	PRIVATE LAND										
	Brick Channel	234.09	Farmers of the village	2060 Rm	0.02500	29.24580	19.49720	2.75700	51.50000	2.75700	51.50000
	RCC Chanel	36.36	Do	170 Rm	0.04800	5.20000	2.40000	0.40000	8.00000	0.40000	8.00000
	Boulder Pitching	258.18	Do	1102.62 Cum	0.05150	36.92000	17.04000	2.84000	56.80000	2.84000	56.80000
	Earthen Agri Bund	80.00	Do	217395.79 Cum	0.00238	-	14.60000	3.00000	17.60000	0.88000	17.60000
	Grand total	**608.63**	**-**	**-**	**-**	**71.36580**	**53.53720**	**8.99700**	**133.90000**	**6.87700**	**133.90000**

(M – Materials, W- wages, O- others, T – Total)

5.3.2: Details of engineering structures for Water Harvesting WHS

M – Materials, W- wages, O- others, T – Total

1	2	3		4				
S. No.	Name of structures			Proposed plan				
		Total units (No./ cu.m./ rmt)	UNIT COST (Rs)	Estimated cost* (Rs. in lakh)				Farmers contribution (Rs)
				M	W	O	T	
A	**PRIVATE LAND**							
A1	**Individual structures**							
1	Gully Control Project	21	0.53300	156.03175	66.87075	12.14750	235.05000	12.14750
2	Renovation of Pond	1	0.00190	0	6.30000	0.70000	7.00000	0.35000
	Grand total			**156.03175**	**73.17075**	**12.84750**	**242.05000**	**12.49750**

Table No. 5.3.3: Details of activities connected with vegetative cover in watershed works*

1	2	3		4			
S. No.	Name of structure/ work			Proposed plan			
		Area (ha)/No.	No. of plants	Unit Cost (Rs)	Estimated cost (Rs. in lakh)	Farmer Contribution (Rs. in lakh)	Grant (Rs. in lakh)
1	Horticulture Plantation	14.51	15961	2.28000	33.05000	1.65250	33.05000
2	Road side Plantation	2.01 (153 Nos.)	153	0.03000	4.60000	0.23000	4.60000
	Grand total				**37.65000**	**1.88250**	**37.65000**

Chapter 6

Capacity Building Plan

Capacity Building is the process of assisting the group or individuals to identify and address issues and gain the insights, knowledge and experience needed to solve problems and implement change. There is a realization in the development sector that there is a need to appraise the success of development interventions by going beyond the conventional development targets and measures of success (e.g. in the form of commodities, goods and services) to take into account improvements to human potential. Capacity building of stakeholders is also increasingly viewed as an important factor in developmental projects that involve participation of stakeholders at all levels for effective implementation of projects. The scope of capacity building, in general, is:

- Alternative Land Use Plan
- Scientific technique of Soil and Moisture conservation
- Improved and Scientific agriculture practices
- Fodder development and Management
- Afforestation
- Meteorological Information
- Income Generation Activities
- Micro entrepreneurship
- Food Processing
- Post Harvest management practices

Table No. 6.1 Details of Capacity Building

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	**Name of the Training & Exposure (Knowledge, Skill, etc. at both *Being and Doing* level)**	**Number of events**	**Number of Participants in an event**	**Total Number of days per event**	**Total Trainee days (= 3 x 4 x 5)**	**Cost per Trainee day (in Rs)**	**Total Cost required for the programme (= 6 x7 ; in Rs.)**	**Total Grant Amount (in Rs)**	**Year of Implementation (1st/2nd/3rd/4th/5th)**	**Monitoring Indicators**
SHG/ UG / WC / PI related										
1	Training for SHGs	14	50	1	700	500	350000	350000	1st, 2nd & 3rd year	
2	Training for UGs	5	40	1	200	500	100000	100000	1st, 2nd, 3rd & 4th year	
3	Training for WCs	1	40	1	40	500	20000	20000	1st, 2nd, 3rd & 4th year	
4	Training for PIA/WDT	1	10	1	10	600	6000	6000	1st, 2nd & 3rd year	
5	Training for WCDC	1	23	1	25	1000	25000	25000	1st year	
Subtotal		**22**			**975**		**501000**	**501000**		
NRM related										
1	Training on NRM for WDT	1	10	1	10	600	6000	6000	1st, 2nd & 3rd year	
2	Training on NRM for WC	5	40	1	200	500	100000	100000	1st, 2nd, 3rd & 4th year	
3	Training on NRM for UG	5	51	2	510	500	255000	255000	1st, 2nd, 3rd, 4th & 5th year	
Subtotal		**11**			**720**		**361000**	**361000**		
Production Enhancement related										
1	Training on Livelihoods/ Micro-enterprises for WDT	1	10	1	10	600	6000	6000	2nd & 3rd year	
2	Training on Livelihoods/ Micro-enterprises for WC	2	40	1	80	500	40000	40000	2nd, 3rd & 4th year	

3	Training on Livelihoods/ Micro-enterprises for SHG & BPL beneficiary	5	50	1	250	500	125000	125000	2nd, 3rd, 4th & 5th year	
Subtotal		**8**			**340**		**171000**	**171000**		
Livelihoods / Micro-enterprises related										
1	Training on Livelihoods/ Micro-enterprises for WDT	1	10	1	10	600	6000	6000	2nd & 3rd year	
2	Training on Livelihoods/ Micro-enterprises for WC	1	40	1	40	500	20000	20000	2nd, 3rd & 4th year	
3	Training on Livelihoods/ Micro-enterprises for SHG & BPL beneficiary	10	47	1	470	500	235000	235000	2nd, 3rd, 4th & 5th year	
Subtotal		**12**			**520**		**261000**	**261000**		
Awareness Generation (events) to be conducted										
1	Pamphlets distribution	1900	-	-	-	10	19000	19000	1st year	
2	Wall posters	100	-	-	-	400	40000	40000	1st year	
3	Small Group meetings	30	50	1	1500	25	37500	37500	2nd, 3rd, 4th & 5th year	
4	Mass meeting in Project level	1	540	1	540	50	27000	27000	1st year	
5	Mass meeting in MWS level	10	200	1	2000	25	50000	50000	1st, 2nd & 3rd year	
6	Mass meeting in Village level	20	200	1	4000	25	100000	100000	1st & 2nd year	
Subtotal							**273500**	**273500**		
Regular Meetings to be conducted										
1	WC Meeting	60	15	1	900	25	22500	22500	1st, 2nd, 3rd, 4th & 5th year	
2	UGs/LGs Meeting	50	40	1	2000	25	50000	50000	2nd, 3rd & 4th year	
3	VO/SHGs Meeting	80	50	1	4000	25	100000	100000	2nd, 3rd & 4th year	
4	Self Monitoring events	20	10	1	200	50	10000	10000	1st, 2nd, 3rd, 4th & 5th year	

5	Social Audit events	10	5	1	50	500	25000	25000	2nd, 3rd, 4th & 5th year	
6	Participation in Exhibition	2	150	1	600	100	60000	60000	3rd, 4th & 5th year	
7	Seminar & Workshop	2	250	1	1000	100	100000	100000	3rd & 4th year	
8	Exposure visit	2	50	1	200	2000	400000	400000	2nd & 3rd year	
Subtotal							**767500**	**767500**		
Institutional Building										
1	Formation of UGs	80	10	1	800	25	20000	20000	1st, 2nd, 3rd & 4th year	
2	Formation of SHGs	500	11	1	5500	20	110000	110000	1st, 2nd & 3rd year	
3	Formation of WC	5	250	1	1250	100	125000	125000	1st year	
4	Registration of WC	5	-	-	-	10000	50000	50000	2nd year	
Subtotal							**305000**	**305000**		
GRAND TOTAL							**2640000**	**2640000**		

Chapter 7

Phasing of Programme and Budgeting

YEAR WISE PHASING IN FUND ALLOCATION IN % DURING THE PERIOD FROM 2021-22 TO 2026-27

COMPONENT	PHASE-II/WORK PHASE %					TOTAL IN %
	1st Year	2nd Year	3rd Year	4th Year	5th Year	
	2021-22	2022-23	2023-24	2024-25	2025-26	
Management Cost	2%	2%	2%	2%	2%	10%
Monitoring & Evaluation	0%	0.5%	0.5%	0.5%	0.5%	2%
Entry Point Activity	2%	0%	0%	0%	0%	2%
DPR Preparation	1%	0%	0%	0%	0%	1%
Institution & Capacity Building	1.5%	0.5%	0.5%	0.25%	0.25%	3%
Natural Resource Management	16%	16%	9.5%	3.0%	2.5%	47%
Production System	1%	3%	6%	4.25%	0.75%	15%
Natural Resource Management & Governance	0.5%	0.5%	0.5%	0.5%	0%	2%
Livelihood, Activities for the asset less persons, micro enterprises & business development	1%	2.5%	6%	4.5%	1%	15%
Consolidation & Withdrawal Phase	0%	0%	0%	0%	3%	3%
Total	**25%**	**25%**	**25%**	**15%**	**10%**	**100%**

