



**Bangladesh Water Development Board (BWDB)**



**Kingdom of the Netherlands**



**Department of Agricultural Extension (DAE)**

**Embassy of the Kingdom of the Netherlands (EKN) Dhaka, Bangladesh**



# **Impact of LCS Work on Poverty Reduction and Women's Empowerment**



**Socioconsult Ltd.**  
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# Impact of LCS Work on Poverty Reduction and Women's Empowerment

May 2020

## Blue Gold Program

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## Glossary

BBS	Bangladesh Bureau of Statistics
BWDB	Bangladesh Water Development Board
CALIP	Climate Adaptation and Livelihood Protection
CCRIP	Coastal Climate Resilient Infrastructure Project
CDF	Community Development Facilitator
DWO	Detailed work order
FFS	Farmers' Field School
FHH	Female headed household
GDP	Gross Domestic Product
GoB	Government of Bangladesh
HH	Household
HILIP	Haor Integrated Livelihood Improvement Project
GPWM	Guidelines for Participatory Water Management
IFAD	International Fund for Agricultural Development
IGA	Income generating activity
LCS	Labour Contracting Society (also: Landless Contracting Society)
LGED	Local Government Engineering Department
MoLGRDC	Ministry of Local Government Rural Dev. and Cooperatives
MIDPCR	Market Infrastructure Development Project in Charland Regions
MoWR	Ministry of Water Resources
NWPo	National Water Policy
PWMR	Participatory Water Management Rules
FRMP	Forestry Resources Management Project
RMRSU	Rural Maintenance and Road Safety Unit (of LGED)
SO	Sectional Officer
TA	Technical Assistance
WMA	Water Management Association
WMG	Water Management Group
WMO	Water Management Organization
XEN	Executive Engineer

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## CHAPTER ONE: INTRODUCTION

### 1.1 Labor Contracting Society (LCS): An Introduction

The economy of Bangladesh largely depends on agriculture, and its agriculture largely depends upon the rainfall received during the summer monsoon, and availability of water for agriculture during dry winter season. The topography, rainfall pattern, and the river regime are ideal for agriculture. However, too much water in monsoon and too little water in dry season make Bangladesh highly susceptible to a number of water related hazards, like flood and droughts, which often turn into catastrophe causing immense damages to lives and livelihoods of the people. Structural solutions towards food control, flood mitigation, flood management, irrigation and drainage have been given emphasize through public investment in Bangladesh for decades. The structural solutions to be effective required legal systems, policies and institutions for management in place.

In Bangladesh, the water resources have historically been dealt with by a number of public sector agencies under different Ministries. The principal agencies include Bangladesh Water Development Board (BWDB) under the Ministry of Water Resources (MoWR), and the Local Government Engineering Department (LGED) under the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C), among others.

National Water Policy (NWPo) by GoB was declared in January 1999. The NWPo through its various provisions emphasized the issue of participatory water management<sup>1</sup> and highlighted the importance of stakeholder<sup>2</sup> participation<sup>3</sup>. Through a Notification issued by MoWR in 1999, an Inter-Agency Task Force was constituted. Synthesizing all the experiences of the concerned implementing agencies with respect to participatory water management, common **Guidelines for Participatory Water Management (GPWM)** for all agencies working in the water sector was prepared by the Task Force. The GPWM was approved by the Executive Committee of the National Water Council (ECNWC) and issued by MoWR in 2000 ‘to avoid conflicts, duplications and to accommodate flexibility, integrity and complementarities’ (GPWM, 2000) among agencies.

In 2014, the MoWR issued Participatory Water Management Rules through a gazette notification, which is now known as PWMR, 2014. The PWMR, 2014 is applicable to the projects of BWDB. Both GPWM, 2000 and PWMR, 2014 complement each. The GPWM, 2000 and PWMR, 2014 have elaborated the types and levels of water management organization, marked their responsibilities and provided directives to get these local stakeholder bodies to be institutionalized. ‘To be meaningful and sustainable’ (GPWM,2000), the institutional mechanism

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<sup>1</sup> Participatory Water Management is a process by which the local stakeholders are directly and actively involved in identification, planning, design, implementation, operation and maintenance and evaluation of a water resource project/sub-project/scheme (GPWM, 2000).

<sup>2</sup> Stakeholders include all individuals, groups and agencies involved with the water resource projects/sub-projects/schemes (GPWM, 2000).

<sup>3</sup> Stakeholder participation include participation of all stakeholders, individually or collectively at all stages of project cycle (GPWM, 2000).

of local stakeholder participation in water management involve formation of different types of Water Management Organization (WMO)<sup>4</sup>, such as, Water Management Group (WVG)<sup>5</sup>, Water Management Association (WMA)<sup>6</sup> and Water Management Federation (WMF)<sup>7</sup> depending on the size and complexity of the project/sub-project/scheme.

BWDB implements its projects in light of these guideline and rule, which create provision to engage local poor men and women in construction and maintenance of small-scale infrastructure, especially the earthwork<sup>8</sup>. Recognizing that Bangladesh having one of the highest population densities in the world, agencies like BWDB and LGED have been promoting labor-based technology<sup>9</sup> ‘to create employment opportunities at local level and use local materials in construction and maintenance to optimize the project implementation cost with preserving the desired quality’.

To facilitate this process of local people’s engagement in construction /maintenance of small infrastructure development scheme, the Public Procurement Act, 2006<sup>10</sup>, and Public Procurement Rule, 2008, have endorsed ‘Direct Contract’ with Labor Contracting Society (LCS) consisting of a group of landless men and/or women from the local community ‘under Direct Procurement Method’ (Ministry of Planning, 2006; Ministry of Planning, 2008). The concept is to bypass the traditional mode of contracting to facilitate involvement of local people where the poor members from the neighbourhoods directly benefit from development projects. A public procurement entity (here, BWDB) has got the legal mandate to directly make contracts with local people/community in a bid towards their poverty alleviation through creating employment for the extremely disadvantaged segment of the community.

The Labor Contracting Society (LCS), also called ‘Landless Contracting Society’, exemplifies the use of groups of disadvantaged rural people, including ultra-poor women, living near the construction sites to undertake small scale infrastructure construction/ development work where unskilled labors can be used, so that the benefits of employment are accrued by the poor. The main objective of LCS activities is to provide employment and income generating

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<sup>4</sup> The common name of organization of the local stakeholders of a water resource project/sub-project/scheme (GPWM, 2000)

<sup>5</sup> The organization of the **local stakeholders at the lowest level** for each smallest hydrological unit or social unit (para/village) of the water resource project/sub-project/scheme (GPWM, 2000).

<sup>6</sup> The organization of the **local stakeholders either at the mid level for each sub-system or at the apex level** of water resource project/sub-project/scheme (GPWM ,2000)

<sup>7</sup> The organization of the **local stakeholders at the apex level** of the water resource project/sub-project/scheme (GPWM, 2000). WMFs are not formed in the BGP area.

<sup>8</sup> GPWM, 2000; Part-1: section 4.5. PWMR, 2014; Chapter 2: section 3.3.8 and Chapter 7.18; Chapter 6.

<sup>9</sup> LGED website: <http://www.lged.gov.bd/LGEDAboutUS.aspx>, accessed on 08 July 2017.

<sup>10</sup> It is to be borne in mind that LGED, as a formal public sector development entity, initiated the engagement of LCS Groups about a quarter century earlier than the first official legal mandate is provided to any such public sector development entity.

opportunities to the rural poor men and women, ensure fair wage and achieve high quality of construction work. Since the eighties, the LCS based construction activities have been proved to be an important source of livelihood for large numbers of rural poor women and men in Bangladesh during the lean employment period, when agriculture offers limited opportunities for income generation.

The PWMR, 2014 directed that at least 25 percent of the earthwork of a project can be offered to WMGs which will carry out the actual work through the LCSs, of which minimum of 30 percent members should be women (if available). For this purpose, an agreement is signed between the implementing agency (here, BWDB) and the WMG, and another agreement is signed between the WMG and the LCS. According to the PWMR, 2014, WMGs are entrusted with the implementation of the earthwork involving LCSs. On principle, BWDB does not have any direct dealings with LCSs. Earlier, before the issuance of PWMR, 2014, BWDB used to contract the LCSs directly, without involving WMGs, if available.

### 1.2 Blue Gold Program

BWDB has been implementing Blue Gold Program (BGP) since March 2013, jointly funded by the Royal Netherlands Government and Bangladesh Government. The BGP operations concentrate on the polders of three districts in the South west of Bangladesh: Patuakhali, Khulna and Shatkhira, with some coverage in a fourth district: Barguna. The overall objective of the BGP is to ***'reduce poverty for 185,000 households living in 120,000 ha of selected coastal polders by creating a healthy living environment and a sustainable socio-economic development'***.

The interventions by the BGP involve both structural<sup>11</sup> and institutional<sup>12</sup> measures along with livelihoods enhancement activities of the local people within the project area. It was expected that the improved water resources infrastructure would create a safe environment to live and work and allow optimal use of water as an input for the productive sector, in particular agriculture. In the design document of BGP, in August 2012, to ascertain sustainability it was envisaged that the Program would put more attention on building WMGs (with the legal status as cooperatives registered under the Cooperative Societies Act) by the local people as directed in GPWM, 2000. These WMGs / cooperatives were also seen as driver for economic development, and the productive sector as the main basis for the economic development

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<sup>11</sup> *'Under Blue Gold, the BWDB will create effective protection in the polders against floods and an infrastructure for water management inside the polder (irrigation and drainage) so that it can be effectively used by the producers (crops, horticulture, fish, livestock, forest)'* (Program Document-Blue Gold; 30 August 2012).

<sup>12</sup> *'Once people can live in a safe – protected from flooding - and healthy - less diseases – environment and they acquire knowledge on managing the available resources in their area the path for a sustainable socio-economic development is open. Overcoming water problems and implementing good water management practices through the approach of community participation is seen as the basis for further improving food production and establishing business opportunities, from which the communities will significantly benefit'* (Program Document-Blue Gold; 30 August 2012).

envisaged<sup>13</sup>. However, as per PWMR, 2014, WMGs had to become registered with BWDB, and no longer as cooperatives.

### 1.3 Rationale for the study

From the inception of BGP it was foreseen that at least 50 percent of the earthwork would be given to LCS groups, without any direct tender procedure. In the initial years of the project this target could have been met, however, from 2017 and onwards engagement with LCS appeared more challenging, also because the modality of working with LCS was completely changed within BWDB following PWMR, 2014.

Bangladesh is approaching to a Middle-Income Country (MIC); the country could manage an impressive decline in poverty over last couple of decades. The majority of Bangladesh's population (about 70 percent) lives in rural areas and comprises of three quarter of the country's workforce. About 87 percent of rural households rely on agriculture for at least part of their income whilst rural non-farm employment is almost two times higher than all urban employment (BBS, 2017; GED, 2015; World Bank, 2016). Bangladesh has made commendable progress over the past forty years in achieving food security in cereal, despite frequent natural disasters and population growth.

With rapid GDP growth over the past 10 years along with good agricultural performance, the incidence of hunger and food poverty in Bangladesh is being reduced substantially. There is also evidence that labour market in agriculture is tightening as reflected in growing agricultural real wages. In view of this changing economic landscape, nature of poverty and the risk profile is also changing, with remaining pockets of poverty, e.g. char, haor, coastal belt, hill districts etc., that are not yet ready to reap the full benefits of the country's economic progress.

Given the employment potentials of poor people in rural areas with increased connectivity to larger markets and mechanization coupled with the approach of managing LCS activities lead to a number of observations regarding the longer-term impact of LCS work on poverty reduction. Whereas the Annual Review Missions emphasized the importance of LCS work for poverty reduction through gaining access to productive assets, especially for very poor women, also more mixed signals about the effectiveness of LCS work as a measure for structural poverty reduction were heard, as well as process related problems.

