

**MAINSTREAMING GENDER IN IWRM: THE CASE OF
SMALL SCALE WATER RESOURCES DEVELOPMENT
SECTOR PROJECT**

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**INSTITUTE OF WATER AND FLOOD MANAGEMENT
BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY**

Mainstreaming Gender in IWRM: The Case of Small Scale Water Resources Development Sector Project

Anil Chandra Barman

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of
Master of Science in Water Resources Development

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CERTIFICATION

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This Thesis is dedicated to my beloved uncle



Debendra Chandra Barman

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ABSTRACT

The aim of this study is to examine the status of mainstreaming gender at field level in three LGED subprojects under SSWRDSP - I, II & III at all six project cycles, where gender issues are addressed as per guidelines and policy of LGED and review the policy, strategy and action plan of GoB related with mainstreaming gender in Bangladesh. Three subprojects, one from each phase are randomly selected for the study. The selected three subprojects are - i) Brajamul Bhiti Khal (Flood Control Drainage and Water Conservation) subproject in Pangsha, Rajbari under SSWRDSP-I, ii) Gumuria (Water Conservation) Subproject in Haluaghat, Mymensingh under SSWRDSP-II and iii) Purba Sarail Madai (Drainage and Water Conservation) in Kalai, Joypurhat under PSSWRSP or SSWRDSP-III.

A comprehensive literature review was done including policy documents of the concerned ministries, organizations of Bangladesh using different sources like IWMF, BUET library, published hard copy, existing documents, study reports, inception reports, feasibility reports, and project/subproject completion reports from various organizations, journal publications using internet, etc. As a result of this review, a fair idea regarding the status of mainstreaming gender in Bangladesh was tried to understand. Through critical review strengths, weaknesses, gaps in addressing gender issues were found and scopes of improvement were identified. Accordingly recommendations are made to modify the present policies by incorporating proposed scopes of improvement in the existing policies.

Both qualitative and quantitative questionnaire methods were followed for assessing the achievement of mainstreaming gender through project cycle analysis. Questionnaire sets were prepared to have background information of respondents by randomly selecting 25 samples from each of the three subprojects.

The contents of questionnaire were closed types and were developed using 33 (thirty three) indicators. These indicators assisted in quantifying gender mainstreaming through project cycle analysis. Gender involvement and participatory process in the project cycles were evaluated looking into the procedure followed by involving women, landless, marginalized and poor people in the project by analyzing the replies “yes” and “no” as %.

General questionnaires were also aimed to reveal the involvements, approaches and attitudes of water professionals, gender specialists, project consultants – designers and planners, LGED officials to consider relevant gender sensitive issues like enhancement of participation of gender in project activities and ownership building, gender consideration is as tokenism or not,

percentage of female members comparing to male in different activities. General Discussions (GD), Focus Group Discussions (FGD), Case Studies and KIIs were used for this purpose.

The Project Cycle Analysis included six components as phase wise. Weaknesses found in all project cycles were analyzed and graphically presented, where improvement of gender participation was visible in Phases I, II, and III. Accordingly scopes of improvement were found and suggestions were made. No remarkable strength in gender mainstreaming was found in Phase I and II, while gender mainstreaming was visible during Phase III. The scope of improvement found in the study should be taken care by IWRM Unit of LGED for mainstreaming gender in SSWRDSP project.

Quantitative analysis using 33 indicators also shows that mainstreaming gender has gradually gained upper trend through Phase I, II & III in the field of gender involvement. Positive trends are observed in attending in project briefing orientation, reconnaissance survey, feasibility study, PRA, GD, FGD and survey. A negative trend is observed in rights of water for all users, in voice for rights, in attending the meeting, in design discussion meeting, in percentage of women member in WMCA, in giving opinion to designer, in pre-evaluation of local resources, in bye law drafting of WMCA, in attending in drawing understanding meeting, in LCS members to implement earth work, in equal wage rate for men and women, in attending in LCS training and in construction of separate toilet facility for women workers, etc.

For carrying out qualitative analysis, 10 (ten) general questionnaires of open type were formulated and developed to capture people's opinions, attitudes and feelings about inclusion of gender issues in subproject identification/selection, subproject formulation and planning, design and Water Management Cooperative Association (WMCA) formation, implementation of subproject, operation and maintenance (O&M), monitoring and evaluation, etc. 21 indicators were formulated to find out qualitative changes happened in the sub projects and the analysis showed that gender relations and empowerment were visible from the very beginning of the project cycles. Women felt proud and sensitization of importance among them grew as a result of consultation with them. Their feelings and attitudes rose to a higher level. Participation of women was quite remarkable in GD, FGD, election of WMCA, meetings of WMCA, LCS activities, O&M activities etc. Their decisions and voices were valued in project activities. These positive feelings helped in achieving mainstreaming gender in all subprojects of SSWRDSP-I, II and III. 4 out of 12 members were elected from women in the executive body of WMCA, which was visible empowerment of women. Number of school going students was increased remarkably after sub-project implementation and food habit was also changed due to generation of income. Housing pattern was changed as income was increased by labour employment opportunity as well as crop

production, microcredit mobility were also increased. A position woman in family was secured and relation to them was positively changed than earlier. Purchasing power of high valued clothes as well as land was increased. Gradual increase of voice of women in WMCA was visible day by day through their bold and strong participation in WMCA's meetings and demonstration of their capability to face election individually. Problem solving capability of women in providing decision was enhanced in family as well as in community. Women and landless farmers were involved in earth work and plantation activities through LCS. This opportunity helped them to be economically solvent and empowered them increasing their status. Moreover, women as well as landless farmers received different types of IG trainings through which they were able to earn and reduce poverty.

As a part of qualitative analysis, one case study from each subproject totaling to three case studies were carried out exclusively among earning women benefitted especially by the subproject to assess the status of mainstreaming gender among voiceless and powerless groups. Three women of three subprojects are gradually improving their status day by day in their family, in society by economically and by status.

It has been revealed by the study that a lot of scopes of improvement are there in all gender and water related policies, strategies and action plans of GoB documents to mainstreaming gender. The study also showed that gender mainstreaming has been increased from Phase I to Phase II and from Phase II to Phase III in all subprojects of SSWRDSP. The trend of gender improvement has gradually got upward trend. Gender mainstreaming is possible to attain further, if scopes of improvement that are found in the study are followed as mentioned in the study.

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BARD	Bangladesh Academy for Rural Development
BADC	Bangladesh Agriculture Development Corporation
BBS	Bangladesh Bureau of Statistics
BDT	Bangladesh Taka
BIDS	Bangladesh Institute of Development Studies
BUET	Bangladesh University of Engineering and Technology
BWDB	Bangladesh Water Development Board
CEDAW	Committee on the Elimination of Discrimination against Women
CIDA	Canadian International Development Agency
CHT	Chittagong Hill Tracts
CLO	Community Land Ownership
COS	Country Operational Strategy
CZI	Cooperative Zonal Institution
DAWN	Development Alternatives with Women for a New Era
DND	Dhaka Narayangonj Dhaka
DP	Development Partner
DPHE	Department of Public Health Engineering
DR	Drainage
DR&WC	Drainage and Water Conservation
DWA	Department of Women's Affairs
FAP	Flood Action Plan
FCD&WC	Flood Control, Drainage and Water Conservation
FCD	Flood Control and Drainage
FCDI	Flood Control, Drainage and Irrigation
FGD	Focus Group Discussions
FMC	First management committee
FPCO	Flood Plan Coordination Organization
GA	Gender Awareness
GAD	Gender and Development
GAE	Gender and Empowerment
GAP	Gender Action Plan
GD	General Discussions

GoB	Government of Bangladesh
GoN	Government of the Netherlands
GPP	Guidelines for People's Participation
GPWM	Guidelines for Participatory Water Management
GWA	Global Water Alliance
HH	Household
HOPE	Head of the procuring entity
HYV	High Yielding Variety
FPCO	Flood Plan Coordination Organization
ICZM	Integrated Coastal Zone Management
IDA	International Development Agency
IFAD	International Fund for Agricultural Development
IGA	Income Generating Activities
IMF	International Monetary Fund
IPM	Integrated Pest Management
IPSWAM	Integrated Planning for Sustainable Water Management
IRDP	Integrated Rural Development Programme
IWFM	Institute of Water and Flood Management
IWRM	Integrated Water Resources Management
IWRM U	Integrated Water Resources Management Unit
JICA	Japan International Cooperation Agency
KII	Key Informant Interview
LCS	Labor Contracting Society
LF	Large Farmer
LGD	Local Government Division
LGED	Local Government Engineering Department
LGI	Local Government Institution
LL	Land Less
LLP	Low Lift Pump
MC	Managing Committee
MDG	Millennium Development Goal
MGF	Marginal Farmer
MIS	Management Information Center
MoCHT	Ministry of Chittagong Hill Tracts
MoHFW	Ministry of Health and Family Welfare

MoLE	Ministry of Labour and Employment
MoLGRDC	Ministry of Local Government, Rural Development and Cooperatives
MoPME	Ministry of Primary and Mass Education
MoSW	Ministry of Social Welfare
MOU	Memorandum of Understanding
MoYS	Ministry of Youth and Sports
MoWR	Ministry of Water Resources
MoWCA	Ministry of Women and Children Affairs
MRF	Marginal Farmer
MSc	Master of Science
MTEF	Medium Term Expenditure Framework
NAP	National Action Plan
NAPA	National Adaptation Programme of Action
NCWD	National Council for Women's Development
NGO	Non-Government Organization
NMIP	National Minor Irrigation Project
NSEGPRSD	National Strategy for Economic Growth, Poverty Reduction and Social Development
NWDP	National Women Development Policy
NWMP	National Water Management Policy
NWP	National Water Policy
NWPo	National Water Policy
OC	Organizing Committee
O & M	Operation and Maintenance
PMO	Project Management Office
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
PSSWRSP	Participatory Small Scale Water Resources Sector Project
PWD	Public Works Department
RDA	Rural Development Academy
SIMT	System Improvement and Management Transfer
SF	Small Farmer
SRP	System Rehabilitation Project
SSWRD	Small Scale Water Resources Development
SSWRDSP	Small Scale Water Resources Development Sector Project

SSWRDSP-I	Small Scale Water Resources Development Sector Project –Phase 1
SSWRDSP-II	Small Scale Water Resources Development Sector Project- Phase 2
UDCC	Upazila Development Coordination Committee
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UP	Union Parishad
UPPRP	Urban Partnership Poverty Reduction Project
WAD	Women and Development
WARPO	Water Resources Planning Organization
WB	World Bank
WC	Water Conservation
WID	Women in Development
WM	Water Management
WMA	Water Management Association
WMCA	Water Management Cooperative Association
WMF	Water Management Federation
WMG	Water Management Group
WMO	Water Management Organisation
WMA	Water Management Association
WMF	Water Management Federation
WSS	Water Supply and Sanitation
WUG	Water User Group

CHAPTER ONE

INTRODUCTION

1.1 Preamble

Bangladesh ranks 140th out of total 177 countries worldwide according to the UN Gender Development Index [1]. Although many of the basic development indicators show that women lag behind men in terms of literacy, health and income, yet improvements are noticed, in recent years, in primary school enrolment and female mortality rates.

It is generally acknowledged that deep gender discriminations exist in Bangladesh. Women face deprivation in many areas like education, health, nutrition, employment, credit, security as well as control over assets. In fact, the feminization of poverty has become more and more evident. However, improvements in gender related development have placed Bangladesh, as per international comparisons, with the country ranking higher in Gender Development Index than in Human Development Index. The most significant contribution in reducing the existing gender gap is the difference in educational attainment.

Bangladesh, as a traditional society within a patriarchal, patri-lineal and patri-local social system, upholds a rigid gender division of labor that perceives men and women's roles differently and controls women's mobility, duties and responsibilities along with their sexuality. However, this gender construct is under threat and is changing noticeably due to persistent poverty reduction and the gradual erosion of the familial umbrella support. The society and the gender equation in Bangladesh are in a state of transition and flux.

Bangladesh is one of the densely populated with overwhelming rural and extremely poor countries of the world. The country has a current population of 145 million. The population density is over 1160 persons per square kilometer [2]. Almost 75% of the total population lives in the rural areas and 50% of them live below poverty level where the per capita income is about BDT 30,000 only. The percentage of poor

households is higher in the rural area than in the urban area. Women constitute almost half of the total population of the country and it is extremely important that they are involved in the mainstream of development activities [3].

However, Government of Bangladesh has taken initiatives to improve the situation. Constitution of Bangladesh mandated in many articles that men and women are equal through article number 10, 11, 19(2), 27, 28(1), 28(2), 28(3), 28(4), 29(1), 65(3), etc. Bangladesh has given considerable importance to the women development, like any other country in the world. Government of Bangladesh declared National Women Development Policy (NWDP) in 1997 [4], which is a significant step towards women in development and as complementary the National Water Policy (NWP) was declared in 1999 [5], where women's participation was recommended with high importance. It appears that Government is very keen with women development and relevant aspects as women's participation is utterly integrated with the development process as a whole. Despite the fact in most of the cases, women are the most disadvantaged and vulnerable group of the community [6].

The aim of this study is to examine the assessment of mainstreaming gender at field level in three LGED subprojects under SSWRDSP- I, II & III at all six project cycles. Women have benefitted in several ways through these subprojects like participation in Labour Contracting Society (LCS), institutional involvement in WMCA, in receiving training and micro credit, independence of action and decision making, etc.[7]. Indeed participation is about power; about the ability to raise one's 'voice' in formal (institutional) or informal contexts like women's group meeting around a village water source [8]. This study will put special focus on this issue.

Gender related weaknesses and learning in mainstreaming gender through subprojects were dealt with project management improvements in Phase I, II and III of Small Scale Water Resources Development Sector Project (SSWRDSP). So, three subprojects namely Brajamul Bhity Khal (FCD&WC) subproject, Rajbari under Phase-I; Gumuria (WC) Subproject, Mymensingh under Phase-II and Purba Sarail Madai (DR&WC), Joypurhat under Phase-III are considered for carrying out the research.

1.2 Background of the Study

Promoting gender equity by involving men and women at different levels in water resources programmes, including decision-making and implementation is essential to speed up the process of sustainable water management. Women play a key role in the collection and safeguarding water for different uses, including water supply and sanitation and in many cases agriculture; yet their representations in water management decision making have been much less [9].

In promoting equity and equality, the Small Scale Water Resources Development project is supported by several high level policy mandates. The MoWCA has made a firm promise to advance the position of backward women through its National Action Plan for women's Advancement and the National Women Development Policy [10]. Within the water sector, the Government of Bangladesh addressed gender issues in its 1999 NWP [5].

BUET and others (2003) [7] reviewed 30 projects under SSWRDSP, Phase-I & II. The review looked into, among others, gender participation and observed that women in the WMA generally play a subdued role.

Under SSWRDSP, LGED for the first time has selected the subprojects in Small Scale Water Sector through a detailed Reconnaissance, Participatory Rural Appraisal (PRA) feasibility study/survey in the proposed subproject areas ensuring the participation of all the stakeholders and thereby incorporating the consensus based decisions/suggestions in all stages of design and implementation phase. At the end of the day, the completed subproject was handed over to the stakeholders forming a Water Management Cooperative Association (WMCA) with a mandatory of minimum 33% female members to develop the sense of women ownership of the subproject. Ashrafi (2007) [11] assessed three subprojects in Rajbari District under SSWRDSP-I and expressed satisfaction about positive trend in Women Empowerment in all three sites compared to base (control) site. As a succession of the success of first phase SSWRDSP-I (1995-2002), ADB financed for the second phase (2002-2010) as SSWRDSP-II, which is almost at the end of its journey. In phase – I & II, gender related shortcomings and learning points were that in most of the cases,

there was no upward trend in female membership as the project evolved, the importance of persuading men to support involvement of their wives and other women in the WMCA, the need to recognize that women are interested in exploring the opportunities offered by the project. In phase-III, these shortcomings have been dealt with through Project Management Improvements [12]. So, it is the demand of time to make an assessment of Gender Mainstreaming in subprojects of all phases to assess the status that to what extent and how much the target of institutionalization the Gender Equity and Women Empowerment have been possible so far.

The aim of the study will be to assess Mainstreaming Gender in three LGED subproject areas having almost same social & cultural characteristics under SSWRDSP-I, II & III. For this purpose, Gender related weaknesses and learning in mainstreaming gender through subprojects were dealt with project management improvements in Phase I, II and III. So, the above mentioned three subprojects are considered for carrying out the research. Preliminary assessment about the gender status by field visits in proposed sites apparently revealed that women engagement in WMCA, access to agriculture, fisheries etc., related practical trainings have been achieved almost satisfactorily although some inequalities between men and women seems to be existed in decision making, leadership activities, easy access & control of water resources etc. It is presumed that significant positive changes have been made in gender equity in the field of participation, communication, mobility, power exercising, etc. ranging from phase I to III.

1.3 Objectives of the Study

The aim of the study is to assess the gender mainstreaming in three small scale water resources subprojects of phase – I, II & III with the following objectives:

- a) To review the policy, strategy and action plan of GoB related with mainstreaming gender.
- b) To assess the achievement of gender mainstreaming in three subprojects of SSWRDSP-I, II and III.

As a result of this research, a fair idea regarding the status of mainstreaming gender in three subprojects is achieved, where incremental change in mainstreaming gender is focused. The findings of this study are to help in formulation of gender issues to be considered for future water projects in light of IWRM.

1.4 Scope of the Study

The study is based on three almost same type of sub-projects covering mainly Pangsha upazila of Rajbari, Haluaghat upazila of Mymensingh and Kalai upazila of Joypurhat districts belong to phase-I, II & III of SSWRDSP respectively. The scope of the study is concerned to mainstreaming gender of three subprojects sites. As Bangladeshi women are the poorest among the poor [13], so deprivation and powerlessness are significantly higher in rural Bangladesh. To reduce the gendered nature of poverty and weaknesses, GoB took policy [5, 14]. In this respect, Bangladesh Water Development Board (BWDB) and LGED are trying to promote gender equity, empowerment, mainstreaming through water projects like Integrated Planning for Sustainable Water Management [15] and Small Scale Water Resources Development Sector Project [10, 15, 16, 17, 18, 19] respectively. Women of sub-project areas i.e. from beneficiary households are generally benefited as a result of the introduction of different training activities of WMCA, less time consumption in domestic water collection, involvement in different types of income generating activities, getting loan from WMCA, increased opportunities to disseminate opinions in meeting, etc. But it is to be ensured that women are positioned into the mainstream of politics, economy, and leadership [20]. The continuing subordination of women in the legal profession must be challenged and remedied [21].

1.5 Limitations of the Study

The limitations of the study are as follows:

- 1) The study has been conducted in only a few households under a few villages of three study areas of three sub-project sites considering 25 sample sizes. It was inadequate to focus the overall scenario of mainstreaming gender.
- 2) Concept on gender and women's empowerment in some respect were not clear to people. As a result the study has been stumbled a little bit due to lack of information from the respondents resulting from less knowledgibility.
- 3) For the study purpose, the total sample for three areas has been limited to Landless (LL), Marginal Farmers (MRF) and Small Farmers (SF) only keeping in mind the fact that these households represent comparatively poorer and lower sections of

the community. In a broad sense it is not sufficient to portray the overall scenario of mainstreaming gender of those study areas.

1.6 Scope of further study

There are a lot of scopes to carry out further study on mainstreaming gender in water project of Bangladesh such looking into participation of gender in formulation of subproject proposal from bottom level of LGIs to upper level; How much it is participatory in Six project Cycles of a water project? Identification of barriers in mainstreaming gender in a water sub project; Measuring gender empowerment in a water subproject, etc.

CHAPTER THREE

POLICY REVIEW

3.1 Mainstreaming of Gender in different organizations of Bangladesh

Bangladesh remains one of the world's poorest countries with a population of approximately 150 million. In the UN Human Development Index, Bangladesh ranked 139 among 175 countries and according to the Gender Development Index, it ranked 112 among 114 countries. Moreover, in the Gender Empowerment Index, the ranking of Bangladesh was at 69 among 70 countries [25]. A detailed policy reviewed to fulfill one of the objectives of the study. Which mentioned below.

3.2 Women and Constitution of Bangladesh

In order to make development cooperation more sustainable and more cost-effective it is necessary to pay greater attention to the female half of the populations in our country. As it is extremely important that women to be involved in the mainstream of development activities so the GOB has clearly expressed its commitment for actions leading to women's empowerment and realization of their human rights. The principles of gender equality are embedded in the Constitution of the People's Republic of Bangladesh. Women's rights to equality and affirmative action in support of equality are guaranteed in the Constitution. According to the Constitution, all citizens are equal before the law and are entitled to equal protection of law (Article 27). Article 28(1) states the principles of non-discrimination: "The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex or place of birth ". Women's human rights and basic freedoms are incorporated in Article 28(2): "Women shall have equal rights with men in all spheres of the state and of public life". Article 29(1) requires that "there shall be equality of opportunity for all citizens in respect of employment or office in the service of the Republic". The principle of non-discrimination with regard to employment is stated in Article 29(2). The Constitution makes clear that the principles of affirmative action for the advancement of women and other sections of the citizenry who are deprived is not

contradictory to the principle of equality. In Article 29(4) it is stated, “Nothing in this article shall prevent the State from making special provision in favour of women or for the advancement of any backward section of citizens”[6].

3.3 Ministry of Women and Children Affairs (MoWCA)

MoWCA is the lead ministry for mainstreaming gender in all other line ministries. However, it is headed by the State Minister and is considered as a weak ministry both in human, as well as financial resources. In addition to the Ministry of Women and Children’s Affairs, the Government also put into operation a comprehensive national machinery to promote the advancement of women. At the highest level is the National Council for Women’s Development (NCWD), chaired by the Prime Minister. Below the apex, the implementing agency for the National Action Plan (NAP) for Women’s Advancement (which also is responsible for the National Policy for the Advancement of Women) and the Parliamentary Standing Committee interact with WID Focal Points in all line ministries, servicing ministries and the MoWCA. WID focal points in the line ministries comprise the Women’s Development Implementation and Evaluation Committee. Associate WID focal points also are located in the line ministries, servicing ministries, and the MoWCA. Below the MoWCA, the Department of Women’s Affairs (DWA) contains a Sub-WID focal point, which oversees the district DWA, which houses the WID Coordination Committee [14].

3.4 Ministry of Water Resources

3.4.1 National Water Policy (NWP)

Government of Bangladesh (GoB) has taken initiatives to improve the situation of women in Bangladesh. Accordingly GoB has declared National Women Development Policy in 1997. It is a step towards women in development. In 1999, GoB declared the National Water Policy, where women’s participation was highlighted. In order to realize the broader objectives of development and empowerment of women, necessary steps have been taken to strengthen the institutional capacity of various national machineries. In 1999, BBS published “Gender Dimension in Development”, where it

has been stated that “the government of Bangladesh realizes that there is still a big way to go to ensure women’s equality in development and empowerment. Government has undertaken initiatives relating to women issues in all spheres of life. In order to realize the broad objectives of development and empowerment of women, necessary measures have been taken to strengthen the institutional capacity of various national machineries.”

In water resources management, an uncoordinated and sectoral approach has resulted in environmental degradation from over exploitation of water resources, inappropriate allocations among competing uses, inequitable distribution of benefits and burdens, and inadequate operations and maintenance of infrastructures. Inadequate involvement of both men and women has hindered program and projects aimed at addressing sustainability in water resources management. Community participation and management approaches have failed to address these issues, largely because communities are often seen as collection of people with common purpose (Global Water Alliance, 2005). So gender perspectives in water resources management, is a key to ensure sustainable water management, as people centered approaches do not always ensure gender sensitiveness in water resources management.

IWRM, a cross sectoral holistic approach to water management for sustainable development, illustrates in principle “women should be recognized as central to the provision, management and safeguarding of water”. Philosophy, policy and implementation guidelines of IWRM also addressed “gender and social disparities in terms of equitable access to and control over resources, benefits, cost and decision-making between women and men”.

On the other hand “NWP-1999” is aimed at to bring institutional changes that will help decentralize the management of water resources and enhance the role of women in water management; to develop a state of knowledge and capability that will enable the country to design future water resources management plans by itself with economic efficiency, gender equity, social justice and environmental awareness to facilitate achievement of the water management objectives through broad participation.

In the gender mainstreaming National Water Policy is undoubtedly a great leap forward to establish discipline and direction to the water management of the country. The policy looks at water resources and its multiple uses in a comprehensive manner and also clearly spells out the rights and responsibilities of various stakeholders.

Guideline for Participatory Water Resources Management was approved in 2000 while National Water Management Plan (NWMP), 2004 emphasized on women's participation in water resources management. As a reflection of all these policy and guidelines, BWDB and LGED have been incorporating women in large and small scale water resources development and management projects in all stages ranging from planning to operation & maintenance via implementation [6].

3.4.2 National Water Management Plan (NWMP) - Stakeholder Participation

Decisions regarding water resources management can affect nearly every sector of the economy and the public as a whole, and stakeholder participation should be established in a form that elicits direct input from people at all levels of engagement. Stakeholder involvement should be an integral part of water resources management, at all stages of the project cycle. Towards that objective there should be a complete reorientation of the institutions for increasing the role of stakeholders and the civil society in decision making and implementation of water projects. The Government has to be at the core of the effort to help build the local institutions and to impart a precise awareness of the issues and an unambiguous understanding of their role in water management. Similarly, Government must lead the effort to ensure greater participation of women in this endeavour.

In order to ensure that all stakeholders actively and fruitfully participate in water resources management decision making at all stages, it is the policy of the Government that: (a) The "Guidelines for People's Participation (GPP) in Water Development Projects" be adhered to as part of project planning by all institutions and agencies involved in public sector management of water resources, (b) Guidelines for formation of water user groups (WUG) and similar community organisations will be formulated, (c) Generally 25 percent of the earthwork of any public water project will be offered to specific target groups or beneficiaries, (d) All opportunities are explored

and efforts undertaken to ensure that the landless and other disadvantaged group are directly involved in participatory management of local water resources and (e) New projects proposed by a community or local institution will be considered for implementation on a priority basis only when the beneficiaries have mobilised a certain percentage of the total cost as their contribution to the project [26].

3.4.3 Guideline for Participatory Water Management (GPWM)

The community participation in water management is not new to the people of Bangladesh. Historically, the people especially in the tidal flood plains of the south and *haors* (depressions) in the northeast of the country used to build small earthen dykes around their paddy fields or along riverbanks under the leadership of Zamindars (landlords). At that time, the water management was confined to protecting lands from monsoon and tidal floods by small dykes and limited irrigation with indigenous methods. Over the time, the socio-economic scenario experienced dramatic and rapid changes and the Zamindari system was abolished in 1954. Increasing population, and hence the need for more land under agriculture, led eventually to the growth of public investments in terms of construction of massive coastal polders and few large irrigation projects. In subsequent years, the number of projects piled up and presently totalling to more than five hundred spreads all over the country. BWDB is the major public sector agency under the Ministry of Water Resources responsible for developing flood control, drainage and surface water irrigation projects. Earlier, this organization was pioneer in tapping ground water for irrigation in the northern Bangladesh; but subsequently its role in groundwater development was overtaken by Bangladesh Agriculture Development Corporation (BADC) and later on by private sector. In 1980s, there was a surge in private sector involvement in ground water extraction mostly by shallow tube wells. At present the role of BADC is very minimal. Lately, the Local Government Engineering Department (LGED) started developing small water resources projects having an area less than 1000 ha. Much effort has been expended in the past two decades to review stakeholder's participation under the Dutch aided Early Implementation FCD projects, and IDA/CIDA assisted small-scale FCDI projects. This initiative was later enforced through Flood Action Plan (FAP) studies and the System Rehabilitation Project (SRP) of the BWDB.

BADC during its programme to expand groundwater irrigation required WUGs to be formed. The Barind Multipurpose Area Development Project has successfully used

cooperatives for water management. The Ministry of Agriculture has a shared experience in participatory management under National Minor Irrigation Project (NMIP) where beneficiaries voluntarily re-excavated canals to support LLP irrigation. The Department of Public Health Engineering has also introduced participatory management to support rural water supply and sanitation program. An important development in participatory management has been in Small Scale Water Resources Development Project of LGED. The beneficiaries have participated in the water management projects right through its initiation by making a percentage payment toward investment and for operating and managing the project entirely by them. However, except for a very few, the experience of participatory management has been mixed one. Perhaps, it is due to some gap at the initial stage of the project preparation where it might not have been possible to involve the beneficiaries at all stages of project cycle.

In 1994, the Government of Bangladesh formulated the ‘Guidelines of Peoples Participation’. It was applicable to water resources projects of BWDB only. These guidelines mainly focused on irrigation projects and not flood control projects. As the flood control and drainage aspects in Bangladesh is very important, the new Guidelines for Participatory Water Management (GPWM) was formulated in 2000 taking into consideration of the past experience. The GPWM will be applicable in all flood control, drainage and irrigation projects of the country. The institutional framework of GPWM, in which the local stakeholders will participate, comprises of 3-tiers of Water Management Organisation (WMO), namely Water Management Group (WMG), Water Management Association (WMA) and Water Management Federation (WMF).

WMOs will be responsible for planning, implementing, operating as well as maintaining local water schemes in a sustainable way and depending on the type of scheme WMOs will contribute towards the capital and operating costs of the scheme as decided by the Government or on a voluntary basis acting in their own interest [27].