YEAR WISE PHASING IN FUND ALLOCATION DURING THE PERIOD FROM 2021-22 TO 2026-27
(Rs in Lakh)

COMPONENT	PHASE-II/WORK PHASE %					TOTAL IN %
	1st Year	2nd Year	3rd Year	4th Year	5th Year	
	2021-22	2022-23	2023-24	2024-25	2026-27	
Management Cost	17.60	17.60	17.60	17.60	17.60	88.00
Monitoring & Evaluation	-	4.40	4.40	4.40	4.40	17.60
Entry Point Activity	17.60	0.0	0.0	0.0	0.0	17.60
DPR Preparation	8.80	0.00	0.00	0.00	0.00	8.80
Institution & Capacity Building	13.20	4.40	4.40	2.20	2.20	26.40
Natural Resource Management	140.80	140.80	83.60	26.40	22.00	413.60
Production System	8.80	26.40	52.80	37.40	6.60	132.00
Natural Resource Management & Governance	4.40	4.40	4.40	4.40	0.00	17.60
Livelihood, Activities for the asset less persons, micro enterprises & business development	8.80	22.00	52.80	39.60	8.80	132.00
Consolidation & Withdrawal Phase	0.00	0.00	0.00	0.00	26.40	26.40
Total	**220.00**	**220.00**	**220.00**	**132.00**	**88.00**	**880.00**

Table No. 7.1: Phasing of the action plan

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
1	**Entry Point Activities (2%)**															
	1	Box Culvert	No.	3.00	1	3.00	-	-	-	-	-	-	-	-	1	3.00
	2	Box Culvert	No.	2.50	1	2.50	-	-	-	-	-	-	-	-	1	2.50
	3	Earth Filling in Crematorium	No.	3.00	1	3.00	-	-	-	-	-	-	-	-	1	3.00
	4	Solar Light	No.	0.26	10	2.60	-	-	-	-	-	-	-	-	10	2.60
	5	Box Culvert	No.	3.00	1	3.00	-	-	-	-	-	-	-	-	1	3.00
	6	Renovation of Fishery Pond	No.	3.50	1	3.50	-	-	-	-	-	-	-	-	1	3.50
		Sub Total of Entry Point Activity			**15**	**17.60**	-	-	-	-	-	-	-	-	**15**	**17.60**
2	**Institution & Capacity Building (3%)**															
	i)	Poor HHs in Watersheds to be covered under SHGs														
		SC	No.	-	-	-	-	-	-	-	-	-	-	-	-	-
		ST	No.	-	-	-	-	-	-	-	-	-	-	-	-	-
		BC	No.	-	-	-	-	-	-	-	-	-	-	-	-	-
		OC	No.	-	-	-	-	-	-	-	-	-	-	-	-	-

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
	ii)	Awareness Generation (events) to be conducted														
		Pamphlets distribution	No.	0.00001	1900	0.1900	-	-	-	-	-	-	-	-	1900	0.1900
		Wall posters	No.	0.004	100	0.40	-	-	-	-	-	-	-	-	100	0.40
		Small Group meetings	No.	0.0125	-	-	10	0.125	10	0.125	5	0.0625	5	0.0625	30	0.375
		Others 1. Mass meeting in Project level	No.	0.27	1	0.27	-	-	-	-	-	-	-	-	1	0.27
		2.Mass meeting in MWS level	No.	0.05	3	0.15	4	0.20	3	0.15	-	-	-	-	10	0.50
		3.Mass meeting in Village level	No.	0.05	10	0.50	10	0.50	-	-	-	-	-	-	20	1.00
	iii)	Formation of UGs	No.	0.0025	30	0.075	20	0.05	20	0.05	10	0.025	-	-	80	0.20
		No. of women	No.													
		No. of men	No.													
	iv)	Formation of SHGs	No.	0.0022	500	1.10	-	-	-	-	-	-	-	-	500	1.10
		No. of women	No.													
		No. of men	No.													
	v)	Formation of Watershed Committee	No.	0.25	5	1.25	-	-	-	-	-	-	-	-	5	1.25
		No. of women	No.													

1	2	3	4	5	6		7		8		9		10		11	
S. No	**Component**	**Activities**	**Unit**	**Unit Cost** (Rs.)	**1 year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
		No. of men	No.													
	vi)	Regular Meetings to be conducted														
		Watershed Committee	No.	0.00375	30	0.1125	10	0.0375	10	0.0375	5	0.01875	5	0.01875	60	0.225
		UGs/LGs	No.	0.01	-	-	20	0.20	20	0.20	10	0.10	-	-	50	0.50
		VO/SHGs	No.	0.0125	-	-	30	0.375	30	0.375	20	0.25	-	-	80	1.00
		Gram Panchayat	No.													
	vii)	Registration of WC	No.	0.10	5	0.50	-	-	-	-	-	-	-	-	5	0.50
	viii)	Self-Monitoring events (planning, review of activities through tool)	No.	0.005	8	0.04	4	0.02	4	0.02	2	0.01	2	0.01	20	0.10
	ix)	Social Audit events	No.	0.025	-	-	3	0.075	3	0.075	2	0.05	2	0.05	10	0.25
	x)	**Trainings & Exposures**														
	a)	On Institutional & Capacity Building	No. Trgs	0.22773	15	3.41595	3	0.68319	1	0.22773	1	0.22773	2	0.45540	22	5.01
		Women	No.													
		Men	No.													
	b)	On Gender	No. trgs													

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
		Women	No.													
		Men	No.													
	c)	On Natural Resource Management	No. trgs	0.361	6	2.166	1	0.361	1	00.361	1	0.361	1	0.361	10	3.61
		Women	No.													
		Men	No.													
	d)	On Enterprise Promotion	No. trgs	0.23	4	0.9857	2	0.25756	2	0.46463	1	0.27394	3	0.62817	12	2.61
		Women	No.													
		Men	No.													
	e)	On Productivity Enhancement	No. trgs	0.213	3	0.60677	3	0.55161	-	-	1	0.27581	1	0.27581	8	1.71
		Women	No.													
		Men	No.													
	f)	Exposure Visits	Nos.	2.00	1	2.00	-	-	1	2.00	-	-	-	-	2	4.00
		Women	No.													
		Men	No.													
	g)	Participation in Exhibition	No.	0.30	-	-	1	0.300	-	-	-	-	1	0.30	2	0.60

1	2	3	4	5	6		7		8		9		10		11	
S. No	**Component**	**Activities**	**Unit**	**Unit Cost** (Rs.)	**1 year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
		Women	No.													
		Men	No.													
	h)	Seminar & Workshop		0.50	-	-	1	0.50	-	-	1	0.50	-	-	2	1.00
		Women	No.													
		Men	No.													
	Sub Total IB & CB {Do not sum Men & Women under CB events (a to h)}[1]					**13.20**		**4.40**		**4.40**		**2.20**		**2.20**		**26.40**
3	**Production System (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	3	0.912	6	1.824	12	3.648	10	3.04	3	0.912	34	10.336
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	2	1.2712	-	-	2	1.2712
	iii)	Vermi compost	No.	0.497	-	-	2	0.994	4	1.988	4	1.988	-	-	10	4.97
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	30	0.588	45	0.882	90	1.764	73	1.4308	14	0.2744	252	4.9392