In this backdrop, BGP decided to commission a study on the structural impact of LCS work on poverty reduction of LCS members' households, and the empowerment of female LCS members as an outcome. Considering that PWMR, 2014 include new procedures for LCS management with a key role for WMGs, it is also important to assess and compare the previous and new procedures for LCS in overall functioning of LCS activities.

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<sup>13</sup> *'The cooperatives will have to become organised and managed as private sector enterprises in order to create the maximum benefit for their members, being higher household income. Linkages with existing (inter)national private enterprises will be created but also small-scale enterprises will be established. Innovative approaches and technologies will be introduced as an answer to the many challenges faced by the water and productive sectors'* (Program Document-Blue Gold; 30 August 2012).

### 1.4 Objective

The objective of this study was to assess to what extent and/or under what conditions LCSs work, as promoted under the Blue Gold Program is (or can be) a tool for poverty reduction<sup>14</sup> of LCS members' families and contributes to the economic and social empowerment, including more decision-making power, of especially the female LCS group members. In addition, this study will assess the effects of the changes in LCS related procedures due to PWMR 2014, in particular related to the new role of WMGs. The study will also provide recommendations for the future.

Specifically, this study addresses the following **main research questions**:

1. To assess the approach and procedures of LCS activities within the Blue Gold Program before and after the PWMR 2014 focusing on the new role of WMGs and the changed role of BWDB.
2. To develop insight in the targeting and selection process of especially women LCS members, including what categories of women are selected and their reasons to join LCS groups.
3. To describe the functioning of the LCS groups, including the conditions and constraints of LCS work, the dynamics within LCS groups, the payment system and the relationships with WMGs and BWDB.
4. To identify insight in the achieved short-term and longer-term benefits and impact of LCS work on individual LCS group members, their families and the communities, including the income and welfare derived from LCS work, the use of LCS income, any savings and/or investments in productive activities (IGAs), and the impact on the position and (social and economic) empowerment of women LCS members.
5. To compare (i) the BWDB modalities of LCS work for especially women with modalities of similar work in other projects and/or by other organizations (e.g. LGED, WFP); and(ii) compare LCS work modalities with similar work implemented by contractors (including the use of mechanization).
6. To provide recommendations for (i) Blue Gold's LCS approach to ensure an improved functioning of LCS work and/or increased impact on poverty reduction and women's empowerment as well as (ii) to provide conclusions and recommendations for the future of (BWDB) LCS work in general, taking into account issues such as the future need for such temporary employment, aspects as dignity / decent work, the use of mechanization and the cost-effectiveness of using LCS vis-à-vis contractors.

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<sup>14</sup> Though there are many aspects to poverty, up till now the Blue Gold Program defines this as "households below the poverty line".

## 1.5 Scope of the study and Methodology

The study is largely qualitative, apart from a survey among 203 LCS workers (167 female) to assess the impact of LCS work on especially women, see chapter 5.

Intense **Key Informant’s Interviews (KII)** have been carried out with a number of stakeholders like BWDB officials (project and also key officials related to LCS in Dhaka and regional offices), BGP TA team members at Dhaka and regional offices, WMG members, men and women in LCS groups, Monitoring Committee members, selected community members, Community Development Facilitators (CDF) of BGP, local people (not involved in LCS), and members of Local Government Institutions.

Given the limited time frame of the study, the selection of the locations for interviews in the field was done carefully in consultation with BGP officials in Dhaka and regional offices. BGP officials provided the list of LCSs in 2018 and their status on working progress. Men and Female LCSs along with different stages of working progress (Completed but the third/ final check is not yet issued, carried over, completed and all payment received) were chosen independently by the study team.

**Meeting local stakeholders:** With the help of the regional BGP office the study team visited the sites, talked to the WMG and LCS members and other local stake holders. While visiting the sites, the issues with a number of LCSs, which worked before 2018, were discussed by the local stakeholders. With the help of BGP officials and WMG/LCS members, the study team also met with a number of LCS groups.

**Table 1: No of LCS and WMG visited**

District	No. of LCSs visited	No. of LCS/WMG members met
Khulna	11	130
Shatkhira	03	32
Patuakhali	17	98
Total	31	260

The study team **conducted a survey** on 167 female and 36 male LCS members under BGP with a structured questionnaire (Annex A: questionnaire for the survey). The survey data were structured in a standard statistical format and the analysis is done using SPSS.

In a bid to explore the employment potentials of poor people in polder areas, a number of Sub Assistant Agriculture Officers (SAAOs) working in those areas were interviewed. The project office at Department of Agriculture Extension facilitated the process.

Mappings of actors who work with LCS modalities and have knowledge on this issue were done. A number of academicians, officials in BWDB/LGED, World Food Program, Asian Development Bank, who have knowledge on LCS works, were interviewed.

The above modalities of field data collection and stakeholders' engagement have been complemented by a **review of documents**. The study takes note of available documents of different projects and its different components involving LCS within and outside BWDB. Acknowledging that LCS approaches have been evolving with the development trajectory of Bangladesh, a number of relevant policy documents have been reviewed to put current practices and future directives related to LCS at per the development priority / strategies of the country. Government Rules / Acts / 'Poripatra's related to construction and labor have been consulted, as well as a number of policy documents like National Social Security Strategy, 2015; a number of Development Partner's funded infrastructure projects documents have been of interest.

The initial findings of the study were shared with the Netherlands Embassy in presence of BGP Team Leader and Deputy Team Leader; feedback, especially from BGP TA, is incorporated in this version of the report.

### 1.6 Organization of the Report

The report entails six chapters. At the end of chapters 2 to 5 the main findings are summarized.

**This first chapter** introduces the concept and legal mandate of LCS and frames the rationale for the study along with a statement for objective and methodology.

**Chapter Two** describes the modality of implementation for LCS within BWDB after PWMR, 2014.

**Chapter Three** details out the LCS approaches practiced by other actors with a special reference to LGED.

**Chapter Four** figures out a number of key challenges in current LCS approach of BWDB and details out the existing employment potentials for poor people in BGP working areas.

**Chapter Five** highlights some of the key issues and challenges around female LCSs. This chapter represents survey findings and shades lights on potential impacts of LCSs in terms of income and social outcomes.

**Chapter Six** draws conclusions from the previous chapters, also highlighting some prospects for the future.

## CHAPTER TWO: MODALITIES OF LCS ENGAGEMENT UNDER PWMR, 2014 AND PRACTICES IN REALITY

### 2.1 PWMR, 2014 and previous practice...basic feature and differences (related to LCS only)

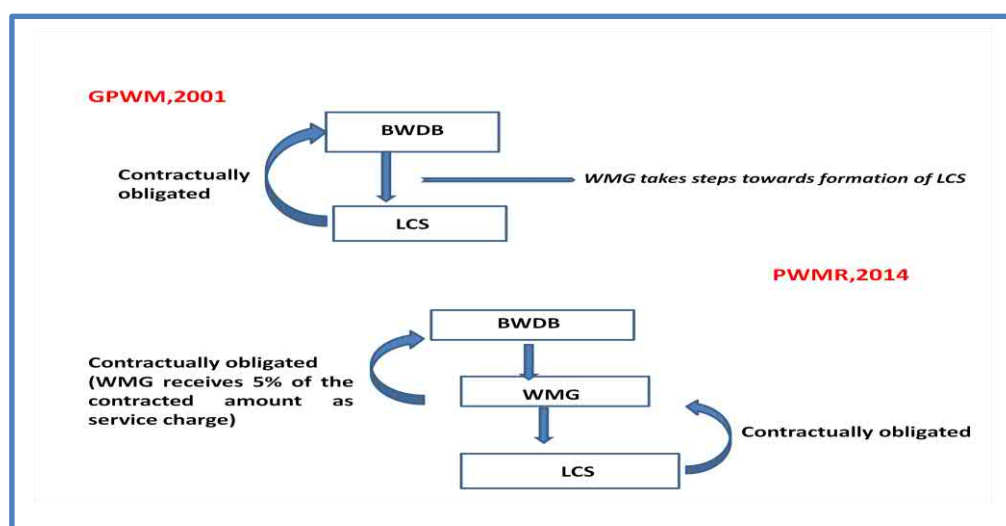
The government of Bangladesh, through its Policies, Guidelines, and Rules has reckoned that local stakeholders’ participation is needed at all stages of the project cycle to ensure the sustainability of water infrastructure. The Guidelines for Participatory Water Management 2001 explicitly directed how the local stakeholders, representatives of the local government institutions, private sector and the public sector agencies would work together for participatory water management in Bangladesh. The Participatory Water Management Rule, 2014 complemented the GPWM, 2001. However, there are some basic differences in these two documents in terms of engagement of LCS.

Before PWMR, 2014, BWDB used to make contracts with the LCS groups directly, without involvement of other parties/entities. The WMGs used to form the LCS groups to accomplish an earthwork in the community, and BWDB used to make direct contracts with LCSs. There were no intermediaries. The LCSs were directly accountable to the BWDB to carry out the designated task in due course ensuring certain degree of quality work. BWDB used to supervise the activities of LCSs.

There has been a shift in management of LCS engagement in PWMR, 2014. According to this Rule, now BWDB has got the mandate of making contracts directly with WMGs designating them to carry out the earthwork by LCSs. The WMGs make contracts with the LCSs. Basically, now there are two contracts for LCS engagement. First: a contract between the BWDB and the WMG; second, a contract between the WMG and the LCS (*Chapter Six; Sub rule 44(1) and 44 92; PWMR, 2014*).

**Box 1** represents a schematic overview on the differences between the approaches of PWMR, 2014 and its previous provisions.

**Box 1: Difference between the approaches in PWMR, 2014 and its earlier practices with reference to LCS engagement**





The WMG will be responsible to the Board for successful completion of the work (Chapter Six; Sub Rule 44(3); PWMR, 2014). To carry out the task by LCSs, the WMGs have to take up the supervisory role. To facilitate the whole process, the WMGs are allowed to receive as high as 5 percent of the bill amount as their ‘Service Charge’ (Chapter Six; Sub Rule 44(8)).

## 2.2 Responsibilities of different stakeholders in LCS engagement

For each of the projects in BWDB where engagement of LCS is sought for, BWDB issues a guideline for LCS for that project. It reveals that there might be a bit of flexibility in the process of LCS’s engagement keeping the basic premises of PWMR, 2014 and GPWM, 2001.

The Director General, BWDB has approved the LCS guideline for Blue Gold Project (*Memo No.DP-III/506/124*). The guideline clearly states the process of the engagement of LCS and mark clear responsibilities of shouldering different activities in the process by BWDB, the Technical Assistant Team (TA Team) of BGP, the Water Management Groups, the Water Management Associations and LCS groups.

Table 2 presents a brief accounting of the steps involved in LCS engagement and corresponding responsible stakeholder(s), as stated in the BGP LCS guideline.