3.4.4 Gender Mainstreaming in BWDB

As a pioneer Govt. organization, BWDB is engaged in implementing large scale water resources development projects since independence of Bangladesh through its well organized fleet of qualified workers. The major projects where participatory activities were involved were GK project, Deep Tube Well project and DND project etc. At the beginning BWDB and Flood Plan Coordination Organization (FPCO), Ministry of

Water Resources invented and adopted the Guidelines for People’s Participation in water management for realizing the future need in water sector projects.

Consequent upon the declaration of the NWP in January, 1999 a common Guideline for Participatory Water Management (GPWM) for all water sector agencies has been prepared by an inter-Agency Task Force under the leadership of Ministry of Water Resources published in April, 2001 describing in detail the stakeholders participation, Water Management Organization (WMO) & their composition, participatory process, legal status of WMO and capacity development of different stakeholders etc. institutionalized the participation of stakeholders to ensure the sustainable development in water sector through forming of 3 tiers of WMO such as Water Management Group (WMG), Water Management Association (WMA) and Water management Federation (WMF) by incorporating beneficiaries (both men and women) of different occupations, where WMO may consisted 2 or 3 levels belong to tiers depending on project size ranging from 1000 ha to above 5000 ha.

BWDB (September, 2008), has approved Integrated Planning for Sustainable Water Management (IPSWAM), which is used throughout the country for medium size Flood Control and Drainage (FCD) projects where specific gender provisions included as shown in Table 3.1.

Table 3.1: Specific Gender Provisions in the IPSWAM Process

Step	Activity	Gender Provisions
1	Selection	Carried out by a multi-disciplinary team, including Gender Expertise. Consultation with female and male Union Parishad members.
2	Data collection	Full participation of women and men (separately and jointly) in consultation at bari, para, and village level.
3	Organization	Women encouraged to join WMOs and potential women leaders given “Gender and Leadership” training. Women constitute > 30% of WMG managing committees and 50% of WMA membership. Extensive training provided to women and men.
4	Plan Finalization	Women and men WMG members participate equally in discussions for plan finalization.
5	Rehabilitation	LCSs comprising women and men participate actively in rehabilitation earthwork, and derive benefits in terms of poverty reduction. Women and men participate in Quality Monitoring, and receive special training for this purpose.

6	O & M and Monitoring	Women and men participate actively in WMGs which cooperate with each other and with the BWDB to carry out effective operation, maintenance and joint monitoring.
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Since one of the main objectives of the IPSWAM programme is to ensure full and appropriate people's participation at all stages of the water resources rehabilitation project, special attention is given to gender issues

The IPSWAM planning approach therefore, values men's and women's experience and knowledge about existing water management systems and possibilities for improvement; recognizes women's needs and interest in water management in their locality; recognizes men's and women's complementary roles and responsibilities to increase efficiency of polder water management; promotes both genders' contribution in problem identification, option development for polder rehabilitation, implementation, operation and maintenance.

Specific activities carried out to emphasize the gender importance are to review local women's perspective on water management in planning studies; to collect gender segregated data; to consider women's needs in option development for water management system improvement; to ensure women staff for mobilizing women and promote an enabling environment to ensure the full participation of women in WMOs; to promote and disseminate the IPSWAM gender approach at all levels of WMOs as well as within BWDB; to provide gender training to WMOs and BWDB staff members and to support BWDB in institutionalizing gender (the projects involvement in the approval and implementation of the BWDB gender equity strategy is an example of this process) [15].

3.4.5 Water Management Improvement Project, BWDB

The project involves enhancing institutional performance of Bangladesh Water Development Board (BWDB) and Water Resources Planning Organization (WARPO) and improving national water resources management by involving the local communities, to play an expanded role in all stages of the project cycle. The project consists of three key components, i.e. system improvement and management transfer-

SIMT; O&M; performance improvement and institutional strengthening. The project is expected to result in reduced vulnerability and enhanced livelihood opportunities for the beneficiaries, and create a favourable environment for improved water management by the core water institutions in partnership with beneficiaries [16].

3.5 Gender Mainstreaming in LGED under LGRD

3.5.1 Gender & Infrastructure in LGED

LGED works under the Local Government Division (LGD) of the Ministry of Local Government, Rural Development and Co-operatives. LGED is responsible for the implementation of a number of development projects funded by Government and various Development Partners (DPs). LGED is currently responsible for implementation of a wide range of rural and urban infrastructure development projects. So it has many opportunities to address gender equity issues in socio-economic program of infrastructure development activities. As the role of women is no longer confined in the households has to be strengthened by providing appropriate support so the development projects can change the role of women to make them more effective in contributing towards the national development. Management and staff of LGED have demonstrated their commitment to this work. LGED's program approach has been innovative both in relation to Bangladesh and in the region. Its Labour Contracting Societies (LCSs) address the needs of both women and men. LGED has developed a range of projects aimed specially at women; participation and employment have been the focus of a number of general program as well as pilot schemes. Its works on participation, women's market sections, tree planting schemes and other areas have been highly innovative and are seen as positive example for the other sectors. This strategy builds on many successes of LGED and leads way for further innovation and achievement in the area of gender equity. LGED has a Gender Development Forum which provides a focus by gender equity work within LGED [6].

3.5.2 Gender and Water Structures in LGED

In our country, various steps have been taken to provide adequate supply of drinking water, to improve agricultural production and to facilitate the waterway transportation

through the implementation of water resources development projects with the assistance of GOB funds, loan/grant of development partners and a little bit local contribution. The main implementing agencies for water sector projects in the country are Bangladesh Water Development Board (BWDB), Department of Public Health Engineering (DPHE) and Local Government Engineering Department (LGED).

Water resources development projects may be categorized in two ways, i.e. i) water supply, sanitation and hygiene promotion and ii) water resource management that works for improvement of agriculture production. LGED mainly involves in water sector by implementing small scale water resources development projects where the command area are considered not more than 1000 hector.

Under SSWRDSP the water resources management activities include the construction of regulators, culverts/bridges, embankments, excavation of canals, resection of khals etc. named as Flood Control & Management Sub-project or Water Conservation & Drainage or Water Conservation Sub-projects. Under SSWRDSP, LGED selects (selection criteria : table 4.2) the subprojects in Small Scale Water Sector through a detailed feasibility study/survey in the proposed subproject area ensuring the participation of all the stakeholders and thereby incorporating the consensus based decisions/suggestions in all stages of design and implementation phase. End of the day the completed subproject was handed over to the stakeholders forming a single tier Water Management Cooperative Association (WMCA) with a mandatory of 33% female members at the minimum to develop the sense of women ownership of the subproject [6].

3.5.3 Gender Concerns in SSWRDSP-I

Through the financial assistance of Asian Development Bank (ADB) , Government of Netherlands (GoN), International Fund for Agricultural Development (IFAD), Government of Bangladesh (GoB) and a little bit beneficiary contribution the first phase of Small Scale Water Resources Development Sector Project (SSWRDSP-I) implemented 280 subprojects in 37 districts of western part of Jamuna river where the primary object of the project was to facilitate a sustainable increase in agricultural

production and incomes for small-holders in the subproject areas in western of Bangladesh, where more than half of the population falls below the poverty line. In the water sector in Bangladesh SSWRDSP-I played a vital role in rural areas by developing infrastructure and enhancing water resource development, while also giving importance to the formation of local institutions with some degree of gender awareness.

The goal of the SSWRDSP-I's gender and development was to promote gender equity, which was "a process of being fair and providing equal opportunity to women and men" according to the Ministry of Women and Children Affairs. The initial women in development (WID) shifted to a broader gender and development (GAD) approach as SSWRDSP-I evolved. Initially the Project's concern with women was limited to helping the poorest. Over the course of SSWRDSP-I women of poor and middle-income households were given practical training (e.g. in fisheries, seeds, vegetable production as table 4.3), enhancing their homestead-based productive capacity and providing some with new income generating opportunities. The most significant gender related activities of SSWRDSP-I were: (i) Women engagement in First Management Committees of the Water Management Cooperative Association (WMCA) - thus integrating women into water resources development from the beginning all the way through to O & M committee participation, (ii) Provision of practical training of women in large scale, (iii) Arrangement for employment of poor women as LCS members in earthworks and as tree plantation caretakers, (iv) Arrangement of WMCA micro-credit and savings programs also benefited women along with men, (v) Inclusion of training on Gender Sensitivity for male and female staff of LGED and others associated with the Project, including WMCA leaders and female WMCA members and (vi) Institutional support focused on supporting LGED's project management capabilities.

The project design also included a number of special features to facilitate a direct focus on mitigating environmental impacts, reducing poverty and involving women. To increase the role (visibility) of women in the project, several initiatives were put in place. Few areas are: (a) First initiative was to promote the participation of disadvantaged women in LCSs with the intention that long-term support would be

provided, (b) Second initiative was to provide women with opportunities to participate in income generating activities such as planting and caring of trees on newly constructed or rehabilitated embankment, pond aquaculture and (c) Third initiative was to encourage the water management cooperative association to employ women for maintenance activities on subproject infrastructures.

All these initiatives are taken as initial intent of the project with regard to women in development approach “to benefit women, particularly landless and destitute women through provision of employment opportunities during construction and subsequent O & M work and income generating activities such as tree cultivation, fish fingerling production.”[18]

3.5.4 Gender Concerns in SSWRDSP-II

As the succession of the success of the Phase-I the development partners financed for the Phase-II (2002-2009) named as SSWRDSP-II which is under implementation throughout the 61 districts of the country except 3 hilly districts with an aim to implement 300 subprojects. Since the millennium declaration (UN, 1989) all the development partners globally hold the strand to incorporate the GAD in all of development program to ensure gender equality and women empowerment. Basically LGED being an upright institution has been incorporating this concept in its diversified projects including the SSWRDSP–II which is in the end of its journey.

The SSWRDSP’s second phase includes a gender action plan which defines key gender issues and identifies related roles and responsibilities of project personnel. There are scopes, by men and women, to participate simultaneously and equally in all stages of sub-project development such as identification, implementation, and operation & maintenance. Project related staffs confirm to communicate about this to short and long term beneficiaries, especially those who utilize water resources and / or those who are eager to utilize them in future. The SSWRDSP-II thinks that participation of local people with their experiences, local contribution as part of estimated cost of the sub-project, active involvement by physical labour and the technical knowledge of professionals are very essential for the acceptability, smooth implementation and survival of the Project. Women’s experiences and involvement in decision making have given importance as part of this process.

The SSWRDSP-II also feels that women cannot contribute simply by appearing at meetings etc. in large numbers but they must work to implement sub-project decisions. They must express their own thinking and develop themselves. If decision making opportunities are given to women, they will learn how to deliberate and what to realistically expect from participation. Social development will also be benefited when women got such opportunities to share in decision making process as on an equal basis with men. Their involvement relates directly to the Project goal of encouraging the poor, vulnerable, and landless and involving people in income related affairs.

A Memorandum of Understanding (MOU) was signed between LGED and the Department of Women Affairs on 22 July 2003, thanks in large part to the efforts of Project's staff which contributed in maintaining the project to focus on gender goals. The following Table 3.2 shows how gender equity is introduced at each stage of project implementation and Table 3.3 presents the Project's Gender Action Plan (GAP) as per elements of LGED Gender Equity Strategy. It is well known that the activities of LGED in Phase I & II were evaluated by BUET, BIDS and other agencies [19, 28].

Table 3.2: Gender Equity Action Plan at Subproject Implementation in main Stages under SSWRDSP-II

Step & Activity	Gender Provisions
Subproject Identification and Feasibility	Every PRA team should recruit female staff
	Training on gender equity for PRA teams
	Separate meetings with men and women at village level during PRA work and data collection
	Gender-specific data collection and write-up in technical feasibility reports
	Training for Union Parishad chairmen and members, to review guidelines for project proposal in the Upazila Development Committee: includes attention to gender issues
Design and Institutional Establishment	Inclusion and implementation of gender issues in recruitment and training of Facilitators
	In forming By-law Drafting Committee, a minimum of one-third committee members should be women; they should be trained
	In proposing mitigation measures (to assist persons negatively affected by subprojects), information on different impacts on men and women should be collected and recorded.
	In WMA formation and membership promotion, a minimum of one-third members should be women. Women from all social categories should be recruited: e.g., from farming, fishing, and landless laborer families.

Step & Activity	Gender Provisions
	In the First Managing Committee of the WMA, a minimum of one-third members should be women. Women should be represented among office-bearers.
	In preparing beneficiary lists, female-headed households should be listed separately.
Construction and First Year Operation & Maintenance	In training WMA members, both female and male members should be selected as trainees, and women and men both should receive training.
	When implementing mitigation/compensation measures, affected women and men both should be treated in the same way; i.e., both should get similar access to alternative livelihood opportunities or other mitigation arrangements.
	Adherence to new LCS guidelines in formation of earthworks crews is carefully monitored.
	Guidelines for LCS training include session on gender issues; LCS trainers are to receive TOT including gender session
	LCS training is to be implemented at field level as per guidelines, including session on gender issues
	Equal wages are to be paid to women and men who do earthworks. Earthworks supervisors will ensure adherence to this policy.
	One-third of O&M Committee members and those who plan O&M activities should be women.
	The MIS will document details of the first year's O&M (annual plan preparation, follow-up for year-round work) in a way that demonstrates the levels of participation of both women and men.

Table 3.3 SSWRDSP-II Gender Action Plan under LGED's Gender Equity Strategy

LGED Gender Strategy Element/Activity	Gender Provisions
1. Data/Information	<ul style="list-style-type: none"> a. Routine data collection on gender indicators: quantitative, qualitative b. Review gender disaggregated and gender sensitive data/information; prepare reports on them c. Identify research areas & conduct studies d. Analytic reports (annual/ongoing): <ul style="list-style-type: none"> - EME - Gender component
2. Human Resources Development/Training	<ul style="list-style-type: none"> a. Provide district, upazila, and field level training on new LCS guidelines regarding equal pay for both men and women laborers doing earthworks. b. Ensure equal pay through implementation of guidelines and policies stipulating equal pay for equal work. c. Increase knowledge and skills of women and men through specific training, both strategic and practical. d. Conduct special training to orient Project staff and beneficiaries on gender issues e. Include gender sensitivity training modules in any other training activities.
3. Participation	<ul style="list-style-type: none"> a. Motivate and involve women in the subproject identification phase b. Increase effective participation of men and women in all stages of the project implementation cycle: i.e., Planning, Implementation, and O&M
4. Water-related Governance	<ul style="list-style-type: none"> a. Contribute to national policy development [no specific Project activity planned] b. Engage female UP members through district-level workshops and in field visits
5. Communication	<ul style="list-style-type: none"> a. Incorporate gender issues in Project orientation film, and arrange for all concerned to view film b. Incorporate gender issues into quarterly newsletter and distribute it c. Conduct gender sensitivity campaign through songs and dramas performed by RUPANTOR
6. Income Generating Activities	<ul style="list-style-type: none"> a. Practical training for poor women and men in subproject areas b. Training arranged conducted in collaboration with other Governmental departments, such as Agricultural Extension, Fisheries, Environment, Women Affairs
7. Monitoring and Evaluation	<ul style="list-style-type: none"> a. Identify MIS indicators, and develop checklist questions for qualitative studies b. Prepare evaluation reports on gender issues in SSWRDSP-2
8. Contracting	<ul style="list-style-type: none"> a. Follow sector guidelines to increase numbers of poor women taking part in LCS or similar work b. Provide equal pay for equal work
9. Support Facilities	<ul style="list-style-type: none"> a. Implement programs taking into account the need for appropriate facilities, including toilets, first aid services, and child care
10. Program Areas	<ul style="list-style-type: none"> a. Training: <ul style="list-style-type: none"> - Gender sensitization and orientation training for Project/LGED officers and staff

LGED Gender Strategy Element/Activity	Gender Provisions
	<ul style="list-style-type: none"> - Gender-based Training of Trainers (TOT) for Project/LGED and other Governmental departments' officers and staff - Practical and Strategic training for beneficiaries b. Improve relationship with Union Parishad <ul style="list-style-type: none"> - Training for U.P. Chairmen and members - Increased membership of women in WMAs with assistance of female U.P. members c. Gender sensitive data collection <ul style="list-style-type: none"> - Collection of appropriate data through monthly and quarterly field reports d. Model subprojects <ul style="list-style-type: none"> - Identify five gender and development model subprojects - Offer special training to women of model subprojects - Assist to build up equitable relationship between men and women through regular follow-up e. Research studies <ul style="list-style-type: none"> - Identify research areas and conduct studies - Implement new programs, if needed, based on research findings f. Income generating activities <ul style="list-style-type: none"> - Provide training for poor women as per local needs - Assist with starting up IGA/small businesses - Evaluate success in terms of poverty reduction impacts

3.5.5 Gender Concerns in PSSWRSP-III

All earthworks under the Project will be done by using Labour Contracting Societies (LCS) contracted directly by the Project. LCSs can be with all-female members and can be mixed also. Thus, landless poor and destitute women will benefit from the Project investment through getting employment opportunity. Tree plantation along embankments developed under the Project will be done by engaging landless destitute women for which LGED has prior experience. This will generate longer term employment opportunity for them. In maintenance of embankments, women groups will be involved which will provide them with employment. Women can also find scope of work in fisheries development activities in potential subprojects. In the Management Committees of WMCAs, having at least 33% female members are obligatory. This empowers women in participating in management of the affairs of the local water management Subprojects. Children, particularly of the poor families, will be benefited getting improved food and nutrition through improved earning of their parents [29].

3.6 Poverty Reduction Strategy Paper (PRSP)

The Government of Bangladesh (GOB) makes a clear commitment to equality between women and men in its recently-approved Poverty Reduction Strategy Paper (PRSP). It sets out several strategic goals: to enhance women's participation in decision-making; to promote gender equality and empowerment of women (also a Millennium Development Goal) and to ensure women's full participation in mainstream economic activities. The Poverty Reduction Strategy Paper (PRSP) is the 'national roadmap' for reaching longer-term MDG targets through short/medium-term policy reforms and budget restructuring.

A sourcebook prepared by the World Bank (WB) as lead agency for PRSPs where the chapter on gender outlines how gender analysis can be used in poverty diagnosis and in defining priority public policy responses. It also provides guidelines for monitoring and evaluating men's and women's involvement in PRS programs and for evaluating gender differences in the outcomes and impacts of these programs.

In September 1999 a new framework developed by the World Bank and IMF for providing the low interest loans and debt relief to 42 poorest countries in the world where it was conditional on countries developing a Poverty Reduction Strategy Paper (PRSP). PRSP is about prioritizing budget allocation in order to achieve poverty reduction objectives. The PRSP is matched by national level medium term expenditure framework (MTEF). Gradually the MTEF and PRSP could be the basis for all donor assistance.

In March 2003 the national strategy for economic growth, poverty reduction and social development (NSEGPRSD) was released where government recognizes women's contribution to economic and human development in the most recent policy on poverty reduction. Gender equality has been incorporated into some key sections of the analysis, and gender disparities are recognized in several areas.

The NSEGPRSD identified the impact of the deteriorating law and order situation on women and how gender-based violence is limiting the capacity of women to participate in market activities and to access social services such as education and

health. It also identified the need to strengthen women's capacities to participate fully in local governance and in decision making.

In reducing gender gaps where it needs to empower women the government has also set targets to be realized by 2015 that correspond to the MDGs which would ensure positive effects on lower fertility rates, improvements in child and maternal nutrition, and the greater welfare of the women themselves and of society as a whole. The government pledges to incorporate measures into the three-year rolling plan to address the following areas: (i) Negative sex ratios; (ii) Violence against women and high maternal mortality; (iii) Restrictions on women's employment and economic opportunities and formal equality and (iv) Quotas and affirmative action at all levels and in all spheres, woman-friendly institutional environments and statistics disaggregated by sex [6].

3.7 Gender Concerns in Agriculture

Women represent nearly half of the country's human resources. For this, the government believes that more women comprising officials and farmers should enter the agricultural workforce. As women have potentials to contribute to agricultural growth, it is obligatory on the part of the Government to meaningfully involve them in agriculture-related income-generating activities and to develop their human resources. Nonfarm activities: The Government will promote poverty reduction through creation of employment opportunities in rural non-farm sectors. Necessary support will be provided for non-farm income generation activities for the poor and disadvantaged farmers. Empowerment of Women: Necessary support will be provided for capacity building of women in promoting household food and nutrition security. The Government will facilitate increased women participation in management decision making and their advancement in agriculture. Efforts will be made to ensure women's equal access to agricultural inputs (e.g. seed, fertilizer, credit, education & training, information etc.). Participation in Production and Marketing: The Government will encourage participation of the rural poor women in production of crops particularly in agro-processing and agri-business activities so that they can improve their economic well-being. Women's participation in agricultural production

system will be facilitated through access to agricultural technologies. The Government will take steps to encourage women's participation in various extension programmes like training, farmers' rally and workshop. Income Generation: The Government will provide credit support to women for agricultural activities such as homestead gardening, post harvest activities, seed production & preservation, nursery, bee-keeping, food processing etc. The government will provide micro-credit support to women for small-scale agro processing, storage and preservation. Efforts will be made to ensure non-discrimination in wages. Budgetary Allocation: A block allocation in the agricultural budget will be made exclusively for undertaking women related activities and programmes [30].

3.8 National Adaptation Plan of Action (NAPA) updated version of 2005

Livelihood Protection for Vulnerable Socioeconomic Groups, including women and children, to increase their resilience, through development and scaling up of community level adaptation, livelihood diversification, better access to basic services and social protection (e.g., safety nets, insurance) [31].

3.9 Environment Policy 1992 and its implementation

It must be ensured the participation of women in development activities and encourage the unemployed labour force to development activities [32].

3.10 National fisheries policy,1998

Genuine fishers will be prioritized for the government khas water bodies to improve their socio-economic condition [33].

3.11 National Sustainable Development Strategy (Revised), 2010-2021

Bangladesh coincide with green economy strategies and policies, such as striving for sustained, inclusive, and equitable economic growth and job creation, promoting productive activities that contribute to eradication of poverty, improving the livelihoods and empowerment of the poor and vulnerable groups, enhancing the

welfare of women, children, persons with disabilities, and fishers, promoting the welfare of ethnic communities, promoting gender equality, and providing workers with skills through education and capacity building, promoting communication technologies, and encouraging existing and new partnerships including public private partnerships to mobilize financing for sustainable development. Rural Development: Rural Non Farm (RNF) Sector: Ensure access of women and lower income groups engaged in RNF sector to training, skill formation, and credit and business development services. Disseminate use of environment friendly cooking stoves to rural households which improve women's health by reducing indoor air pollution and save energy and time. Promote and Ensure Women's Advancement and Rights: The objective of women's advancement and rights is to create a society where men and women will have equal opportunities and will enjoy all fundamental rights on an equal basis. This is to be achieved by ensuring women's advancement and rights in activities of all sectors of the economy. Develop policy and legal framework for ensuring equal rights for women based on the constitution and the government's commitment to various international forums, e.g., CEDAW and Beijing Platform for Action. Undertake measures to improve women's employment opportunities and wages and also ensure equal pay for equal work. An enabling environment would be created by ensuring compliance with social issues of work such as safe workplace and transportation facilities and infrastructure like separate toilets, lunch rooms and lunchtime, and day care centres in the workplace. Provision would be made for life and disability insurance for workers, especially women workers. Steps would be taken to ensure secure jobs and decent working conditions for women in the formal and informal sectors. Promote gender mainstreaming by reforming laws, rules and regulations, institutional mechanisms, policies, projects and programmes which are not gender sensitive. Continue to integrate gender issues in planning and budgetary processes to reduce disparities in education, health, and nutrition. Continue and expand existing programmes for social protection for disadvantaged women. Undertake measures to protect women from economic vulnerability and risk due to natural disasters and climate change. Ensure increasing participation of women in the National Parliament and the local political institutions. Undertake initiatives to make women politically more conscious, encourage women to participate in politics and to build leadership among women at all levels. Ensure elimination of all forms of violence against women through appropriate administrative, legal and judicial actions.

Strengthen “One-Stop Crisis Centre” in medical college hospitals to provide medical treatment, legal and psycho-social counseling to women and children victims of violence, and provide shelter facilities and make efforts for their reintegration and rehabilitation in society. Facilitate women entrepreneurship through providing relevant training and providing finance.

Promote Development of Ethnic Communities: A holistic land policy will be formulated to deal with the land disputes of ethnic peoples. A secure land tenure system will be introduced in CHT. Representatives of the ethnic communities will be included in undertaking development projects in areas inhabited by ethnic communities. The Government will ensure participation of local governments in the management of natural resources and will recognize the traditional knowledge of ethnic communities. The government will ensure community involvement in the adoption of technologies without competing with their traditional food production system. An authentic sense of ownership/tenure of resources will also be developed. Ministries of Land, Education, Primary and Mass Education, Health, LGRD, Social Welfare and Agriculture will be mobilised for the development of ethnic peoples. The Ministry of Chittagong Hill Tracts Affairs (MoCHT) will be the lead ministry to mobilize other ministries/divisions to ensure ethnic people’s access to education, health, sanitation and water, skill training facilities and employment. In the case of the ethnic people outside the CHT, the Special Affairs Division will be the lead agency. Existing human development programmes under MoLE, MoPME, MoHFW, MoLGRDC, MoSW and MoYS will address the special needs of ethnic people. Monitoring and supervision will be strengthened so that education, health and maternal child health services, and nutrition and housing facilities reach the ethnic people. An action plan on mainstreaming the education of children of ethnic communities will be implemented. The fund for stipends and purchasing learning materials under the block allocation of Prime Minister office will be increased for ethnic students. Assistance will be provided in hill districts to strengthen their capacities and increase employment opportunities to cope with any sudden decrease of their income due to damage to Jhum crops caused by flood and drought. In the hill districts income generating activities through small and cottage industries, small trading and poultry and livestock rearing will be expanded. The income of poor people will be enhanced through social forestry in hilly areas and cultivation of fruits

and medicinal plants. Studies will be carried out to assess the feasibility of pisciculture in hill districts by creating small lakes. Area-appropriate Micro-credit activities for the poor people will be expanded and vocational training will be provided to the poor. Development of rural roads and hat-bazars for marketing of agricultural products will continue. Action will be taken to eliminate barriers so that agriculture and local products have easy access to national and international markets. Action will be taken to ensure electricity supply for small and medium enterprises. Measures will be taken to support EPB's one district one product initiative under which 'Textile for Rangamati', 'Pineapples for Khagrachari' and 'Rubber for Bandarban' has been decided on. Arrest Marginalization: Increase financial support and emergency relief to poor and marginalized group. Create job opportunity round the year for poor, marginalized and lower middle income group. Protective laws for sharecroppers and lessee. Implement risk reduction and climate change adaptation particularly livelihood schemes for the most vulnerable and deserving members of the poorest communities. Reforming Police: The perception of police being only protective of the wealthy, and indifferent or contemptuous to the poor or the working class, must be changed. A system of gender sensitization training (covering violence against women issues and other laws to protect human rights) will be established for all legal and police officers. The concept of community police will be reinforced [34].

3.12 National policy for arsenic mitigation 2004

Population exposed to arsenic in Bangladesh runs into millions, thousands of people are suffering from arsenicosis and many among them have developed cancer and other complications. This will also supplement the National Water Policy 1998, National Policy for Safe Water Supply and Sanitation 1998 in fulfilling the national goals of poverty alleviation, public health and food security.

Capacity Building- Capacity at local and community levels for installation, operation and maintenance of mitigation options including monitoring, information management and reporting [35].

3.13 National Food policy plan of action (2008-2015)

Objective : Adequate and stable supply of safe and nutritious food, Increased purchasing power and access to food of the people, Adequate nutrition for all individuals, especially women and children. It would meet: a) Long-term national plan for ensuring balanced food in building a healthy nation, b) Supply of sufficient nutritious food for vulnerable groups, c) Balanced diet containing adequate micronutrients, d) Safe drinking water and improved sanitation, e) Safe quality food supply and f) Adequate health status.

Particular attention has been paid to mainstreaming food security concerns in the Poverty Reduction Strategy Paper. Bangladesh has made remarkable progress towards reaching the Millennium Development Goals (MDGs) by 2015, with indicators showing that Bangladesh is “on track” to reach 100% enrolment rates and gender equality in primary and secondary education and in significantly reducing child and maternal mortality. Millennium Development Goal on poverty and food security (MDG1), MDG3 (Promote gender equality and empower women) [36].