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
	ii)	Tillage implements	No.	0.75	5	3.75	10	7.50	20	15.00	10	7.50	5	3.75	50	37.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	5	1.05	20	4.20	40	8.40	27	5.67	5	1.05	97	20.37
	ii)	Piggery	No.	0.50	2	1.00	16	8.00	32	16.00	23	11.50	-	-	73	36.50
	C)															
		Improved Practices														
		Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	1	0.1136	1	0.1136
		Fish Pond	No.	0.50	3	1.50	6	3.00	12	6.00	10	5.00	1	0.50	32	16.00
	Sub-Total PE				**48**	**8.80**	**105**	**26.40**	**210**	**52.80**	**162**	**37.40**	**29**	**6.60**	**554**	**132.00**
4	**Livelihood (15%)**															
	i)	Piggery	No.	0.50	5	2.50	15	7.50	27	13.50	22	11.00	5	2.50	74	37.00
	ii)	Goatery	No.	0.21	5	1.05	20	4.20	31	6.51	22	4.62	5	1.05	83	17.43
	iii)	Milching Cow	No.	0.75	5	3.75	6	4.50	10	7.50	10	7.50	5	3.75	36	27.00
	iv)	Handloom	No.	0.50	3	1.50	10	5.00	25	12.50	25	12.50	3	1.50	66	33.00
	v)	Mushroom	No.	0.16	-	-	5	0.80	30	4.80	23	3.68	-	-	58	9.28

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
	vi)	E-Rickshaw	No.	1.50	-	-	-	-	5	7.50	-	-	-	-	5	7.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	10	0.49	-	-	-	-	10	0.49
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	3	0.30	-	-	3	0.30
	Sub-Total EP				**18**	**8.80**	**56**	**22.00**	**138**	**52.80**	**105**	**39.60**	**18**	**8.80**	**335**	**132.00**
5	**Natural Resource Management (47%)**															
	I)	**WHS (MI Works)**														
	a	Gully Control Project	Nos.	0.535	7	94.80	6	69.90	4	32.20	2	22.40	2	15.75	21	235.05
	d	Renovation of ponds	Nos.	0.0019	1	7.0	-	-	-	-	-	-	-	-	1	7.00
	II	**Soil Moisture Conservation (SMC)**														
	a	Brick Channel	No.	0.025	2	29.30	2	22.20	-	-	-	-	-	-	4	51.50
	b	RCC Chanel	No.	0.047	-	-	1	8.00	-	-	-	-	-	-	1	8.00
	c	Boulder Pitching	No.	0.0515	-	-	2	29.00	3	27.80	-	-	-	-	5	56.80
	d	Earthen Agri Bund	No.	0.00238	1	5.00	1	4.70	1	3.90	1	4.00	-	-	5	22.60
	III	**Vegetative Measures**														
	a	Horticulture Plantation	Ha.	2.28	2.06	4.70	3.08	7.00	6.62	15.10	-	-	2.75	6.25	14.51	33.05

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
	b	Road side Plantation	No.	0.03	-	-	-	-	153	4.60	-	-	-	-	153	4.60
		Sub Total NRM:				**140.80**		**140.80**		**83.60**		**26.40**		**22.00**		**413.60**
6	**Management Cost (10%)**															
	a	**WCDC Level**	Rs.			0.50		0.50		0.50		0.50		0.50		2.50
	b	**PIA / WDT Level**														
		1)Honorarium/Specialist/ wages to temporary PIA staff	Rs.			2.90		2.90		2.90		2.90		2.90		14.50
		2) T.A/D.A.	Rs.			2.00		2.00		2.00		2.00		2.00		10.00
		3) Office contingencies.	Rs.			2.20		2.20		2.20		2.20		2.20		11.00
		4) Pol	Rs.			5.00		5.00		5.00		5.00		5.00		25.00
	c	**WC / Village Level**														
		1) Honorarium to village level Workers	Rs.			1.20		1.20		1.20		1.20		1.20		6.00
		2) Honorarium/Salary to Secy.	Rs.			1.50		1.50		1.50		1.50		1.50		7.50
		3) Office contingencies.	Rs.			1.30		1.30		1.30		1.30		1.30		6.50
		4) T.A/D.A.	Rs.			1.00		1.00		1.00		1.00		1.00		5.00
		Sub Total Management				**17.60**		**17.60**		**17.60**		**17.60**		**17.60**		**88.00**

1	2	3	4	5	6		7		8		9		10		11	
S. No	Component	Activities	Unit	Unit Cost (Rs.)	1 year		2nd year		3rd year		4th year		5th year		Total	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
7	**Monitoring & Evaluation (2%)**				**-**	**0**	**-**	**4.40**	**-**	**4.40**	**-**	**4.40**	**-**	**4.40**	**-**	**17.60**
8	**DPR Preparation (1%)**				**1**	**8.80**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**8.80**
9	**Natural Resource Management & Governance (2%)**				**-**	**4.40**	**-**	**4.40**	**-**	**4.40**	**-**	**4.40**	**-**	**0**	**-**	**17.60**
	I	**Maintenance of Natural Resources Related Assets**														
	a	Meeting with the members of Gram Panchayat along with PRI members	No.	0.05	6	0.30	6	0.30	6	0.30	6	0.30	-	-	24	1.20
	b	Preparation of over all Project Development Plan	No.	0.05	2	0.10	2	0.10	2	0.10	2	0.10	-	-	8	0.40
	c	Meeting for Annual Audit under Budgeting with GP and PRI members	No.	0.50	-	-	6	0.30	6	0.30	6	0.30	-	-	18	0.90
	II	**# Water Budgeting, Management/ Regulatory Norms and Governance**														
	a	Ground Water Monitoring (twice a year)	No.	0.10	14	1.40	12	1.20	14	1.40	15	1.50	-	-	55	5.50
	b	Training for the Monitoring Exercises	No.	0.20	3	0.60	3	0.60	3	0.60	3	0.60	-	-	12	2.40
	III	**Protection and Regulation/ Regeneration of Common Lands (For the protection of the upper reaches of the watershed slopes)**														

1	2	3	4	5	6		7		8		9		10		11	
S. No	**Component**	**Activities**	**Unit**	**Unit Cost (Rs.)**	**1 year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)
	a	Meeting with Departmental Officers & staff of Forest, Agriculture, Veterinary etc. for protection & regeneration/ regulation in upper reaches of the watershed slope.	No.	0.50	12	0.60	12	0.60	12	0.60	12	0.60	-	-	48	2.40
	b	Formation of User's Group & Mobility	No.	0.20	40	0.80	35	0.70	25	0.50	20	0.40	-	-	120	2.40
	c	Formation of Vouluntary Organization & Mobility	No.	0.30	20	0.60	20	0.60	20	0.60	20	0.60	-	-	80	2.40
	Sub Total of NRM Governance:				**97**	**4.40**	**96**	**4.40**	**88**	**4.40**	**84**	**4.40**	**-**	**-**	**365**	**17.60**
10	**Consolidation & Withdrawal phase (3%)**				-	-	-	-	-	-	-	-	-	**26.40**	-	**26.40**
		Grand Total (sum of all sub-totals 1 to 10)				**220.00**		**220.00**		**220.00**		**132.00**		**88.00**		**880.00**

Table No. 7.2 Estimated Benefit Cost Ratio

S. No.	Name of the activity	Total Cost (Rs.)	Total Benefit expected * (Rs.)	BCR	Remarks
	EPA	17.60	21.12	1:1.2	
	NRM	413.60	579.04	1:4	
	PE	132.00	171.60	1:3	
	Livelihood for Asset less	132.00	171.60	1:3	
	Institution and Capacity building	26.40	31.68	1:2	
	Overall	721.60	975.04	1.28	

***Kindly relate this with table no. 9.2 (expected outcomes)**

Chapter 8

Consolidation and completion of various works

Table No. 8.1: Consolidation of Action Plan

1	2	Implementation Phase								Consolidation/ exit Phase		Total
S. No	Component	1 year		2nd year		3rd year		4th year		5th year		
		Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	Phy (No)	Fin (Rs.)	
1	Entry Point Activities (2%)	2%	17.60	-	-	-	-	-	-	-	-	17.60
2	DPR Preparation by PIA (1%)	1%	8.80	-	-	-	-	-	-	-	-	8.80
3	Institution & Capacity Building (3%)	1.5%	13.20	0.5%	4.40	0.5%	4.40	0.25%	2.20	0.25%	2.20	26.40
4	Production System (15%)	1%	8.80	3%	26.40	6%	52.80	4.25%	37.40	0.75%	6.60	132.00
5	Livelihoods, Activities for the Assetless persons micro enterprises & business development (15%)	1%	8.80	2.5%	22.00	6%	52.80	4.5%	39.60	1%	8.80	132.00

6	Natural Resource Management (47%)	16%	140.80	16%	140.80	9.5%	83.60	3%	26.40	2.5%	22.00	413.60
7	Monitoring & Evaluation (2%)	-	-	0.5%	4.40	0.5%	4.40	0.5%	4.40	0.5%	4.40	17.60
8	Consolidation & Withdrawal phase (3%)	-	-	-	-	-	-	-	-	3%	26.40	26.40
9	Management Cost (10%)	2%	17.60	2%	17.60	2%	17.60	2%	17.60	2%	17.60	88.00
10	Natural Resource Management & Governance (2%)	0.5%	4.40	0.5%	4.40	0.5%	4.40	0.5%	4.40	-	-	17.60
	Total	**25%**	**220.00**	**25%**	**220.00**	**25%**	**220.00**	**15%**	**132.00**	**10%**	**88.00**	**880.00**

CHAPTER – 9

EXPECTED OUTCOMES

9.1 Describe in detail the "Expected Outcomes"

9.1 Expected outcomes of the interventions in the Integrated Watershed Management Project area can be summarized as below-

9.1.1. Employment

Unemployment is a big problem in the Champabati Upper IWMP project area. Main occupation of the villagers is agriculture; Fishery and daily wage labours. Due to lack of any irrigation facility people only cultivate one crop that is kharif crop. Only some farmers undertake Ravi crops and summer crops. Due to lack of fodder animal husbandry is also difficult in the project villages.