**Table 2: Responsible authorities / entities for different activities in LCS engagement according to BGP LCS Guideline**

Activities	BWDB	TA Team	WMG	LCS
Reach selection	Primary	Facilitate	Facilitate	
Pre work measurement	Primary	Facilitate		
Attestation to pre work measurement	Primary	Facilitate		
Work Order Issue	Primary	Facilitate		
Detailed Work Order Issue	Primary	Facilitate		
Profiling	Primary	Facilitate		
Contract between BWDB and WMG	Primary	Facilitate	Primary	
Contract between WMG and LCS		Facilitate	Primary	Primary
LCS Formation		Facilitate	Primary	
Formation of LCS Executive Committee		Facilitate		Primary
Approval to LCS	Primary	Facilitate		
Training to LCS members	Facilitate	Primary		
Training to WMG members		Primary		
Hand over work profile and pre work measurement to LCS members with detailed task and design specification	Primary	Facilitate	Facilitate	
Carrying out the earth work		Facilitate		Primary

Activities	BWDB	TA Team	WMG	LCS
Opening of bank account for LCS		Facilitate		Primary
Maintaining meeting documents on withdrawal of money from LCS account		Facilitate	Facilitate	Primary
Facilitate LCS to accomplish the whole task according to design specification		Facilitate	Primary	
Quality control of the work by LCS	Primary	Primary	Primary	
Post work measurement	Primary	Facilitate		
Attestation to post work measurement		Primary		
Payment to WMG	Primary	Facilitate		
Bank account maintenance of WMG			Primary	
Bill attestation and facilitation the payment process		Primary		
Payment to LCS Bank account		Facilitate	Primary	
Payment to LCS members			Facilitate	Primary
Facilitate LCS to find land /collect soil			Facilitate	Primary
Social issues monitoring		Primary	Primary	Facilitate

## 2.2.1 Selection of the site/Reach selection

Water Management Associations (WMA) discuss the necessity of a water infrastructure with the BWDB officials at local level. BWDB in association with the TA team (component 1) finalize the site of work.

## 2.2.2 LCS formation

When the discussion regarding finalization of each site is on the table, the WMGs are informed (by the TA team), and the TA team facilitates the WMGs to initiate and form the LCS. Usually, WMGs announce a general meeting of their members. At least 55% of the households of that area covered by the WMG should be represented by the members of that WMG. In that general meeting, in presence of a BWDB official, TA team members, WMA members and in cases representatives from the Local Government (Union Parishad members), the LCS is formed. Following is the qualification for an individual to be included in a LCS:

- ✓ Age: More than 18 years but less than 50 years
- ✓ Physically fit
- ✓ Resident to the work area
- ✓ Willing to join LCS and carry out the earth work/ skilled labor
- ✓ WMG member
- ✓ Being poor and/or destitute

The LCS members are supposed to be selected from very poor households, especially those who do not have land. It is expected that the community people can identify the households who should get priority in this selection; and the selection should be on a consensus basis.

It is claimed by the BWDB officials and TA team members that this process is self targeting; engagement in earthwork involves intense manual labor (as LCSs are not allowed to use machines) and nobody other than poor and extreme poor would like to take up a job in LCS.

Under one WMG one or more LCS can be formed, depending on the magnitude of the work. Male and female LCSs are formed as separate groups. According to PWMR, 2014, at least 30 percent LCS members will be female; however, such rule is not mentioned in the BGP LCS guideline, but the Logical Framework of the Blue Gold inception report included as indicator: "At least 50% of all earth work is by LCS, of which 40% are female; at least 7500 women earn from LCS work".

### 2.2.3 Approval of LCS

All 511 WMGs in the BGP polders have been registered under BWDB following certain procedure. The official from the office of the Chief Water Management in BWDB at the project implementation area was responsible to give registration to the WMGs. The Executive Engineer (XEN) of the BWDB office at project implementation area gives an approval to the LCSs formed by the WMGs. The TA team has a part to facilitate this approval.

### 2.2.4 Pre-work measurement

The pre-work measurement should be taken in presence of WMG representatives before the estimation of the work. The BWDB Executive Engineer is primarily responsible to take the pre-work measurement. It is a baseline document which should help to design, and estimate the cost of completing the task. The XEN office / TA Team members hand over the necessary documents to the WMG / LCS; during site visits the TA Team members make them understand the technical issues.

If the pre-work measurement is not done, the work order cannot be designed properly. It is surprising to note that in most cases the pre-work measurement is taken just before the commencement of the work, even after a number of days of the work starts, obviously after the issuance of work order and Detailed Work Order (DWO).

The LCS and WMG members are hardly informed about the technical specification of the pre work measurement and no record of such measurement is handed over to WMG/LCS. It is understood that the WMG/ LCS members might not be able to understand the technical details. Often BWDB officials and BGP TA team members mark the selected area for work with a piece of coloured cloth tied up to a tree or other objects on the project site to demark the area for LCS activities. A moderate to high wind speed (75 kilometers per hours and above) or even a moderate shower can destroy the marks. However, a copy of this measurement should be kept with WMG and LCS. WMG and LCS members should be given an idea of this in very simple dialect so that they can also be more aware of the measurement of final work. In ceases, a dispute regarding post work measurement can resort to this baseline.

### 2.2.5 Work order and detailed work order

Upon finalization of the site, the work order is issued by BWDB and handed over to the WMG in a bid to start the work. The detailed work order contains the work specification in detail and issued by BWDB. In both cases, the TA team has a part to play.

It is observed that in 2018, most of the work orders are issued 'NOT BEFORE MARCH' and the date of receipt of work orders by the WMGs are 'NOT BEFORE MAY', in all three districts of BGP working area. Table 4 (see Chapter Four) is presented as an evidence to substantiate the statement. This Table exhibits the detailed information on the dates of work orders issued and actual date of receipt of work orders by the WMGs in Satkhira in 2018-19, along with the information on the dates for the issuance and receipt of detailed work orders, and profiling. The same information in Khulna and Patuakhali do not exhibit any difference.

The earthwork is supposedly carried out in the dry season. Given the hydro-geophysical reality of the south west coastal belt in Bangladesh, especially the three regions where BGP has been working, incessant rainfall in May is expected even before the monsoon approaches. To ensure the quality of the earth work, earth work should be carried out within the time frame of late October to April.

The issuance of the work order any time after February create uncertainty regarding the completion of the work before the rain comes. If not completed before the commencement of next monsoon, the work can be carried over to next dry season. It has huge implication on LCS engagement.

***If the work is partially done and carried over:*** The work partially done will be exposed to monsoon rainfall and prone to erosion. The LCS will have to fill up that erosion while they will start the work in next dry season. For this additional work, 'No revision' of cost of work or contractual amount will be done. Basically, the additional cost will have to be borne by poor LCS members, despite the fact that they do not have any responsibility in this faulty process.

***If the work is not started and carried over:*** There will be high chance of erosion of the existing infrastructure and the pre work measurement taken before the commencement of the monsoon, if not revised, will not justify the contractual amount to cover the cost of LCS labor.

There are more challenges while the work orders are issued late! The challenges will be discussed in subsequent sections of the report.

### 2.2.6 Profiling of the work

Profiling of the work is done by BWDB and the TA team. It contains detailed specification of the work, filling and cutting charts. Profiling along with the pre-work measurement constitute an important part for understanding the task clearly from the beginning.

Usually the engineers from BWDB and TA team mark the work site with distinct objects like red cloth/flag on a tree or a bamboo pole to give a direction to the LCS members. This is a very easy way to make the LCS members understand about the magnitude of the work.

Profiling should be done before the commencement of the work. In most cases, the profiling is done before the work starts, but also cases of profiling after commencement were reported. There was no official document on profiling in any of the WMGs/LCSs visited; however, zonal TA engineers do keep records at their office, such as date of profiling and photographs.

### 2.2.7 Contractual agreements

According to PWMR, the WMGs are responsible to carry out the work with the help of LCSs. There is no direct legal agreement between BWDB and LCSs. BWDB makes direct contracts with WMGs on a non-judicial stamp. Another contract is signed between the WMG and the LCS, again on a non-judicial stamp. Both the contracts follow the standard specifications written in the BGP LCS guideline.

The study team examined the contractual agreements of the WMGs and LCSs visited. There is no room for negotiation on the contractual amount and on the process. BWDB determines the contract amount according to its 'rate schedule'.

It is observed that both the contracts detail out the responsibilities of different parties (here BWDB, WMG and LCS). However, there is 'NO SAFEGUARD' for WMGs or LCSs if they cannot deliver the work on time. The contract does not make any provision for third party settlement or NO Grievance Response Mechanism is mentioned in the LCS Guidelines. BWDB has projects where such provisions have been created (Environment and Social Management Framework (ESMF): Climate Smart Agricultural Water Management Project (CSAWMP); BWDB, December, 2017).

### 2.2.8 Training to WMG Members: No one's responsibility

As the contract is directly made with WMGs making them responsible and accountable to BWDB for the quality completion of the work, the WMGs are supposed to take up a role of supervision of the whole work, though table 2 clearly states that there are activities where WMG's involvement is not officially expected.

One cannot expect that WMG members have the experience and expertise of managing and supervising an earth work. There are technical parts and management parts of the work, which need to be combined. To guide the poor and unskilled (as categorized by BWDB rate schedule) LCS members to carry out the earthwork with good quality given the stipulated time frame retaining the expected remuneration to realize, WMG members must receive training on technical and management issues. It is found from the field that, some of the WMG members do have experience and they can supervise the work better. A number of WMGs hire sardar(s) who have expertise in managing such kind of works. Then the LCSs have to pay additional for his /their charges from their own money.

### 2.2.9 Training to LCS members: A missed opportunity

BGP Guideline for LCSs states that

- ✓ Training is conducted immediately before the actual earthworks start
- ✓ Training conducted for 1 day with day as on-the-job training
- ✓ All LCS members trained

It is also mentioned that 'only the listed and trained laborers are engaged in work'.

Up to the 2016-17 fiscal year all LCS members were provided with formal training. But it was observed that due to the delay of starting LCS work, many LCS members went away for temporary work. For that reason, the training part of the LCS Guidelines was adjusted, revising formal training into on-the-job training by the appropriate authority. During on-the-job training, both executive WMG members and LCS members were made aware about the technical issues. Financial and social issues are discussed in the LCS formation meeting.

Among 31 LCSs visited by the study team, only nine LCSs reported to have received training. The majority of the LCS members could not recall of receiving any training (even the LCS members who completed their works recently this year). A few of the WMG members and LCS Executive Committee members could recall, however could not detail out anything about the training content they received. The WMG/ LCS members who could recall about the training received, most of them reported about few hours' engagement of training. Any on-the-job coaching was apparently not perceived as training.

Not only the number of training provided to a number of LCS/WMG members exhibit the performance indicator, rather the quality of the training has great potential to add value. It is found that the training to LCS members mainly focuses on a very basic issues of carrying out the earth work, which is absolutely necessary. However, the total process of engagement is never communicated to the LCS members, especially there is no communication on the tentative assessment of the workdays required involving all the members of the LCS. It is impossible for the poor LCS members (especially female LCS members) to make such assessment by their own and make a plan on their engagement (no. of days, working hours, no. of labour required) to ensure milestones of the activities, and thereby ensuring their expected remuneration based on that assessment.

### 2.2.10 Deciding the contractual amount

BWDB decides what will be the contract amount to carry out a specific amount of earth work. The BWDB rate schedule guides such process. The BWDB Schedule of Rates is primarily aimed at providing the field offices of LGED with the unit prices of different construction items for various types of infrastructure within the mandate of the BWDB. These rates are usually being updated by BWDB in every two years and get published. To make optimum use of this Rate Schedule document, BWDB has compartmentalized its entire geographical working jurisdiction into smaller circles. In addition, comparatively higher rates have been exclusively considered for the remote and isolated places to accommodate the transportation cost along with cost variation due to acute crisis of materials and skilled/semi-skilled labors. The items of works contained in this document are intended, mainly towards construction of cost-effective physical infrastructure in rural areas, without making any compromise to quality.

In order to facilitate wider user's context, basic unit price of different construction materials, labor, charges for hired equipment and machinery, gradation of aggregates, frequency and testing fees, unit conversion, cross-sectional area of round bars, unit weights of different engineering materials and different size bars, miscellaneous measurement relations, and standard drawing are included in this Schedule of Rates. The circle offices collect information on current market prices of materials (all inputs including labor) at local level and that constitutes the rate for a specific infrastructure related cost.