3.14 Land use policy of Bangladesh

As objectives the policy illustrates: i) To ensure best utilisation of khasland through rehabilitation of landless and marginalized poor, ii) To ensure legitimate rights of the marginalized community (indigenous peoples) in respect of land and land related issues including community ownership and use, iii) To ensure rights of women in land and waterbodies, iv) To reduce landlessness, alleviate poverty and promote income generation in the country, v) To ensure best utilization of Charland through rehabilitation of Landless and marginalized poor. Stakeholders to be involved in land zoning and land policy building Government: Almost all Ministries and relevant directorates/departments (with Land Ministry as focal point). Civil Society Organizations: Academia, research bodies, policy advocacy organizations, think tanks, professional bodies, peasant organizations, political parties Non-government Organizations: All types with Land and Water Rights-based as focal point. Land and Women: Women’s right to landed property is limited legally. As a

matter of fact, women hardly have right on landed property. This constitute on of the major barriers to women's empowerment. Inheritance law, patriarchal values and social practice – all these are instrumental in denying women's right to landed property. In our country, women's inheritance law is based on religion-based personal law – in case of Muslims, it is Sharia law and in case of Hindus, it is Daibhag. In Sharia law, women's right is particularly recognized and as per Daibhag, inheritance is not recognized. Among most indigenous peoples (except garo) women's right on land is not recognized. The existing inheritance law should be amended and implemented on the basis of recognizing equal rights for woman irrespective of cast, creed and religion. Indigenous People: Land right issues of the indigenous communities should be enshrined in Land use Policy. The issues of land ownership and land-rights of indigenous communities should be brought under consideration. Involvement of indigenous people with agricultural production should be clearly mentioned in the policy. Land ownership of the indigenous people should be ensured for implementation of CLO (Community Land Ownership).

Waterbodies for Fishermen and Fisherwomen: Out of 1 crore 32 lakh fishermen and women, 80 lakhs are poor. Family members dependent on fishing are about 4 crores, half of whom are poor under any criterion and income-flow is extremely uncertain. Out of 12 lac acres khas waterbodies, only 5% has been leased to poor fishermen and women and 95% of the leasees are waterbody-grabbers. Therefore, maximum efforts has to be made in leasing-out khas waterbodies to the poor fishers' community following the Agriculture Khas Land and Waterbodies Distribution Policy of the Government. This should be treated as one of the key poverty eradication strategies in Bangladesh [37]. There are two committees as District Land Use Committee and Upazila Land Use Committee. But both committees show no specific women are involved.

3.15 Coastal zone policy- 2005

The main principles in ICZM approach would include: a. integration through harmonization and coordination; b. adoption of a process approach; c. linkage to national planning mechanisms; d. implementation through respective line agencies; e. co-management and participatory decision; f. gender equality; g. participatory

monitoring and evaluation; h. supporting national policy of decentralization and development of the private sector; i. interventions based on the best available knowledge; efforts to fill knowledge gaps; j. priority setting on issues of the coastal zone.

Basic needs and opportunities for livelihoods: **i)** Alleviation of poverty through creation of job opportunities and finding options for diversified livelihoods would be the major principles of all economic activities. Economic opportunities based on local resources will be explored to enhance income of the people; **ii)** Private sector and the non-governmental organizations (NGO) will be encouraged to implement activities for the poor people and **iii)** Khas land will be distributed among the landless and a more transparent process of land settlement will be ensured.

Reduction of vulnerabilities - Effective measures will be taken to enhance coping capacity of the poor during the period of disaster and to initiate insurance scheme for improving their social security; The asset base of the poor, with special focus on women, shall be improved through ownership or access so that their coping capacity improves.

Sustainable management of natural resources - Initiation of plan and its implementation will be ensured by participation of people of all sectors.

Women's development and gender equity - It is recognized that gender inequalities and gaps exist in the coastal zone, in particular in the fields of access to livelihoods assets and access to resources. Malnutrition in coastal zone is twice the national average as severe among girls. Poor access to sources of potable water for domestic purposes contributes to heavy workload on poor women. Other gender issue that affects women's life and limits their participation is personal insecurity, more serious in remote coastal areas. Enabling cultural and institutional environment is necessary to remove hurdles to mobility of women. The national strategy of the Government clearly states the importance of women's development and reduction of gender gaps as a development objective. The Government has ratified major international conventions on the rights of women and children.

Government policy will be as follows: a. A gender sensitive and participatory approach will be adopted that focuses at the reduction of gender inequalities and that takes into account differences in needs and interests between men and women; b. Efforts will be made to close the gender gap, giving priority to women's education, training and employment and special support for broadening their coping capacity; c.

Special attention will be paid towards employment generation for women, the promotion of women entrepreneurs as well as the removal of restrictions on women's employment and economic opportunities; d. During distribution of newly accreted khas lands, special attention will be paid to the allocation of land titles to women; e. Special projects will be implemented exclusively addressed to livelihoods enhancement and empowerment of disadvantaged women; f. Necessary institutional measures including mass awareness and motivation on violence against women will be taken [38].

3.16 Forest policy

Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people. Involvement of local community in protected area management is inevitable. The national policy on protected areas should be adopted to recognize that protected areas are the habitats of flora and fauna, which are all vital ingredients to the people's existence and important components of the country's ecological balance [39].

CHAPTER FOUR

MATERIALS AND METHODS

4.1 Study Areas

4.1.1 Selection of the Study Area

LGED started its water sector activities through Integrated Rural Development Programme (IRDP) from 1986. After IRDP, SSWRDSP was started by phase wise. The duration of SSWRDSP-I (first phase) was from 1995-2002, second phase was 2002-2010 and third phase started from 2009-2010 and would continue up to 2017. The third phase of SSWRDSP was renamed as Participatory Small Scale Water Resources Sector Project (PSSWRSP). The concept of Integrated Water Resources Management (IWRM) was introduced in the SSWRDSP from the very beginning, where gender component was an integral part and gender mainstreaming through water sector activities in Bangladesh was one of the targeted goals. The project area covered by SSWRDSP-I was only the south-western part under 37 districts of the country, whereas SSWRDSP-II and PSSWRSP-III covered the whole country except three hilly district.

Three subprojects, one from each phase are randomly selected. The three subprojects are: i) Brajamul Bhati Khal (Flood Control Drainage and Water Conservation) subproject in Pangsha, Rajbari under SSWRDSP-I, ii) Gumuria (Water Conservation) Subproject in Haluaghat, Mymensingh under SSWRDSP-II and iii) Purba Sarail Madai (Drainage and Water Conservation) in Kalai, Joypurhat under PSSWRSP or SSWRDSP-III and their location maps are shown in Figures 3.1, 3.2 and 3.3 respectively. The phase wise interdisciplinary approaches undertaken by subprojects were improved having gaining experiences from each phase of SSWRDSP. In this thesis study, a systematic analysis has been done through project cycles of undertaken subproject from each phase the status of gender mainstreaming i.e., strength and weakness has been revealed.

4.1.2 Brajamul Bhity Khal (FCD & WC) subproject

The subproject is bounded by the Chatra River to the north and the east, the Garai River to the south and high land and village roads to the west. During the monsoon rainfall, the Chatra River swells from rainfall run-off and run-off water enters the subproject area via Brazamul and Bhiti khals. Farmers were historically used to construct cross-dams to prevent inundation of their aman crops. Usually this approach excludes the intrusion of flood, but it could not resolve the problem of regulating water in the subproject area in a controlled manner during the drought period. So, the farmers and the local community were for regulators on drainage channels falling into the Chatra and Garai Rivers, re-excavation of the channels to protect against flooding, improve drainage condition, and increase water retention.

The gross and net area under the project are 560 ha and 504 ha respectively. The total number of households under the project is 616 and among them beneficiary households are 616 of which males are 547, while females are 230. Accordingly, Water Management Cooperative Association (WMCA) was formed with male members of 547 and female members of 230. The registration number was 05 made on February 10, 1998. Executive Committee of 12 members was formed of which 4 members were female.

There were three khals - Bhiti khal, Brajamul khal and Paturia khal of length 1.22 km, 2.78 km and 1.83 km respectively. All the khals were re-excavated. One vent water control structure (regulator) of 1.5m by 1.5m size was constructed at each khal of Bhiti khal, Brajamul khal and Paturia khal for regulating water from Chatra and Garai rivers. One operation and maintenance shed of size 9m by 5m was constructed for WMCA.

Total cost of the physical components of the project was Taka 4,440,077. The total money deposited by WMCA was Taka 487,680, where share contribution was Taka 84,250 and savings was Taka 403,430 (entry fee as a member contribution, income of WMCA, donation of local government institutions, etc.). WMCA was bound to fulfill twelve preconditions (Annexure 1) set by LGED to get approved of the water project in their proposed locality, which is finally to be run, monitored and operated by

WMCA. It was the philosophy of the SSWRDSP to transfer ownership to the local people through WMCA for attaining sustainability of the water project.

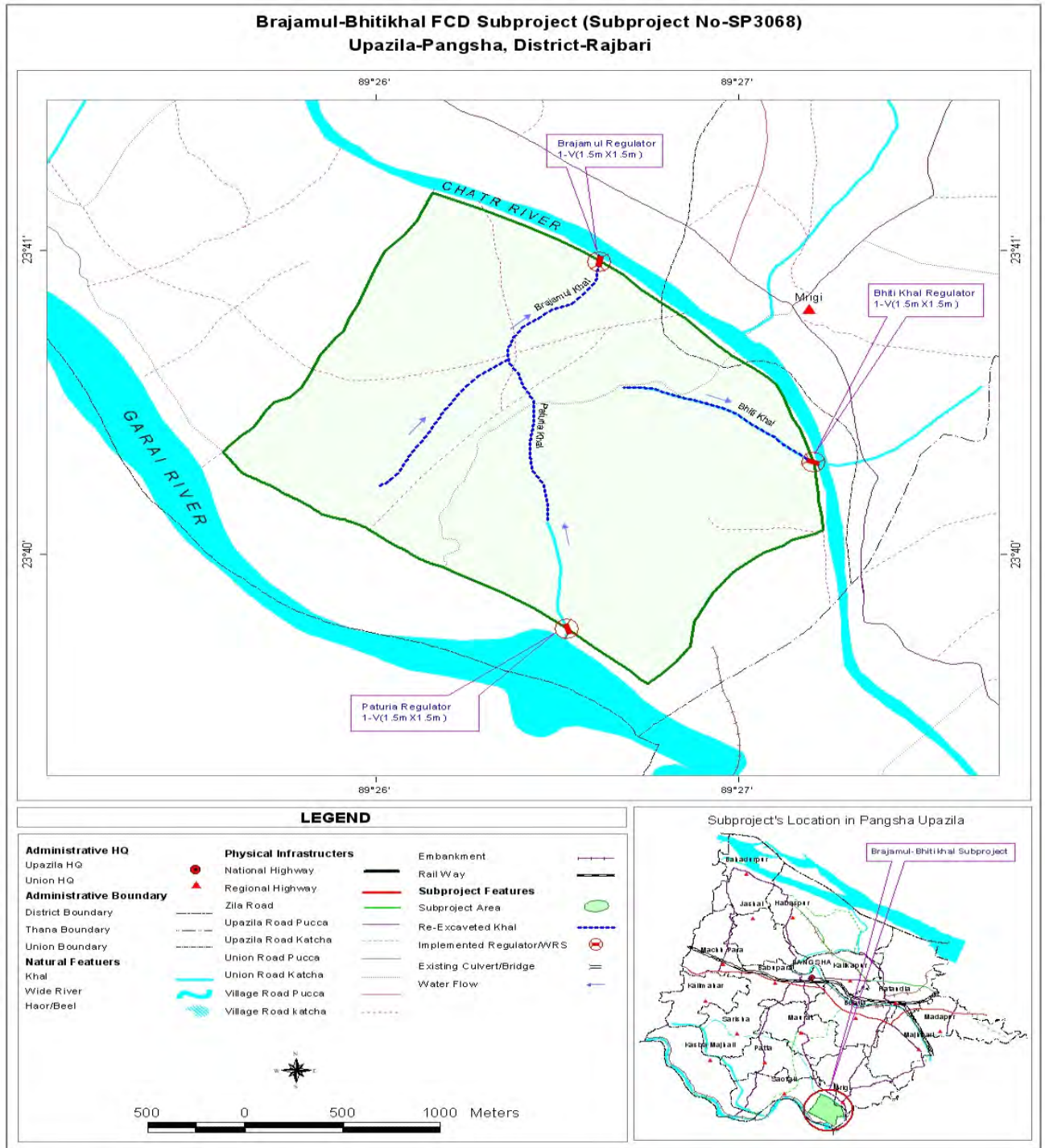


Figure 4.1: Location of subproject area of Brajamul Bhitikhal (FCD & WC) in Pangsha, Rajbari under SSWRDSP-I.

4.1.3 Gumuria (WC) Subproject

The sub-project area is in the northern tip of Haluaghat Upazila in Mymensingh district bordering Indian territory of Meghalaya. The river Gumuria is a border river which enters into Bangladesh territory near Dumnikura village and flows almost parallel to international boundary upto 1.50km and then it flows towards south over the subproject area and falls into the river Bhogai kainbeel in Dhobaura upazila under Mymensingh district. The river Gumuria is flashy originated from the Garo Hills in Indian side and it has perennial source of water. The catchment Indian side is not known. The river after entering into Bangladesh flows over plain land in the sub-project area having steep slope. The ground elevation in the northern tip is about 20.73m PWD when the same in the southern side on the project boundary on Upazila boundary line of Haluaghat and Dhobaura is about 12.35m PWD. The bed level varies from 18.357m PWD to 11.10m PWD at a distance of 5.50km from the point of its entry into Bangladesh to the south subproject boundary point. Thus, the land elevation of the SP area is very steep from higher in the north to lower in the south and also the river bed slope.

The subproject is bounded by the International Boundary of India to the north, the Zila Parishad road to the south. The east and the west sides are confined by villages. Subproject area from south to north is risen bed gradient which is very high at this reach and it is almost 0.0013. The land elevation of the subproject area also varies from 12.35m PWD to 20.61m PWD. Aman and Aus are the main cereal crop in the area which suffer from drought. No Rabi crop is prodded excepting a insignificant area along both sides of river. Presently, people try to save crops by putting seasonal earthen cross dams across the river and watering through low lift pumps in the upper reach of the subproject area only. Most of the cultivable area remains fallow during Rabi season. So, their demand to conserve water for Boro and Rabi crops to resolve the problem of regulating water in the subproject area in a controlled manner during the drought period. The farmers and the local community were for regulators to conserve water, re-sectioning of both sides of the channel to increase storage capacity and reduce inundation during monsoon.

The gross and net area under the project are 552 ha and 468 ha respectively. The total number of households under the project is 848 and among them beneficiary households are 572. Accordingly, Water Management Cooperative Association (WMCA) was formed with male members of 490 and female members of 154. The registration number was 78 made on November 12, 2006. Executive Committee of 12 members was formed of which 4 members were female.

The dikes of the Gumuria River which were developed were 0.40 km and 0.80 km respectively. All the dikes were re-sectioned. One eight vent water control structure (regulator) of 1.5m by 2.0m size was constructed at the Gumuria river was constructed for regulating water. One operation and maintenance shed of size 9m by 5m was constructed for WMCA.

Total cost of the physical components of the project was Taka 13,630,224. The total money deposited by WMCA was Taka 76,060, where share contribution was Taka 25,700 and savings was Taka 50,360 (entry fee as a member contribution, income of WMCA, donation of local government institutions, etc.). WMCA was bound to fulfill twelve preconditions (Annexure I) set by LGED to get approved of the water project in their proposed locality, which is finally to be run, monitored and operated by WMCA. It was the philosophy of the SSWRDSP to transfer ownership to the local people through WMCA for attaining sustainability of the water project.

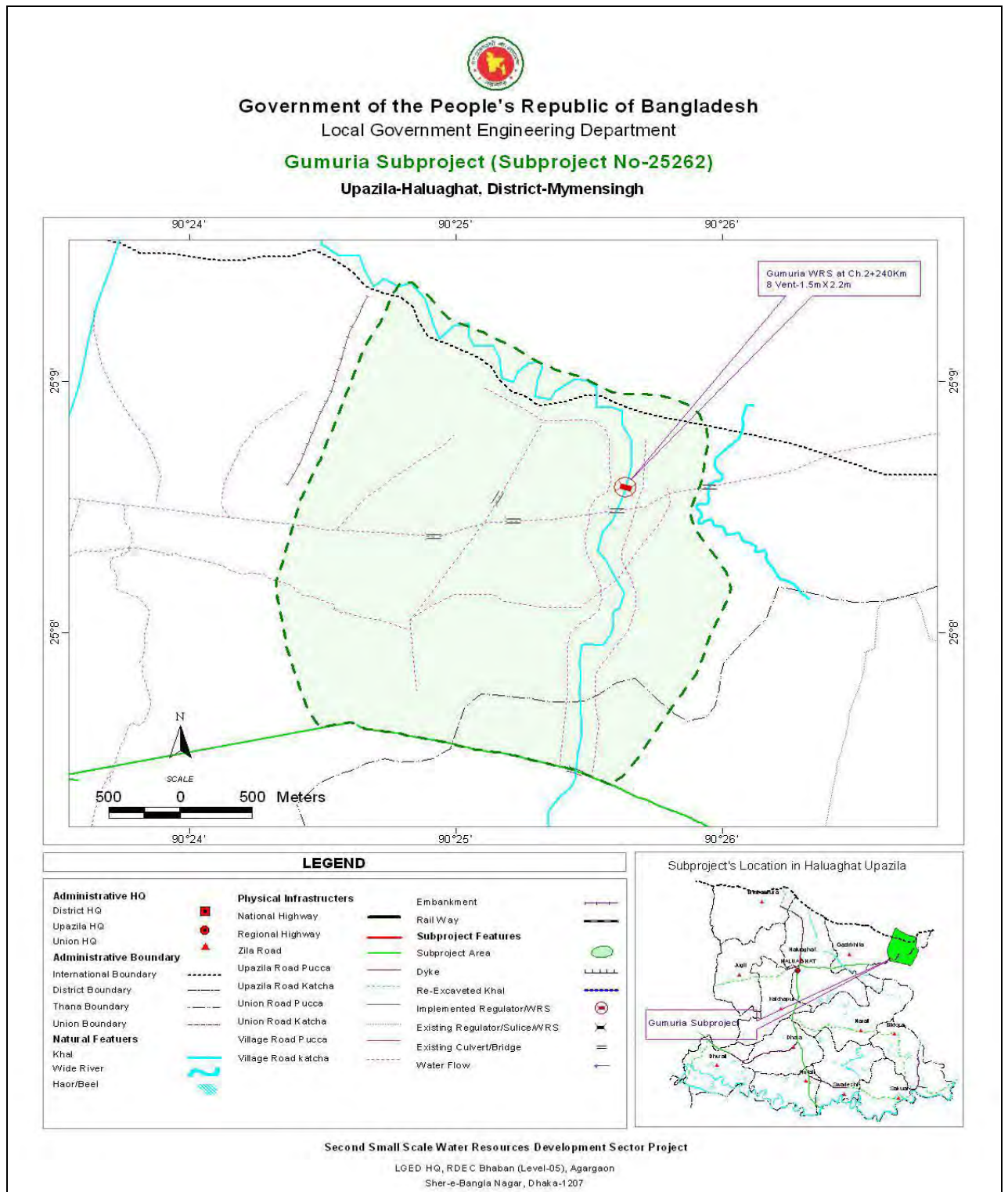


Figure 4.2: Sub Project Area of Gumuria (WC)

4.1.4 Purba Sarail Madai (DR & WC) Sub-project

The subproject is in Kalai Upazila in Joypurhat District. It is situated south of the Joypurhat-Bogra highway. The area is a part of the Upper Nungolar River Floodplain

and life is dominated by monsoon rain flooding. Floods submerged the whole area in 1988. Flooding of the lower land is annual and lasts over several weeks due to drainage congestion. The land is mostly between 17.88m to 19.85m PWD, Classified Fo (high land). The high land mostly is occupied by homesteads and homestead gardens. About 90% of the area is used for agriculture. The cropping pattern is diverse and includes HYV Aman, HYV Boro, spices, oil seeds and potato as the major crops. There is no industry other than farming. The objectives of the project are to improve food security and relieve the community from crop damage due to draught.

The subproject is bounded by the Bogra – Joypurhat Highway to the north, the Nungolar River to the south, village roads to the east and west. During the monsoon rainfall and run-off water enters the subproject area and the Purba Sarail Madai khal which causes water logging. During dry period serious water crisis arises for Robi and Boro crop. To resolve the problem of regulating water in the subproject area in a controlled manner during the monsoon and drought period the farmers and the local community wanted regulators and re-excavation of the channel to protect against flooding, improve drainage condition, and increase water retention.

The gross and net area under the project are 763 ha and 520 ha respectively. The total number of households under the project is 1085 and among them beneficiary households are 435. Water Management Cooperative Association (WMCA) was formed with male members of 273 and female members of 178. The registration number was 406 made on January 16, 2011. Executive Committee of 12 members was formed of which 4 members were female.

There was one khal – Purba Sarail Madai khal of length 7.427 km and the khal was re-excavated. Two water control structures (regulator) of two vent 1.5m by1.5m size was constructed at one end and another of three vent 1.5m by2.0m size was constructed at other end of the khal for regulating water. One operation and maintenance shed of size 9m by 5m was constructed for WMCA.

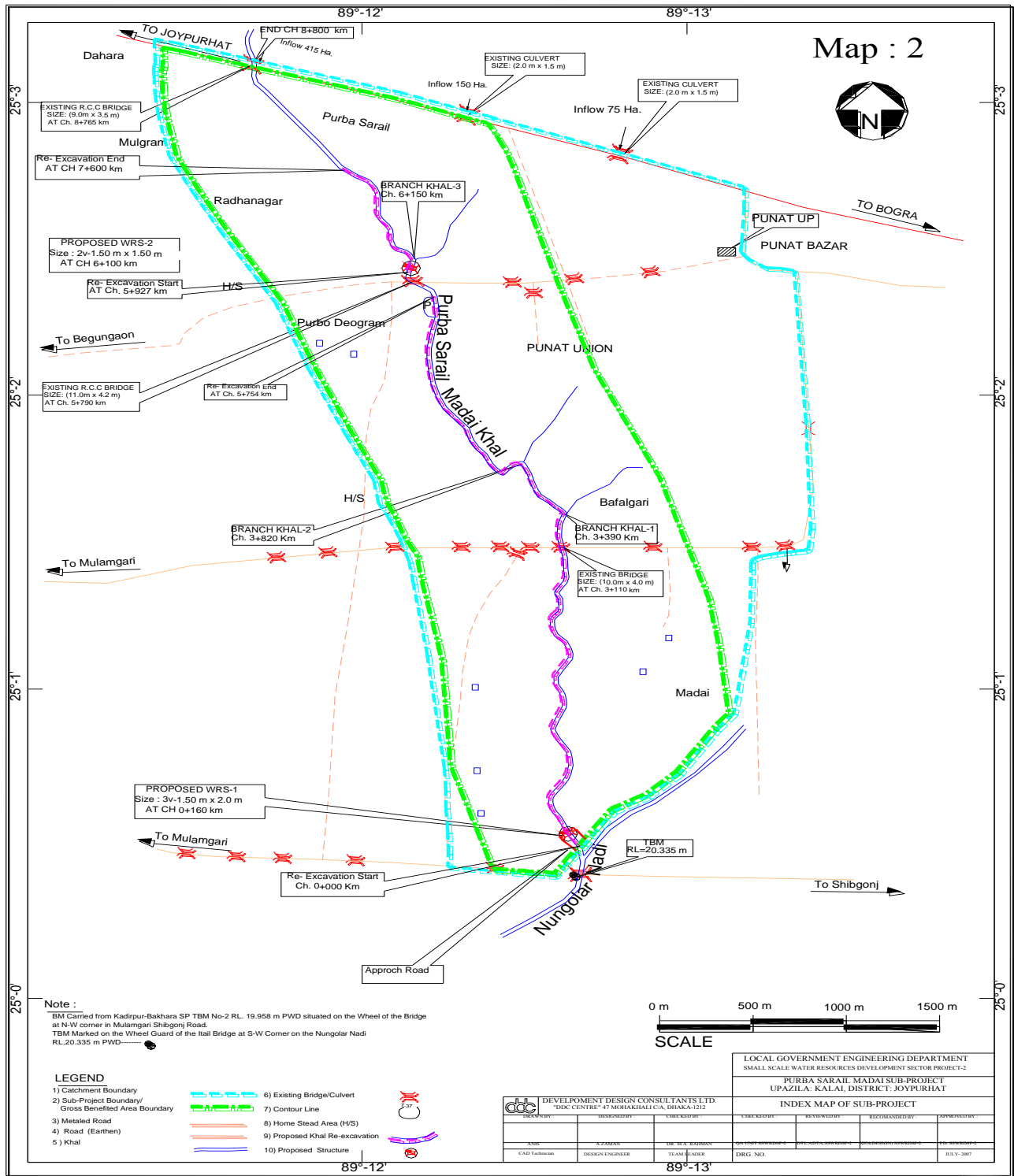


Figure 4.3: Sub Project Area of Purba Sarail Madai (DR & WC)

Total cost of the physical components of the project was Taka 8,909,943. The total money deposited by WMCA was Taka 150,520 where share contribution was Taka 45,100 and savings was Taka 105,420 (entry fee as a member contribution, income of

WMCA, donation of local government institutions, etc.). WMCA was bound to fulfill twelve preconditions (Annexure I) set by LGED to get approved of the water project in their proposed locality, which is finally to be run, monitored and operated by WMCA. It was the philosophy of the SSWRDSP to transfer ownership to the local people through WMCA for attaining sustainability of the water project.

4.2 Methodology

4.2.1 Policy Review

To fulfill the first part of the objectives of this study, i.e., to review the policy, strategy and action plan of GoB related with mainstreaming gender and assess the achievement of gender mainstreaming in three subprojects of SSWRDSP-I, II and III. A comprehensive literature review was done for this purpose in Chapter Two. Policy documents of the concerned ministries, organizations were collected from different sources like IWFM, BUET library, published hard copy, existing documents, study reports, inception reports, feasibility reports, project/subproject completion reports from various organizations, journal publications using internet, etc. As a result of this review, a fair idea regarding the status of mainstreaming gender in Bangladesh as well as in abroad was achieved. Through critical review, strengths, weaknesses, gaps etc., were tried to explore in mainstreaming gender in water projects of Bangladesh.

4.2.2 Achievement of Mainstreaming Gender in Three Sub-Projects

Both qualitative and quantitative questionnaire methods were followed for the second part of the objectives i.e., achievement of mainstreaming gender where project cycle analysis was performed. The subproject cycles used for the study are shown in Figure 4.4. A discussion on content of questionnaire is described in the following section.

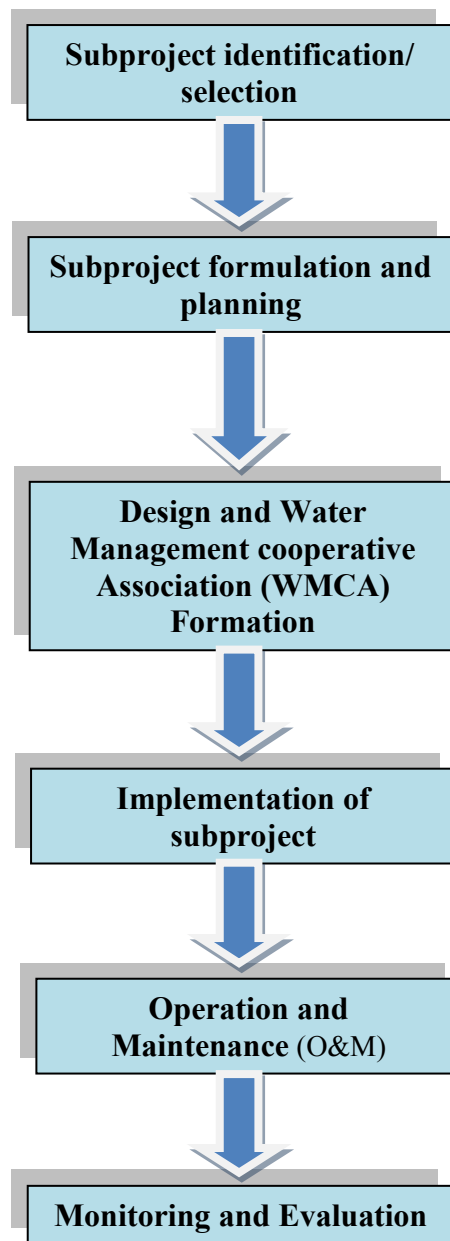


Figure 4.4: Subproject cycles

4.2.3 Contents of Questionnaire

Total beneficiaries of the three subprojects are 777, 644 and 451 in Brajamul Bhity Khal, Gumuria and Purba Sarail Madai respectively. To represent the beneficiaries more than 3% persons were selected and the sample size is 25 for each subproject. At first, questionnaire sets were prepared to have general or background information of respondents taken up as 25 samples from each of the three subprojects. The sample of a prepared questionnaire set for general or background information is shown in Annexure II. Sample size of 25 members was randomly selected from each

subproject. 25 members include mainly landless, marginal and small farmers, men and women, WMCA members and non WMCA members. The category of respondent's household (HH) has been assessed using the classification noted in Annexure II. Some introductory features like household category, name & location of the sub-project, type & ID No. of sub-project, etc. were focused through general information. In short, general information about the respondents are collected the questionnaire in Annexure II.

The second part is Project Cycle Analysis which includes six components as i) sub-project identification/selection, ii) sub-project formulation and planning, iii) design and water management co-operative association formation, iv) implementation of sub-project, v) operation and maintenance and vi) monitoring and evaluation. Six project cycles represent the process of introducing Integrated Water Resources Management, where gender mainstreaming is the cross-cutting issue. So, indicators and questionnaire were formulated to go deep into the project cycle process and clarify the gender status achieved in the subprojects.