Project will provide wage employment as well as self-employment to the villagers. Wage employment would be created by engaging the people in watershed development works. Self-employment would be created by providing agricultural activities,

9.1.2. Skill development-All the members of the watershed committee and staff such as watershed Secretary and volunteers and the members of users groups and self-help groups have been given orientation and training to improve their knowledge and upgrade technical/management and community organization skills to a level that is appropriate for the successful discharge of their responsibilities on withdrawal of the watershed development team from the project.

9.1.3. Enhanced Production-The in-situ soil and moisture conservation measures, improved agronomic practices would result in increase in cropping are and intensity and agricultural productivity reflecting in overall increase in agricultural production

9.1.4. Income Generation- Interventions would help in enhancement on income generation not only through increased production but also through wage component to be earned by the farmers.

9.1.5 Ground Water Recharge-Watershed Intervention would result in increase in Ground water table due to enhanced recharge.

Table No. 9.2: Summarize in the table given below (Quantifiable indicators)

1	2		3	4	5	6
S. No.	Item		Unit of measurement	Pre-project Status	Expected Post-project Status	Remarks
1	Status of water table (Depth to Ground water level)		Meters	4.70	3.90	At some points recharge may be observed more but the overall raise of Groundwater Table is expected to be about 2 meters.
2	Ground water structures repaired/ rejuvenated		No.	8	33	
3	Quality of drinking water		Description	Turbid water	Clear. potable	
4	Availability of drinking water		Description	Scarce	sufficient	Many Ring well and Tube well etc. would be Provided
5	Increase in irrigation potential		Hec.	Nil	3600	Supplementary irrigation through improved soil moisture regime, Water distribution channel from water harvesting structures, pump etc.
6	Change in cropping/ land use pattern		Description	Single Cropping	Double Cropping also multiple cropping in suitable areas	
7	Area under agricultural crop		Hec.	4121	4327	
	I	Area under single crop	Hec.	3709	3894	
	Ii	Area under double crop	Hec.	412	433	
	iii	Area under multiple crop	Hec.			
8	Net increase in crop production area		Hec.	4169	4377	

9	Increase in area under Vegetation/Forest	Hec.	Nil	16.52	
10	Increase in area under horticulture	Hec.	Nil	14.51	
11	Increase in area under fuel	Hec.	Nil	Nil	
12	Increase in area under Fodder	Hec.	Nil	Nil	
13	Increase in milk production	Litres/day	1200	1300	
14	Environmental Impact		Environment is in peril due to lack of vegetation	Improve in environmental impact will be noticed.	Area under permanent vegetation will be increased
	Change in Soil Loss		57 Ton/Ha/Yr	Soil loss will be reduced	Soil loss will have to be monitored
	Perenniality of flow and change in Run-off			Surface runoff will be reduced due to increase in time of concentration & rate of infiltration.	
	Recharge of ground water		13	11	Ground water table in 6 open wells as recorded in table 3.14 will have to be maintained and monitored.
14	No. of SHGs Promoted	No.	12	182	Assetless and women will be given priority I selection of SHG.
15	Increase in no. of livelihoods	No.	24	335	

16	Increase in income	Rs.	10,000/family	Av-Rs. 30000/Yr /Family	Socio economic condition will be improved.
17	Status of Migration	No.	361	Nil	Migration is expected to be stopped.
18	SHG Federations formed	No.	Nil	5	Federations of homogenous SHGs will be organized.
19	Credit linkage with banks	Rs.	Nil	All UGs and SHGs would have credit linkage	All SHGs will be linked with credit linkage in Banks
20	Resource use agreements		4	Frame work under process.	Resource use agreements will be applicable for all stake holders.
21	WDF collection & management	Rs.	Nil	33,88,000.00	As detailed in Water shed Development works schedule
22	Summary of lessons learnt	Systemic efforts are to be made by the PIA/WDT/WC to earn from the field experiences as also from feedback of independent sources. The following measures are suggested for the PIA/WDT/WC to enable the learning process at different levels. 1 Systematic analysis of monitoring data on a regular basis and sharing with DWDU/SLNA. as well as with DOLR through SLNA 2. Engaging services of independent academic and voluntary Organizations by the DWDU/SLNA for taking up research and action research projects. 3. Initiating pilots and innovative models. 4. Organizing Workshops at District/ State level sharing success stories of other projects.				

Table No.9.3: Backward and Forward Linkages

1	2	3	4
Type of Marketing Facility	Name of the institution	Pre-project (no.)	Expected post project status
(A) Backward linkages			
(i) Seed certification	Assam Seed Corporation, Seed corporation of India	Nil	2 Nos.
(ii) Seed supply system	Assam Seed Corporation, Seed corporation of India	Nil	3 Nos.
(iii) Fertilizer supply system	Fertilizer Corporation of India	Nil	2 Nos.
(iv) Pesticide supply system	From reputed manufacturers through the Department of Agriculture	2 Nos.	5 Nos.
(v) Credit institutions	K.C.C. Banks	4 Nos.	6 Nos.
(vi) Water supply	State Department of Public Health Engineering	5 Nos.	25 Nos.
(vii) Extension services	State Departments of Agriculture and Allied Services	Nil	2 Nos.
(viii) Nurseries	Provision for creation of Forestry and Horticultural Nursery is made in the DPR	Nil	3 Nos.
(ix) Tools/machinery suppliers	Department of Agriculture, Assam	7 Nos.	15 Nos.
(x) Price Support system	State Department of Agriculture	Nil	3 Nos.
(xi) Labour	State Department of Labour and Employment	7 Nos.	14 Nos.
(xii) Any other (please specify)			
(B) Forward linkages			
(i) Harvesting/threshing machinery	State Department of Agriculture	22 Nos.	41 Nos.
(ii) Storage (including cold storage)	State Department of Agriculture	Nil	Nil
(iii) Road network	State PWD Deptt.	8 Nos.	8 Nos.
(iv) Transport facilities	Name of the institution	6 Nos.	6 Nos.
(v) Markets / Mandis	State Department of Transport	7 Nos.	8 Nos.
(vi) Agro and other Industries	VCDC/(Panchayats), Local Bodies	4 Nos.	6 Nos.
(vii) Milk and other collection centres	Agro Industries Development Corporation, Assam Small Industries Development Corporation. State Department of Industries and Commerce	2 Nos.	4 Nos.
(viii) Labour	Dairy Development Department	Nil	2 Nos.
(ix) Any other (please specify)			

ANNEXURE-II

SDG Format

Total Target Area to be treated during implementation of Project underWDC-PMKSY 2.0				
DISTRICT : CHIRANG PROJECT : CHIRANG-I (CHAMPABOTI UPPER) 2.0 WDC-PMKSY/2021-22				
Sl. No.	**Component**	**List of Activities (as per 5 year Action Plan)**	**Location**	**Total Treatable Area tobe benefitted (ha)**
1	**NRM Activities**	Dologaon Gully Control Project	Dologaon	125.20
2		Deolguri Gully Control Project	Deolguri	147.55
3		Balapara Gully Control Project	Balapara	177.00
4		Jaoliabari Gully Control Project	Jaoliabari	128.00
5		North Gendergaon Horticulture Plantation	North Gendergaon	41.25
6		Choto Mazabari Renovation of Pond	Choto Mazabari	69.00
7		Dhupguri Gully Control Project	Dhupguri	204.00
8		Kolobari Kashibari Brick Channel	Kolobari Kashibari	153.00
9		Dipu Gully Control Project	Dipu	145.60
10		Namalpur Earthen Agri Bund	Namalpur	30.20
11		Solmari Brick Channel	Solmari	130.35
12		Nimagaon Gully Control Project	Nimagaon	48.25
13		Dologaon Boulder Pitching Project	Dologaon	138.45