An example is given in Table 3. Table 3 clearly states different rates for manual labors involved in earth work, depending on very specific work description. It is claimed by BWDB officials that these unit prices are updated on a regular basis.

**Table 3: Item Rate for Khulna O & M Circle (Earthwork), as of (06.08.2018)**

Description	Unit Meas.	Rate (taka)
Earthwork by manual labor, embk/canal bank/road: 3m ht	cum	189.71
Earthwork by manual labor, embk/canal bank/road: 4m ht	cum	191.81
Earthwork by manual labor in excavation of channels	Cum	167.65
Earthwork by manual labor, manual compaction, 0.0 to 3.0 m.	Cum	220.95
Earthwork by manual labor, manual compaction, 0.0 to 4.0 m.	Cum	234.04
Earthwork by manual labor: cross bundh/ring bundh	Cum	167.60
Earthwork by manual labor: removing the ring bundh	Cum	167.65
Earth work by carried earth (manual compaction): 300m to 1.0 km	Cum	427.89
Earth work, carried earth (manual comp.):1.0km to 5.0 km (E.Rate)	Cum	504.70

There is an analysis of rate schedule available in each of the circles which document the information on market prices for each of the materials. According to this analysis of rate schedule, currently available for the circles in 3 districts of BGP working areas, the manual labor is differentiated among 'skilled' and 'unskilled' labor. In all three districts, the skilled labor (head man) gets a daily rate of 650 taka while the unskilled labor secures a rate of 400 taka per day.

This daily rate appears an average of all the seasons' daily labor rates, including the lean and peak seasons. The information collected on the existing daily rates of manual labor in different seasons exhibits significant seasonal variation which is completely missing in this rate schedule. If the project intends to employ manual labor in an '*employment potential-wise peak season*', a work as LCS member for 20 to 40 days and that too with lots of procedural uncertainties in getting payments, the offer (contractual amount) for LCS does not appear as attractive.

### 2.2.11 LCS members unaware of the complete picture of financial package

The actual contract amount is communicated to the LCS members and also the rule for VAT and Tax are mentioned. The contract amount appears high to the poor LCS members while they are incapable of calculating the actual amount to be received by the LCS members after the deduction of all payments (Tax, VAT, WMG's service charge), which is about 12.5 percent lower than the contractual amount.

At the time of LCS selection in open general meeting of WMGs, the approximate contractual amount is announced (though the contract between BWDB and WMG is not yet signed).

The announced amount is inclusive of Tax and VAT. Tax and VAT deduction procedure are usually announced in the general meeting. An overwhelmingly majority of the LCS and WMG members were found not to know or understand the Tax and VAT Rule, even though explained at the LCS formation meetings. This means 5% Tax, 2.5% VAT, 10% as security money, to be paid

after one year, and 5% as WMG's Service Charge, which results in a total of 22.5% deduction of payment, of which 10% security money can be added only if the quality of the work seems satisfactory after one year of completion the task.

The contract amount inclusive of VAT and Tax often attracts poor people to get involved as a LCS member. However, most of the LCS members expressed ignorance (and dissatisfaction) and this led to higher expectation by the poor LCS members, who obviously had not well understood any explanations.

For many poor unskilled LCS members, insufficiently aware of the modality of engagement in terms of number of days and expected wage per day, it was the total contract amount that attracted them to engage in LCS work, as they apparently did not adequately grasp or realize the deductions due to VAT, Tax and WMG service charge.

Because of the lack of understanding on such issues, the LCS members often drag the number of working days longer with an expectation to earn more.

Considering the LCS engagement as a business which the regular contractors carry out making profit, there is NO clear enough business model presented before the LCS members in the trainings and/or meetings, which is absolutely critical. The training neither cover any social nor rights issues, nor do they make any awareness even on the work safety issues and provisioning of facilities in the work site like making sheds/ separate toilets (as indicated in the performance indicator of the guideline).

### 2.2.12 Payment modality and maintenance of accounting

The BGP LCS guideline provides direction in terms of payments after achieving certain milestones of the work. All transactions need to be through banks. The WMGs and LCSs open and operate their own bank account. BWDB gives payment in check (not bank transfer) to WMGs. WMGs deposit the payment in their bank accounts. WMGs issue a check for the LCSs after deducting 5 % as service charge from the amount received from BWDB. LCSs deposit the check received from WMGs and withdraw cash to distribute among the members as per their level of engagement. The phasing of payments are as follows:

**1<sup>st</sup> instalment**, 33% (one third of the contract amount) is to be paid for mobilization after starting the work

**2<sup>nd</sup> instalment**, 33%, to be paid after the advancement of 50% work

**3<sup>rd</sup> instalment**, 34%, after completion of the work according to contract

10% money will be kept with BWDB as deposit; it is usually deducted from 3<sup>rd</sup> instalment's check, which then is 24%.

Mobilization money is not made available before 15-21 working days. The 2<sup>nd</sup> instalment is made available, in most cases, almost at the end of the work. It is revealed that receiving the check for 3<sup>rd</sup> instalment is a real challenge. It is given after the post work measurement is done.

A very pertinent question is how the poor LCSs would survive if the first payment is made available after 3-4 weeks of the start of work. The case study of two ultra-poor women in Batiaghata upazila (Polder 31 part) portrays the story of struggling LCS members.



**Box 2: Case Study: Bithika Sarker, LCS group leader; Shornali LCS; Kechorabad Khal WMG; Polder 31 part**

Vill: Vogobotipur, Union: 4 no. Surkhali , Bhatiyaghata , Khulna

**Bithika Rani (50)** became widow with two kids at very young age. She was the only earning member in her family for long. She became the group leader of Shornali LCS, which carried out their activities in 2017-18. She received 2000 taka as first instalment of payment. She bought a goat with that. She received a cow as gift from her marriage. And now she could manage to have eight cows at her disposal. She raised her two kids, the daughter got married after her Higher Secondary Exam and the son is a student of local College. She used to work for half a day as LCS member, used to pack her lunch at LCS work site, and just after having lunch she used to go to local *gher* owners and managed half a day work in *ghers* or worked as labor in water melon/ paddy fields. This half a day work allowed her to earn 50 - 200 taka per day, with which she could survive with her family members even after receiving the first payment from LCS engagement after 21 days of starting of the work.

**Beauty Mondal (29)** is the only earning member in the family. She had to take loans from the local market to survive for those days of LCS work before the first payment. She has two young kids at home and her husband is sick and cannot work for any gainful employment. She used to work for half a day as an LCS member and the rest of her time was devoted to the household chores. Once she got the payment, which was about 2000 taka, as 1<sup>st</sup> instalment, she had to repay her loan which she had to take to survive during her work days as LCS group member.

It can be concluded that the same payment modality and payment amount can affect two different individuals differently depending on their individual situation.

Usually, the average daily rate after receiving a check is fixed by calculating the total number of working days and the amount received. So, there may be different daily rates the LCS members receive after different instalments of payments. For example: in the above mentioned case, both the male and female LCS members received 200 taka per day as 1<sup>st</sup> instalment, 60 taka per day as 2<sup>nd</sup> instalment, 590 taka per day received by male members for grass plantation while this rate was 560 taka per day for female LCS members.

As there is no provision for check transfer for LCSs/WMGs within BWDB system, WMGs have to go to regional BWDB office to collect the check, which incurs cost for transportation, the cost of lunch/ snacks by the visiting members and others. Usually 2 to 3 LCS members accompany 1 to 2 WMG members while going to the regional office to collect the check for WMGs. Mistrust seems to be common among all the stakeholders.

The third payment is made after the grass plantation. Given current practice of late issuance of work order, and subsequent delay in starting the work, the grass cannot be planted before the rain comes in. In most cases the post work is done in September/October, in the middle of the

monsoon. There are grievances within WMGs and LCSs regarding the post work measurement of the work by BWDB.

It is revealed that BWDB officials visit the site for post work measurement after pursuance from WMGs and LCSs. Like the pre work measurement, the post work measurement is also solely done by BWDB; the TA team members are usually present at that time. It is quite common that the post work measurement exhibits less than 90 percent of the work accomplished by the LCSs as per the contract. Even, less than 80 percent accomplishment in post measurement is not uncommon.

The LCS and WMG members recognize that the BGP engineer visit the work site on a regular basis, and they try to ensure the quality. It is understood that there might be some differences between the measurement specified in the detailed work order and the accomplishment of the work after completion, as it is process involving manual labour.

However, after regular visits by a TA Engineer at the working sites, no rational could be found for such a large discrepancy in work accomplishment. Allegedly, in a number of cases, to receive a satisfactory post work measurement as a reflection of good work, LCSs have to spend 'extra'. The box at the end of this chapter exhibits a case where the LCSs had to mobilize 'extra money' to get the third check and a few numbers of LCSs kept the document in their accounting 'khata' (note pad).

If the LCS work does not progress with specified technicalities, the TA engineer should have helped towards guiding them in right direction. There might be a number of challenges involved:

- ✓ The post work is done in the middle of the monsoon. The chance of erosion of earthen work is high during high monsoon and eventually it is reflected in the post work measurement;
- ✓ In cases, the pre work measurement is not done properly. It has an effect on the volume of work carried out by LCS members, which is also reflected through the post work measurement.
- ✓ Often, the LCS members do not have a clear understanding on the profiling of the job.
- ✓ Allegedly, LCSs/WMGs have to 'manage' BWDB to receive satisfactory performance clearance through the post work measurement.

### 2.2.13 Management cost

Apart from the 5 percent service charge from the contract amount for the WMGs, BGP LCS guidelines allowed as high as 10 percent of the contract amount to be spent as administrative cost. The design circle two at Dhaka office, which coordinates the process of making the rate schedules, informed that there is no provision for administrative cost to be added in this kind of work while calculating its rate. Rather BWDB adds 10 percent as profit (the amount in the contract after deducting all the spending on labor and other material inputs in the work).

An effort has been made to explore how much an LCS incurs as 'management cost'. The information regarding the actual management cost, including all the efforts by WMGs and the Executive Committee of LCS, are not recorded in most of the cases. There are instances where the attendance sheet for LCS labor is not maintained, even though the deposit money (10 percent) is not yet received from BWDB.

**Box 3: Case Study: Pashchim Shovna (Dakshin) WMG, Padma LCS (male) and Meghna LCS (female);**

Upazila: Dumuria; Union: 7 No. Shovna; Village: Shovna

Work: Khal re-sectioning

Contract amount: 5,27,283.81 and 7,69,074.90

Contracting year: 2016-17

The work was started in end of March, 2016 and completed by the end of July. The LCS committee well documented the accounts and payment related information, including all the details of 'management cost' and 'hidden cost'. They received payments after the receipt of checks from WMGs. Calculating their number of working days and payment received in different instalments, the average daily wage rate for men was 135 taka and that for women were 106 taka.

The pre work measurement was not taken correctly (!) and it was communicated to the WMG/ LCS members by BWDB just before the payment of 3rd instalment. For this mistake by BWDB, after finishing the work on time, they received much less amount than the contract amount. It was revealed from their document that they had to pay 2% of the check amount (1st and 2nd instalment) in advance to BWDB (allegedly to SO) to release the check. For the payment of 3rd instalment they had to mobilize 10,000 taka in advance; for it the LCS committee had to take a loan with a very high interest rate from a local money lender and gave it to SO of BWDB (allegedly). For taking loan of 10,000 taka as advance payment for 'managing BWDB', they incurred additional 2000 taka as interest.