4.2.4 Indicators and Questionnaire for Quantitative Analysis

The contents of questionnaire were developed with a view to clarify and understand the active participation (voice and decision) of local beneficiary people (gender) and their effective contributions in all the six project cycles. In total, 33 (thirty three) indicators with related questionnaires were formulated for six project cycles. As for example, 2 (two) indicators with 5 (five) questionnaires were developed for first project cycle analysis and 8 (eight) indicators with 11 (eleven) questionnaire were developed for second project cycle analysis. Thus in total 33 (thirty three) indicators with 56 (fifty six) questionnaire were developed and shown in Table 4.1 and elaborated types of questionnaire with format of reply of Table 4.1 are shown in Annexure III.

Table 4.1 Indicator and closed ended questionnaire for quantitative analysis

Sl. No.	Indicator	Questionnaire
Subproject identification/ selection		
01	Communication with LGI and LGED to send subproject proposal	i) Do you think there was any Women's Participation?
		ii) Have women of different socio economic status in the community been consulted?
02	Attending in project briefing orientation	i) Do you think there was any Women's Participation?
		ii) Do you think there was any Women's Participation in Mass Announcement/ Circulation about the Subproject?
		iii) Do you think there was any Women's Participation in saying about their rights?
Subproject formulation and planning		
03	Reconnaissance Survey	i) Do you think there was any Women's Participation in Attending in Reconnaissance Survey?
		ii) Do you think there was any UP Women Members involvement in Reconnaissance Survey?
04	Feasibility Study	i) Do you think there was any Women's Participation in Attending in Feasibility Study?
		ii) Do you think there was any Women's Participation in Preparing Resettlement Plan?
05	Participatory Rural Appraisal (PRA)	i) Do you think there was any Women's Participation in Attending in PRA?
06	Women participation in Group Discussion (GD)	i) Do you think there was any Women's Participation in Attending in Group Discussion (GD)?
07	Women participation in Focus Group Discussion (FGD)	i) Do you think there was any Women's Participation in Attending in Focus Group Discussion (FGD)?
08	Survey	i) Do you think there was any Women's Participation in Attending in Subproject Survey Activities?
09	Rights of water for all users	i) Do you think there was any Women's Participation in saying about their Rights of water for all users?
10	Voice for rights	i) Do you think there was any Women's Voice for their rights?
		ii) Are women involved in the collection and interoperation of data?
Design and Water Management cooperative Association (WMCA) Formation		
11	Attending in the meeting	i) Do you think there was any Women's Participation in Attending in the Meeting?
12	Design discussion meeting	i) Do you think there was any Women's Participation in Attending in Design discussion meeting?
13	33% Women member in WMCA	i) Do you think there was any Women's Participation in WMCA?
14	Giving opinion to designer	i) Do you think there was any Women's Participation in Giving opinion to designer?

15	Pre-evaluation of local resources	i) Do you think there was any Women's Participation in Pre-evaluation of local resources?
16	Bye –law drafting of WMCA	i) Do you think there was any Women's Participation in Attending in Bye law drafting of WMCA?
		ii) Do you think there was any Women's Participation in Attending in house hold survey?
		iii) Do you think there was any Women's Participation in collecting savings and share?
		iv) Do you think there was any Women's Participation in collecting beneficiary contribution?
17	Attending in drawing understanding meeting	i) Do you think there was any Women's Participation in Attending in drawing understanding meeting?
		ii) Did women and men participate in project design and implementation?
Implementation of subproject		
18	LCS member to implement earth work	i) Do you think there was any Women's Participation in LCS members to implement earth work?
19	Equal wage rate for women and men	i) Do you think there was any Equal wage rate for women and men?
20	Attending in LCS training	i) Do you think there was any Women's Participation in Attending in LCS training?
		ii) Do you think there was any Women's Participation in Attending in Agriculture sub-committee?
		iii) Do you think there was any Women's Participation in Attending in Fisheries sub-committee?
		iv) Do you think there was any Women's Participation in Attending in Loan sub-committee?
21	Separate toilet facility for women workers	i) Do you think there was any Separate toilet facility for women workers?
22	Member of construction observation committee for quality control and problem solving	i) Do you think there was any Women's Participation in Attending as Member of construction observation committee for quality control and problem solving?
Operation and Maintenance (O&M)		
23	Member of O&M subcommittee	i) Do you think there was any Women's Participation in Attending in O&M sub-committee?
		ii) The number of women and men involved in maintenance of the water scheme for day to day maintenance, and operation and for emergency repairs.
		iii) The number of women and men trained on repair and maintenance and the overall management of water schemes
24	Active participation for O&M fund collection	i) Do you think there was any Women's Active Participation for O&M fund collection?

25	Need assessment for O&M	i) Do you think there was any Women's Participation in Attending in Need assessment for O&M?
26	Joint work through	i) Do you think there was any Women's Participation in Attending in Joint Work Through?
27	O&M related training	i) Do you think there was any Women's Participation in Attending in O&M related training?
28	Voice of women, participation in post evaluation	i) Do you think there was any Women's Voice of women, participation in post evaluation?
29	Production of poverty reduction plan book	i) Do you think there was any Women's Participation in Attending in Production of poverty reduction plan book?
30	Gender awareness	i) Do you think there was any Women's Participation in Attending in Gender awareness activities?
31	Environment awareness	i) Do you think there was any Women's Participation in Attending in Environment awareness activities?
Monitoring and Evaluation		
32	Income Generating Activities (IGA)	i) Does the project integrate gender concerns in the evaluation process?
		ii) Do you think there was any Women's Participation in Attending in IGA activities?
		iii) Do you think there was any Woman who is capable to maintain her family individually?
		iv) Do you think there was any Woman who is capable to maintain her family jointly with her husband?
		v) Do you think there was any Woman who is capable to maintain her family jointly with other member(s) of her family?
		vi) Types of benefits gained by women and men, girls and boys.
		vii) Improvement of food security status and economic situation of women and men by beneficiaries of irrigation schemes.
33	WMCA election for leadership	i) Do you think there was any Women's Participation in Attending in WMCA election for leadership?
		ii) Do you think there was any Woman who has solved any social problem by her leadership?
		iii) Do you think there was any Woman who has protested any social discrimination?

Applying these formulated indicators and questionnaire, communication with Local Government Institutions (LGI) and LGED in sending proposal and attendance in project briefing orientation, reconnaissance survey, feasibility study, participatory process, survey, rights of water, voice of rights, attendance in WMCA meeting, design discussion meeting, presence of 33% women member in WMCA, providing opinions to designer, pre-evaluation of local resources, bye law drafting of WMCA, attendance in drawing understanding meeting, selection of Labour Contracting

Society (LCS) members to implement earth work, fixation of equal wage rate for women and men, attendance in LCS training, separation of toilet facility for women workers, selection of member of construction observation committee and problem solving and member of O&M sub-committee, active participation for O&M fund collection, need assessment of O&M activities, joint work through O&M related training, status of voice of women in participation of post evaluation of project cycles, production of poverty reduction plan book, gender awareness, environment awareness, income generating activities, attendance in training on agriculture, fisheries and O&M, WMCA election for leadership and general improvements, etc. were evaluated for each subproject.

This methodology assisted in quantifying gender mainstreaming through the all project cycles. The replies of questionnaire were analyzed as number and percentage of respondents grouping into three types as “yes”, “no” and “don’t know” as shown in Annexure III. But discussions upon the results are made on two groups - “yes” and “no” for each subproject. Further gender involvement and participatory process in the project cycles were evaluated looking into the procedure followed and accordingly discussions were made by which strength, weakness of gender mainstreaming were surfaced out and scopes of improvement were suggested for each subproject.

A comparative summary on positive responses for all 33 (thirty three) indicators through six project cycles was tabulated for all three subprojects in one table and the consecutive achievement of gender mainstreaming by phase wise (I, II, III) of SSWRDSP. All the results were presented graphically to show the improvements of project performance in light of gender mainstreaming.

4.2.5 Questionnaires for Qualitative Analysis

10 (ten) general questionnaires of open type were formulated and developed to capture people’s opinions, attitudes and feelings about inclusion of gender issues in subproject identification/selection, subproject formulation and planning, design and Water Management Cooperative Association (WMCA) formation, implementation of subproject, operation and maintenance (O&M), monitoring and evaluation, etc., and are shown in Table 4.2.

Table 4.2 Open ended general questionnaire for qualitative analysis

General findings	
General question	i) How many Water Professionals were present during sub project planning?
	ii) How many Gender Professionals were present during sub project planning?
	iii) How many LGED Officials were present during sub project planning?
	iv) How many Consultants were present during sub project planning?
	v) How much the project increases women's and men's access to its resource in terms of income, decision making, labour saving and appropriate technology, etc?
	vi) How far the project or programme provide measure to enhance the participation of female agents and beneficiaries?
	vii) How far the project allow for the development of ownership of the water scheme of project among women and men and legal framework and provision taken to sustain the ownership of the scheme by women and men in the community?
	viii) How do the Project designers or planners and water resource development personnel influence their decisions to enhance the integration of gender concerns in water resource development projects?
	ix) How do the officials take gender considerations as tokenism or not in water resource development projects?
	x) According to your view what % of women members comparing to of male members were present in different activities?

General questionnaires were also aimed to reveal the involvements, approaches and attitudes of water professionals, gender specialists, project consultants – designers and planners, LGED officials to consider relevant gender sensitive issues like enhancement of participation of gender in project activities and ownership building, gender consideration is as tokenism or not, percentage of female members comparing to male in different activities, in all six project cycles of the selected subprojects. These general questionnaires were applied using participatory processes of investigation e.g. based on the principle that men and women should be the agents of their own development, contributing their decisions and voices in all General Discussions (GD), Focus Group Discussions (FGD), Case Studies and KIIs to reveal the status of achievement of mainstreaming gender in the subproject activities of the SSWRDSP-I, II and III.

The photographs of carrying out FGD in three subprojects during field data collection are shown in Photographs 4.1, 4.2 and 4.3 (Annexure IV).



Photograph 4.1: Carrying out FGD in Brajamul Bhity Khal subproject



Photograph 4.2: Carrying out FGD in Gumuria subproject



Photograph 4.3: Carrying out FGD in Purba Sarail Madai subproject

Qualitative analysis was also aimed to reveal increase of school going students, change of food habit, housing and clothing pattern, increase of income and

microcredit mobility, position in family life, husband's respect to wife evaluate, increase of land purchase capacity and voice in WMCA, capability of facing election individually, increase of voice and decision giving of women in problem solving, etc.

All the issues concerned with mainstreaming gender were focused through general questionnaires reveal the gender status in six stages of subproject activities of the SSWRDSP-I, II and III. To understand the process of mainstreaming gender at policy and execution level in LGED, Key Informant Interviews (KII) were carried out with LGED officials at Head office, District, Upazila levels and consultants of the project. The photographs taken during interviewing with KIIs are shown in Photographs 4.4, 4.5, 4.6 and 4.7.



Photograph 4.4: Interview with Project Director, SSWRDP (JICA), LGED during KII



Photograph 4.5: Interview with Project Director, PSSWRSP, LGED during KII



Photograph 4.6: Interview with resettlement specialists, PSSWRSP, LGED during KII



Photograph 4.7: Interview with gender specialist, PSSWRSP, LGED during KII

One case study from each subproject totaling to three case studies were carried out exclusively among income earning women benefitted especially by the subproject to assess the status of mainstreaming gender among voiceless and powerless groups.

CHAPTER FIVE

RESULTS AND DISCUSSIONS

5.1 Introduction

The research activities were performed using the methods described in Chapter 3. The results of the study are discussed in the following sections.

5.2 Policy Review and Issues on Gender Mainstreaming

Gender mainstreaming in water related policies has been reviewed critically through literature review. Policies and related issues described in the documents are cited sequentially in Table 5.1 to demonstrate the relevancy of the policies where a gender conception might be clearly visible

Table 5.1: Identification of Gender sensitive strengths, weaknesses in existing major water related policies of Bangladesh

Policy	Gender related issues, strength and weakness
Women and Constitution of Bangladesh, 1972	<ul style="list-style-type: none">• Having gender policy.• It was included in Bangladesh Constitution at the beginning, 4th November 1972.• It was written by the Constitution experts of Bangladesh.• Its implementation is monitored by respective ministries.• Paying greater attention to the female, half of our population.• Involving women in the mainstream of development activities, empower them to realize their human rights.• The principles of gender equality are embedded in the Constitution of the People's Republic of Bangladesh.• Women's rights to equality and affirmative action in support of equality are guaranteed in the Constitution.• The Constitution makes clear that the principles of affirmative action for the advancement of women and others who are deprived are not contradictory to the principle of equality. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none">• Numbers of women in parliament, education, service,

	<p>different social activities, politics, etc. are still inadequate.</p> <ul style="list-style-type: none"> • No clear outlines about women rights.
National Women Advancement Policy, 1997	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1997. • It was published by the MoWCA. • It uses sex disaggregated data and implementation is monitored by District and Upazila level officials of MoWCA. • GoB has taken initiatives to improve the situation of women in Bangladesh and declared National Women Advancement Policy in 1997. • MoWCA is the lead ministry for mainstreaming gender in all other line ministries. • In addition to the Ministry of Women and Children’s Affairs, the Government also put into operation a comprehensive national machinery to promote the advancement of women. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Though MoWCA is the lead ministry and responsible for mainstreaming gender in all other line ministries, it cannot still function so effectively.
National Water Policy (NWP), 1999	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1999. • It was developed by the MoWR. • Its implementation is monitored by all water sector project implementing agencies. • In 1999, GoB declared the National Water Policy, where women’s participation was highlighted to develop and empower them. • “NWP-1999” is aimed at to bring institutional changes which will enhance the role of women in water management. • It will develop a state of knowledge and capability that will enable the country to design future water resources management plans by itself with economic efficiency, gender

	<p>equity, social justice and environmental awareness.</p> <ul style="list-style-type: none"> • As a reflection of all Water policy and guidelines, BWDB and LGED have included women in water resources development and management projects in all stages. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • NWP should focus gender issues in all of its components as in water and agriculture, water and industry, water and fisheries and wildlife, water and navigation, water for hydropower and recreation, water for the environment, water for preservation of haors, baors, and beels, economic and financial management, research and information management, institutional policy, legislative framework, etc. • NWP highlighted gender equity and women participation in several sections, but did not provide directives of gender sensitive planning, design and budget to mainstreaming gender in the above mentioned fields. • NWP has limited to 25% of earth work to LCS, while BWDB and LGED, the implementing agencies, are carrying out earth work accordingly.
National Water Management Plan (NWMP) 2000 - Stakeholder Participation	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2000. • It was prepared by WARPO under the supervision of the Ministry of Water Resources and has been approved by the National Water Resources Council (NWRC) headed by the honorable Prime Minister of the People's Republic of Bangladesh. • Its implementation is monitored by all water sector project implementing agencies. • The Government has to take the core effort to include more women in local institutions for understanding their role in water management and ensuring greater participation. • In order to ensure all stakeholders including deprived active

	<p>and fruitful participation in all stages, 25 percent of the earthwork of any public water project will be offered to specific target groups or beneficiaries.</p> <ul style="list-style-type: none"> • All opportunities are explored and efforts undertaken to ensure landless and other disadvantaged group's direct involvement in participatory management of local water resources and • New projects that are proposed for implementation will be considered when the beneficiaries mobilise a certain percentage of the total cost as contribution. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • NWMP has not highlighted in detail on gender equity and women participation, and do not provide directives of gender sensitive planning, design and budget to mainstreaming gender in the above mentioned fields.
<p>Guideline for Participatory Water Management (GPWM), 2000</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2000. • It was prepared Ministry of Water Resources, Bangladesh. • Its implementation is monitored by all water sector project implementing agencies. • The people especially in the tidal flood plains of the south and haors (depressions) in the northeast used to build small earthen dykes around their paddy fields or along riverbanks under the leadership of Zamindars (landlords). • As population is increasing, hence the need for more land under agriculture, led eventually to construction of massive coastal polders and few large irrigation projects. • In Small Scale Water Resources Development Project of LGED, the beneficiaries have participated right through its initiation by making a percentage payment towards investment and for operating and managing the project entirely by them. • Under the Guidelines for Participatory Water Management

	<p>(GPWM) for all flood control, drainage and irrigation projects, local stakeholders participation comprises 3-tiers of Water Management Organisation (WMO), namely Water Management Group (WMG), Water Management Association (WMA) and Water Management Federation (WMF) for BWDB projects, while for LGED exist 2-tiers water management, namely Water Management Group (WMG), Water Management Association (WMA).</p> <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • For earth work or small other works are suggested to do by labour contracting society (LCS) at least 25% of total volume. • But for poverty alleviation and local employment generation, it is too insufficient in addressing gender interest.
<p>Poverty Reduction Strategy Paper (PRSP), 2005</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2005. • It was prepared by the World Bank and the IMF and General Economics Division Planning Commission Government of People’s Republic of Bangladesh. • Its implementation is monitored by all government agencies. • The Government of Bangladesh (GOB) makes a clear commitment to equality between women and men in its recently-approved Poverty Reduction Strategy Paper (PRSP). • A sourcebook prepared by the World Bank (WB) as lead agency for PRSPs, where there is a chapter on gender outlines and how men’s and women’s involvement effects PRS Programs as well as gender differences in the outcomes and impacts of these programs. • In March 2003, the national strategy for economic growth, poverty reduction and social development (NSEGPRSD) was released where government recognizes women’s contribution to economic and human development • The NSEGPRSD identified how gender-based violence is limiting the capacity of women to participate in market

	<p>activities and to access social services such as education and health. It also identified the need to strengthen women's capacities to participate fully in local governance and in decision making.</p> <ul style="list-style-type: none"> • In reducing gender gaps where it needs to empower women the government has also set targets to be realized by 2015 that correspond to the MDGs. • The government pledges to incorporate measures into the three-year rolling plan to address violence against women and high maternal mortality; restrictions on women's employment and economic opportunities and formal equality; quotas and affirmative action at all levels and in all spheres, woman-friendly institutional environments and statistics disaggregated by sex. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • For women, PRSPs represent a major failure on promises made by both the international community and by national actors to redress issues of political, economic and social discrimination that remain pervasive in most societies across the world today. • States need to commit to actions that integrate representative voices of women in the institutions and processes that set economic and social policies. Governments need to ensure that all poverty assessments are gendered, and that women's experiences of exclusion and poverty form significant parts of policies that are designed. • There is a need to ensure that discriminatory laws, policies and practices are reformed and to overcome the biases that allow these practices to continue unchecked.
National Agriculture Policy-2013	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1999 and modified in 2013. • It was prepared by the Ministry of Agriculture, Government

	<p>of the People’s Republic of Bangladesh. Researchers, Planners, Extension workers and other related participants were involved in it.</p> <ul style="list-style-type: none"> • Its implementation is monitored by the different agencies under MOA and also IMED under Planning Ministry. • Women represent nearly half of the country's human resources. For this, more women comprising officials and farmers should enter as agricultural workforce. • As women have potentials to contribute to agricultural growth, it is obligatory for the Government meaningful involvement of them in agriculture-related income-generating activities and to develop human resources. • The Government will promote poverty reduction through creation of employment opportunities in rural non-farm sectors. Necessary support will be given to non-farm income generation activities for the poor and disadvantaged farmers. • Necessary support will be provided for capacity building of women in promoting household food and nutrition security. • The Government will facilitate increased women participation in management decision making and their advancement in agriculture. • Efforts will be made to ensure women’s equal access to agricultural inputs (e.g. seed, fertilizer, credit, education & training, information etc.). • The Government will encourage participation of the rural poor women in production of crops particularly in agro-processing and agri-business activities so that they can improve their economic well-being. • Women’s participation in agricultural production system will be facilitated through access to agricultural technologies and the Government will take steps to encourage women’s participation in various extension programmes like training, farmers' rally and workshop.
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	<ul style="list-style-type: none"> • The Government will provide credit support to women for agricultural activities such as homestead gardening, post harvest activities, seed production & preservation, nursery, bee-keeping, food processing etc. • The government will provide micro-credit support to women for small-scale agro-processing, storage and preservation. • Efforts will be made to ensure non-discrimination in wages. • A block allocation in the agricultural budget will be made exclusively for undertaking women related activities and programmes. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • As a predominantly agricultural country, Bangladesh needs to have a vast reservoir of educated, trained and skilled agricultural workforce to bridge the gap between the production capacity of farmers and the consumption requirement of citizens and to ensure their food security by applying both male and female workers. • But not remarkable female workers are employed.
<p>NAPA updated version of 2005</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2005. Ministry of Environment and Forests has formulated the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) which has been updated and endorsed by present government in 2009. • It was prepared by the Ministry of Environment and Forest, Government of The People’s Republic of Bangladesh. • Its implementation is monitored by the Ministry of Environment and Forest. • The criteria used for prioritization of projects in Bangladesh NAPA 2005 followed the NAPA guideline like as: sustainable development, gender equality, and cost effectiveness. • One of Prioritization Criteria and Indicators is Gender equality (as a cross-cutting criteria).

	<ul style="list-style-type: none"> • In conformity with the guiding elements of country-drivenness, simplicity and flexibility in procedures, set in the NAPA Guidelines, poverty reduction and security of livelihoods with a gender perspective has been ranked as the most important set of criteria for prioritization of adaptation needs and activities. • Livelihood Protection for Vulnerable Socioeconomic Groups, including women and children, to increase their resilience, through development and scaling up of community level adaptation, livelihood diversification, better access to basic services and social protection (e.g., safety nets, insurance). <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • “To reduce vulnerability to natural, environmental and human induced hazards through community empowerment and integration of sustainable risk management initiatives in all development programs and projects”. • In supporting the above mentioned comment, specific action of plan for gender mainstreaming is needed.
Environment Policy 1992	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1992. • It was prepared by the Ministry of Environment and Forest, Government of The People’s Republic of Bangladesh. • Its implementation is monitored by the Ministry of Environment and Forest. • Women participation in development activities must be ensured. • Unemployed labor forces are to be encouraged in development activities. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Public-community partnerships, public–private partnerships, public-voluntary organization partnerships, public-private voluntary organization partnerships are suggested in this policy to address environmental issues.

	<ul style="list-style-type: none"> • But gender issues regarding environment is not properly addressed.
National fisheries policy,1998	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1998. • It was prepared by the Ministry of Fisheries and Livestock, Government of The People’s Republic of Bangladesh. • Its implementation is monitored by the Ministry of Fisheries and Livestock. • The Fishermen Societies along with the local government will be engaged in the execution of the fish conservation acts besides the authorities presently engaged for the same, purposes. • Government owned khas ponds and other water bodies will be leased out on long-term basis to the poor and interested fishers/ trained jobless youths. • Local fisher communities will be given priorities for fish culture in baor, and technical and socio-economic support will be provided. • Females will be encouraged in fish culture and trained accordingly. • Genuine fishers will be prioritized for the government khas water bodies to improve their socio-economic condition. • Small-scale fishers in the coastal region will get fish harvesting rights. A separate fish harvest area will be demarcated for the small and large-scale fishers. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • The issue of equity and gender is being incorporated in newer fisheries projects. • But in older fisheries projects the gender issues are not considered.
National Sustainable Development	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2012.

<p>Strategy (Revised), 2010-2021</p>	<ul style="list-style-type: none"> • It was prepared by the General Economics Division Planning Commission Ministry of planning Government of People’s Republic of Bangladesh. • Its implementation is monitored by all government agencies. <p>Green Economy</p> <p>Bangladesh coincide with green economy strategies and policies, such as striving for sustained, inclusive, and equitable economic growth and job creation, promoting productive activities that contribute to eradication of poverty, improving the livelihoods and empowerment of the poor and vulnerable groups, enhancing the welfare of women, children, persons with disabilities, and fishers, promoting the welfare of ethnic communities, promoting gender equality, and providing workers with skills through education and capacity building, promoting communication technologies, and encouraging existing and new partnerships including public private partnerships to mobilize financing for sustainable development.</p> <p>Rural Development: Rural Non Farm (RNF) Sector</p> <ul style="list-style-type: none"> • Ensure access of women and lower income groups engaged in RNF sector to training, skill formation, and credit and business development services. • Disseminate use of environment friendly cooking stoves to rural households which improve women’s health by reducing indoor air pollution and save energy and time. <p>Promote and Ensure Women's Advancement and Rights</p> <ul style="list-style-type: none"> • The objective of women's advancement and rights is to create a society where men and women will have equal opportunities and will enjoy all fundamental rights on an equal basis. This is to be achieved by ensuring women’s advancement and rights in activities of all sectors of the economy. • Develop policy and legal framework for ensuring equal rights for women based on the constitution and the
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	<p>government's commitment to various international forums, e.g., CEDAW and Beijing Platform for Action.</p> <ul style="list-style-type: none"> • Undertake measures to improve women's employment opportunities and wages and also ensure equal pay for equal work. An enabling environment would be created by ensuring compliance with social issues of work such as safe workplace and transportation facilities and infrastructure like separate toilets, lunch rooms and lunchtime, and day care centres in the workplace. Provision would be made for life and disability insurance for workers, especially women workers. Steps would be taken to ensure secure jobs and decent working conditions for women in the formal and informal sectors. • Promote gender mainstreaming by reforming laws, rules and regulations, institutional mechanisms, policies, projects and programmes which are not gender sensitive. Continue to integrate gender issues in planning and budgetary processes to reduce disparities in education, health, and nutrition. • Continue and expand existing programmes for social protection for disadvantaged women. Undertake measures to protect women from economic vulnerability and risk due to natural disasters and climate change. • Ensure increasing participation of women in the National Parliament and the local political institutions. Undertake initiatives to make women politically more conscious, encourage women to participate in politics and to build leadership among women at all levels. • Ensure elimination of all forms of violence against women through appropriate administrative, legal and judicial actions. Strengthen "One-Stop Crisis Centre" in medical college hospitals to provide medical treatment, legal and psycho-social counseling to women and children victims of
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	<p>violence, and provide shelter facilities and make efforts for their reintegration and rehabilitation in society.</p> <ul style="list-style-type: none"> • Facilitate women entrepreneurship through providing relevant training and providing finance. <p>Promote Development of Ethnic Communities</p> <ul style="list-style-type: none"> • A holistic land policy will be formulated to deal with the land disputes of ethnic peoples. A secure land tenure system will be introduced in CHT. Representatives of the ethnic communities will be included in undertaking development projects in areas inhabited by ethnic communities. • The Government will ensure participation of local governments in the management of natural resources and will recognize the traditional knowledge of ethnic communities. The government will ensure community involvement in the adoption of technologies without competing with their traditional food production system. An authentic sense of ownership/tenure of resources will also be developed. • Ministries of Land, Education, Primary and Mass Education, Health, LGRD, Social Welfare and Agriculture will be mobilised for the development of ethnic peoples. The Ministry of Chittagong Hill Tracts Affairs (MoCHT) will be the lead ministry to mobilize other ministries/divisions to ensure ethnic people's access to education, health, sanitation and water, skill training facilities and employment. In the case of the ethnic people outside the CHT, the Special Affairs Division will be the lead agency. • Existing human development programmes under MoLE, MoPME, MoHFW, MoLGRDC, MoSW and MoYS will address the special needs of ethnic people. Monitoring and supervision will be strengthened so that education, health and maternal child health services, and nutrition and
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	<p>housing facilities reach the ethnic people.</p> <ul style="list-style-type: none"> • An action plan on mainstreaming the education of children of ethnic communities will be implemented. The fund for stipends and purchasing learning materials under the block allocation of PM office will be increased for ethnic students. • Assistance will be provided in hill districts to strengthen their capacities and increase employment opportunities to cope with any sudden decrease of their income due to damage to Jhum crops caused by flood and drought. • In the hill districts income generating activities through small and cottage industries, small trading and poultry and livestock rearing will be expanded. The income of poor people will be enhanced through social forestry in hilly areas and cultivation of fruits and medicinal plants. Studies will be carried out to assess the feasibility of pisciculture in hill districts by creating small lakes. • Area-appropriate Micro-credit activities for the poor people will be expanded and vocational training will be provided to the poor. Development of rural roads and hat-bazars for marketing of agricultural products will continue. Action will be taken to eliminate barriers so that agriculture and local products have easy access to national and international markets. Action will be taken to ensure electricity supply for small and medium enterprises. • Measures will be taken to support EPB's one district one product initiative under which 'Textile for Rangamati', 'Pineapples for Khagrachari' and 'Rubber for Bandarban' has been decided on. <p>Arrest Marginalization</p> <ul style="list-style-type: none"> • Increase financial support and emergency relief to poor and marginalized group. • Create job opportunity round the year for poor, marginalized and lower middle income group.
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	<ul style="list-style-type: none"> • Protective laws for sharecroppers and lessee. Implement risk reduction and climate change adaptation particularly livelihood schemes for the most vulnerable and deserving members of the poorest communities. <p>Reforming Police</p> <ul style="list-style-type: none"> • The perception of police being only protective of the wealthy, and indifferent or contemptuous to the poor or the working class, must be changed. • A system of gender sensitization training (covering violence against women issues and other laws to protect human rights) will be established for all legal and police officers. The concept of community police will be reinforced. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • In transportation sector gender issue is hidden.
National policy for arsenic mitigation 2004	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2004. • It was prepared by the Department of Public Health under the Ministry of Local Government, Rural Development and Cooperatives, Government of The People’s Republic of Bangladesh. • Its implementation is monitored by the Department of Public Health. • This will also supplement the National Water Policy 1998, National Policy for Safe Water Supply and Sanitation 1998 in fulfilling the national goals of poverty alleviation, public health and food security. • Capacity at local and community levels for installation, operation and maintenance of mitigation options including monitoring, information management and reporting. • Endeavor to promote piped water systems wherever feasible and such schemes must ensure that the poorest members of the community have access to safe water that meets the minimum service levels established by the Government.