14		Laoripara Boulder Pitching Project	Laoripara	177.00
15		Jaoliabari Gully Control Project	Jaoliabari	129.00
16		Bamungaon Gully Control Project	Bamungaon	187.50
17		Pretgaon Gully Control Project	Pretgaon	152.60
18		Kashikotra No. 1 RCC Channel	Kashikotra No. 1	81.00
19		Kashikotra No. 2 Earthen Agri Bund	Kashikotra No. 2	41.50
20		Bairajhora Gully Control Project	Bairajhora	150.70
21		Dipu (Kumguri) Horticulture Plantation	Dipu (Kumguri)	26.90
22	**NRM Activities**	Thunkhobari Gully Control Project	Thunkhobari	53.30
23		Dipu Gully Control Project	Dipu	71.20
24		Thunkobari Horticulture Plantation	Thunkobari	26.89
25		Krishnapur Brick Channel	Krishnapur	120.30
26		Namalpur Brick Channel	Namalpur	52.60
27		Amguri Earthen Agri Bund	Amguri	32.00
28		North Deolguri Horticulture Plantation	North Deolguri	44.90
29		Dologaon Horticulture Plantation	Dologaon	39.00
30		Kashikotra No. 1 Road Side Plantation	Kashikotra No. 1	14.92
31		Shyamthaibari Gully Control Project	Shyamthaibari	152.60

32		Amguri Gully Control Project	Amguri	10.50
33		Dhupguri Boulder Pitching Project	Dhupguri	102.30
34		Dhupguri Gully Control Project	Dhupguri	41.50
35		Bamungaon Boulder Pitching Project	Bamungaon	86.75
36		Dangishbari Boulder Pitching Project	Dangishbari	98.72
37		Rajajan Gully Control Project	Rajajan	46.75
38		Palashbari Gully Control Project	Palashbari	50.80
39		Namalpur Horticulture Plantation	Namalpur	17.90
40		Solmari Horticulture Plantation	Solmari	4.70
41		Goragaon Earthen Agri Bund	Goragaon	32.88
42		Athibari Gully Control Project	Athibari	62.80
43		Choto Mozabari Gully Control Project	Choto Mozabari	172.30
44		Shyamthaibari Horticulture Plantation	Shyamthaibari	27.00
45		Salbari Gully Control Project	Salbari	77.76
46		Namalpur Gully Control Project	Namalpur	60.20
47		Palashbari Horticulture Plantation	Palashbari	10.85
Total (A)				**3995.47**

48	**Production System (Land Based Activities)**	Horticultural Block Plantation.	-	4.53
Total (B)				4.53
Total(C = A+ B)				**4000.00**

Annexure – A

Natural Resource Management for MWC Dologaon

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No.	Name of the Activities (Structures)	Name of the Hamlet / Village	Plot Numbers (including Name of the local Patch)	Name of Beneficiaries	Area (in Ha)/ Dimension (in M/ Sq. M /CuM) of Structure	Unit Cost	Total Cost (Rs. In Lakh)	Contribution	Total Grant Amount (Rs. In Lakh)	Year of Implementation (1st/2nd/3rd/4th/5th)	GPS Points	
											Long	Lat
1	Gully Control Project	Dologaon	Const of Gully Control project	All villagers & farmers	24.30 Sqm.	0.535	13.000	0.650	13.000	1st Year	26.546475	90.393879
2	Gully Control Project	Deolguri	Const of Gully Control project	All villagers & farmers	28.00 Sqm	0.535	15.000	0.750	15.000	1st Year	26.521422	90.410678
3	Boulder Pitching	Dologaon	Const of Boulder Pitching	All villagers & farmers	252.43 Cum	0.0515	13.000	0.650	13.000	2nd Year	26.549188	90.397085
4	Boulder Pitching	Laoripara	Const of Boulder Pitching	All villagers & farmers	310.68 Cum	0.0151	16.000	0.800	16.000	2nd Year	26.566268	90.388155
5	Earthen Agri Bund	Amguri	Const of Earthen Agri Bund	All villagers & farmers	1638.65 Cum	0.00238	3.900	0.195	3.900	3rd Year	26.558416	90.399876
6	Horticulture Plantation	North Deolguri	Horticulture Plantation	All villagers & farmers	2.19 Ha	2.280	5.000	0.250	5.000	3rd Year	26.558618	90.379919
7	Horticulture Plantation	Dologaon	Horticulture Plantation	All villagers & farmers	1.97 Ha	2.280	4.500	0.225	4.500	3rd Year	26.54781	90.395843
8	Road Side Plantation	Amguri	Road Side Plantation	All villagers & farmers	70 Nos.	0.030	2.10	0.105	2.100	3rd Year	26.557284	90.398408
9	Earthen Agri Bund	Goragaon	Const of Earthen Agri Bund	All villagers & farmers	1680.67 Cum	0.00238	4.000	0.200	4.000	4th Year	26.558542	90.379885
	Sub Total of NRM:						**76.500**	**3.825**	**76.500**			

Natural Resource Management for MWC Athiabari

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No.	Name of the Activities (Structures)	Name of the Hamlet / Village	Plot Numbers (including Name of the local Patch)	Name of Beneficiaries	Area (in Ha)/ Dimension (in M/ Sq. M /CuM) of Structure	Unit Cost	Total Cost (Rs. In Lakh)	Contribution	Total Grant Amount (Rs. In Lakh)	Year of Implementation ($1^{st}/2^{nd}/3^{rd}/4^{th}/5^{th}$)	GPS Points	
											Long	Lat
1	Gully Control Project	Balapara	Const of Gully Control project	All villagers & farmers	29.90 Sqm	0.535	16.000	0.800	16.000	1^{st} Year	26.566268	90.388155
2	Gully Control Project	Jaoliabari	Const of Gully Control project	All villagers & farmers	22.42 Sqm	0.535	12.000	0.600	12.000	1^{st} Year	26.574405	90.4361
3	Gully Control Project	Jaoliabari	Const of Gully Control project	All villagers & farmers	22.42 Sqm	0.535	12.000	0.600	12.000	2^{nd} Year	26.575125	90.409495
4	Gully Control Project	Bamungaon	Const of Gully Control project	All villagers & farmers	31.77 Sqm	0.535	17.000	0.850	17.000	2^{nd} Year	26.574379	90.436119
5	Gully Control Project	Shyamthai bari	Const of Gully Control project	All villagers & farmers	26.17 Sqm	0.535	14.000	0.700	14.000	3^{rd} Year	26.55097	90.390345
6	Boulder Pitching	Bamungaon	Const of Boulder Pitching	All villagers & farmers	165.05 Cum	0.0515	8.500	0.425	8.500	3^{th} Year	26.55912	90.424252
7	Gully Control Project	Athibari	Const of Gully Control project	All villagers & farmers	12.15 Sqm	0.535	6.500	0.325	6.500	4^{th} Year	26.55912	90.424252
8	Horticulture Plantation	Shyamthaibari	Horticulture Plantation	All villagers & farmers	1.21 Ha	2.280	3.500	0.175	3.500	5^{th} year	26.538999	90.42723
	Sub Total of NRM:						**89.500**	**4.475**	**89.500**			