This extra money was mobilized in the month of Ramadan (20.07.16). The poor LCS members demanded their due payment before Eid, and the LCS executive committee members were forced to take such steps. The LCS members got very frustrated having such a low payment and they lodged a complaint to the Union Parishad Chairman. The Chairman convened a meeting involving the WMG members, LCS Executive Committee Members and the LCS members. The Executive committee members presented the detailed cost and payments made to different individuals including labor charge. The total management cost and hidden cost were about 12 percent of the contract amount, apart from the WMG's contractual service charge of 5%. However, as the contract amount was revised by BWDB (but the contract was not renewed/ revised) unilaterally, and the amount became smaller; that 12 percent of contract amount actually became larger.

Collecting data checking LCS's labor attendance sheet for 18 LCSs (out of 31 LCSs visited, attendant sheets were found in 18 LCSs) and the account keeping 'khata' (note book), it is revealed that the management cost ranges from 12 percent to 18 percent of the total contractual amount. This charge is beyond the 5% of the contracted amount which WMGs usually keep aside in their account from the checks received from the BWDB as their service charge.

### **Summarized findings from Chapter Two:**

This chapter describes the LCS procedures and modalities as per guidelines, illustrated by findings from the survey. The latter demonstrate that in practice LCS procedures are not always as smooth as in the Guidelines, concluding that LCS groups do meet complications, including individual LCS members being disappointed about the expected earnings.

The introduction of PWMR, 2014, complementing GPWM, 2001 meant a new and essential role for WMGs in the LCS procedures, as all LCS work is now implemented through the WMGs, receiving a 5% service charge for this. In practice also any actual costs incurred by WMG executive members are often additionally subtracted from the contract amount. The late payment of the first instalment is problematic for the ultra-poor; problems related to get the third instalment were also reported.

Timeliness of work orders and work measurements can be problematic as work orders are often issued late in the construction season, which enhances the need to carry over part of the work to the next construction season, which can lead to extra work due to erosion by monsoon rains.

Despite explanations on contract and financial issues at the time of LCS formation, the study found a lack of proper understanding, in particular about the expected remuneration per day and the difference between the total contract amount and the actual amount available for payments.

The replacement of formal basic LCS training by on-the-job training seems not always to be understood by WMG and LCS members, who perceive this as not being trained. The late start of the actual construction now coincides with the peak agricultural season, complicating a proper start of the work, also causing absence of LCS group members at certain times. The higher wages in the agricultural peak season makes LCS work at that time less attractive.

## CHAPTER THREE: LCS APPROACHES PRACTICED BY DIFFERENT ACTORS

This chapter will take notes on different engagement modalities of LCSs by different actors, with special reference to other BWDB projects (other than BGP) and by the Local Government Engineering Department (LGED).

### 3.1 LCS: LGED Model

There are other actors in Bangladesh who apply the LCS approach, e.g. in small scale infrastructure projects. LGED is one of the champions in that. There are broadly two categories of LCS works:

1. Performance-based (directly involved in construction/re-construction, excavation/re-excavation);
2. Maintenance-based (also assessed by performance, however, involved in post-construction maintenance).

#### 3.1.1 Types of activities by Performance-based/ Construction LCS

LCS activities started with road development work in late 80s. Then it evolved through different experiences based on socio economic and hydro-geophysical realities in different regions in Bangladesh.

Within the LGED system LCSs are involved in the construction of (among others):

- Earthen roads
- Market development (market basic structure and sheds)
- Herringbone brick (HBB) roads and paved union/village roads
- Roadside/embankment slope protection
- (*Haati/Afal*) Protection walls (block, brick)
- *Killa* (earthen mound)
- Field development
- Boat landing sites/*ghat*
- Construction of U-drains, box culverts, bridges
- *Khal*/canal excavation/ re-excavation

The whole objective of involving LCS is to reduce poverty through employment generation. Performance/ construction works are usually short-term (4 months to one and half years at the most), compared to maintenance LCSs. The detailed of such LCSs will be discussed in section 3.1.5.

### 3.1.2 Institutional set up

LCS selection/formation by LGED are almost similar to that in BWDB.

LGED makes direct contracts with the LCSs. The contractual amount follow the LGED Rate Schedule which is inflation adjusted regularly on a two-year basis.

LGED does not have any provision to hold 10% of contractual amount as 'security money' to be paid after one year of the completion of the task. Rather LGED keeps 10% as profit money (the idea is to consider an LCS as a contractor/ contracting entity who is supposed to make profits) while calculating the contract amount for a certain amount of tasks (apart from standard Tax and VAT calculation as it is in BWDB).

LGED has an institutional set up and local level officials to supervise community works and LCSs. It has been found that (Report by Sharmind Neelormi to International Fund for Agricultural Development, IFAD, 2017) there are designated officials (permanent staff) and field workers to oversee LCS activities from the projects financed by different development partners. On top of that, the project staffs regularly coordinate with LGED staffs, designated to oversee LCS activities from LGED.

### 3.1.3 Remuneration package

Remuneration package for the LCS includes their daily subsistence allowances (as a part of their estimated wages) and share of profit after completion of the work. It is interesting to note that, there is significant variation of daily subsistence rates across projects. Before the commencement of the work, LGED staffs and project staffs seat with LCS members and try to discuss on the remuneration issues. In many cases the communication appears to be ineffective and quite vague. However, there is a practice to decide on how much money they will take as daily subsistence amount and how much money they can get after the completion of the task (as profit and remaining of the subsistence wage, if any).

Despite the fact that every project estimates the cost of construction as per LGED Rate Schedule, however, there are variations in subsistence rates, and consequentially it affects the rate of money received after the completion of the work (a part of wage rate saved from the scheduled rate by LGED as daily wage plus profit).

If one work is done by a relatively higher number of people, there is always a chance that the profit amount may not be significant as a start-up capital for a small business/ employment, which is often considered as a result of LCS work. Or, if the LCS workers take longer time to complete the task for different reasons, the daily rate (average, inclusive of profit) appears to be quite low.

### 3.1.4 Profit distribution

LCS group members are entitled to have a part of the contract amount as profit. As per LGED rate schedule estimation, it is expected that the LCS group should make at least 10% net profit upon completion of development works. The profit is distributed among the LCS members as a proportion of their efforts/ man-days. In cases (for example: the HILIP project) a fixed proportion of the profit (40%) is distributed equally among each member of the LCS, and the remaining part of the profit is distributed according to their daily attendance.

### 3.1.5 Maintenance LCS

Maintenance LCS is widely known as ‘length man’, as each LCS member maintains a designated length of rural road at Union level on a regular basis. There are three types of maintenance activities in LGED:

- Routine/regular maintenance
- Periodic maintenance
- Emergency maintenance

Length man LCS involves routine low-cost maintenance. Such maintenance of earthen roads involves keeping the surfaces level, fixing rain cuts, maintaining slopes by planting vetiver grass etc. On-pavement maintenance includes restoring drainage, filling potholes and cracks, maintaining edges of pavement on reactive basis etc.

#### Box 4: Rural Road Maintenance Financing by LGED

There is a **Road Maintenance and Road Safety Unit (RMRSU)** at LGED headquarter.

##### **Financing**

- From revenue budget
- Through Development projects by foreign assistances or Government Development program;
- Block allocation to Local Government Institutions like *Union Parishads* or *Upazila Parishads* or *Zila Parishads* and
- Rural Road Maintenance Fund is  $\frac{1}{4}$  of Rural Road Construction Cost
- Almost 1% Cost is used in terms of Asset Value

Maintenance LCSs are usually engaged for a relatively longer period (1 year to 5 years). The current practice (both by the funding from the government and from the Development Partners) is to engage 10 poor women (forming one LCS) from each Union to be responsible to maintain the roads in that Union. They work for eight hours per day, six days a week and having a weekly holiday (and also enjoying other government holidays). Their approach of engagement is like fixed-term for certain period (one or more years) upon a satisfactory performance assessed by project supervisors/ Community Officers (COs) of the LGED local office.

Currently, the government of Bangladesh allocates funds from its revenue budget which allows agencies to invest on maintenance activities. LGED through its RMRSU engages LCSs throughout the country and these engagements usually last for 3 years (extending up to 4 to 5 years) for one LCS group. Until July 2017, LCS group members used to be paid 4,500 BDT per month as salary, which is increased up to BDT 6,000 per month. All transactions are maintained through banks, which maintains transparency and keep the involvement of middlemen<sup>15</sup> out of the transaction. Salaries are paid on a monthly basis. Generally, two-thirds of the total amount payable per

<sup>15</sup>This has been a chronic problem in rural Bangladesh, which has made the cash transaction modalities involving social safety net programmes of GoB significantly less effective than initially anticipated.

month is paid to the individual LCS members as immediate monthly payment. The remaining one-third is kept as 'forced savings' in the respective individual bank accounts of LCS members, however, an LCS member is not allowed to withdraw that savings money unless and until a written pledge is placed to the bank by the Upazila Engineer (UE), in case of any emergency situation of the individual LCS member. The forced savings becomes a hefty start-up capital<sup>16</sup> for each of the LCS members.

The effective daily wage rate (i.e. 150 to 200 BDT per day) is way below the existing wage rate for unskilled labour, irrespective of spatial differences in wage rates across the country. However, the field experience suggests that women in such LCS groups were previously unemployed or engaged in occasional/seasonal activities driven by demand and that too was uncertain to get. Such modality of engagement and remuneration attracts poor women as the engagement is almost fixed-term (generally a multi-year contract) and they can plan around it. Especially, the forced savings amount after the completion of their activities for 4 to 5 years<sup>17</sup>, if they can plan well, are used as start-up capital for a petty-business which generally helps the family to maintain a sustained income. These LCS members are offered with different livelihood training where LGED takes partnership with NGOs.

LGED is implementing one project (RERMP II) funded by the European Union (EU), where the remuneration package and modality of disbursement are the same as stated above. However, the engagement continues for only two years. Eventually, the savings money appears much smaller for such LCSs. Discussions with relevant actors revealed that EU has intended to expand the coverage (number of beneficiaries). This project involves other women forming other LCSs after two years, thereby the LCS coverage is expanded to many poor women. It remains to be seen whether the thinly spread financial benefit package involving an increased number of LCS members would pay more dividend or not.

### 3.2 Changing LCS modalities over time within LGED activities

Since the realities involving poor women and men have changed with respect to the earlier periods, the potential LCS members now have the means and willingness to compare relative gains from their engagement in LCS as against availing opportunities around them, mostly involving micro-credit and becoming micro-entrepreneurs. Their aspirations are no longer met by an offer of a lowly paid temporary employment as a member of an LCS, during which period their respective households are no longer eligible to receive Social Safety Net support from GoB agencies.

As a response to the changing realities, a few projects in LGED are bringing up additional/ new approaches to the engagement of LCS. Particularly since early 2000, few projects (especially IFAD funded projects) have introduced 'group life insurance' (CCRIP), 'day care service' etc. for the

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<sup>16</sup>Recognizing that, the poor women often do not find such start-up capital to begin something after the completion of the term and generally fall back to poverty, the LCS modality now allows them to meet the current households needs from regular monthly payment and also enable them to enjoy their own capital following the contract period to begin an IGA, without being indebted to other people. The entire management enhances their self-esteem, ability to face sudden financial stress and enabling them to become self-sufficient.