	<p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Men typically have more economic power than women, but domestic water is a woman's responsibility, one she takes seriously as a contribution to family health and well-being. • Awareness in women throughout Bangladesh has been increased about unsafe use of surface water and reduction of diarrhoea as a result of tube well water use. But women are not highlighted in that way.
<p>National Food Policy Plan of Action (2008-2015)</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2008. • It was prepared by the Food Planning and Monitoring Unit (FPMU) Ministry of Food and Disaster Management. • Its implementation is monitored by the Food Planning and Monitoring Unit (FPMU). • Facilitate adequate and stable supply of safe and nutritious food by increased purchasing power and access to food of the people. • Adequate nutrition for all individuals, especially women and children. • It would meet: a) Long-term national plan for ensuring balanced food in building a healthy nation, b) Supply of sufficient nutritious food for vulnerable groups, c) Balanced diet containing adequate micronutrients, d) Safe drinking water and improved sanitation, e) Safe quality food supply and f) Adequate health status. • Particular attention has been paid to mainstreaming food security concerns in the Poverty Reduction Strategy Paper. Bangladesh has made remarkable progress towards reaching the Millennium Development Goals (MDGs) by 2015, with indicators showing that Bangladesh is "on track" to reach 100% enrolment rates and gender equality in primary and secondary education and in significantly reducing child and maternal mortality. Millennium Development Goal on

	<p>poverty and food security (MDG1), MDG3 (Promote gender equality and empower women).</p> <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Poor nutrition is implicated in more than half of all child deaths worldwide and is intimately linked with poor health and environmental factors. • Targeting nutrition improvement actions for children particularly in the first year of life is strategically important because malnutrition in infancy is the genesis of malnutrition in pre-school age and is also directly or indirectly associated with most child deaths. • It is due to absence of taking gender specific policies where poor children must be considered.
<p>Land Use Policy of Bangladesh 2007</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2007. • It was prepared by Abul Barkat, Rowshan Ara, M. Taheruddin, Saiful Hoque and Nazrul Islam of Human Development Research Centre (HDRC). • Its implementation is monitored by the Land Ministry of Bangladesh. • Ensure best utilization of khas land through rehabilitation of landless and marginalized poor • Legitimate rights of the marginalized community (indigenous peoples) in respect of land and land related issues including community ownership • Ensure rights of women in land and water bodies • Alleviate poverty and promote income generation in the country by best utilization of Charland through rehabilitation of Landless and marginalized poor. • The existing inheritance law should be amended and implemented on the basis of recognizing equal rights for woman irrespective of cast, creed and religion.

	<ul style="list-style-type: none"> • Land ownership of the indigenous people should be ensured for implementation of CLO (Community Land Ownership). • Maximum efforts has to be made in leasing-out khas waterbodies to the poor fishers' community following the Agriculture Khas Land and Waterbodies Distribution Policy of the Government. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Women's right to land property is limited legally. • As a matter of fact, women hardly have right on land property. • This constitutes major barriers to women's empowerment. • Inheritance law, patriarchal values and social practice – all these are instrumental in denying women's right to land property. • In our country, women's inheritance law is based on religion-based law – in case of Muslims, it is Sharia law and in case of Hindus, it is Daibhag. • In Sharia law, women's right is particularly recognized and as per Daibhag, inheritance is not recognized. • Among most indigenous peoples (except garo) women's right on land is not recognized.
Coastal Zone Policy- 2005	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2005. • It was prepared by Ministry of Water Resources, Government of the People's Republic of Bangladesh. • Its implementation is monitored by all water sector implementing agencies. • Economic opportunities based on local resources will be explored to enhance income of the people. • Private sector and the non-governmental organizations (NGO) will be encouraged to implement activities for the poor

	<p>people.</p> <ul style="list-style-type: none"> • Khas land will be distributed among the landless and a more transparent process of land settlement will be ensured. • Effective measures will be taken to enhance coping capacity of the poor during the period of disaster. • Initiate insurance scheme for improving their social security. • The asset base of the poor, with special focus on women, shall be improved through ownership or access so that their coping capacity improves. • A gender sensitive and participatory approach will be adopted that focuses at the reduction of gender inequalities and that takes into account differences in needs and interests between men and women • Efforts will be made to close the gender gap, giving priority to women’s education, training and employment and special support for broadening their coping capacity • Special attention will be paid towards employment generation for women, the promotion of women entrepreneurs as well as the removal of restrictions on women’s employment and economic opportunities • During distribution of newly accreted khas lands, special attention will be paid to the allocation of land titles to women • Special projects will be implemented exclusively addressed to livelihoods enhancement and empowerment of disadvantaged women • Necessary institutional measures including mass awareness and motivation on violence against women will be taken. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • Women’s mobility is a personal insecurity and is very serious issue in remote coastal areas, which increases gender gap. • Though it is very hard to remove, but it should be minimized. There is no clear guideline in the policy to ensure personal security.
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	<ul style="list-style-type: none"> • This policy is supported by other government policies.
<p>Forest Policy, 1994, Published in 1995 and Social Forest Rules, 2010</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 1995. • It was prepared by the Environment and Forest Ministry Government of The People’s Republic of Bangladesh. • Its implementation is monitored by the Environment and Forest Ministry Government of The People’s Republic of Bangladesh. • Women will be encouraged to participate in homestead and farm forestry, and participatory afforestation programs. • Forest Department will be strengthened in order to achieve the goal and objectives of National Forestry Policy. A new department called "Department of Social Forestry" will be established. • Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people. • Involvement of local community in protected area management is inevitable. • The national policy on protected areas should be adopted to recognize that protected areas are the habitats of flora and fauna, which are all vital ingredients to the people’s existence and important components of the country’s ecological balance. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • A large number of tribal people live around few forest zones. • Since the ownership of land under their disposal is not determined, the powerful group grabs the forest land at will and drives them away from their settlements. • No directives are there to protect the tribal peoples’ right and share on land and forest.
<p>BWDB Gender Action Plan and</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2006.

<p>Strategy, 2006</p>	<ul style="list-style-type: none"> • It was developed by the BWDB. • Its implementation is monitored by BWDB. • As a pioneer Govt. organization, BWDB is engaged in implementing large scale water resources development projects. • The major projects where participatory activities were involved were GK project, Deep Tube Well project and DND project etc. • At the beginning BWDB and Flood Plan Coordination Organization (FPCO), Ministry of Water Resources invented and adopted the Guidelines for People’s Participation in water management for realizing the future need in water sector projects. • The stakeholders participation, Water Management Organization (WMO) & their composition, participatory process, legal status of WMO and capacity development of different stakeholders etc. institutionalized the participation of stakeholders to ensure the sustainable development in water sector through forming of 3 tiers of WMO such as Water Management Group (WMG), Water Management Association (WMA) and Water management Federation (WMF) by incorporating beneficiaries (both men and women) of different occupations, where WMO may consisted 2 or 3 levels belong to tiers depending on project size ranging from 1000 ha to above 5000 ha. • BWDB (September, 2008), has approved Integrated Planning for Sustainable Water Management (IPSWAM), which is used throughout the country for medium size Flood Control and Drainage (FCD) projects where specific gender provisions included. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • In medium and large water sector projects, introduction of 3-tier cooperative associations is mandatory, but in most of the
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	<p>projects, it is not followed.</p>
<p>LGRD Gender Action Plan and Strategy, 2003</p>	<ul style="list-style-type: none"> • Having gender policy. • It was declared in 2003. • It was developed by the LGED. • Its implementation is monitored by LGED. • LGED works under the Local Government Division (LGD) of the Ministry of Local Government, Rural Development and Co-operatives. LGED is responsible for the implementation of a number of development projects funded by Government and various Development Partners (DPs). • LGED is currently responsible for implementation of a wide range of rural, urban and water infrastructure development projects. • It has many opportunities to address gender equity issues in socio-economic program of infrastructure development activities. So in the above three sectors it has three individual gender action plans. • The role of women is no longer confined in the households has to be strengthened by providing appropriate support so the development projects can change the role of women to make them more effective in contributing towards the national development. • LGED's program approach has been innovative both in relation to Bangladesh and in the region. Its Labour Contracting Societies (LCSs) address the needs of both women and men. • LGED has developed a range of projects aimed specially at women; participation and employment have been the focus of a number of general program as well as pilot schemes. Its works on participation, women's market sections, tree planting schemes and other areas have been highly innovative and are seen as positive example for the other sectors. • This strategy builds on many successes of LGED and leads

	<p>way for further innovation and achievement in the area of gender equity.</p> <ul style="list-style-type: none"> • LGED has a Gender Development Forum which provides a focus by gender equity work within LGED. • The goal of the SSWRDSP-I's gender and development was to promote gender equity, which was “a process of being fair and providing equal opportunity to women and men” according to the Ministry of Women and Children Affairs. The initial women in development (WID) shifted to a broader gender and development (GAD) approach as SSWRDSP-I evolved. Initially the Project's concern with women was limited to helping the poorest. Over the course of SSWRDSP-I women of poor and middle-income households were given practical training (e.g. in fisheries, seeds, vegetable production), enhancing their homestead-based productive capacity and providing some with new income generating opportunities. The most significant gender related activities of SSWRDSP-I were: (i) Women engagement in First Management Committees of the Water Management Cooperative Association (WMCA) - thus integrating women into water resources development from the beginning all the way through to O & M committee participation, (ii) Provision of practical training of women in large scale, (iii) Arrangement for employment of poor women as LCS members in earthworks and as tree plantation caretakers, (iv) Arrangement of WMCA micro-credit and savings programs also benefited women along with men, (v) Inclusion of training on Gender Sensitivity for male and female staff of LGED and others associated with the Project, including WMCA leaders and female WMCA members and (vi) Institutional support focused on supporting LGED's project management capabilities. • The SSWRDSP-II also feels that women cannot contribute
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	<p>simply by appearing at meetings etc. in large numbers but they must work to implement sub-project decisions. They must express their own thinking and develop themselves. If decision making opportunities are given to women, they will learn how to deliberate and what to realistically expect from participation. Social development will also be benefited when women got such opportunities to share in decision making process as on an equal basis with men. Their involvement relates directly to the Project goal of encouraging the poor, vulnerable, and landless and involving people in income related affairs.</p> <ul style="list-style-type: none"> • In SSWRDSP-III all earthworks under the Project will be done by using Labour Contracting Societies (LCS) contracted directly by the Project. LCSs can be with all-female members and can be mixed also. Thus, landless poor and destitute women will benefit from the Project investment through getting employment opportunity. Tree plantation along embankments developed under the Project will be done by engaging landless destitute women for which LGED has prior experience. This will generate longer term employment opportunity for them. In maintenance of embankments, women groups will be involved which will provide them with employment. Women can also find scope of work in fisheries development activities in potential subprojects. In the Management Committees of WMCAs, having at least 33% female members are obligatory. This empowers women in participating in management of the affairs of the local water management Subprojects. Children, particularly of the poor families, will be benefited getting improved food and nutrition through improved earning of their parents. <p style="text-align: center;">Weakness:</p> <ul style="list-style-type: none"> • LGED works in rural, urban areas and in water sectors. It implements both donor aided projects and GoB funded
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	<p>projects.</p> <ul style="list-style-type: none"> • Gender action plan and strategy mostly followed in donor aided projects, but a little attention is given in GoB funded projects.
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5.3 Improving of gender specific weaknesses found in major existing policies

After critical review of gender policies adopted by GoB and different organizations, it was tried to focus upon the gender specific strengths, weaknesses and gaps embedded in them and to extract them in surface. Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies and programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences in an integrated way i.e., in design, implementation, monitoring and evaluation of policies and programmes and in all political, economic and societal spheres, so that women and men can benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. So, a comprehensive review was carried out upon different policies like in the previous section where gender issues are highlighted precisely.

As a result of this review, scopes of improvement in the policies were surfaced out and the summary has been summarized in Table 5.2.

Table 5.2: The summary of scopes of improvement of existing major gender policies

Policy	Improving of gender sensitive weaknesses
Women and Constitution of Bangladesh, 1972	<p>Women in parliament, in education, in services, in different social activities and politics, etc. are to be increased up to 33% or more than that.</p> <p>Clear out lines about women rights should be provided.</p>
National Women Advancement Policy, 1997	<p>MoWCA is the lead ministry for mainstreaming gender in all other line ministries.</p> <p>The ministry should monitor the advancement in development of women in Bangladesh through all ministerial activities for achieving the goals of mainstreaming gender.</p>

National Water Policy (NWP), 1999	<p>As a reflection of all water policies and guidelines, the implementing agencies like BWDB and LGED have taken up water resources development and management projects considering gender issues in all project cycles.</p> <p>The ministry should take up more active policies so that gender issues are included in all project stages more effectively and efficiently. As for example, the involvement of women should be increased more than 33%, sustainability of WMO and WMCA should be ensured through policy interventions.</p>
National Water Management Plan (NWMP) 2000 - Stakeholder Participation	<p>In Current water sector development activities, implementation plan, funding the NWMP, monitoring, evaluation and updating the NWMP, action plan, etc.</p> <p>In NWMP gender equity and women participation are to be highlighted and to provide directives of gender sensitive planning, design and budget to mainstreaming gender in the above mentioned fields.</p>
Guideline for Participatory Water Management (GPWM), 2000	<p>For earth work or small other works are suggested to do by labour contracting society (LCS) at least 25%.</p> <p>But for poverty alleviation and local employment generation, it can be extended up to 33% or more.</p>
Poverty Reduction Strategy Paper (PRSP), 2005	<p>For women, PRSPs represent a major failure on promises made by both the international community and by national actors to redress issues of political, economic and social discrimination that remain pervasive in most societies across the world today. States need to commit to actions that integrate representative voices of women in the institutions and processes that set economic and social policies. Governments need to ensure that all poverty assessments are gendered, and that women's experiences of exclusion and poverty form significant parts of policies that are designed.</p> <p>There is a need to ensure that discriminatory laws, policies and practices are reformed and to overcome the biases that allow these</p>

	practices to continue unchecked.
National Agriculture Policy-2013	As a predominantly agricultural country, Bangladesh needs to have a vast reservoir of educated, trained and skilled agri-workforce to bridge the gap between the production capacity of farmers and the consumption requirement of citizens and to ensure their food security by applying both male and female workers. To do that remarkable female workers are employed.
NAPA updated version of 2005	“To reduce vulnerability to natural, environmental and human induced hazards through community empowerment and integration of sustainable risk management initiatives in all development programs and projects”. To implement, this specific action of plan is needed.
Environment Policy 1992	Public-community partnerships, Public–private partnerships, public-voluntary organization partnerships, public-private voluntary organization partnerships are suggested in this policy to address environmental issues. At the same time gender issues regarding environment should be properly addressed.
National fisheries policy, 1998	The issue of equity and gender is to be incorporated in newer fisheries projects and activities.
National Sustainable Development Strategy (Revised), 2010-2021	In transportation sector, gender issue should be activated. People lie at the centre of development in Bangladesh and the benefits of development should be shared equitably by all. An educated, well trained and healthy population plays an important role in improving the quality of life of people, reducing poverty and attaining sustainable economic growth. It is possible when all types of community, especially gender groups come forward.
National	

Policy for Arsenic Mitigation 2004	Women are the sole agent of domestic water use. So they have to be highlighted in the policy.
National Food Policy Plan of Action (2008-2015)	<p>Poor nutrition is implicated in more than half of all child deaths worldwide and is intimately linked with poor health and environmental factors.</p> <p>Targeting nutrition improvement actions for children particularly in the first year of life is strategically important because malnutrition in infancy is the genesis of malnutrition in pre-school age and is also directly or indirectly associated with most child deaths.</p> <p>So, in achieving the targeted goal, gender sensitive actions must be taken up.</p>
Land Use Policy of Bangladesh, 2007	<p>Women’s right to land property is limited legally and they hardly have right on landed property. This constitute as the major barrier to women’s empowerment. Inheritance law, patriarchal values and social practice – all these are instrumental in denying women’s right to landed property.</p> <p>In our country, women’s inheritance law is based on religion law and personal law. In case of Muslims, it is Sharia law, while for Hindus, it is Daibhag.</p> <p>In Sharia law, women’s right is particularly recognized and as per Daibhag, inheritance is not recognized.</p> <p>Among most indigenious peoples (except garo) women’s right on land is not recognized.</p> <p>Right to land property for women must be constitutionally addressed.</p>
Coastal Zone Policy 2005	For women’s mobility, personal insecurity should be minimized through adopting proper laws and guidelines in the policy in remote

	coastal areas to decrease gender gap.
Forest Policy, 1995	Tribal people as well as gender groups should be imparted ownership of certain amount of land through the forest settlement process. The rest of the forest land will be brought under permanent protection.
BWDB Gender Action Plan and Strategy, 2006	In medium and large water sector projects, 3-tier cooperative associations should be introduced properly.
LGRD gender action plan and strategy 2003	Gender action plan and strategy must be followed in GoB funded projects also.

5.4 Achievement of Mainstreaming Gender in Three Sub-Projects

5.4.1 Background Information

Background information of respondents found through questionnaire survey from 25 samples of each of the three subprojects is shown in Table 5.3.

Table 5.3: Background information of three subprojects

Category	General/Background Information (Person in no.)		
	Brajamul Bhati Khal	Gumuria	Purba Sarai Madai
Household category interviewed			
Landless (LL)	10	14	13
Marginal Farmer (MRF)	8	4	6
Small Farmer (SF)	2	3	3
Medium Farmer (MGF)	3	2	2
Large Farmer (LF)	2	2	1
Total	25	25	25
Type of persons interviewed			
Male	13	14	15
Female	12	11	10
Total	25	25	25
WMCA member and Non WMCA member			
WMCA member	6	8	6
Non WMCA member	19	17	19
Total	25	25	25

5.5 Data for quantitative analysis

The Project Cycle Analysis included six components: i) sub-project identification/selection, ii) sub-project formulation and planning, iii) design and water management co-operative association formation, iv) implementation of sub-project, v) operation and maintenance and vi) monitoring and evaluation. The replies of questionnaire were analyzed as number respondents and their percentage grouping into three types as “yes”, “no” and “don’t know” as shown in Annexure III. But discussions upon the results are made on two groups - “yes” and “no” for each subproject which are presented in Table 5.4.

Table 5.4: Data presentation for quantitative analysis

Sl. No	Indicator	Response by respondents (%)											
		Brajamul Bhiti Khal				Gumuria				Purba Sarai Madai			
		Yes		No		Yes		No		Yes		No	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Subproject identification/ selection													
01	Communication with LGI and LGED to send subproject proposal	3	12	6	24	7	28	6	24	12	48	1	4
02	Attending in project briefing orientation	8	32	6	24	14	56	3	12	18	72	2	8
Subproject formulation and planning													
03	Reconnaissance Survey	18	72	2	8	20	80	2	8	22	88	1	4
04	Feasibility Study	17	68	5	20	22	88	2	8	23	92	0	0
05	Participatory Rural Appraisal (PRA)	20	80	2	8	22	88	2	8	24	96	0	0
06	Women participation in Group Discussion (GD)	19	76	3	12	21	84	1	4	24	96	0	0
07	Women participation in Focus Group Discussion (FGD)	18	72	3	12	23	92	2	8	24	96	0	0
08	Survey	15	60	5	20	19	76	3	12	24	96	0	0
09	Rights of water for all users	13	52	6	24	12	48	6	24	12	48	1	4
10	Voice for rights	7	28	7	28	10	40	5	20	12	48	2	8
Design and Water Management cooperative Association (WMCA) Formation													
11	Attending in the meeting	15	60	5	20	20	80	1	4	23	92	0	0
12	Design discussion meeting	16	64	6	24	19	76	3	12	22	88	0	0
13	33% Women member in WMCA	20	80	3	12	23	92	2	8	24	96	0	0
14	Giving opinion to designer	5	20	5	20	11	44	1	4	17	68	0	0
15	Pre-evaluation of local resources	3	12	8	32	5	20	5	20	8	32	2	8
16	Bye –law drafting of WMCA	11	44	5	20	15	60	1	4	19	76	1	4
17	Attending in drawing understanding meeting	13	52	3	12	17	68	1	4	20	80	1	4
Implementation of subproject													

18	LCS member to implement earth work	20	80	0	0	24	96	0	0	24	96	0	0
19	Equal wage rate for women and men	16	64	5	20	20	80	2	8	20	80	0	0
20	Attending in LCS training	14	56	3	12	15	60	2	8	16	64	1	4
21	Separate toilet facility for women workers	10	40	7	28	19	76	3	12	23	92	0	0
22	Member of construction observation committee for quality control and problem solving	11	44	5	20	9	36	2	8	11	44	2	8
Operation and Maintenance (O&M)													
23	Member of O&M subcommittee	15	60	2	8	20	80	1	4	2	8	4	16
24	Active participation for O&M fund collection	16	64	3	12	21	84	0	0	6	24	2	8
25	Need assessment for O&M	19	76	2	8	22	88	0	0	3	12	2	8
26	Joint work through	22	88	0	0	23	92	0	0	1	4	1	4
27	O&M related training	18	72	0	0	21	84	1	4	3	12	0	0
28	Voice of women, participation in post evaluation	17	68	2	8	21	84	2	8	9	36	0	0
29	Production of poverty reduction plan book	12	48	3	12	18	72	2	8	15	60	1	4
30	Gender awareness	15	60	1	4	21	84	1	4	17	68	0	0
31	Environment awareness	13	52	2	8	16	64	2	8	11	44	1	4
Monitoring and Evaluation													
32	Income Generating Activities (IGA)	16	64	1	4	21	84	0	0	19	76	0	0
33	WMCA election for leadership	12	48	4	16	14	56	5	20	13	52	3	12

Table 5.4 was analyzed further as per project cycles. It was the study object to look into the active involvement and participation of gender from the very beginning of the subproject and their improvement in condition and position in subproject as well as in the society. So, Table 5.4 was remolded into Table 5.5, where findings of the project cycle analysis of each subproject have been surfaced out and project procedure as followed (Annexure V), and consequently strength and weakness in the followed procedure in each project cycle have been evolved. Based on the findings marked in Table 5.5, scope of improvement of the project performance as a whole in terms gender involvement, participatory process in the project cycles, local people satisfactions, etc. are recommended. Table 5.5 represents discussions that are, at present, inherent in all subprojects of LGED. It also indicates the gradual improvement of all project cycle activities as phase by phase i.e., Phase I, II and III.

The strength, weakness of gender mainstreaming, scope of improvement of project performance, etc. are all formulated in Table 5.5.

Table 5.5: Looking into gender and participatory process through project cycle analysis

Items	Brajamul Bhati Khal	Gumuria	Purba Sarai Madai
Subproject identification/ selection			
Procedure followed	<ul style="list-style-type: none"> • publicity at district, upazila and union level by sending letters, circulars, etc. • Two types of subproject proposal forms were sent by LGED - one for union parishad (Annexure-VI) and another for Upazila parishad (Annexure-VII) • Union parishad fills up the form-1 with the union parishad's minute and sends it to the Upazila Engineer. • Upazila Engineer fills the form-2 with the upazila parishad's minute and sends it to the Executive Engineer, LGED of the district. • Executive Engineer, LGED of the district verified the documents and the subproject site by his/her staffs. As it was okay it was sent to the Project Management Office (PMO). • PMO verified the documents of the subproject proposal and prescreened it depending on the supplied documents. Then it was sent to reconnaissance. 	<ul style="list-style-type: none"> • publicity at district, upazila and union level by sending letters, circulars, etc. • Two types of subproject proposal forms were sent by LGED - one for union parishad (Annexure-VI) and another for Upazila parishad (Annexure-VII) • Union parishad fills up the form-1 with the union parishad's minute and sends it to the Upazila Engineer. • Upazila Engineer fills the form-2 with the upazila parishad's minute and sends it to the Executive Engineer, LGED of the district. • Executive Engineer, LGED of the district verified the documents and the subproject site by his/her staffs. As it was okay it was sent to the Project Management Office (PMO). • PMO verified the documents of the subproject proposal and prescreened it depending on the supplied documents. Then it was sent to reconnaissance. 	<ul style="list-style-type: none"> • publicity at district, upazila and union level by sending letters, circulars, etc. • Two types of subproject proposal forms were sent by LGED - one for union parishad (Annexure-VI) and another for Upazila parishad (Annexure-VII) • Union parishad fills the form-1 with the union parishad's minute and sends it to the Upazila Engineer. • Upazila Engineer fills the form-2 with the upazila parishad's minute and sends it to the Executive Engineer, LGED of the district. • Executive Engineer, LGED of the district verified the documents and the subproject site by his/her staffs. As it was okay it was sent to the Project Management Office (PMO). • Project preparation technical assistant (PPTA) team had investigated the subproject site. • PMO verified the documents of the subproject proposal and prescreened it depending on the supplied documents. Then it was sent to reconnaissance.
Analysis	Twenty five persons were interviewed applying two indicator, i) Communication with LGI and LGED to send subproject proposal and ii) Attending in project	Twenty five persons were interviewed applying two indicator, i) Communication with LGI and LGED to send subproject proposal and ii) Attending in project	Twenty five persons were interviewed applying two indicator, i) Communication with LGI and LGED to send subproject proposal and ii) Attending in project

	<p>briefing orientation. In case of sending subproject proposal only 12% respondent answered that women were consulted by the LGI and LGED people from the very beginning. 24 % answered women were not consulted and 64% answered that they do not know whether the women were consulted or not. In case of project briefing orientation only 32% respondent answered that women attended in the project briefing orientation, 24% replied that women did not attend and 44% said they are not aware of it.</p>	<p>briefing orientation. In case of sending subproject proposal only 28% respondent answered that women were consulted by the LGI and LGED people from the very beginning. 24% answered women were not consulted and 48% answered that they do not know whether the women were consulted or not. In case of project briefing orientation 56% respondent answered that women were consulted in attending in the project briefing orientation. 12% said that women were not consulted and 32% said they are not aware of it.</p>	<p>briefing orientation. In case of sending subproject proposal 48% respondent answered that women were consulted by the LGI and LGED people from the very beginning. 4% answered women were not consulted and 48% answered that they do not know whether the women were consulted or not. In case of project briefing orientation 72% respondent answered that women attended in the project briefing orientation, 8% replied that women did not attend and 20% said they are not aware of it.</p>
Discussion	<p>According to the analysis of data we find communication with LGI and LGED is quite dissatisfactory (only 12%). Attending in subproject briefing orientation is poor (32%). Women of different socioeconomic status were not consulted and they did not take part in project briefing orientation.</p>	<p>According to the analysis of data we find communication with LGI and LGED is poor (28%). Attending in subproject briefing orientation is moderate (56%). Women of different socioeconomic status were not consulted and they did not attend in project briefing orientation.</p>	<p>According to the analysis of data we find communication with LGI and LGED is not satisfactory (48%). Attending in subproject briefing orientation is satisfactory (72%). Women of different socioeconomic status were consulted and they took part in project briefing orientation.</p>
Weakness	<ul style="list-style-type: none"> • publicity in district, upazila and union level by workshop, meeting, seminar, etc. among the officials, public representatives and beneficiaries were limited. • folk drama shows in the community level, which represents the project benefits in a drama. But it was not shown here. • Women involvement in the subproject identification/Selection was poor. • In both cases women of different socioeconomic status were not consulted. Communication of LGI and LGED people with local people was poor. And in project briefing orientation attendance of women was remarkably 	<ul style="list-style-type: none"> • publicity in district, upazila and union level by workshop, meeting, seminar, etc. among the officials, public representatives and beneficiaries were limited. • folk drama shows in the community level, which represents the project benefits in a drama form were not shown. • Women involvement in the subproject identification/Selection was poor. • In fact women of different socioeconomic status were not consulted before sending project proposal and project briefing orientation attendance was not satisfactory. Communication of LGI and LGED people with 	<ul style="list-style-type: none"> • publicity in district, upazila and union level by workshop, meeting, seminar, etc. among the officials, public representatives and beneficiaries were limited. • folk drama shows in the community level, which represents the project benefits in a drama form were not shown. • Women involvement in the subproject identification/Selection was poor. • Communication of LGI and LGED people with local people was poor.