Natural Resource Management for MWC Dhopguri

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No.	Name of the Activities (Structures)	Name of the Hamlet / Village	Plot Numbers (including Name of the local Patch)	Name of Beneficiaries	Area (in Ha)/ Dimension (in M/ Sq. M /CuM) of Structure	Unit Cost	Total Cost (Rs. In Lakh)	Contribution	Total Grant Amount (Rs. In Lakh)	Year of Implementation ($1^{st}/2^{nd}/3^{rd}/4^{th}/5^{th}$)	GPS Points	
											Long	Lat
1	Horticulture Plantation	South Gendergaob	Horticulture Plantation	All villagers & farmers	2.06 Ha	2.28	4.700	0.235	4.700	1st Year	26.53814	90.418802
2	Renovation of Pond	Choto Mazabari	Renovation of Pond	All villagers & farmers	3684.21 Cum	0.0019	7.000	0.350	7.000	1st Year	26.525548	90.395392
3	Gully Control Project	Dhupguri	Const of Gully Control project	All villagers & farmers	34.20 Sqm	0.535	18.300	0.910	18.300	1st Year	26.553686	90.422768
4	Gully Control Project	Pretgaon	Const of Gully Control project	All villagers & farmers	26.17 Sqm	0.535	14.000	0.700	14.000	2nd Year	26.53748	90.40101
5	RCC Channel	Kashikotra No. 1	Const of RCC Channel	All villagers & farmers	170 Rm	0.047	8.000	0.400	8.000	2nd Year	26.546555	90.445312
6	Earthen Agri Bund	Kashikotra No. 2	Const of Earthen Agri Bund	All villagers & farmers	1974.79 Cum	0.00238	4.700	0.235	4.700	2nd Year	26.53297	90.428231
7	Boulder Pitching	Dhupguri	Const of Boulder Pitching	All villagers & farmers	190.29 Cum	0.0515	9.800	0.490	9.800	3th Year	26.546475	90.432766
8	Gully Control Project	Dhupguri	Const of Gully Control project	All villagers & farmers	8 Sqm	0.535	4.700	0.235	4.700	3th Year	26.554173	90.419025
9	Road Side Plantation	Kashikotra No. 1	Road Side Plantation	All villagers & farmers	83 Nos.	0.030	2.500	0.125	2.50	3th Year	26.542474	90.436884
10	Gully Control Project	Choto Mozabari	Const of Gully Control project	All villagers & farmers	29.72 Sqm	0.535	15.900	0.795	15.900	4th Year	26.525548	90.395392
	Sub Total of NRM:						**89.600**	**4.475**	**89.600**			

Natural Resource Management for MWC Thungkubari

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No.	Name of the Activities (Structures)	Name of the Hamlet / Village	Plot Numbers (including Name of the local Patch)	Name of Beneficiaries	Area (in Ha)/ Dimension (in M/ Sq. M /CuM) of Structure	Unit Cost	Total Cost (Rs. In Lakh)	Contribution	Total Grant Amount (Rs. In Lakh)	Year of Implementation (1st/2nd/3rd /4th/5th)	GPS Points	
											Long	Lat
1	Brick Channel	Kolobari Kashibari	Const of Brick Channel	All villagers & farmers	560 Rm	0.025	14.000	0.700	14.000	1st Year	26.554573	90.454273
2	Gully Control Project	Dipu	Const of Gully Control project	All villagers & farmers	25.35 Sqm	0.535	13.500	0.675	13.500	1st Year	26.56449	90.431475
3	Gully Control Project	Bairajhora	Const of Gully Control project	All villagers & farmers	25.35 Sqm	0.535	14.000	0.700	14.000	2nd Year	26.575784	90.461983
4	Horticulture Plantation	Dipu (Kumguri)	Horticulture Plantation	All villagers & farmers	1.54 Ha	2.28	3.500	0.175	3.500	2nd Year	26.55205	90.441724
5	Gully Control Project	Thunkhobari	Const of Gully Control project	All villagers & farmers	10.65 Sqm	0.535	5.700	0.285	5.700	2nd Year	26.571839	90.443674
6	Gully Control Project	Dipu	Const of Gully Control project	All villagers & farmers	13.46 Sqm	0.535	7.200	0.360	7.200	2nd Year	26.552022	90.441805
7	Horticulture Plantation	Thunkobari	Horticulture Plantation	All villagers & farmers	1.54 Ha	2.28	3.500	0.175	3.500	2nd Year	26.602078	90.461078
8	Boulder Pitching	Dangishbari	Const of Boulder Pitching	All villagers & farmers	187.47 Cum	0.0515	9.500	0.475	9.500	3th Year	26.588572	90.460905
9	Gully Control Project	Salbari	Const of Gully Control project	All villagers & farmers	14.48 Sqm	0.535	7.750	0.3875	7.750	5th Year	26.596849	90.460673
	Sub Total of NRM:						**78.650**	**3.9325**	**78.650**			

Natural Resource Management for MWC Nimagaon

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No.	Name of the Activities (Structures)	Name of the Hamlet / Village	Plot Numbers (including Name of the local Patch)	Name of Beneficiaries	Area (in Ha)/ Dimension (in M/ Sq. M /CuM) of Structure	Unit Cost	Total Cost (Rs. In Lakh)	Contribution	Total Grant Amount (Rs. In Lakh)	Year of Implementation (1st/2nd/3rd /4th/5th)	GPS Points	
											Long	Lat
1	Earthen Agri Bund	Namalpur	Const of Earthen Agri Bund	All villagers & farmers	2100.84 Cum	0.00238	5.000	0.250	5.000	1st Year	26.544792	90.451996
2	Brick Channel	Solmari	Const of Brick Channel	All villagers & farmers	612 Rm	0.025	15.300	0.765	15.300	1st Year	26.556279	90.467001
3	Gully Control Project	Nimagaon	Const of Gully Control project	All villagers & farmers	13 Sqm	0.535	7.000	0.350	7.000	1st Year	26.539231	90.460109
4	Brick Channel	Krishnapur	Const of Brick Channel	All villagers & farmers	600 Rm	0.025	15.000	0.750	15.000	2nd Year	26.546555	90.495312
5	Brick Channel	Namalpur	Const of Brick Channel	All villagers & farmers	288 Rm	0.025	7.200	0.360	7.200	2nd Year	26.71542	90.572822
6	Gully Control Project	Rajajan	Const of Gully Control project	All villagers & farmers	12.15 Sqm	0.535	6.500	0.325	6.500	3rd Year	26.535485	90.462609
7	Gully Control Project	Palashbari	Const of Gully Control project	All villagers & farmers	11 Sqm	0.535	7.000	0.350	7.000	3rd Year	26.530105	90.486145
8	Horticulture Plantation	Namalpur	Horticulture Plantation	All villagers & farmers	0.92 Ha	2.280	2.100	0.105	2.100	3rd Year	26.546559	90.451649
9	Horticulture Plantation	Solmari	Horticulture Plantation	All villagers & farmers	1.54 Ha	2.280	3.500	0.175	3.500	3rd Year	26.553618	90.462659
10	Gully Control Project	Namalpur	Const of Gully Control project	All villagers & farmers	14.95 Sqm	0.535	8.000	0.800	8.000	5th year	26.546131	90.444887
11	Horticulture Plantation	Palashbari	Horticulture Plantation	All villagers & farmers	1.21 Ha	2.280	2.750	0.1375	3.500	5th year	26.523779	90.468733
	Sub Total of NRM:						**79.350**	**4.3675**	**79.350**			

Budgeting for Natural Resource Management

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
5	**Natural Resource Management (47%)**															
	I	**Soil and Moisture Conservation Structures**														
	a	Brick Channel	No.	0.025	2	29.30	2	22.20	-	-	-	-	-	-	4	51.50
	b	RCC Chanel	No.	0.047	-	-	1	8.00	-	-	-	-	-	-	1	8.00
	c	Boulder Pitching	No.	0.0515	-	-	2	29.00	3	27.80	-	-	-	-	5	56.80
	d	Earthen Agri Bund	No.	0.00238	1	5.00	1	4.70	1	3.90	1	4.00	-	-	5	17.60
	II	**Water Harvesting Structures**														
	a	Gully Control Project	No.	0.535	7	94.80	6	69.90	4	32.20	2	22.40	2	15.75	21	235.05
	d	Renovation of ponds	No.	0.0019	1	7.00	-	-	-	-	-	-	-	-	1	7.00
	III	**Vegetative Measures**														
	a	Horticulture Plantation	Ha.	2.280	2.06	4.70	3.07	7.00	6.62	15.10	-	-	2.75	6.25	14.50	33.05
	b	Road side Plantation	No.		-	-	-	-	153	4.60	-	-	-	-	153	4.60
		Sub Total of NRM:				**140.80**		**140.80**		**83.60**		**26.40**		**22.00**		**413.60**

Annexure – B

Productivity Enhancement for MWS No. 1

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	1	0.304	2	0.608	4	1.216	4	1.216	1	0.304	12	3.648
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	-	-	-	-	-	-
	iii)	Vermi compost	No.	0.497	-	-	-	-	-	-	-	-	-	-	-	-
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	6	0.1176	12	0.2352	24	0.4704	21	0.4116	2	0.0392	65	1.274
	ii)	Tillage implements	No.	0.75	1	0.75	2	1.50	4	3.00	2	1.50	1	0.75	10	7.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	1	0.21	4	0.84	8	1.68	6	1.26	1	0.21	20	4.20
	ii)	Piggery	No.	0.50	1	0.50	4	2.00	8	4.00	6	3.00	-	-	19	9.50
	C)	**Fisheries**														
	i)	Fishery	No.	0.50	-	-	-	-	-	-	-	-	-	-	-	-
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	-	-	-	-
		Sub-Total of Production System			**10**	**1.8816**	**24**	**5.1832**	**48**	**10.3664**	**39**	**7.3876**	**5**	**1.3032**	**126**	**26.122**