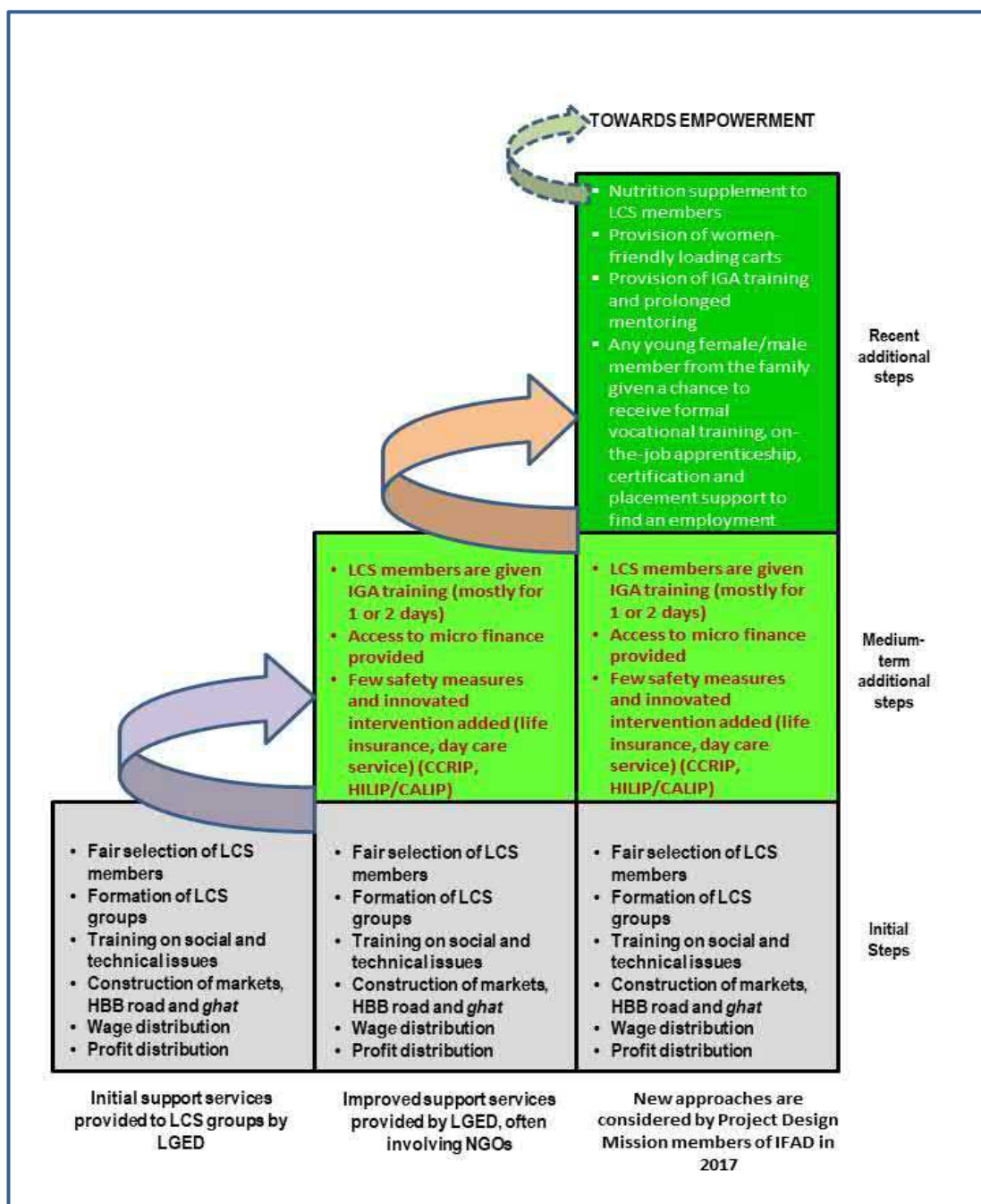
<sup>17</sup>They receive 75,000 to 1,00,000 BDT, adding bank interest on their savings.



children of LCS members (HILIP, to a limited extent). Provisioning of IGA training and linking with micro-credit financing organizations (MIDPCR) are added in post-construction support programmes so that longer term objectives to engage poor women are also met.

Figure 1 presents schematically the evolution of LCS that offer additional incentives to LCS members over the decades, walking through the development pathway of Bangladesh.

**Figure 1: Evolution of LCS modalities within LGED over the decades**



### 3.3 LCS engagement modality by other projects within BWDB

There are a number of projects in BWDB where LCS are engaged as per PWMR, 2014. The study team consulted with project officials of the South West Project (major funding comes from Asian Development Bank), and visited one of their project sites to make a discussion with LCS members in Nobaganga WMG, Kalia Upazila, Narail.

Interestingly, there is no instance of engaging LCS modality in completely GoB funded BWDB projects (except one recently passed project in Comilla). The rationale for that was discussed with the Chief of Water Management Office in BWDB, who has got the mandate to oversee the issues of water management groups at the local level. It appeared that the appetite from the development partners to work with poor people at the community as a means of employment generation catalyse the project formulation missions to embed and design LCS engagement. Usually the projects funded by development partners designate resources to mobilize manpower to oversee and manage LCS activities along with other community level engagements.

BWDB largely depend on financing from development partners to work with LCS modality. The PWMR, 2014 is not restricted to the project funded by development partners.

However, there are permanent staffs (revenue) in BWDB who are designated to coordinate and oversee the community level engagements, including LCS. They are mostly stationed in zonal and circle offices.

There will not be any LCS activities till March, 2019 after the PWMR, 2014, in SW project. A guideline of LCS modality has been underway and after its finalization the project is envisaging to engage LCSs. Earlier (before PWMR, 2014), the LCS engagement were directly supervised by the BWDB staffs, not by the TA team. It has been opined that, as BWDB has got the institutional mandate and manpower to coordinate local level engagements, for greater interest of the sustainability of the infrastructure and wellbeing of the poor, the ownership is much higher by the BWDB while implemented directly by them.

The Blue Gold project has Community Development Facilitators (CDFs) to oversee LCS activities along with other activities like organizing different trainings in the community, addressing grievances by different stakeholders among others. CDFs suppose to coordinate with the BWDB staffs on LCS issues. However, the primary and foremost responsibility of LCS engagement in BGP is bestowed upon TA team, unlike the SW project.

There are two key learning from exploring different practices of LCS engagements within BWDB:

**First:** there is not much appetite within BWDB to work with LCS modality; otherwise they would have engaged LCSs in GoB funded projects.

**Second:** BWDB usually does not assume much of a responsibility in case of LCS engagement where TA team takes up the primary responsibility.

### Summarized findings from Chapter Three

This chapter describes the LGED LCS model, distinguishing construction-based and maintenance-based LCS work. Construction-based LCS work has similarities with the BWDB LCS model, but also has different aspects, in particular: (i) There are no intermediary organisations such as WMGs, rather, LGED works directly with LCS groups, having designated officials for community and LCS work; (ii) No withholding of 10% of the contract value as security money, rather, 10% is kept to be paid as profit; and (iii) Part of the money is regularly paid as subsistence wages; the remaining part as profit after completion.

In maintenance-based LCS groups, each member maintains a certain length of a rural road on a regular basis, usually for a longer period, up to 5 years. They receive a fixed monthly salary; there are forced savings. The monthly salaries converted into daily wages are considerably lower than agricultural wages, but these LCS salaries are certain and not seasonal. The forced savings serve as a start-up capital for a petty business to maintain a sustained income; livelihood training is provided. More recently some projects also added elements as life insurance, IGA training and/or vocational training for young male or female family members.

Unlike LGED, BWDB only works with the LCS modality in projects financed by development partners, and not in projects only financed by GoB. And where BWDB works through LCS, TA teams seem to take up the main responsibility for implementing the LCS approach, although certain permanent BWDB staff are designated for coordinating and overseeing community activities such as LCS work.

## CHAPTER FOUR: KEY CHALLENGES

### 4.1 Delayed Issuance of Work Order

The LCSs do not get a Work Order (WO) from the respective WMG immediately after release of the same from the BWDB. They receive such an important document almost after two months of issuance of such a document. Due to such delayed (deliberate as well?) issuance of WO, the LCSs are given a completion date which is after the monsoon season (5 out of 6 had expected date of completion in December).

If it is a khal re-excavation work, a partially completed work means they are required to remove silts those are likely to be deposited during monsoon. Therefore, number of days required to complete the task is essentially increased, which is not at all compensated. This is by design where the LCS members have no say. No wonder, LCS members and groups complain a lot regarding such a delayed issuance of WO.

**Table 4: Progress of LCS activities under Blue Gold Programme, Satkhira, 2017-2018**

Name of WMG	Name of LCS	LCS Type	Official date of work order	Receipt of WO by WMG	Official date of DWO	Actual date of receipt of DWO	Actual date of receipt of profiles by LCS	Actual date of cement of work	Date of completion as per WO	Progress of work reported officially on 24 June 2018
Bolkati Bottola Khal	Golapful	Male	12/03/2018	07/05/2018	13/03/2018	07/05/2018	25/04/2018	22/06/2018	30/12/2018	10%
Nobadkhal i khal	Juiful	Female	12/03/2018	07/05/2018	13/03/2018	07/05/2018	25/04/2018	08/05/2018	30/12/2018	5%
Shurjomukhi khal-1	Jobaful	Male	12/03/2018	07/05/2018	13/03/2018	07/05/2018	25/04/2018	08/05/2018	30/12/2018	70%
Shurjomukhi khal-2	Beliful	Male	12/03/2018	07/05/2018	13/03/2018	07/05/2018	25/04/2018	08/05/2018	30/12/2018	75%
Jordia Arukhal	Shurjomukhi	Male	12/03/2018	07/05/2018	13/03/2018	07/05/2018	25/04/2018	20/05/2018	30/12/2008	65%
Bewla Nayaberkhal	Padmaful	Male	12/03/2018	10/05/2018	14/03/2018	10/05/2018	14/05/2019	14/05/2019	20/06/2018	20%

Source: BGP, Shatkhira office

All the dates of issue of WOs in Satkhira are found to be 12<sup>th</sup> March in 2018, while actual issuance for the LCS (receipt of the WO) was in May 2018. There are allegations that in reality, all the signatures are effectively done by the regional BWDB Office using a back-date. The WMGs do not have the power to challenge such discrepancies, they do not have the courage to complain regarding such irregularities due to a fear that if they do so, the work would never go

to their area and a chance to find GoB investment for area-specific water management might be lost. If that happens, local people will not forgive the WMG members.

The TA team keeps record of the facts; they have limited options for addressing this challenge. However, the LCSs suffer as a consequence of eventual delay in the issuance of WO and the progress appears much less than expected. While asking the reason, the Executive Engineers of BWDB in Zonal Offices highlighted the shortage of manpower to process all the formalities.

Meanwhile, monsoon sets in and it brings multi-faceted dimensions which further complicate the work of LCSs.

From table 4, it is clear that in 2018 in Satkhira none of the LCS projects could begin before half way through in May or later. Given the nature of monsoon, this should be a time-line not to begin earthen works in the coastal zone. However, under pressure the LCSs often start and pay the price. Moreover, they are being often criticized not being able to complete the job on time.

The Schedule of Rates calculates this volume based on the earthwork volume and the volume of leads and lifts to place the earth in the right location. The average daily income per worker depends on how well the work is organised within the LCS and how long the LCSs works per day. Well-functioning LCSs willing to do two shifts a day can earn very high average daily per capita amounts. Problem with the late work orders is that by the time the work order is given the temperatures are much higher than in – say – January, and it is difficult to do a double shift.

### 4.2 Disregarding hydrological realities

The root cause of involving LCS groups in earthen works along the coastal areas is to address hydrological issues: (a) re-sectioning of an embankment, (b) increasing drainage by de-silting through the excavation/ re-excavation of khals/canals, etc. A weakened embankment structure may fail due to high tides during monsoon, which may lead to tidal inundation of the otherwise protected area. Therefore, re-sectioning of a weakened structure appears necessary, preferably before high tides occur during monsoon. De-silting, on the other hand, allows greater drainage – the need for which appears paramount before the increase of drainage volume in monsoon. Again, de-silting is more useful when it is done prior to monsoon. Monsoon tides generally bring in silts, which choke the drainage canals and increase the bed level of canals. For such activities, the preferred time-frame appears to be prior to monsoon.