	poor.	local people was poor.	
Strength	No remarkable strength was found in gender mainstreaming here.	No remarkable strength was found in gender mainstreaming here.	Women of different socioeconomic status were consulted and project briefing orientation attendance was remarkable.
Scope of improvement	Communication of LGI and LGED personnel with local people must be improved at least up to satisfactory level i.e. local people involvement should be ensured.	Communication of LGI and LGED personnel with local people as well as attending in project briefing orientation meeting should be improved i.e. local people involvement should be extended.	Communication of LGI and LGED personnel with local people should be improved i.e. local people involvement should be extended largely.
Subproject formulation and planning			
Procedure followed	<ul style="list-style-type: none"> • After having the subproject proposal it was selected for Reconnaissance survey. • After Reconnaissance in house PRA was done. • Feasibility study was done by (PPTA) Project Preparation Technical Assistance team. • Detailed design was done in house. 	<ul style="list-style-type: none"> • After having the subproject proposal it was selected for Reconnaissance survey. • After Reconnaissance in house PRA was done. • Feasibility study was done by (PPTA) Project Preparation Technical Assistance team. • Detailed design was done in house. 	<ul style="list-style-type: none"> • After having the subproject proposal it was selected for Reconnaissance survey. • After Reconnaissance in house PRA was done. • Feasibility study was done by (PPTA) Project Preparation Technical Assistance team. • Detailed design was done in house.
Analysis	<p>Twenty five persons were interviewed applying eight indicator i) Reconnaissance survey ii) Feasibility study iii) Participatory Rural Appraisal iv) Group Discussion v) Focus Group Discussion vi) Survey vii) Rights of water for all users and Voice for Rights. For indicator (i) i.e. Reconnaissance survey two questions were asked a) Women's participation in attending in Reconnaissance survey and b) UP women's involvement in Reconnaissance survey. In case of Women's participation in attending in Reconnaissance survey 72% participants said there was women's participation, 8% said there was not any women's participation and 20% said they don't know about it. In case of feasibility study 68% participant answered that there was women's participation in feasibility</p>	<p>Twenty five persons were interviewed applying eight indicator(i) Reconnaissance survey (ii) Feasibility study (iii) Participatory Rural Appraisal (iv) Group Discussion (v) Focus Group Discussion (vi) Survey (vii) Rights of water for all users and (viii) Voice for Rights. In case of Women's participation in Reconnaissance survey 80% participants said there was women's participation, 8% said there was not any women's participation and 12% said they don't know about it. In case of feasibility study 88% participant answered that there was women's participation in feasibility study, 8% denied and 4% said they do not know about it. In case of Participatory Rural Appraisal (PRA) 88% women were involved, 8% denied and 4% said that</p>	<p>Twenty five persons were interviewed applying two indicator applying eight indicator i) Reconnaissance survey ii) Feasibility study iii) Participatory Rural Appraisal iv) Group Discussion v) Focus Group Discussion vi) Survey vii) Rights of water for all users and Voice for Rights. In case of Women's participation in Reconnaissance survey 88% participants said there was women's participation, 4% said there was not any women's participation and 8% said they don't know about it. In case of feasibility study 92% participant answered that there was women's participation in feasibility study and only 8% said they do not know about it. In case of Participatory Rural Appraisal (PRA), Group Discussion (GD), Focus Group Discussion (FGD) and Survey 96% participants said there was</p>

	<p>study, 20% said there was not women's involvement and only 12% said they do not know about it. In case of Participatory Rural Appraisal (PRA) 80% answered that there was active women's participation, 8% denied and 12% said that they do not know it. In case of Group Discussion (GD) 76% answered that there was women's participation, 12% denied and 12% said they don't know about it. 72% answered that there was women's participation in Focus Group Discussion (FGD), 12% denied it and 12% answered that they do not know this matter. In case of Survey 60 % participants said there was women's participation, 20% denied and rest 20% answered they do not know about it. In case of Rights of water for all users 52% participants said that there was women's participation in saying about the rights, 24% said there was not women's participation and other 24% said they do not know about it.</p> <p>In case of voice of rights of water for all users 28% participants said there was women's voice for rights, 28% said there was no women's voice and 44% participants said that they do not know it.</p>	<p>they do not about it. In case of Group Discussion (GD) 84% said women took part, 4% denied and 12% said that they do not know it. 92% interviewer said women's were involved in Focus Group Discussion (FGD) and 8% said that they do not know it. In case of Survey 76% participants said there was women's participation, 12% denied and rest 12% answered they do not know about it. In case of Rights of water for all users 48% participants said that there was women's participation in saying about the rights of all users, 24% said there was not women's participation and 28% said they do not know about it. In case of voice for rights of water for all users 40% participants said there was women's voice for rights, 20% denied and 40% participants said that they do not know it.</p>	<p>women's participation and only 4% answered they do not know about this. In case of Rights of water for all users 48% participants said that there was women's participation in saying about the rights of all users, 4% said there was not women's participation and 48% said they do not know about it.</p> <p>In case of voice for rights 48% participants said there was women's voice for rights and 8% participants said that there was not women's participation and 44% said that they do not know it.</p>
Discussion	<p>According to the analysis of data, we find women's participation in PRA was good. In case of GD, FGD and survey, reconnaissance survey, it was satisfactory and in feasibility survey was not so good. But women's awareness for Rights for all users and Voice of rights were very poor.</p>	<p>According to the analysis of data we find women's participation in Reconnaissance, PRA, GD, FGD and survey was excellent, Reconnaissance survey and Feasibility study good. But women's participation in Rights for all users and Voice of rights were not satisfactory.</p>	<p>According to the analysis of data we find women's participation in PRA, GD, FGD and survey was excellent, Reconnaissance survey and Feasibility study good. But women's participation in Rights for all users and Voice of rights were not satisfactory.</p>
Weakness	<p>PRA was not done by NGO/Farm. Rights of water for all users and voice of rights were very</p>	<p>PRA was not done by NGO/Farm. Rights of water for all users and voice of rights were poor.</p>	<p>PRA was not done by NGO/Farm. Rights of water for all users and voice of rights were poor.</p>

	poor.		
Strength	Women of different status including UP members were consulted and attendance response in case of PRA was good.	Women of different status including UP members were consulted and attendance in case of Feasibility study, PRA and F'GD were remarkable, Reconnaissance survey and GD was satisfactory.	Women of different status including UP members were consulted and attendance in case of PRA, GD, FGD and survey was remarkable.
Scope of improvement	There is scope of improvement in PRA, GD, FGD, etc. But in case of Reconnaissance survey and women's awareness in Rights of water for all users and Voice of rights must be improved at least up to satisfactory level.	There is scope of improvement in Reconnaissance survey and women's participation in Rights of water for all users and Voice of rights should be improved at least up to satisfactory level.	There is scope of improvement in Reconnaissance survey and women's participation in Rights of water for all users and Voice of rights should be improved at least up to satisfactory level.
Design and Water Management Cooperative Association (WMCA) Formation			
Procedure followed	<ul style="list-style-type: none"> ▪ Survey and data collection was done by the LGED officials. ▪ Design was done by in house designers. ▪ Institution development activities was carried out simultaneously. ▪ First management committee (FMC) was formed by selection from the local elites. ▪ It operates household survey, bye-law drafting, WMCA registration, Office set up, accountant appointment, fulfillment 12 pre conditions for subproject implementation, etc. ▪ After FMC Organizing Committee (OC) was formed which worked for 1 year. ▪ Different types training like: orientation, bye-law drafting, management, action plan preparation, etc. were given to them. ▪ Design firm completed design of the subproject and handed it to PMO. ▪ PMO checked the design and took the permission of HOPE and Partner Agencies before sending it to the field. • After approval it was send to the field to implement the subproject. 	<ul style="list-style-type: none"> ▪ Survey and data collection was done by the LGED officials. ▪ Design was done by in house designers. ▪ Institution development activities was carried out simultaneously. ▪ First management committee (FMC) was formed by selection from the local elites. ▪ It operates household survey, bye-law drafting, WMCA registration, Office set up, accountant appointment, fulfillment 12 pre conditions for subproject implementation, etc. ▪ After FMC Organizing Committee (OC) was formed which worked for 1 year. ▪ Different types training like: orientation, bye-law drafting, management, action plan preparation, etc. were given to them. ▪ Design firm completed design of the subproject and handed it to PMO. ▪ PMO checked the design and took the permission of HOPE and Partner Agencies before sending it to the field. • After approval it was send to the field to implement the subproject. 	<ul style="list-style-type: none"> ▪ Survey and data collection was done by the LGED officials. ▪ Design was done by in house designers. ▪ Institution development activities was carried out simultaneously. ▪ First management committee (FMC) was formed by selection from the local elites. ▪ It operates household survey, bye-law drafting, WMCA registration, Office set up, accountant appointment, fulfillment 12 pre conditions for subproject implementation, etc. ▪ After FMC Organizing Committee (OC) was formed which worked for 1 year. ▪ Different types training like: orientation, bye-law drafting, management, action plan preparation, etc. were given to them. ▪ Design firm completed design of the subproject and handed it to PMO. ▪ PMO checked the design and took the permission of HOPE and Partner Agencies before sending it to the field. • After approval it was send to the field to implement the subproject.

Analysis	<p>Applying seven indicator twenty five persons were interviewed on Design and formation of Water Management Cooperative Association (WMCA). In case of attending in the meeting 60% respondent answered that there was women's participation, 20% said there was not and other 20% said they do not know it. 64% said there was women's participation in design discussion meeting, 24% said there was not women's participation and only 12% said they do not know it. In case of 33% women's participation 80% said there was women's participation in WMCA and 12% said there was not and only 8% said that they are not aware of it. Only 20% participants said there is clear women's participation in giving opinion to designer, 20% said there was not and 60% said they do not know it. In respect of pre-evaluation of local resources only 12% interviewer said women's took part in pre- evaluation of local resources, 32% denied and 56% answered that they do not know this. In case of Bye law drafting 44% participants answered that there was women's participation, 20% denied and 36% said they do not whether there was women's participation or not. In case of attending in drawing understanding meeting 52% participants said there was women's participation, 12% denied and 36% answered that they do not about it.</p>	<p>Applying seven indicator twenty five persons were interviewed on Design and formation of Water Management Cooperative Association (WMCA). In case of attending in the meeting 80% respondent answered that there was women's participation, 4% denied and 16% said they do not know it. 76% said there was women's participation in design discussion meeting, 12% denied and 12% said they do not know it. 92 % of the participants said there was 33% women in WMCA and 8% denied. 44% participants said there is clear women's participation in giving opinion, 4% denied and majority (52%) said they do not know it. Only 20% interviewer said women's took part in pre-evaluation of local resources, 20% denied and most (60%) answered that they do not know this. in case of Bye law drafting 60% participants answered that there was women's participation, only 4% denied and 36% said they do not whether there was women's participation or not. In case of attending in drawing understanding meeting 68% participants said there was women's participation, 4% denied and 28% answered that they do not about it.</p>	<p>Applying seven indicator twenty five persons were interviewed on Design and formation of Water Management Cooperative Association (WMCA). In case of attending in the meeting 92% respondent answered that there was women's participation and 8% said they do not know it. 88% said there was women's participation in design discussion meeting and only 12% said they do not know it. 96 % of the participants said there was 33% women in WMCA and 4% said they are not aware of it. 68% participants said there is clear women's participation in giving opinion and 32% said they do not know it. 32% interviewer said women's took part in pre-evaluation of local resources, 8% denied and 60% answered that they do not know this. In case of Bye law drafting 76% participants answered that there was women's participation, only 4% denied and 20% said they do not whether there was women's participation or not. In case of attending in drawing understanding meeting 80% participants said there was women's participation, 4% denied and 16% answered that they do not about it.</p>
Discussion	<p>According to the analysis of data we find that in case of Brajamul VitiKhal subproject there was not so much effective participation of women's</p>	<p>According to the analysis of data we find that in case of Gumuria subproject there was effective participation of women's and they took part in</p>	<p>According to the analysis of data we find that in case of Purba Sarail Madai subproject there was effective participation of women's and they took</p>

	and they did not take part in WMCA meeting. Women's participation was poor in giving opinion to designer, Bye law drafting and drawing understanding meeting. There was least participation of women's in pre-evaluation of local resources.	WMCA meeting. Women's participation was moderate in giving opinion to designer, Bye law drafting and drawing understanding meeting. There was least participation of women's in pre-valuation of local resources.	part in WMCA meeting. Women's participation was moderate in giving opinion to designer, Bye law drafting and drawing understanding meeting. There was least participation of women's in pre-evaluation of local resources.
Weakness	Survey, data collection and design were done by in house LGED personnel. Women's participation in pre-evaluation of local resources was poor and giving opinion to designer and Bye law drafting participation was also poor.	Survey, data collection and design were done in house. Negligible Women's participation in pre-evaluation of local resources and giving opinion to designer are main constraints. Women's participation in Bye law drafting was also poor.	Survey, data collection and design was done in house. Women's participation in pre-evaluation of local resources is the main weakness and giving opinion to designer and Bye law drafting participation was also poor.
Strength	Women's member in WMCA and their attendance in meeting is the main strength.	Women's member in WMCA and their attendance in meeting is the main strength.	Women's member in WMCA and their attendance in meeting is the main strength.
Scope of improvement	Women's participation in pre-evaluation of local resources, opinion to designer and Bye-law drafting should be increased. There is further scope of improvement in women's participation at other cases also.	There is great scope of improvement at Women's participation in pre-evaluation of local resources and giving opinion to designer. There is further scope of improvement in women's participation at Bye law drafting and in drawing understanding meeting also.	Women's participation in pre-evaluation of local resources should be increased. There is further scope of improvement in women's participation at giving opinion to designer and Bye law drafting.
Implementation of subproject			
Procedure followed	<ul style="list-style-type: none"> ▪ After the approval of drawing, design and estimate was send to Executive Engineer of LGED in District. ▪ Executive Engineer of LGED in District invited tender for structures following the guidelines of Donor and Public Procurement Rules. ▪ Earth work was done by Labour Contracting Society (LCS). ▪ An LCS team was formed by 25 male and female members. ▪ Trainings were given to the LCS, construction observation committee, technical trainings to the officials, trainings on Agriculture, Fisheries, 	<ul style="list-style-type: none"> ▪ After the approval of drawing, design and estimate was send to Executive Engineer of LGED in District. ▪ Executive Engineer of LGED in District invited tender for structures following the guidelines of Donor and Public Procurement Rules. ▪ Earth work was done by Labour Contracting Society (LCS). ▪ An LCS team was formed by 25 male and female members. ▪ Trainings were given to the LCS, construction observation committee, technical trainings to the officials, trainings on Agriculture, Fisheries, 	<ul style="list-style-type: none"> ▪ After the approval of drawing, design and estimate was send to Executive Engineer of LGED in District. ▪ Executive Engineer of LGED in District invited tender for structures following the guidelines of Donor and Public Procurement Rules. ▪ Earth work was done by Labour Contracting Society (LCS). ▪ An LCS team was formed by 25 male and female members. ▪ Trainings were given to the LCS, construction observation committee, technical trainings to the officials, trainings on Agriculture, Fisheries,

	<p>Gender Awareness, Environment Awareness, etc. are given to WMCA members.</p> <ul style="list-style-type: none"> Resettlement plan was prepared and paid properly to the affected persons. 	<p>Gender Awareness, Environment Awareness, etc. are given to WMCA members.</p> <ul style="list-style-type: none"> Resettlement plan was prepared and paid properly to the affected persons. 	<p>Gender Awareness, Environment Awareness, etc. are given to WMCA members.</p> <ul style="list-style-type: none"> Resettlement plan was prepared and paid properly to the affected persons.
Analysis	<p>To know women's participation in subproject implementation twenty five persons were interviewed applying five indicators. In case of LCS member to implement earthwork 80% participants said that there was women's participation, none denied and 20% answered they do not know about it. In respect of wedge rate 64% answered that there was equal wedge rate for men and women worker, 20% denied and 16% said that they are not aware of it. In case of attending in LCS training 56% answered that there was women's participation, 12% do not agree and 32% said they do not know whether there was women's participation or not. In respect of separate toilet facilities for women only 40% said there was separate toilet facilities for women and men, 28% denied and 32% said they do not know about this. In respect of quality control and problem solving 44% participant said that there was women member in construction observation committee and they took part in quality control and problem solving, 20% denied and 36% said they do not know about it.</p>	<p>To know women's participation in subproject implementation twenty five persons were interviewed applying five indicator. in case of LCS member to implement earthwork 96% participants said that there was women's participation, none denied and only 4% answered they do not know about it. 80% answered that there was equal wedge rate for men and women worker, 8% denied and 12% said that they are not aware of it. In case of attending in LCS training 60% answered that there was women's participation, 8% do not agree and 32% said they do not know whether the women participate or not. In respect of separate toilet facilities for women 76% said there was, 12% denied and rest 12% said they do not know about this. In respect of quality control and problem solving only 36% participant said that there was women member in construction observation committee and they took part in quality control and problem solving, 8% denied and majority (56%) said they do not know about it.</p>	<p>To know women's participation in subproject implementation twenty five persons were interviewed applying five indicator. in case of LCS member to implement earthwork 96% participants said that there was women's participation, none denied and only 4% answered they do not know about it. 80% answered that there was equal wedge rate for men and women worker, none denied and 20% said that they are not aware of it. In case of attending in LCS training 64% answered that there was women's participation, 4% do not agree and 32% said they do not know whether there was women's participation or not. In respect of separate toilet facilities for women 92% said there was, none denied and 8% said they do not know about this. In respect of quality control and problem solving 44% participant said that there was women member in construction observation committee and they took part in quality control and problem solving, 8% denied and 48% said they do not know about it.</p>
Discussion	<p>According to the analysis of data we find that in case of Brajamul VitiKhal subproject there was effective participation of women in LCS earthwork implementation, there was not clear separate toilet facilities for women. But in case of attending in LCS</p>	<p>According to the analysis of data we find that in case of Gumuria subproject there was effective participation of women in LCS earthwork implementation, there was separate toilet facilities for women. But in case of quality control and making</p>	<p>According to the analysis of data we find that in case of Purba Sarail Madai subproject there was effective participation of women in LCS earthwork implementation, there was separate toilet facilities for women. But in case of quality control and making</p>

	meeting, quality control and making solutions of the problem women's participation was poor.	solutions of the problem was very poor.	solutions of the problem was poor.
Weakness	Opinions on separate toilet facilities for women workers and equal wedge rates were not convincing. The women's participation in quality control and providing solutions of the problems were poor. Women's participation in LCS training was also poor.	The women's participation in quality control and providing solutions of the problems were poor. Women's participation in LCS training was also poor.	The women's participation in quality control and providing solutions of the problems were poor. Women's participation in LCS training was also poor.
Strength	From the above discussion we find that women's participation in earthwork implementation was strong.	From the above discussion we find that women's participation in earthwork and equal wedge rate for men and women were the promising strength in implementation of subproject.	From the above discussion we find that women's participation in earthwork and separate toilet facilities for women worker was the promising strength in implementation of subproject.
Scope of improvement	Separate toilet facilities for women and men, women's participation in quality control and making solution of the problem should be ensured. There is a scope of improving women's participation in LCS training also.	Women's participation in quality control and making solution of the problem should be increased remarkably. There is a scope of improvement in women's participation in LCS training and making separate toilet facilities for men and women also.	Women's participation in quality control and making solution of the problem should be increased remarkably. There is a scope of improving women's participation in LCS training also.
Operation and Maintenance (O&M)			
Procedure followed	<ul style="list-style-type: none"> ▪ After completion of the work one year O & M is maintained by the appointed contractor. ▪ WMCA takes up the SP's O&M when the sub project is handed over to them. ▪ WMCA spend its own fund for petty maintenance work. • Major maintenance work done by the fund is given from the govt. annual budget. 	<ul style="list-style-type: none"> ▪ After completion of the work one year O & M is maintained by the appointed contractor. ▪ WMCA takes up the SP's O&M when the sub project is handed over to them. ▪ WMCA spend its own fund for petty maintenance work. • Major maintenance work done by the fund is given from the govt. annual budget. 	O&M will be started later.
Analysis	Twenty five persons were interviewed applying nine indicator, i) Member of subcommittee ii) Active participation in fund collection iii) Need assessment iv) Joint work through v) training vi) Voice in post evaluation vii) Preparation of poverty reduction plan book viii)	Twenty five persons were interviewed applying nine indicator, i) Member of subcommittee ii) Active participation in fund collection iii) Need assessment iv) Joint work through v) training vi) Voice in post evaluation vii) Preparation of poverty reduction plan book viii)	Basically no O&M activities started yet.

	<p>Gender awareness and ix) Environment awareness etc. In case of member of O&M subcommittee 60% participants answered that there was women's participation, only 8% denied and 32% noticed that they do not know whether there was women's participation in O&M subcommittee or not. In respect of O&M fund collection 64% participants answered that there was women's active participation, 12% denied and a small part (24%) said that they do not know whether there was any women's participation or not. In case of need assessment 76% participants answered that there was women's participation in O&M need assessment meeting, 8% denied and a little (16%) said that they do not know whether there was any women's participation or not. Majority (88%) participants answered that there was women's participation in 'Joint work through', none denied and a small part of the participants (12%) said that they do not know whether there was any women's participation or not. 72% participants answered that there was women's active participation in O&M related training and a few (28%) said that they do not know whether there was any women's participation or not. 68% participants answered that there was women participant's voice in post evaluation, 8% denied and a few (24%) said that they do not know whether there was any women's voice or not. In case of poverty reduction plan book development 48o/o participants answered that there was</p>	<p>Gender awareness and ix) Environment awareness etc. In case of member of O&M subcommittee 80% participants answered that there was women's participation, 4% denied and only 16% noticed they do not know whether there was women's participation in O&M subcommittee or not. 84% participants answered that there was women's active participation in O&M fund collection, none denied and 16% said that they do not know whether there was any women's participation or not. In case of need assessment 88% participants answered that there was women's participation in O&M need assessment meeting, none denied and only 12% said that they do not know whether there was any women's participation or not. Majority of the participants (92%) answered that there was women's participation in 'Joint work through', none denied and only 8% said that they do not know whether there was any women's participation or not. 84% participants answered that there was women's active participation in O&M related training, 4% denied and 12% said that they do not know whether there was any women's participation or not. 84% participants answered that there was women participant's voice in post evaluation, 8% denied and 8% said that they do not know whether there was any omen's voice or not. In case of poverty reduction plan book development 72% participants answered that there was women's active participation in production of poverty</p>	
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	women's active participation, 12% denied and 40% said that they do not know whether there was any women's participation or not. 60% participants answered that there was women's active participation in gender awareness activities, 4% denied and 36% said that they do not know whether there was any women's participation or not. 52% participants answered that there was women's active participation in Environment activities, 8% denied and 40% said that they do not know whether there was any women's participation or not.	reduction plan book, 8% denied and 20% said that they do not know whether there was any women's participation or not. 84% participants answered that there was women's active participation in gender awareness activities, 4% denied and 12% said that they do not know whether there was any women's participation or not. 64% participants answered that there was women's active participation in Environment activities, 8% denied and 28% said that they do not know whether there was any women's participation or not.	
Discussion	According to the analysis of data we find that in case of Brajamul Viti Khal subproject there was moderate effective participation of women in O&M subcommittee.	According to the analysis of data we find that in case of Gumuria subproject there was effective participation of women in O&M subcommittee.	Basically no O&M activities started yet.
Weakness	GoB maintenance fund is not enough as per demand of beneficiaries. Women's participation in O&M subcommittee was poor.	GoB maintenance fund is not enough as per demand of beneficiaries. Environmental awareness is poor.	Basically no O&M activities started yet.
Strength	Collecting O&M fund WMCA is maintaining the subproject well.	From data we find that women's participation in O&M subcommittee was very good.	Basically no O&M activities started yet.
Scope of improvement	In all respect women's participation in O&M subcommittee should be improved at least up to the mark of acceptance.	In respect of creating environmental awareness there is a scope of improvement.	Basically no O&M activities started yet.
Monitoring and Evaluation			
Procedure followed	<ul style="list-style-type: none"> Just after the completion of subproject implementation Monitoring and Evaluation of the subproject started on. At every season data were collected through proper channel and quarterly and annual evaluation report was made at PMO for the project period. After project period subproject was handed over to IWRM unit. 	<ul style="list-style-type: none"> Just after the completion of subproject implementation Monitoring and Evaluation of the subproject started on. At every season data were collected through proper channel and quarterly and annual evaluation report was made at PMO for the project period. After project period subproject was handed over to IWRM unit. 	<ul style="list-style-type: none"> Just after the completion of subproject implementation Monitoring and Evaluation of the subproject started on. At every season data were collected through proper channel and quarterly and annual evaluation report was made at PMO for the project period. After project period subproject was handed over to IWRM unit.

Analysis	To know women's participation in monitoring and evaluation twenty five persons were interviewed applying two indicator and one general information. In case of women's participation in income generating activities it was known that 64% women were involved in income generating activities. 4% denied and only 32% answered they do not know about it. In case of women's participation in WMCA election 48% said that there was women's active participation, 16% denied and only 36% answered they do not know about it.	To know women's participation in monitoring and evaluation twenty five persons were interviewed applying two indicator and one general information. In case of women's participation in income generating activities it was known that 84% women were involved in income generating activities, none denied and only 16% answered they do not know about it. In case of women's participation in WMCA election 52% said that there was women's active participation, 24% denied and only 24% answered they do not know about it.	To know women's participation in monitoring and evaluation twenty five persons were interviewed applying two indicator and one general information. In case of women's participation in income generating activities it was known that 76% women were involved in income generating activities, none denied and only 24% answered they do not know about it. In case of women's participation in WMCA election 52% said that there was women's active participation, 16% denied and only 32% answered they do not know about it.
Discussion	According to the analysis of data we find that in case of Brajamul VitiKhal subproject there was not too much effective participation of women in O&M subcommittee.	According to the analysis of data we find that in case of Gumuria subproject there was effective participation of women in Monitoring & evaluation subcommittee.	According to the analysis of data we find that in case of Purba Sarail Madai subproject there was not effective participation of women in O&M subcommittee.
Weakness	Due to lack of proper personnel data are not collected regularly. Social conflict among the rival groups sometimes hamper the monitoring activities.	Due to lack of proper personnel data are not collected regularly. Social conflict among the rival groups sometimes hamper the monitoring activities.	Due to lack of proper personnel data are not collected regularly. Social conflict among the rival groups sometimes hamper the monitoring activities.
Strength	Project and GOB staffs are playing vital role in this regard. Beneficiaries are also very aware about monitoring.	Project and GOB staffs are playing vital role in this regard. Beneficiaries are also very aware about monitoring.	Project and GOB staffs are playing vital role in this regard. Beneficiaries are also very aware about monitoring.
Scope of improvement	IWRM Unit of LGED playing vital roles in monitoring activities.	IWRM Unit of LGED playing vital roles in monitoring activities.	IWRM Unit of LGED playing vital roles in monitoring activities.

5.6 Summary and discussion on 33 Indicators of the subprojects

Table 5.2 was again further modified as per selected indicators (33 indicators for the study) for all three subprojects and Table 5.4 has been developed as a summary table, where only positive replies are taken into considerations for each indicator of all subprojects under study.

The Table 5.4 helps us to clarify and understand the active participation (voice and decision) of local beneficiary people (gender) and their effective contributions in all the six project cycles. It also indicates the gradual improvement of gender inclusion in each subproject as phase wise. Table 5.4 is to reflect gender mainstreaming at a glance in three subprojects under study through six project cycles.

Table 5.6: Summary table of positive responses as per 33 Indicators of three subprojects

Sl. No	Indicator	Positive response by respondents (%)		
		Brajamul Bhati Khal	Gumuria	Purba Sarai Madai
Subproject identification/ selection				
01	Communication with LGI and LGED to send subproject proposal	12	28	48
02	Attending in project briefing orientation	32	56	72
Subproject formulation and planning				
03	Reconnaissance Survey	72	80	88
04	Feasibility Study	68	88	92
05	Participatory Rural Appraisal (PRA)	80	88	96
06	Women participation in Group Discussion (GD)	76	84	96
07	Women participation in Focus Group Discussion (FGD)	72	92	96
08	Survey	60	76	96
09	Rights of water for all users	52	48	48
10	Voice for rights	28	40	48
Design and Water Management cooperative Association (WMCA) Formation				
11	Attending in the meeting	60	80	92
12	Design discussion meeting	64	76	88
13	33% Women member in WMCA	80	92	96
14	Giving opinion to designer	20	44	68
15	Pre-evaluation of local resources	12	20	32
16	Bye –law drafting of WMCA	44	60	76

17	Attending in drawing understanding meeting	52	68	80
Implementation of subproject				
18	LCS member to implement earth work	80	96	96
19	Equal wage rate for women and men	64	80	80
20	Attending in LCS training	56	60	64
21	Separate toilet facility for women workers	40	76	92
22	Member of construction observation committee for quality control and problem solving	44	36	44
Operation and Maintenance (O&M)				
23	Member of O&M subcommittee	60	80	8
24	Active participation for O&M fund collection	64	84	24
25	Need assessment for O&M	76	88	12
26	Joint work through	88	92	4
27	O&M related training	72	84	12
28	Voice of women, participation in post evaluation	68	84	36
29	Production of poverty reduction plan book	48	72	60
30	Gender awareness	60	84	68
31	Environment awareness	52	64	44
Monitoring and Evaluation				
32	Income Generating Activities (IGA)	64	84	76
33	WMCA election for leadership	48	56	52

5.6.1 Discussions on 33 Indicators of three subprojects

The findings of the comparative summary Table 5.4 are graphically presented and discussions are made as per indicator to clarify the improvements of project performance in light of gender mainstreaming. Indicator wise comparative analysis in light of each indicator is discussed in the following sections.