Productivity Enhancement for MWS No. 2

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	1	0.304	2	0.608	4	1.216	2	0.608	1	0.304	10	3.04
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	-	-	-	-	-	-
	iii)	Vermi compost	No.	0.497	-	-	-	-	-	-	-	-	-	-	-	-
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	6	0.1176	6	0.1176	12	0.2352	12	0.2352	2	0.0392	38	0.7448
	ii)	Tillage implements	No.	0.75	1	0.75	2	1.50	4	3.00	2	1.50	1	0.75	10	7.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	1	0.21	4	0.84	8	1.68	5	1.05	-	-	18	3.78
	ii)	Piggery	No.	0.50	-	-	3	1.50	6	3.00	7	3.50	-	-	16	8.00
	C)	**Fisheries**														
	i)	Fishery	No.	0.50	1	0.50	2	1.00	4	2.00	2	1.00	-	-	9	4.50
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of Production System				**10**	**1.8816**	**19**	**5.5656**	**38**	**11.1312**	**30**	**7.8932**	**4**	**1.0932**	**101**	**27.5648**

Productivity Enhancement for MWS No. 3

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	1	0.304	2	0.608	4	1.216	4	1.216	1	0.304	12	3.648
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	-	-	-	-	-	-
	iii)	Vermi compost	No.	0.497	-	-	-	-	-	-	-	-	-	-	-	-
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	6	0.1176	9	0.1764	18	0.3528	15	0.294	2	0.0392	50	0.98
	ii)	Tillage implements	No.	0.75	1	0.75	2	1.50	4	3.00	2	1.50	1	0.75	10	7.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	1	0.21	4	0.84	8	1.68	4	0.84	1	0.21	18	3.78
	ii)	Piggery	No.	0.50	-	-	2	1.00	4	2.00	3	1.50	-	-	9	4.50
	C)	**Fisheries**														
	i)	Fishery	No.	0.50	1	0.50	2	1.00	4	2.00	4	2.00	-	-	11	5.50
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of Production System				**10**	**1.8816**	**21**	**5.1244**	**42**	**10.2488**	**32**	**7.35**	**5**	**1.3032**	**110**	**25.908**

Productivity Enhancement for MWS No. 4

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	-	-	-	-	-	-	-	-	-	-	-	-
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	-	-	-	-	-	-
	iii)	Vermi compost	No.	0.497	-	-	-	-	-	-	-	-	-	-	-	-
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	6	0.1176	10	0.196	20	0.392	20	0.392	1	0.0196	57	1.1172
	ii)	Tillage implements	No.	0.75	1	0.75	2	1.50	4	3.00	2	1.50	1	0.75	10	7.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	1	0.21	4	0.84	8	1.68	7	1.47	1	0.21	21	4.41
	ii)	Piggery	No.	0.50	1	0.50	3	1.50	6	3.00	4	2.00	-	-	14	7.00
	C)	**Fisheries**														
	i)	Fishery	No.	0.50	1	0.50	2	1.00	4	2.00	4	2.00	1	0.50	12	6.00
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of Production System				**10**	**2.0776**	**21**	**5.036**	**42**	**10.072**	**37**	**7.362**	**4**	**1.4796**	**114**	**26.0272**

Productivity Enhancement for MWS No. 5

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	-	-	-	-	-	-	-	-	-	-	-	-
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	2	1.2712	-	-	2	1.2712
	iii)	Vermi compost	No.	0.497	-	-	2	0.994	4	1.988	4	1.988	-	-	10	4.97
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	6	0.1176	8	0.1568	16	0.3136	5	0.098	7	0.1372	42	0.8232
	ii)	Tillage implements	No.	0.75	1	0.75	2	1.50	4	3.00	2	1.50	1	0.75	10	7.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	1	0.21	4	0.84	8	1.68	5	1.05	2	0.42	20	4.20
	ii)	Piggery	No.	0.50	-	-	4	2.00	8	4.00	3	1.50	-	-	15	7.50
	C)	**Fisheries**														
	i)	Fishery	No.	0.50												
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	1	0.1136	1	0.1136
	Sub-Total of Production System				**8**	**1.0776**	**20**	**5.4908**	**40**	**10.9816**	**21**	**7.4072**	**11**	**1.4208**	**100**	**26.378**

Budgeting for Productivity Enhancement

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	**Productivity Enhancement - Production System & Micro Enterprises (15%)**															
	A)	**Agriculture**														
		(Improved practices)														
	i)	Horticultural Plantation	No.	0.304	3	0.912	6	1.824	12	3.648	10	3.04	3	0.912	34	10.336
	ii)	Horticultural Plantation (Areca Nut)	No.	0.6356	-	-	-	-	-	-	2	1.2712	-	-	2	1.2712
	iii)	Vermi compost	No.	0.497	-	-	2	0.994	4	1.988	4	1.988	-	-	10	4.97
		(Infrastructure)														
	i)	Sprayers	No.	0.0196	30	0.588	45	0.882	90	1.764	73	1.4308	14	0.2744	252	4.9392
	ii)	Tillage implements	No.	0.75	5	3.75	10	7.50	20	15.00	10	7.50	5	3.75	50	37.50
	B)	**Animal Husbandry**														
		(Adoptive trials)														
	i)	Goatary	No.	0.21	5	1.05	20	4.20	40	8.40	27	5.67	5	1.05	97	20.37
	ii)	Piggery	No.	0.50	2	1.00	16	8.00	32	16.00	23	11.50	-	-	73	36.50
	C)	**Fisheries**														
	i)	Fishery	No.	0.50	3	1.50	6	3.00	12	6.00	10	5.00	1	0.50	32	16.00
	ii)	Fingerlings	No.	0.1136	-	-	-	-	-	-	-	-	1	0.1136	1	0.1136
	Sub-Total of Production System				**48**	**8.80**	**105**	**26.40**	**210**	**52.80**	**162**	**37.00**	**29**	**6.60**	**551**	**132.00**

Annexure – C

Livelihood Activities for Asset less Poor in MWS No. 1

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	1	0.50	3	1.50	5	2.50	5	2.50	1	0.50	15	7.50
	ii)	Goatery	No.	0.21	1	0.21	4	0.84	6	1.26	5	1.05	1	0.21	17	3.57
	iii)	Milching Cow	No.	0.75	1	0.75	1	0.75	2	1.50	2	1.50	1	0.75	7	5.25
	iv)	Handloom	No.	0.50	1	0.50	2	1.00	5	2.50	5	2.50	1	0.50	14	7.00
	v)	Mushroom	No.	0.16	-	-	1	0.16	6	0.96	4	0.64	-	-	11	1.76
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	1	1.50	-	-	-	-	1	1.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	2	0.098	-	-	-	-	2	0.098
	viii)	Poultry	No.	0.10	-	-	-	-			-	-	-	-	-	-
	Sub-Total of EP				**4**	**1.96**	**11**	**4.25**	**27**	**10.318**	**21**	**8.19**	**4**	**1.96**	**67**	**26.678**

Livelihood Activities for Asset less Poor in MWS No. 2

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	1	0.50	3	1.50	4	2.00	4	2.00	1	0.50	13	6.50
	ii)	Goatery	No.	0.21	1	0.21	4	0.84	7	1.47	4	0.84	1	0.21	17	3.57
	iii)	Milching Cow	No.	0.75	1	0.75	1	0.75	2	1.50	2	1.50	1	0.75	7	5.25
	iv)	Handloom	No.	0.50	1	0.50	2	1.00	6	3.00	6	3.00	1	0.50	16	8.00
	v)	Mushroom	No.	0.16	-	-	1	0.16	5	0.80	4	0.64	-	-	10	1.60
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	1	1.50	-	-	-	-	1	1.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	2	0.098	-	-	-	-	2	0.098
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of EP				**4**	**1.96**	**11**	**4.25**	**27**	**10.368**	**20**	**7.98**	**4**	**1.96**	**66**	**26.518**