If a re-sectioning activity is left half way through and the incomplete structure is subject to tidal pressure during monsoon, the process damages the structure and further work appears inevitable before the completion of the structure. In efficiency terms, the task must be completed before the occurrence of monsoon, otherwise greater work volume will have to be committed towards the completion of the task. For an embankment re-sectioning contract, an LCS group finds it disadvantageous if they are forced to start the work before monsoon, leave the task unfinished during monsoon, invest non-paid time and labour after monsoon period to address the damages caused by monsoon tides and eventually complete the task.

Similarly, an unfinished task regarding excavation/re-excavation of a canal before monsoon often result in engagement of an increased number of active labour-days on behalf of the LCS Group. They are required not only to render the services under contract, the siltation caused during monsoon also places a requirement to remove the additional silts by committing

additional labour-days, which is an inefficient proposition and disadvantageous for the LCS Group. However, if a contract is given to them asking for commencement of the task just before monsoon and requiring a timely completion during post-monsoon period, it may be projected that the hydrological realities cause additional burden on to the LCS groups. However, in reality, it is the complete disregard of the hydrological realities of the contracting parties (i.e. both BWDB and the WMG) while defining the contracting duration, which forces the poor LCS members to take extra burden.

Some of these delays and 'wrong time-lines' force the LCS members to utilize the time in late-November and/or December, which otherwise could have been invested in the harvesting of Aman followed by post-harvesting and also field preparation/transplantation of Boro paddy – when the labour-days could have been sold at a much higher rate than that for the lean season. A faulty design in terms of time-line can and does lead to much delayed delivery and the social exploitation appears heavy, without giving the victims any chance to recoup.

### **4.3 Pre work and Post work measurement confusion!**

BWDB is primarily responsible to take a pre work measurement and specify the task, certainly way before the commencement of actual work on the ground. The Engineer from TA team also has to be present on the site while the pre work is done. Officially the pre work measurement is supposed to be handed over to WMG, this acts as a baseline document. There is no instance of such act.

There are instances where BWDB declares their measurement 'not correct' (see Box 3 in Chapter Two), that too after the completion of the work. In a number of cases where the discrepancy leads to lower contractual amount, without the revision of the contract (usually the case) the poor LCS members had to accept a much lower remuneration package, which he/she might not find competitive in the market. Poor LCS groups do not have the strength to make complaints against it; actually no grievance addressing mechanism is discussed in training or in any kind of discussion.

In a significant number of cases the WMG and LCS members have reservation regarding the post work measurement. They point out correctly that the TA Engineer visits the work site on a regular basis and there are periodic work advancement measurement. Given this, it is wondered how the post work measurement by BWDB (in presence of TA Engineer) can have a significant deviation from what is expected/ actually contracted for (according to the WO). There can be deviations, as the earthwork involves manual works and encounters different natural phenomena. However, under regular circumstances with regular supervision, deviations of more than 10% and above are not expected.

### 4.4 Subcontracting: an open secret

Given the reality that in many cases, BWDB issued the official work order in March (or even as late as in May) and the receipt of the work order got delayed further (Table 4), it means that in most cases work orders were issued allowing a time frame not adequate to mobilize the LCS group and get the work completed before the rain comes (the first showers in a calendar year are expected in first/second week of May and monsoon approaches in the first week of June). There arise several challenges if the work order is issued late such as in April/May.

Usually the announcement that a 'Work is being designated' (locally it is said that 'work is coming') is made public quite earlier (even 2-4 months earlier) than the actual work starts on the ground. Then the LCS group is formed, mostly in a public meeting involving most of the community members. The announcement of the contractual amount (the contract yet to be signed) is made by the WMG members, in presence of the representatives from BWDB and TA team. If the targeting of LCS formation process is right, it is expected that the LCS members belong to poor/ultra poor groups, and they do not have land to substantiate their livelihoods (that is why the 'Labor Contracting Society' is also called 'Landless contracting Society'). The announcement reveals the 'Total Contractual Amount' of the work. In every case, the amount announced is very close to the actual total contract amount (on paper). The LCS members acknowledged that they were told about the Tax and VAT to be deducted from the 'work amount'; however, in most cases only the President, Secretary and the Treasurer of the LCS see the copy of the contract; the other members don't see and don't know the actual contract amount, and often do not dare to ask. Most of the LCS members are not aware of the official 5 percent service charge for WMG's intermediary role.

The total amount of contract for the work (including VAT and Tax) appears attractive for the poor people in LCS and they have never given any guidelines regarding how many people can complete the task in how many days involving how many hours per day. In the BWDB rate schedule, the labor for earthwork is mostly considered as unskilled labor. These LCS members are expected to be unskilled, though they might have the experience in earthwork as day labor. It is also expected that these unskilled poor people would take up other paid employment (mostly as day labor in nearby areas) if the announced work would start late, leaving 'No Directive of group work' and 'No Specific /Tentative time frame to start'.

After 2-3 months of LCS formation, when the 'work' starts on the ground, mobilization of this LCS group often appears as a problem. One of the major reasons for this is that most of the members (especially the male members) got involved into other activities and thus the group became dismantled.

At this point, when the 'work' supposed to start on the ground after the official receipt of work order (in a number of cases, the work got started without having any office order in the hands of WMGs), there was not much time left before the rains would start. BWDB officials apparently are not much aware of the consequences of the issuance of the work order late, because according to them, the 'same work' can be completed (even with higher efficiency) by the contractors within this time frame. Thus no special attention/sensitivity by BWDB officials regarding 'late issuance work order' is observed considering the nature of engagement of LCS in earthwork (all manual labor).

BWDB wants the job completed within the stipulated time frame, i.e. before June. The community people (WVG members and the LCS members belonging to that community) neither want the work to get postponed till the next dry season, as the 'work' -if physically completed- appears quite useful for them: according to them the work helps to reduce their drudgery in a major way. If the work is carried over till next dry season, the pre-work measurement may change and most likely more work will be needed to complete the task; however, there is no instance to revise the pre-work measurement and the contract accordingly in case of carried over works.

In such situations, WVGs may subcontract/ hire one or a number of '*sardars*' to complete the work before the rain comes. The advantage of such contractors or '*sardars*' is that they have experience to manage earthwork activities and it is expected that they can complete the job within a shorter timeframe being more efficient in labor management, stemming from their experiences than is expected from the LCS. There are instances where these contractors/*sardar*'s use machines (such as an excavator) which allows them to complete the work in a shorter time frame.

'Subcontractors' usually do not hire LCS members; however, there are instances for 'token participation' of some of the LCS members for a number of days, if not for the whole period of the activities.

It is to be noted that just to get involved as a hired day labor and to get involved as a LCS member (even in the same nature of earthwork) are functionally and philosophically two different approaches of employment.

'Subcontracting' is found to be a common secret for BWDB and the TA team, though it does not happen in all polders. The TA team cannot much influence the dates that work orders are issued, though it keeps the records of the official dates of WOP issuance. Both for BWDB and the TA team, the completion of the task is a main performance indicator; moreover, timely completion of a work, such as khal excavation, can also mean that farmers benefit sooner from water management improvements.

### 4.5 No process audit regarding LCS activities

It is found that the zonal offices of the BGP take regular notes on LCS activities in their regular meetings with field level Community Development Facilitators (CDFs). And the engineers from the TA team regularly visit the sites. It was therefore quite remarkable that subcontracting was seldom officially reported upon. Apparently, the whole process of LCS engagement needs to be revised, monitored and the performance indicators for its effectiveness need to be devised.

### 4.6 LCS as an investment

The modality of engagement of LCS is often perceived by BWDB/Development Partners as 'an investment' which is expected to create employment opportunities for poor people and thereby will contribute towards the reduction of their poverty. It is to be noted that BGP/BWDB is purchasing a service from LCS groups, the same service they could have bought from other service providers like regular contractors. There is hardly any additional 'investment' for the poor people, apart from the assumption that any surplus income from LCS work (ie not used for



daily subsistence or debt repayment) could be used to purchase productive resources for more permanent poverty reduction.

BWDB /BGP (or any other project under BWDB) 'does not offer any additional service to the LCS members other than wage payments which the LCS members are required to earn' under contractual obligation. Even, there is no designated LCS official (which is common in LGED projects) from the TA part, to justify the claim as an 'investment on LCS'. The training for LCS members (supposedly for one day only to the executive committee members of LCS, that too being generally very basic, and in many cases there was no formal training, although replaced by some on-the-job training) is often just an 'one tick' on the process which does not contribute to the human resource development/skill development of those members. This means that there is no point of making the argument on current modality of 'investment on LCS and its expected return'.

### **4.7 Predominant perception: there is not enough labor to take up manual earthwork**

The wage rate offered to LCS members (as used to calculate the contract amount based on the rate schedule) is supposed to be 'competitive'. Competitiveness is meant to offer a wage rate/remuneration package which is determined by existing market rate for almost the same work/same level of activities. In reality, there is hardly any data to suggest that the fixed rate applicable towards defining the rate schedule is often found to be competitive with other wage rates in the concerned season. Rather, the offered wage rates undermine the seasonal variation in market rate for the engagement of labour, and are often found to be nearly at par with respect to daily wage rate in the lean season or even below the lean season wage rate. Therefore, when a 'contractual obligation' involves committing days within the peak season of employment, the contract no longer appears competitive to the LCS members, which leads to eventual slowdown of the progress of work and eventual overrun beyond the stipulated time-frame.

In all three regions (Khulna, Shatkhira, Patuakhali) where BGP has been working, getting engaged as day labor in different types of agricultural activities is the most common type of employment for poor people. Employment opportunities/potentials always depend on the availability of work (demand side) and the wage/incentives offered (demand side) and the availability of workforce with desired skill to accomplish the task (supply side). One of the observations by BGP/ BWDB is 'not having or finding enough labor for LCS activities', at least not during agricultural peak season. This means that poor people are apparently not interested to be part of an LCS group because other wage labor work available at that time pays better.

Exploring the national level data on poverty, it is revealed that in all three districts where BGP has been working the poverty is relatively deep as compared to many other districts of the country (pl. see the ranking in Table 5). Especially Khulna and Shatkhira are two of the more poverty-stricken areas in the country. The number and ratio of extreme poor people in these areas are also substantially high compared to those in other districts (*Household Income and Expenditure Survey, BBS, 2017*).

**Table 5: Poverty scenario in BGP working districts in national context**

District	Poverty Head Count ratio (%)	Rank (among 64 districts)	No. of Extreme Poor	Extreme poverty Head Count ratio (%)	National Average Head Count Ratio (%)
Patuakhali	25.80	20/64	2,24,919	14.7	17.6
Khulna	38.8	46/64	4,90,017	21.2	17.6
Shatkhira	46.3	56/64	5,94,006	29.7	17.6

**Source:** Household Income and Expenditure Survey, BBS, 2017

Considering the nature of the work, the LCS activities must be carried out throughout the dry season (from end of October to April, the latest). In May, one can expect incessant rainfall in the coastal belt of Bangladesh. In such a backdrop, it is quite obvious that turfing must be completed by April (latest), preferably by the end of March, to allow the compactions get settled and firm. Otherwise, the earthwork will be exposed to rainfall and the turfing will get eroded by the middle of immediate monsoon.

During these season, when the earthwork should be carried out (October to May), there are different types of activities where poor people get engaged. The labor demand, wage rate, and the types of activities vary within these months. Figure 6, 7 and 8 exhibit a snapshot of activities available in these months and the wage rates offered (data collected in November, 2018) in Polder Areas 29, 30 and 31 part respectively in Khulna, as an example.