5.6.2 Subproject identification/selection

Indicator 1: Communication with LGI and LGED to send subproject proposal

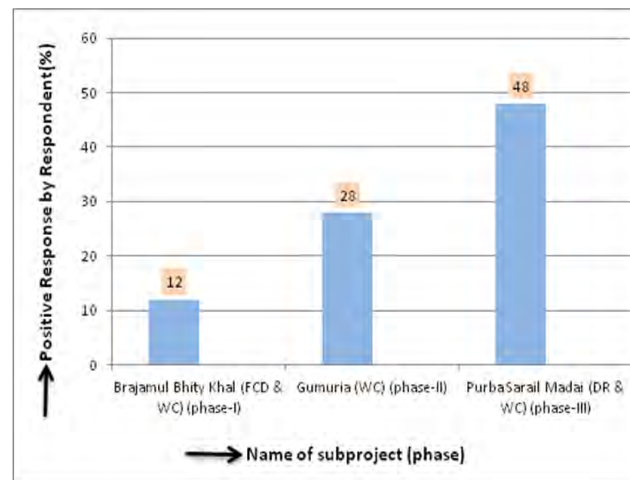


Figure 5.1: Graphical representation of Response by Respondent for Indicator-1

Two questions were used to quantify the communication with LGI and LGED. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 12%, for Gumuria in phase-II was 28% and for Purba Sarail Madai in phase-III was 48%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator-2: Attending in project briefing orientation

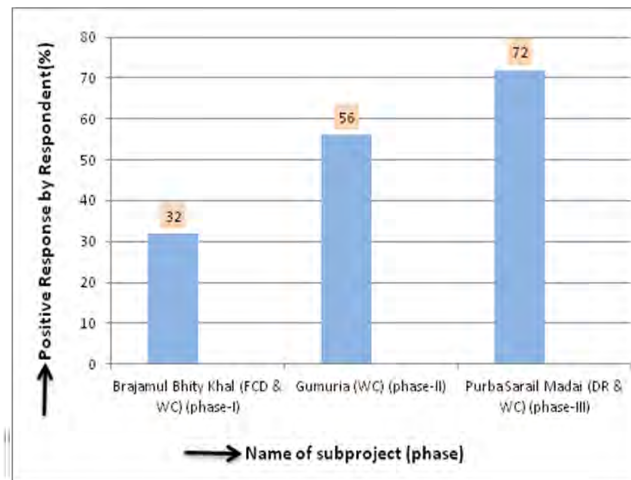


Figure-5.2: Graphical representation of Response by Respondent for Indicator-2

Three questions were used to quantify the attending in project briefing orientation. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 32%, for Gumuria in phase-II was 56% and for Purba Sarail Madai in phase-III was 72%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

5.6.3 Subproject formulation and planning

Indicator 3: Reconnaissance Survey

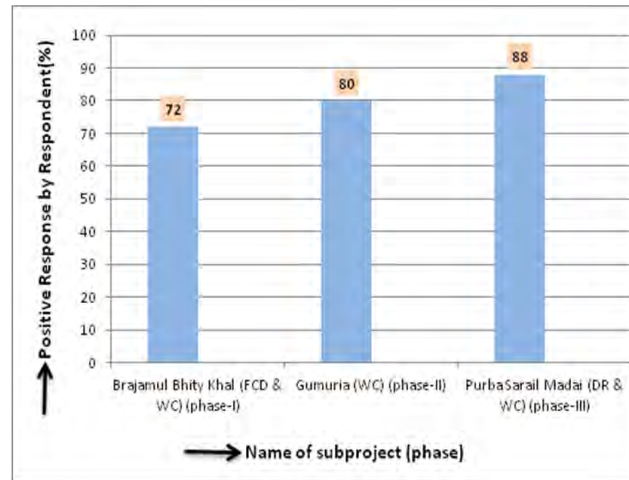


Figure-5.3: Graphical representation of Response by Respondent for Indicator-3

Two questions were used to quantify the reconnaissance survey. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 72%, for Gumuria in phase-II was 80% and for Purba Sarail Madai in phase-III was 86%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator-4: Feasibility Study

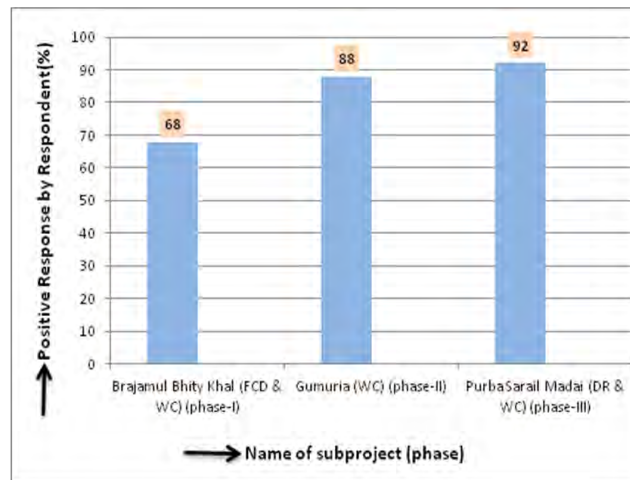


Figure-5.4: Graphical representation of Response by Respondent for Indicator-4

Two questions were used to quantify the feasibility study. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 68%, for Gumuria in phase-II was 88% and for Purba Sarail Madai in phase-III was 92%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 5: Participatory Rural Appraisal (PRA)

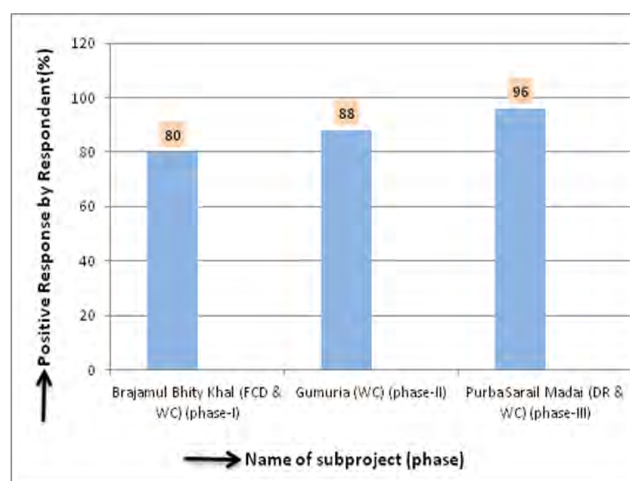


Figure 5.5: Graphical representation of Response by Respondent for Indicator-5

One question was used to quantify the Participatory Rural Appraisal (PRA). Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 80%, for Gumuria in phase-II was 88% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 6: Group Discussion (GD)

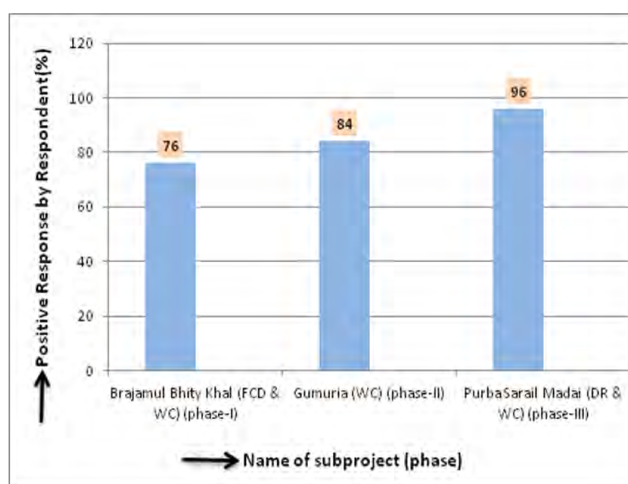


Figure 5.6: Graphical representation of Response by Respondent for Indicator-6

One question was used to quantify the Group Discussion (GD). Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 76%, for Gumuria in phase-II was 84% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 7: Focus Group Discussion (FGD)

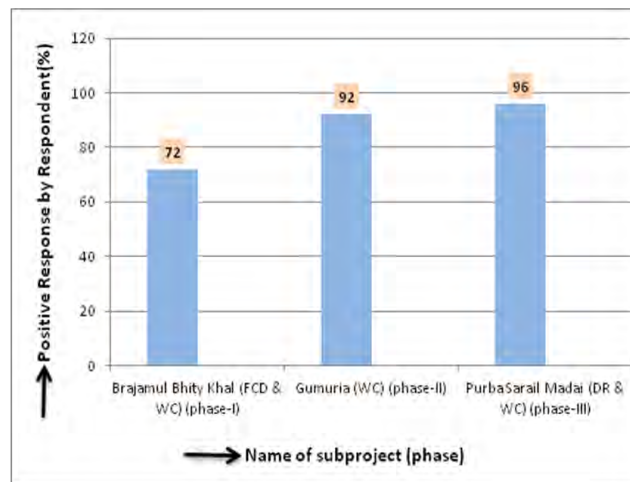


Figure 5.7: Graphical representation of Response by Respondent for Indicator-7

One question was used to quantify the Focus Group Discussion (FGD). Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 72%, for Gumuria in phase-II was 92% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 8: Survey

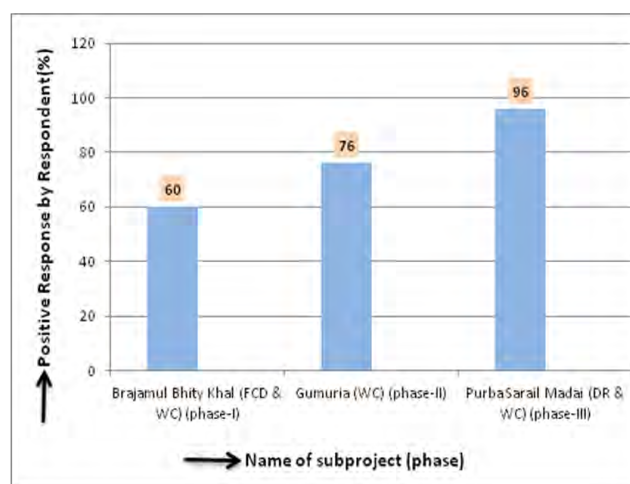


Figure 5.8: Graphical representation of Response by Respondent for Indicator-8

One question was used to quantify the Survey. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 60%, for Gumuria in phase-II was 76% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to more the driving force of awareness of officials and beneficiaries.

Indicator 9: Rights of water for all users

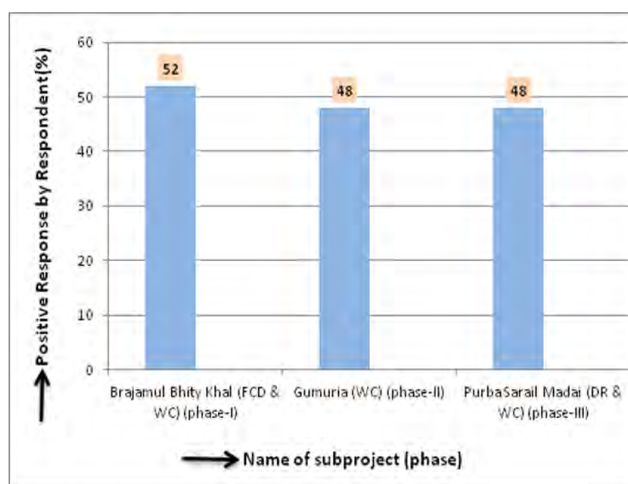


Figure 5.9: Graphical representation of Response by Respondent for Indicator-9

One question was used to quantify the Rights of water for all users. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase I was 52%, for Gumuria in phase II was 48% and for Purba Sarail Madai in phase III was 48%. In phase wise observation it is found that the involvement of women in respect of saying rights of water for all users is declining. It may occur due to less awareness of officials and ignorance of beneficiaries. Women should be aware about their right by capacity building through awareness build up trainings.

Indicator 10: Voice for rights

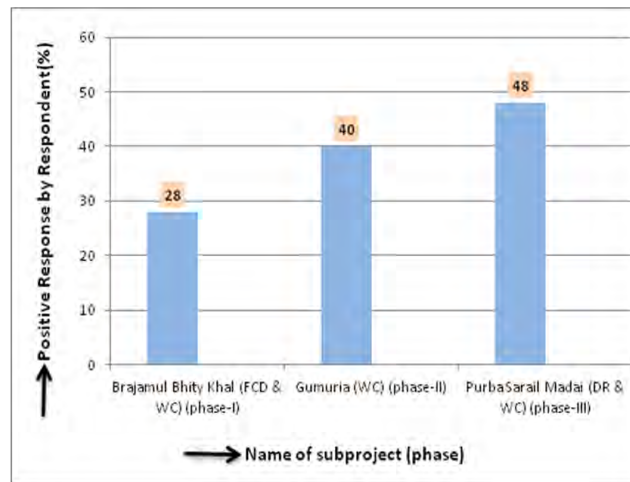


Figure 5.10: Graphical representation of Response by Respondent for Indicator-10

Two questions were used to quantify the Voice for rights. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 28%, for Gumuria in phase-II was 40% and for Purba Sarail Madai in phase-III was 48%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

5.6.4 Design and Water Management Cooperative Association Formation

Indicator 11: Attending in the meeting

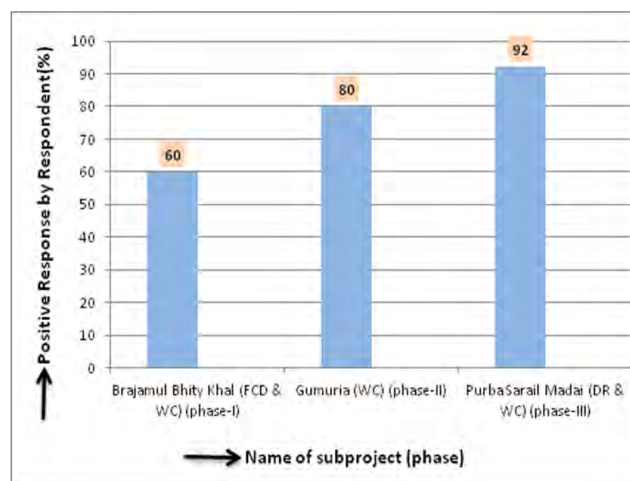


Figure 5.11: Graphical representation of Response by Respondent for Indicator-11

One question was used to quantify the Attending in the meeting. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 60%, for Gumuria in phase-II was 80% and for Purba Sarail Madai in phase-III was 92%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 12: Design discussion meeting

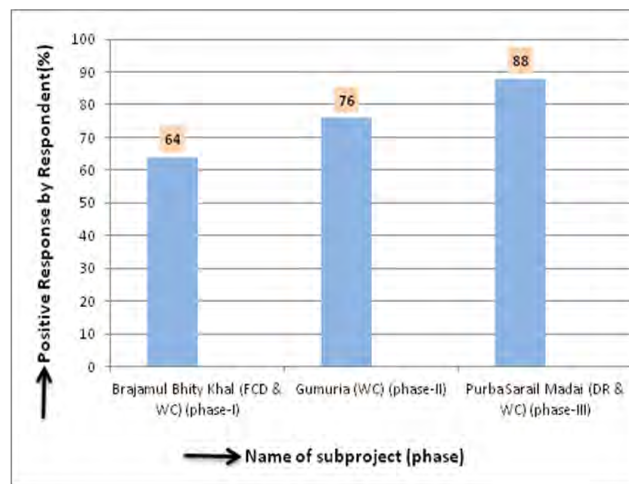


Figure 5.12: Graphical representation of Response by Respondent for Indicator-12

One question was used to quantify the Design discussion meeting. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 64%, for Gumuria in phase-II was 76% and for Purba Sarail Madai in phase-III was 88%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 13: 33% women member in WMCA

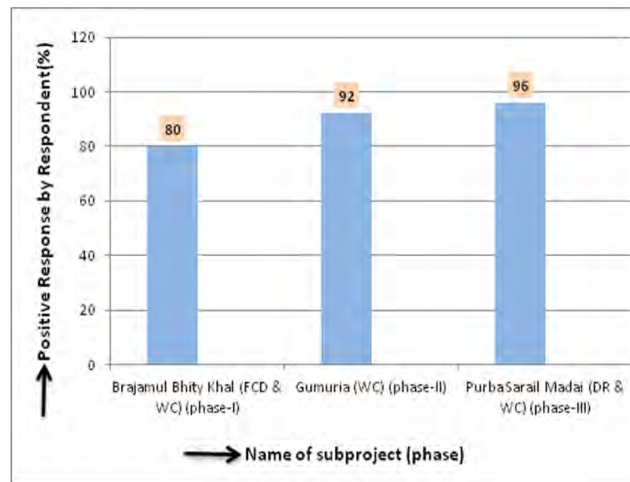


Figure 5.13: Graphical representation of Response by Respondent for Indicator-13

One question was used to quantify the 33% women member in WMCA. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 80%, for Gumuria in phase-II was 92% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 14: Giving opinion to designer

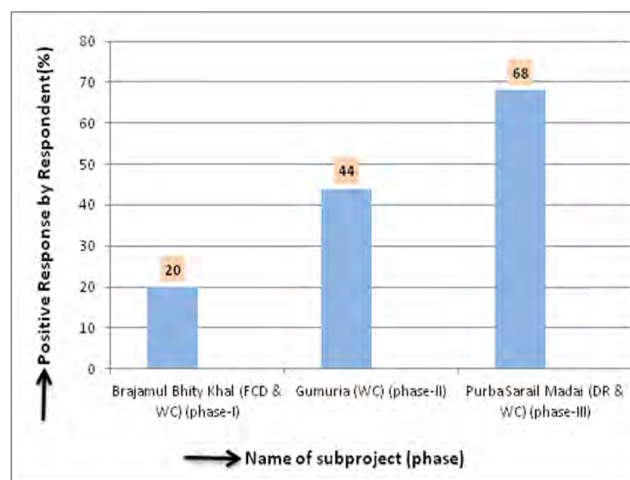


Figure 5.14: Graphical representation of Response by Respondent for Indicator-14

One question was used to quantify the Giving opinion to designer. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 20%, for Gumuria in phase-II was 44% and for Purba Sarail Madai in phase-III was 68%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 15: Pre-evaluation of local resources

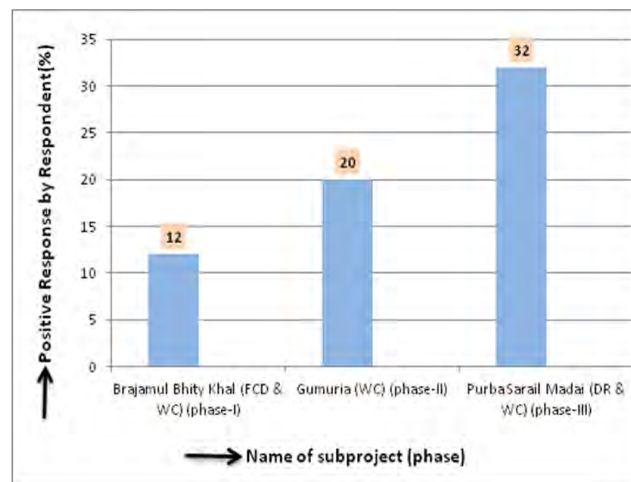


Figure 5.15: Graphical representation of Response by Respondent for Indicator-15

One question was used to quantify the Pre-evaluation of local resources. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 12%, for Gumuria in phase-II was 20% and for Purba Sarail Madai in phase-III was 32%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 16: Bye law drafting of WMCA

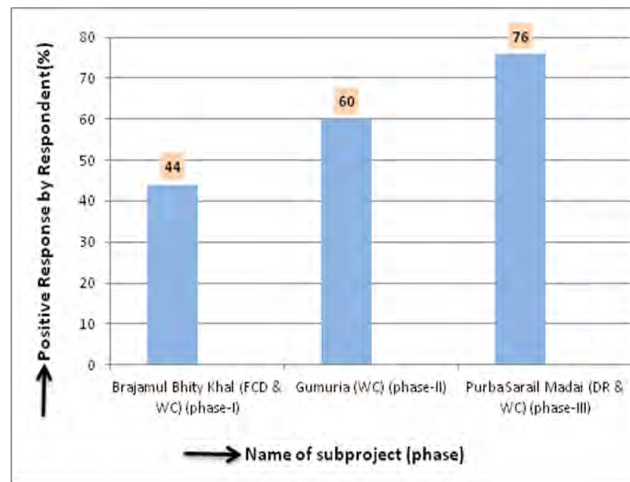


Figure 5.16: Graphical representation of Response by Respondent for Indicator-16

Four questions were used to quantify the Bye law drafting of WMCA. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 44%, for Gumuria in phase-II was 60% and for Purba Sarail Madai in phase-III was 76%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 17: Attending in drawing understanding meeting

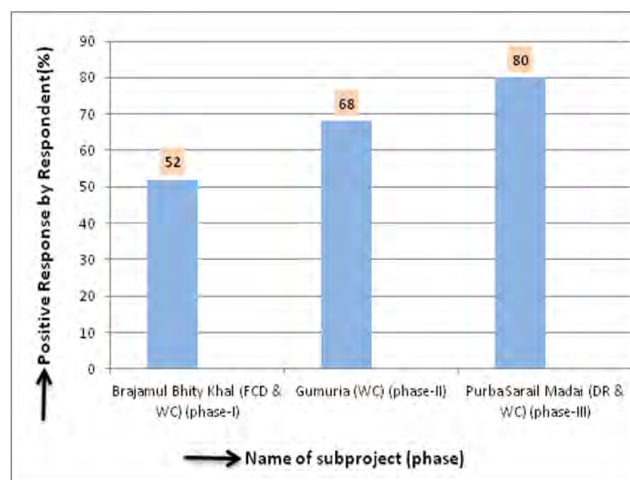


Figure 5.17: Graphical representation of Response by Respondent for Indicator-17

Two questions were used to quantify the Attending in drawing understanding meeting. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 52%, for Gumuria in phase-II was 68% and for Purba Sarail Madai in phase-III was 80%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

5.6.5 Implementation of subproject

Indicator 18: LCS members to implement earth work

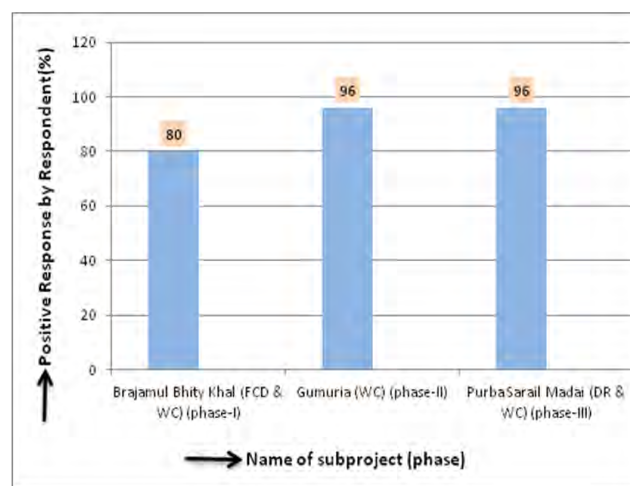


Figure 5.18: Graphical representation of Response by Respondent for Indicator-18

One question was used to quantify the LCS members to implement earth work. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 80%, for Gumuria in phase-II was 96% and for Purba Sarail Madai in phase-III was 96%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 19: Equal wage rate for men and women

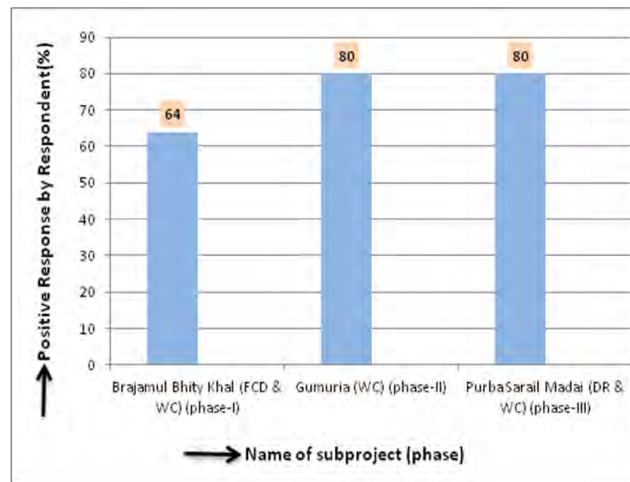


Figure 5.19: Graphical representation of Response by Respondent for Indicator-19

One question was used to quantify the Equal wage rate for men and women. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 64%, for Gumuria in phase-II was 80% and for Purba Sarail Madai in phase-III was 80%. It is found that the involvement of women in phase wise observation is on increasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 20: Attending in LCS training

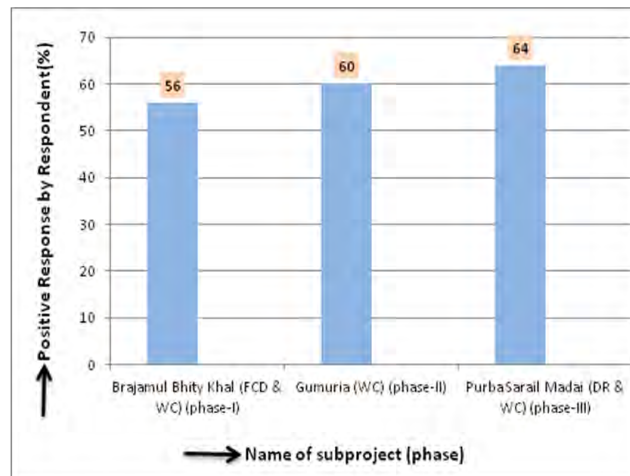


Figure 5.20: Graphical representation of Response by Respondent for Indicator-20

Four questions were used to quantify the Attending in LCS training. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 56%, for Gumuria in phase-II was 60% and for Purba Sarail Madai in phase-III was 64%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 21: Separate toilet facility for women workers

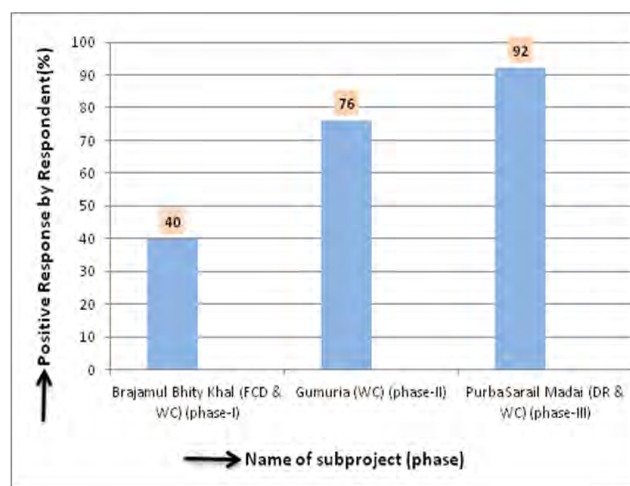


Figure 5.21: Graphical representation of Response by Respondent for Indicator-21

One question was used to quantify the Separate toilet facility for women workers. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 40%, for Gumuria in phase-II was 76% and for Purba Sarail Madai in phase-III was 92%. It is found that the involvement of women in phase wise observation is on creasing trend and improvement in gender participation is quite visible. It is occurring due to the driving force of more awareness of officials and beneficiaries.

Indicator 22: Member of construction observation committee for quality control and problem solving

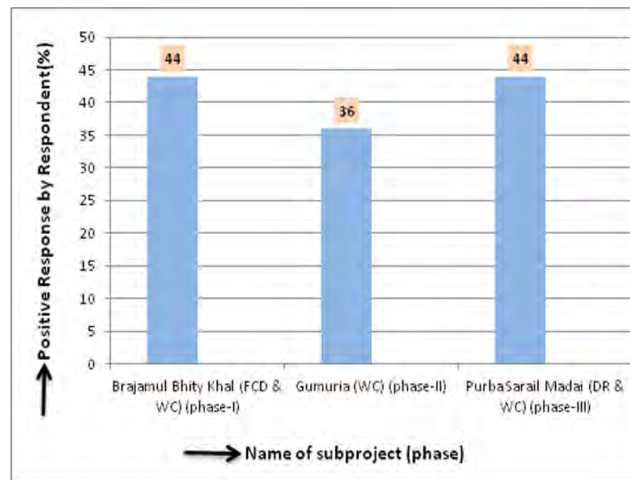


Figure 5.22: Graphical representation of Response by Respondent for Indicator-22

One question was used to quantify the Member of construction observation committee for quality control and problem solving. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 44%, for Gumuria in phase-II was 36% and for Purba Sarail Madai in phase-III was 44%. In phase wise observation it is found that the involvement of women in construction observation committee is not increasing i.e stagnant. It may be due to less awareness or non-awareness of officials and beneficiaries.

5.6.6 Operation and Maintenance (O&M)

Indicator 23: Member of O&M sub-committee

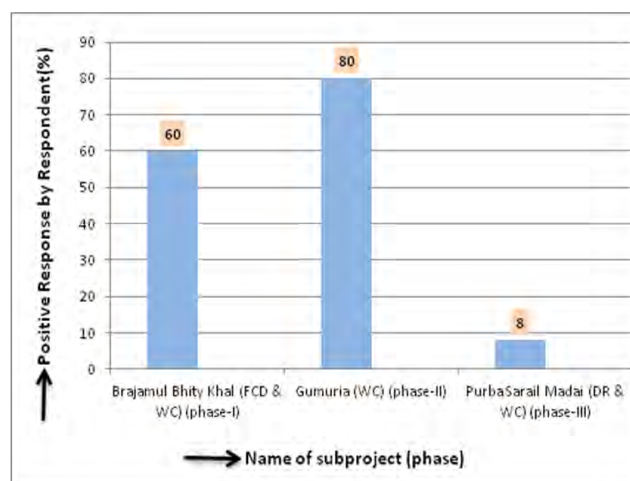


Figure 5.23: Graphical representation of Response by Respondent for Indicator-23

Three questions were used to quantify the Member of O&M sub-committee. Respondents responded positively in all subprojects but with different percentages like for Brajamul Bhity Khal in phase - I was 60%, for Gumuria in phase-II was 80% and for Purba Sarail Madai in phase-III was 8%. In phase wise observation it is found that the involvement of women in O&M subcommittee is not increasing regularly and dropped down in third phase. It may due to that the subproject is not in O&M situation.