Livelihood Activities for Asset less Poor in MWS No. 3

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	**Component**	**Activities**	**Unit**	**Unit Cost (Rs.)**	**1st year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	1	0.50	3	1.50	6	3.00	5	2.50	1	0.50	16	8.00
	ii)	Goatery	No.	0.21	1	0.21	4	0.84	6	1.26	4	0.84	1	0.21	16	3.36
	iii)	Milching Cow	No.	0.75	1	0.75	2	1.50	2	1.50	2	1.50	1	0.75	8	6.00
	iv)	Handloom	No.	0.50	-	-	2	1.00	5	2.50	5	2.50	-	-	12	6.00
	v)	Mushroom	No.	0.16	-	-	1	0.16	6	0.96	4	0.64	-	-	11	1.76
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	1	1.50	-	-	-	-	1	1.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	2	0.098	-	-	-	-	2	0.098
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of EP				**3**	**1.46**	**12**	**5.00**	**28**	**10.818**	**20**	**7.98**	**3**	**1.46**	**66**	**26.718**

Livelihood Activities for Asset less Poor in MWS No. 4

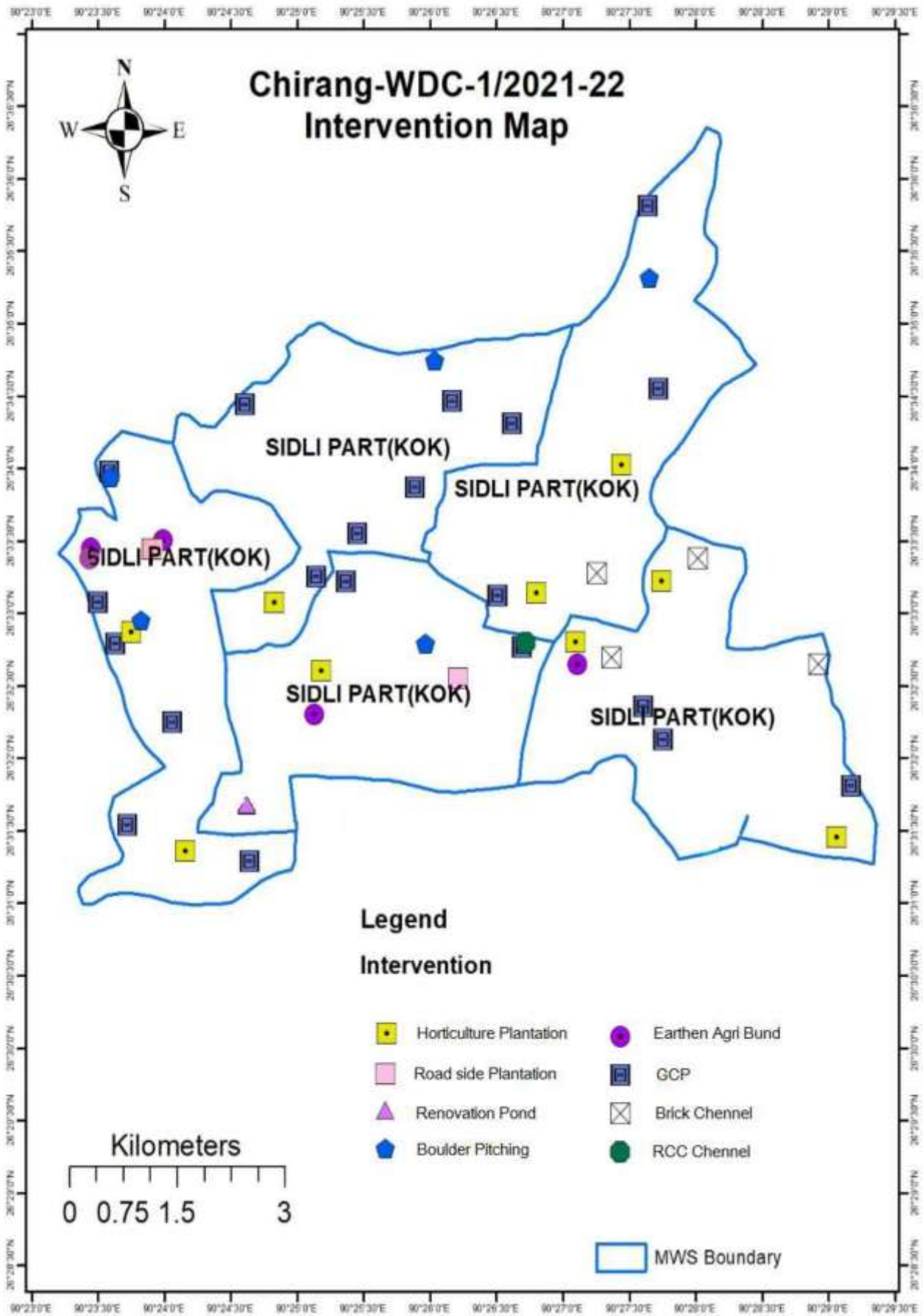
1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	**Component**	**Activities**	**Unit**	**Unit Cost (Rs.)**	**1st year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	1	0.50	3	1.50	6	3.00	4	2.00	1	0.50	15	7.50
	ii)	Goatery	No.	0.21	1	0.21	4	0.84	6	1.26	5	1.05	1	0.21	17	3.57
	iii)	Milching Cow	No.	0.75	1	0.75	1	0.75	2	1.50	2	1.50	1	0.75	7	5.25
	iv)	Handloom	No.	0.50	1	0.50	2	1.00	5	2.50	5	2.50	1	0.50	14	7.00
	v)	Mushroom	No.	0.16	-	-	1	0.16	6	0.96	6	0.96	-	-	13	2.08
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	1	1.50	-	-	-	-	1	1.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	2	0.098	-	-	-	-	2	0.098
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-Total of EP				**4**	**1.96**	**11**	**4.25**	**28**	**10.818**	**22**	**8.01**	**4**	**1.96**	**69**	**26.998**

Livelihood Activities for Asset less Poor in MWS No. 5

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	Component	Activities	Unit	Unit Cost (Rs.)	1st year		2nd year		3rd year		4th year		5th year		Total	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	1	0.50	3	1.50	6	3.00	4	2.00	1	0.50	15	7.50
	ii)	Goatery	No.	0.21	1	0.21	4	0.84	6	1.26	4	0.84	1	0.21	16	3.36
	iii)	Milching Cow	No.	0.75	1	0.75	1	0.75	2	1.50	2	1.50	1	0.75	7	5.25
	iv)	Handloom	No.	0.50	-	-	2	1.00	4	2.00	4	2.00	-	-	10	5.00
	v)	Mushroom	No.	0.16	-	-	1	0.16	7	1.12	5	0.80	-	-	13	2.08
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	1	1.50	-	-	-	-	1	1.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	2	0.098	-	-	-	-	2	0.098
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	3	0.30	-	-	3	0.30
	Sub-Total of EP				**3**	**1.46**	**11**	**4.25**	**28**	**10.478**	**22**	**7.44**	**3**	**1.46**	**67**	**25.088**

Budgeting for Enterprise Promotion

1	2	3	4	5	6		7		8		9		10		11	
Sl. No.	**Component**	**Activities**	**Unit**	**Unit Cost (Rs.)**	**1st year**		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
					Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
4	**Enterprise Promotion - Livelihood Activities for Assetless Poor (15%)**															
	i)	Piggery	No.	0.50	5	2.50	15	7.50	27	13.50	22	11.00	5	2.50	74	37.00
	ii)	Goatery	No.	0.21	5	1.05	20	4.20	31	6.51	22	4.62	5	1.05	83	17.43
	iii)	Milching Cow	No.	0.75	5	3.75	6	4.50	10	7.50	10	7.50	5	3.75	36	27.00
	iv)	Handloom	No.	0.50	3	1.50	10	5.00	25	12.50	25	12.50	3	1.50	66	33.00
	v)	Mushroom	No.	0.16	-	-	5	0.80	30	4.80	23	3.68	-	-	58	9.28
	vi)	E-Rickshawe	No.	1.50	-	-	-	-	5	7.50	-	-	-	-	5	7.50
	vii)	Sewing Machine	No.	0.049	-	-	-	-	10	0.49	-	-	-	-	10	0.49
	viii)	Poultry	No.	0.10	-	-	-	-	-	-	3	0.30	-	-	3	0.30
	Sub-Total of Enterprise Promotion				**18**	**8.80**	**56**	**22.00**	**138**	**52.80**	**105**	**39.60**	**18**	**8.80**	**335**	**132.00**


Chirang-WDC-1/2021-22
Intervention Map
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Road side Plantation
Renovation Pond
Boulder Pitching
Earthen Agri Bund
GCP
Brick Chennel
RCC Chennel
MWS Boundary
Kilometers
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