Indicator 24: Active participation for O&M fund collection

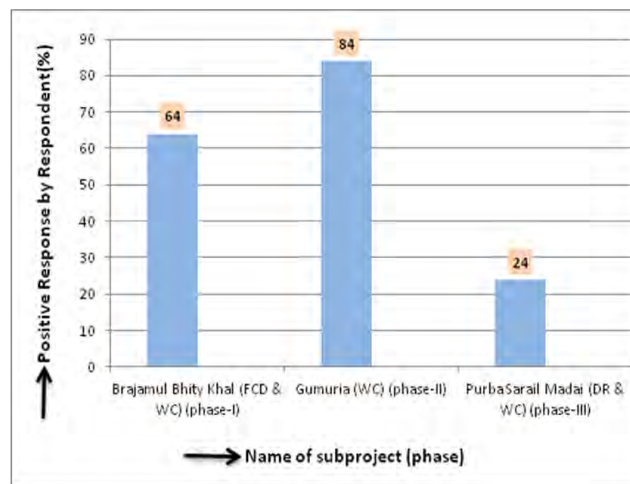


Figure 5.24: Graphical representation of Response by Respondent for Indicator-24

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 64%, Gumuria in phase-II was 84% and Purba Sarail Madai in phase-III was 24%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in O&M fund collection is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in O&M situation.

Indicator25: Need assessment for O&M

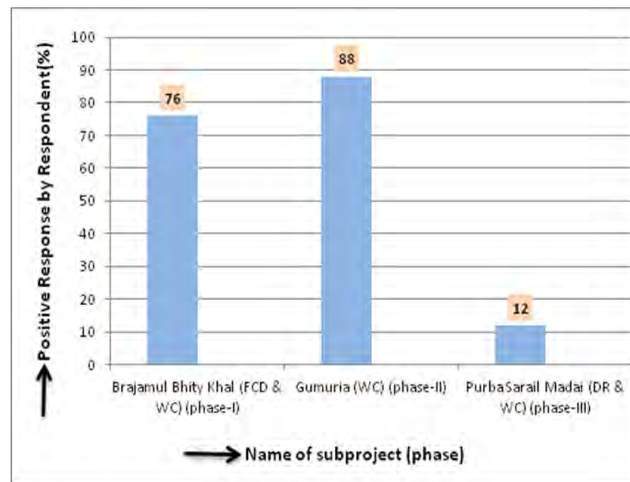


Figure 5.25: Graphical representation of Response by Respondent for Indicator-25

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 76%, Gumuria in phase-II was 88% and Purba Sarail Madai in phase-III was 12%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in need assessment of O&M fund collection is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in O&M situation.

Indicator 26: Joint Work Through

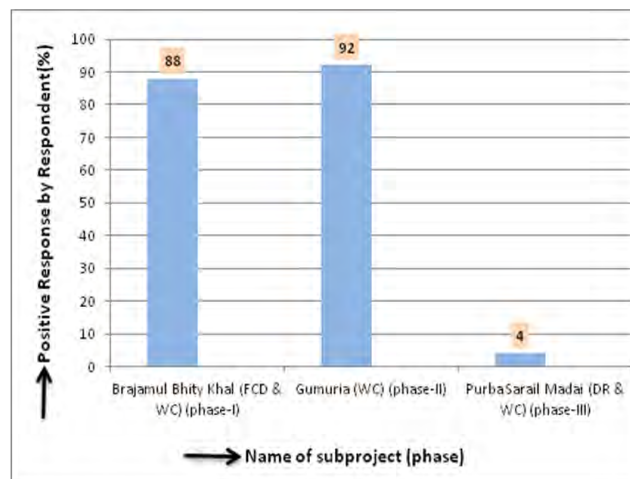


Figure 5.26: Graphical representation of Response by Respondent for Indicator 26
One question was used to quantify this. Brajamul Bhity Khal in phase-I was 88%, Gumuria in phase-II was 92% and Purba Sarail Madai in phase-III was 4%. Respondents were responded as positive. In phase wise observation it is found that the

involvement of women in joint work through is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in O&M situation.

Indicator 27: O&M related training

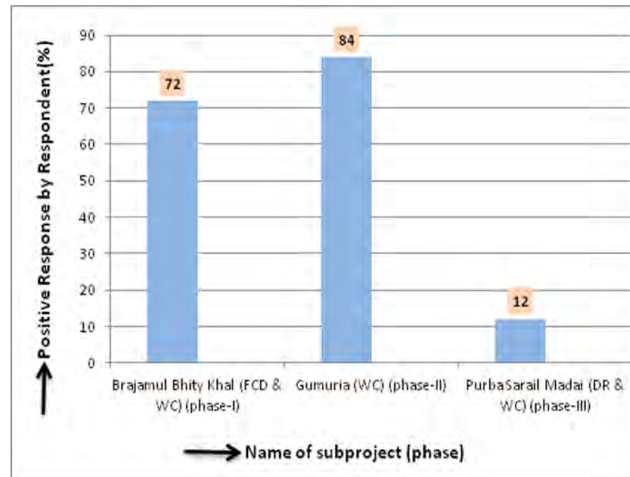


Figure-5.27: Graphical representation of Response by Respondent for Indicator-27
 One question was used to quantify this. Brajamul Bhity Khal in phase-I was 72%, Gumuria in phase-II was 84% and Purba Sarail Madai in phase-III was 12%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in O&M related training is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in O&M situation.

Indicator 28: Voice of women, participation in post evaluation

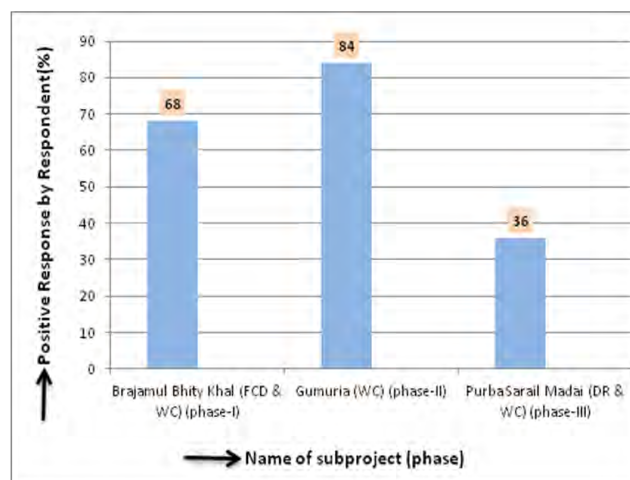


Figure 5.28: Graphical representation of Response by Respondent for Indicator 28

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 68%, Gumuria in phase-II was 84% and Purba Sarail Madai in phase-III was 36%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in participation in post evaluation is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in evaluation situation.

Indicator 29: Production of poverty reduction plan book

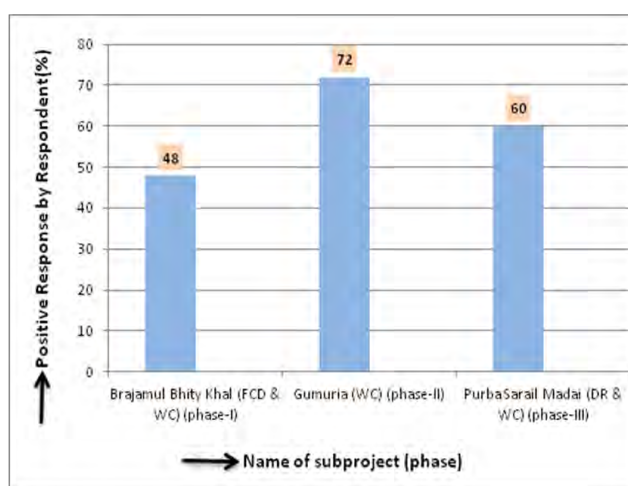


Figure 5.29: Graphical representation of Response by Respondent for Indicator 29

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 48%, Gumuria in phase-II was 72% and Purba Sarail Madai in phase-III was 60%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in participation in production of poverty reduction plan book is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in production of poverty reduction plan book situation yet.

Indicator 30: Gender awareness

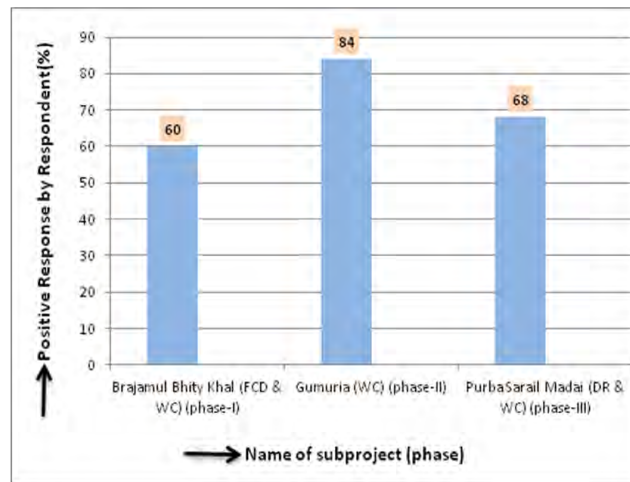


Figure 5.30: Graphical representation of Response by Respondent for Indicator 30

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 60%, Gumuria in phase-II was 84% and Purba Sarail Madai in phase-III was 68%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in gender awareness is increasing in phase I & II and decreasing in phase III. It may be due to less awareness or non-awareness of officials and beneficiaries.

Indicator 31: Environment awareness

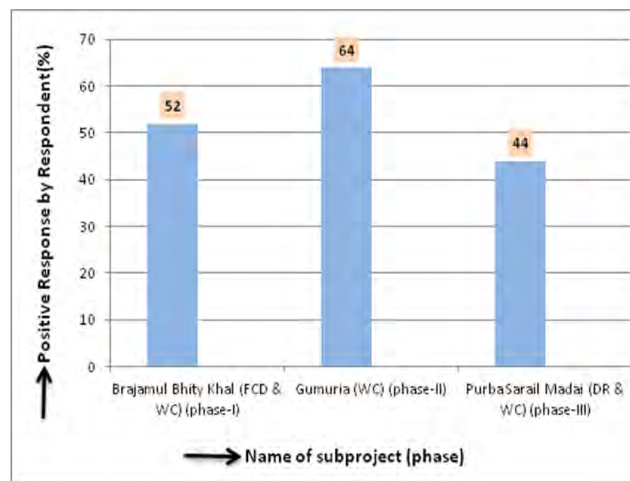


Figure 5.31: Graphical representation of Response by Respondent for Indicator 31

One question was used to quantify this. Brajamul Bhity Khal in phase-I was 52%, Gumuria in phase-II was 64% and Purba Sarail Madai in phase-III was 44%.

Respondents were responded as positive. In phase wise observation it is found that the involvement of women in environmental awareness is increasing in phase I & II and decreasing in phase III. It may be due to less awareness or non-awareness of officials and beneficiaries.

5.6.7 Monitoring and Evaluation

Indicator 32: Income generating activities

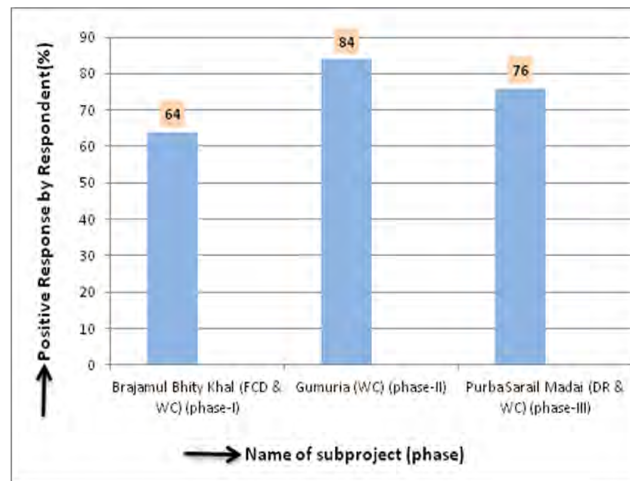


Figure 5.32: Graphical representation of Response by Respondent for Indicator 32

Seven questionnaire were used to quantify this. Brajamul Bhity Khal in phase-I was 64%, Gumuria in phase-II was 84% and Purba Sarail Madai in phase-III was 76%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in income generating activities is increasing in phase I & II and decreasing in phase III. It may be due to less awareness or non-awareness of officials and beneficiaries.

Indicator 33: WMCA election for leadership

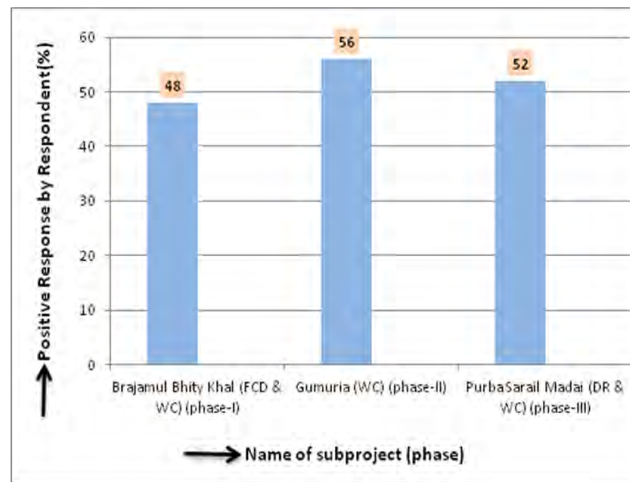


Figure 5.33: Graphical representation of Response by Respondent for Indicator 33

Three questionnaire were used to quantify this. Brajamul Bhity Khal in phase-I was 52%, Gumuria in phase-II was 56% and Purba Sarail Madai in phase-III was 52%. Respondents were responded as positive. In phase wise observation it is found that the involvement of women in WMCA election for leadership is increasing in phase I & II and decreasing in phase III. It may due to that the subproject is not in WMCA election for leadership situation yet.

5.7 Qualitative changes

10 (ten) general questionnaires of open type (Annexure-II) were formulated and developed to capture people's opinions, attitudes and feelings about inclusion of gender issues in subproject identification/selection, subproject formulation and planning, design and Water Management Cooperative Association (WMCA) formation, implementation of subproject, operation and maintenance (O&M), monitoring and evaluation, etc. 21 indicators from the questionnaire were formulated to find the qualitative changes in the subprojects and are mentioned in the Table 5.7.

Table 5.7: Qualitative changes occurred after implementation of subprojects

SI No.	Indicator	Observed Results
1.	Giving opinions	Women are involved and giving opinions in Subproject identification/selection, Subproject formulation and Planning, Design and Water Management Cooperative Association (WMCA) Formation, Implementation of subproject, Operation and Maintenance (O&M), Monitoring and Evaluation, and above gender relations through empowerment, etc.
2.	Attitudes and feelings	Women are proud as they are consulted in all stages of subproject cycles. They have begun to realize their importance in project activities. This made their feelings and attitudes so high.
3.	Participation	It is informed that women were actively participated in General Discussions (GD), Focus Group Discussions (FGD), Election of WMCA, Meetings of WMCA, LCS activities, O&M activities, based on the principle that men and women should be the agents of their own development, contributing their decisions and voices. All these issues of mainstreaming gender were focused during GD, FGD, KII to reveal the status of achievement of mainstreaming gender in the subproject activities of the SSWRDSP-I, II and III.
4.	WMCA	One third members are kept in WMCA executive body. The executive body is consisted of 12 members, where 4 members are female.
5.	School going students	It is observed that due to different awareness activities school going students increased after the sub-project implementation.
6.	Food habit	It is observed that due to increase of income after the sub-project implementation food habit changed.

7.	Housing pattern	It is observed that due to increase of income after the sub-project implementation housing pattern changed.
8.	Income	After the sub-project implementation income increased by labour employment opportunity increase, crop production increase, microcredit mobility increase, etc.
9.	Microcredit mobility	As the increase of WMCA's fund microcredit mobility increased.
10.	Position in family	By the discussion with the local people it is informed that the position of women in family secured.
11.	Evaluation	Husband values women more than before.
12.	Clothing pattern	As the increase of income clothing pattern changed. They purchase high valued clothes than before.
13.	Land purchase capacity	Due to the increase of income land purchase capacity increased.
14.	Voice in WMCA	Voice of women in WMCA increases day by day. They say their rights boldly in the WMCA's meetings.
15.	Election	After every three years WMCA election held. Now they are capable to face election individually.
16.	Voice	Women's voice in WMCA and in family increased.
17.	Problem solving	Now women are capable to give decision in problem solving activities in their family or in their community.
18.	Cropping pattern and intensity	After the sub-project implementation cropping pattern and cropping intensity changed. Diversified crop production increased, cropping intensity increased.
19.	IPM and fertilizer use	Due to agricultural training farmers adopted integrated pest management (IPM) instead of insecticides and use organic fertilizer instead of chemical fertilizer.
20.	LCS	Women and landless farmers are involved in earth work and plantation activities through labour contracting society (LCS).
21.	IGA	Different types of trainings like: (a) Orientation / Management, (b) Planning, Design and Construction, (c) Establishment/Management, (d) Operation and

		Maintenance, (e) Agriculture, (f) Fisheries, (g) Environment (h) Gender and Development, and (i) Demand lead training are given to beneficiaries. By these trainings they do different income generating activities (IGA) like homestead gardening, fingerling production, cow fattening, dry fish production, seed preservation, sewing, mushroom production, etc.
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5.7.1 Cycle wise qualitative analysis of subprojects

A combine phase wise comparative tabulation of all the issues concerned with mainstreaming gender were focused through general questionnaires reveal the gender status in six stages of subproject activities of the SSWRDSP I, II and III and shown in Table 5.8.

Table 5.8: Cycle wise qualitative analysis of subprojects

Name of Subprojects		
Brajamul Bhati Khal	Gumuria	Purba Sarai Madai
Subproject identification/ selection		
By focus group discussion (FGD) and personal interview it was known women of different socioeconomic status in the community took part in the selection of subproject and actively took part in project briefing orientation meeting.	By focus group discussion (FGD) and personal interview it was known that women of different socioeconomic status in the community did not take part in the selection of subproject and did not attend in project briefing orientation meeting.	By focus group discussion (FGD) and personal interview it was known women of different socioeconomic status in the community took part in the selection of subproject and actively took part in project briefing orientation meeting.
Subproject formulation and planning		
By focus group discussion (FGD) and personal interview it was known that women of different socioeconomic status in the community including UP member took part in the subproject formulation and planning. But their involvement was satisfactory in PRA not up to the mark in almost all activities e.g. GD and Reconnaissance survey, poor in survey and rights and very poor in voice for rights.	By focus group discussion (FGD) and personal interview it was known that women of different status in the community including UP member took part in almost all the steps of subproject formulation and planning. They also actively took part in all other activities.	By focus group discussion (FGD) and personal interview it was known women of different status in the community including UP member took part in the subproject formulation and planning. They also actively took part in all other activities.
Design and Water Management Cooperative Association (WMCA) formation		
By discussion with the participants it was known that women's were not only involved in the topics	By discussion with the participants it was known that women's were not only	By discussion with the participants it was known that women's were not only involved in the topics

analyzed in quantitative analysis but they were also involved in House hold survey, collection of beneficiaries contribution, share and savings etc.	involved in the topics analyzed in quantitative analysis but they were also involved in House hold survey, collection of beneficiaries contribution, share and savings etc. Furthermore 72% participants said that women's also took part in project design and implementation.	analyzed in quantitative analysis but they were also involved in house hold survey, collection of beneficiaries contribution, share and savings etc. Furthermore 72% participants said that women's also took part in project design and implementation.
Implementation of subproject		
By discussion with the participants it was known that women's were involved in the committee but they do not have proper facilities and do not participate actively in their activities.	By discussion with the participants it was known that women's were not only involved in the committee but also took part in agriculture, fisheries development activities and loan activities.	By discussion with the participants it was known that women's were not only involved in the committee but also took part in agriculture, fisheries development activities and loan activities.
Operation and Maintenance (O&M)		
By discussion with the participants it was known that they were not asked about the women's involvement in day to day maintenance, operation and emergency repair of the structures. The number of trained women on repair, maintenance and overall management of water schemes was not recorded.	By discussion with the participants it was known that they were not asked about the women's involvement in day to day maintenance, operation and emergency repair of the structures. The number of trained women on repair, maintenance and overall management of water schemes was not recorded.	By discussion with the participants it was known that they were not asked about the women's involvement in day to day maintenance, operation and emergency repair of the structures. The number of trained women on repair, maintenance and overall management of water schemes was not recorded.
Monitoring and Evaluation		
By different approaches before the participants it was known that women's were moderately involved in IGA activities, family maintenance, and improvement of food security status as well as economic situation. Women's took part in	By different approaches before the participants it was known that women's were involved in IGA activities, family maintenance, and improvement of food security status as well as economic situation. Women's took part in	By different approaches before the participants it was known that women's were involved in IGA activities, family maintenance, and improvement of food security status as well as economic situation. Women's took part in income generating activities.

5.8 Case studies as a part of qualitative analysis

As a part of qualitative analysis one case study from each subproject totaling to three case studies were carried out exclusively among income earning women benefitted especially by the subproject to assess the status of mainstreaming gender among voiceless and powerless groups and mentioned below.

5.8.1 Case Study on Brajamul Bhiti Khal subproject

Rozina Akter w/f Hasem Aii Mollah. Village - Laribari. Post- Mrigibazar. KaloKhal, Dist.- Rajbari is a member of WMCA from 1998. She is around 40 years old and the

proud mother of a daughter and a son. Her husband is a teacher of laribari registered primary school and also a member of WMCA. She is involved in household work and teaching. She was also the member of executive committee of WMCA for three terms with a gap period. She has no voice in case of decision making. But she has taken some trainings from different institutions like BARD, CZI and WMCA.



Photograph 5.1: Rozina Akter, Pangsha, Rajbari

She said, "I was married in 16 years old. I along with my husband, daughter and son, father-in-law, mother-in-law lived in a tiny cottage. Our economic condition was so poor like from hand to mouth. Because the small earnings of my husband and me (500X2 1000/00 Tk) was not well enough to bear the family expenditure. In 1998 when I came to know about WMCA then I became its member and got some training (Poverty reduction, Agriculture & fisheries etc.) through this WMCA."

"At first I got 10,00/00 Tk. as a Small loan from WMCA. By this money I leased in our family pond for my own by giving money to the other owners. Then I started fisheries in that pond and got profit. By this profit I owned 44 decimal land on rent for a year. Along with this land I cultivated onion in 110 decimal land and got 80 mounds of onion. Along with other crops grown in that year in my land were sold out at Tk. 2,00,000/00 (Onions were sold out at the price of 2,000/00 Tk/mound). From this money I bought 5 decimal land at Laribari bazar at the cost of 35,000/00 Tk. After 4 years I bought 18 decimal crop land at the cost of Tk. 13,000/00.

Later on I bought a power tiller by 55,000/00 Tk. Which I obtained from JFPR as a loan. I cultivated others land on rent along with my land. Thus I had an income . When this tiller became old I sold it out at 48.000/00 Tk. I made a building with 4 rooms at Laribari bazar by leasing out my own land. 2 rooms were on rent and rest two were used as a shop of rod and cement. Along with these three extension rooms were made which were used as a poultry shop. Now a days my yearly income is about 3,00,000/00 Tk. Recently I got a profit of Tk. 50,000/00 by rearing finger link in my pond." Now she collect seed from BADC office. She lives in two semipucca house instead of tinshed house. She has a tube well. Bathroom and toilet in her house. She has electricity from a NGO named Grameen Sourabidyut at the cost of Tk .49,000/00 only and enjoy television. Before the subproject single crop was grown there. But after the implementation of the subproject peoples are growing triple crops. This additional production have changes the socio-economic condition of the peoples. She is serving her neighbors with first aid and social judgments. Her husband always help and support her.

5.8.2 Case Study on Gumuria subproject

Mos. Shefali Khatun wife of Md. Rafiqul Islam, Village – Shimulkuchi, Post Office- Gazirvita, Upazila- Haluaghat, District- Mymensingh is a general member of WMCA since 2006. She is around 38 years old and the proud mother of one daughter and three sons. Her husband is a small farmer and she is a house wife. Her husband is also a member of WMCA. They have only 1.50 acre cultivated land. Before sub-project implementation they got only one crop per year. Her family members are seven. They have to spend their time hand to mouth.



Photograph 5.2: Mos. Shefali Khatun, Haluaghat, Mymensingh

After sub-project implementation they get three crops every year, their pond remain full of water all over the year. In 2010 she received a loan of Tk.5000 from WMCA. She invested it in fish production in her pond. After a year she got Tk.15000 excluding all expenditures. Further she invested Tk.4000 for fish production in her pond. After one year she got Tk.32000 excluding all expenditures.

Now she buy a cow, which gives her milk. She cultivate vegetables all over the year. Milk and vegetables give her daily cash. She can now entertain her family easily. She sends her children into the school. She is changing her housing pattern. Her husband always help and support her. She is now evaluated by her family and neighbours. People call her to solve minor problems. She took some trainings of IGA activities and different awareness development by WMCA, LGED and NGO.

5.8.3 Case Study on Purba Sarail Madai subproject

Ms. Chanu Bala Sarker wife of Mr. Proveen Sarker, Village – Radha Nagar, Post Office- Punat, Upazila- Kalai, District- Joyjpurhat is a general member of WMCA since 2010. She is around 28 years old and the proud mother of only one daughter. Her husband is a day labour and share cropper and she is a house wife. They have only 3 decimal land for a house only. She works in her house and harvest potato during its harvesting period. Thus they would spend their lives from hand to mouth.



Photograph 5.3: Ms. Chanu Bala Sarker with her husband and son, Kalai, Joypurhat

In 2011 she received a loan of Tk.5000 from WMCA. With this loan her husband cultivated 33 decimal (1 Bigha) for potato as a share cropper. From this they got Tk.20000. By this she buy two oxen for fattening. She gradually recovered the loan and took another Tk.10000 loan from WMCA. By this money she took 20 decimal land as lease. Paddy and potato cultivated in this land. She got near about 16 mounds of paddy. She also earned by sewing 'Khantha', poultry, homestead gardening and working in other land during harvesting period.

She has a tin shed house. She sends her daughter in a primary school. Before sub-project implementation they got only one crop per year. After sub-project implementation they get three crops every year. Her husband always helps and supports her. She is now evaluated by her family and neighbours. People call her to solve minor problems. She took some trainings of IGA activities and different awareness development by WMCA, LGED and NGO.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The following conclusions are drawn from the study:

1. A lot of scopes of improvement are there in all gender and water related policy, strategy and action plan of GoB documents to mainstreaming gender.
2. In subproject identification/selection, women participation is not satisfactory. The trend of gender improvement is gradually getting upward. In project briefing orientation attendance of women arrival is satisfactory. More women are involved in phase-III than phase-I.
3. In subproject formulation and planning women participation is very satisfactory. The gradual upward trend has been found. More women are involved in phase-III than phase-I.
4. The right of water and voice for rights, women are less aware.
5. In Design and Water Management Cooperative Association (WMCA) formation women participation is very satisfactory.
6. In Implementation of subproject women participation is very satisfactory especially in LCS works. Women members under construction observation committee for quality control and problem solving, women involvement is very poor in all the phases.
7. In operation and maintenance (O&M), women participation is very satisfactory in Phase-I and Phase-II. Women participation in Phase-III operation and maintenance (O&M) not yet started. Women members are more involved in different awareness program and training activities in Phase-III.
8. In monitoring and evaluation phase of projects, women participation is very satisfactory in all phases for IGA and WMCA election for leadership.
9. Water professionals, gender professionals, LGED officials, consultants, designers or planners, etc. are involved in all cycles of a sub-project. The officials do not take gender considerations as tokenism in water resource development projects. Here participatory and bottom up approaches are followed among all phases.

6.2 Recommendations

1. National Sustainable Development Strategy (Revised), 2010-2021, gender issues are highlighted in most of the sectors. It can be applied properly to achieve mainstreaming gender.
2. BWDB's gender strategy and LGED's gender strategy and action plan should be adopted sincerely.
3. During sub-project proposal, women participation should be increased.
4. During construction activities, participation of women for observation should be increased.
5. In water right and decision making and in leadership development women should be involved more.
6. Women should be more aware about local resource and its utilization.
7. Enhancement of women's access to financial services, capacity development, in O&M committee should be done by allocating a minimum quota for women.
8. Gender awareness training from WMCA through LGED/NGO should be provided to local male representatives/leaders so that they would show respect to women at all levels and thus to increase women's image.
9. To increase the number of female member in all water related activities as well as to come out from homes and to involve in water management, some incentives from WMCA's micro-credit program can be provided specially for the destitute women.
10. At least 33% female chairpersons should be ensured by making amendment in project guideline regarding WMCA operation, to strengthen the women's position in managing committee as well as in sub-committee.

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