**Table 6: Employment potentials for day labors in Polder area 29, Khulna**

Months	Khulna Batiaghata (Polder 29)	Labor demand (Ranking)	Working hours/ day	Wage rate/day	
				Male	Female
October	Production of seedlings of Rabi crop, weeding, etc.	1.5	Half a day	300 (and food)	200 (without food)
November	Field preparation, Mustard transplantation, rabi crop cultivation, weeding	2	Half a day	300 (and food)	200 (without food)
December	Harvesting of aman, post harvesting activities, field preparation for boro, seed bed preparation for boro, rabi crops cultivation and harvesting, etc.	3	Full day	500 (and food)	400 (without food)
January	Post harvesting activities, field preparation, transplantation of boro	3	Full day	500 (and food)	400 (without food)

Months	Khulna Batiaghata (Polder 29)	Labor demand (Ranking)	Working hours/ day	Wage rate/day	
				Male	Female
	seedlings, rabi crops cultivation and harvesting,				
February	Boro transplantation, mustard harvesting, robi crop harvesting, vegetable cultivation in gher, etc	3	Full day	500 (and food)	400 (without food)
March	Vegetable cultivation at gher, mustard harvesting, maintenance of boro field etc.,	2	Mostly half a day	300 (and food)	200 (without food)
April	Towards the third week of April, the intensity of activities peaks up because of boro harvesting	For first 3 weeks: 1.5	half a day	300 (and food)	200 (without food)
		From 4 <sup>th</sup> week: 3	Full day	700 (and food)	500 (without food)
May	Boro harvesting and post processing	3	Full day	700 (and food)	500 (without food)

General comments: October-November and March-first three weeks of April are the lean employment seasons in polder area 29 area. Engagement of LCS activities during this timeframe (a window of about 75-90 days) can be an optimal scenario for poor LCS members.

Figure 2: Schematic representation of potential timeframe to optimize LCS engagement

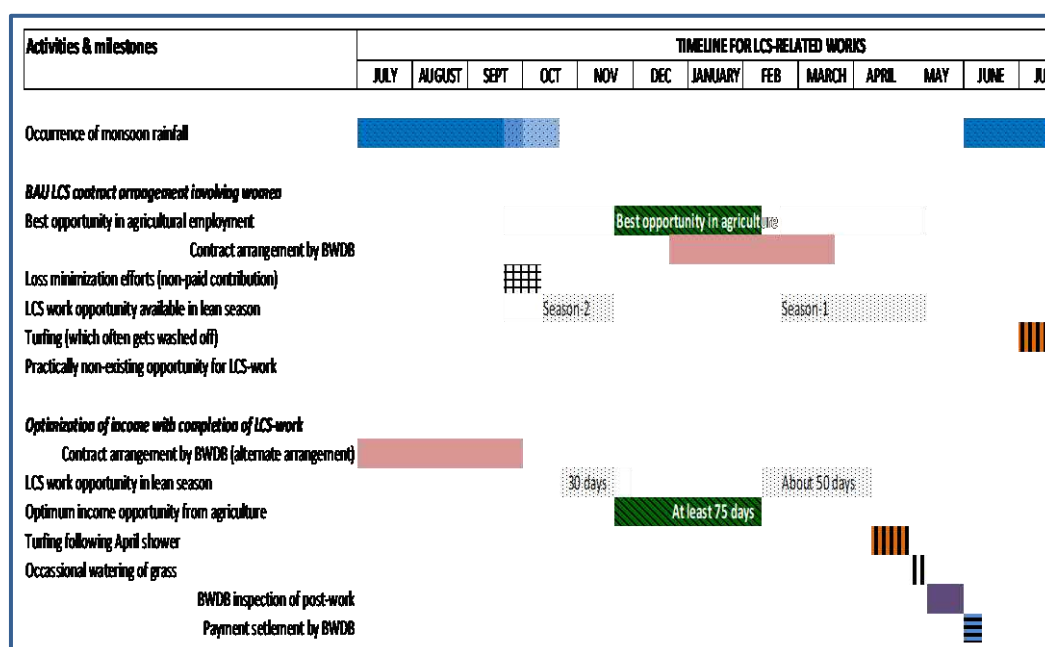


Table 7 and Table 8 represents employment seasonality and wage profile of poor laborers in polder areas 30 and 31 part, in Khulna. It helps to find out the optimal timeframe to engage LCSs so that maximum benefit can be accrued by them.

**Table 7: Employment potentials for day labors in Polder area 30**

Months	Khulna	Labor demand (Ranking)	Working hours/day	Wage rate/day in BDT	
	Batiaghata (Polder 30)			Male	Female
October	Applying insecticides/pesticides in T.aman fields	1	Half a day	250 (and food)	Almost no option
November	Applying insecticides/pesticides in T. aman fields	1	Half a day	250 (and food)	Almost no option
December	At the end of December, T. aman is harvested	2.5	Full day/hourly	500/600 (and food)	300/400 (and food)
January	T. aman harvesting and post harvest activities	3	Full day/hourly	500/600 (and food)	300/400 (without food)
February	Sesame, Mug dal, vegetables, water melon cultivation Women’s employment opportunities are high	3	Full day/half day/hourly	600 (and food)	400 (and food)
March	Sesame, Mug dal, vegetables, water melon cultivation	3	Full day/ Hourly	500 (and food)	400 (and food)
April	Sesame, Mug dal, vegetables, water melon cultivation.	3	Full day/ Hourly	500 (and food)	400 (without food)
May	Harvesting and carrying vegetables for transportation	3	Full day/ Hourly	500 (and food)	400 (without food)
<p><b>General comments: In this area, transplanted aman is the dominant crop. From February sesame (now decreasing), Mung dal, vegetables, water melon are cultivated. From the end of December till May, the intensity of agricultural activities peaks up. Women get engaged in the fields in a large number.</b></p>					

**Table 8: Employment potentials for day labors in Polder area 31 Part**

Months	Khulna	Labor demand (Ranking)	Working hours/day	Wage rate/day in BDT	
	Batiaghata (Polder 31 Part)			Male	Female
October	Applying insecticides/pesticides, weeding, applying fertilizer etc.	1	Full day	400 (and food) /500 (without food)	300 (and food) /350 (without food)
November	Applying insecticides/pesticides, weeding, applying fertilizer etc. Aman harvesting at the end of November. At the end of November, women use to catch shrimp fries	2	Full day	400 (and food) /500 (without food)	300 (and food) /350 (without food) /150-400 (piece rate for shrimp)
December	Aman harvesting, post harvest processing; women's engagement in shrimp fries/ larvae	3	Full day	500/600 (and food)	300/400 (and food)
January	Post harvesting of aman, preparation for boro (small area)	1.5	Full day/hourly	400 (and food)/500 (without food))	300 (and food)/400 (without food)
February	Other than Boro transplant, not enough activities	1	Full day/half day/hourly	400 (and food) /500 (without food)	300 (and food) /350 (without food)
March	Water melon, boro, vegetables (not in large scale), sesame, etc.	2	Full day/ Hourly	400 (and food)/500 (without food)	300 (and food)/350 (without food)
April	Very little activities on the field	1	Full day/ Hourly	400 (and food) /500 (without food)	300 (and food) /350 (without food)
May	Other than boro harvesting and post harvest activities, very little activities on the field	1.5	Full day/ Hourly	400 (and food)/500 (without food)	300 (and food)/350 (without food)
<p><b>General Comment: Salinity is a major issue here. For that, Aman is cultivated in 1140 hectare of land, where boro is cultivated only in 240 hectares of lands. Seasonal out migration, especially to Dhaka (also in adjacent districts) are high. People migrate to Dhaka and other parts of the country to work in brick fields during the dry season. In most cases, the male members usually migrate; in case of working in brick fields, husband and wife with their young kids often tend to migrate. Sesame was a popular crop here, but with increased salinity the sesame production has been decreasing. Women used to get engaged in shrimp <i>ghers</i> in late November till the end of December.</b></p>					

In early nineties the implementors of the Employment Incentive Programs (EIP) considered work orders coming in only in December as very late; but by now the BWDB often does not issue work orders before March. This is a fundamental change, as it shifts the moment of work from a very lean period, to a period during which landless labourers can find employment elsewhere. Moreover, earlier work orders prevent labour migration to remoter locations.

It is key to realise that there are systemic flaws which affect the LCS potentiality as an instrument for poverty reduction. If these systemic flaws are not resolved – primarily by BWDB – then the value of LCS work for poverty reduction is negatively affected. The calls by development partners for a higher percentage of LCS work by GoB (as indicated in different policies), is as barking on the wrong tree – there is a need to focus on the systemic issues.

### 4.8 Mechanization: reality of today

In case of khal re-excavation or embankment re-sectioning, use of machines (like excavators) are quite common. The contractors are allowed to use machines but the LCSs are not allowed. At the same time, the contractual rates of contractors and LCS are different, based on the fact that contractors use machines whereas LCS use human labour. Hence, contractors get 35-40% less than LCSs for a same amount of work. In BWDB's approved LCS guidelines there is therefore no scope to use machines in LCS work at this moment; this may be possible in future by creating such opportunities in the LCS guidelines.

As machines replace human efforts, it is quite obvious that the magnitude of employment created through LCS modality will be much less if the same task is done using machines. It is explicitly expressed by the BWDB professionals and the TA team members that apart from turfing, the other earth work can be well carried out with the help of machines (as contractors do), usually with better quality as a result compared to the quality offered through manual labor by LCS members. This means that the deployment of LCS groups is seen as a poverty reduction measure and not as a cost-efficient way to get earth work done.

Bangladesh, as an aspiring middle-income country, the poverty level has declined commendably since last two decades. People have employment opportunities in different sectors (as discussed earlier). Then the following questions can be raised:

*Why would people take up such manual labor, if not sufficiently compensated?*

*Whether LCSs are allowed to use machines?*

This report raises the important issue of whether LCSs have a future in Bangladesh. The use of labor-intensive methods for construction is in the process of being phased out. Large-scale earthworks, that used to be done by human labor 30 years ago, are now done by machines, and the scale of works required to justify the use of machines is steadily being reduced. In many parts of India there is now a mechanical digger in virtually every village. A few LCSs are now hiring excavators for earth works – doing the job faster and cheaper, and also in waterlogged conditions where human labor could not be easily used.

As per the Rate Schedule analysis of BWDB, the rate for a certain amount of earthwork (with clear specification) done by manual labor and the rate for the same task if carried out with the help of machines are different as mentioned above. Both BWDB and LGED have recently introduced differentiated rates for earthworks using machinery and manual methods, which

may enable LCS to continue to be able to work within the LGED and BWDB rate schedules for a bit longer – but eventually the use of machinery will take over.

If the work is carried out by the help of machine, it does not necessarily replace all the human efforts. A certain portion of manual labor is still needed to run the machines and do certain things which machine cannot perform, such as turfing. However, in such cases (as contractors do) the requirement for human labor is much less than if it is accomplished completely by manual labor.

Other than the efforts by the head man, all other labor engaged in earthwork is considered as ‘unskilled’, both for manual and for machine driven processes. And the daily rates for unskilled labor are the same for both the processes. Then it’s an issue of ‘NUMBER’ of labor days. The analysis boils down to the questions:

- ✓ Does the poverty level of the regions where BGP works provide signal towards enough labor supply in the dry season (October to May) to be willing to get engaged in LCS?

In Khulna and Shatkhira, certainly the poverty level is indicative enough to get a signal that there can be poor people willing to accept hard manual labor, provided the engagement do not potentially conflict with his/ her high potential employment timeframe (discussed in 4.7)

- ✓ Whether the compensation /remuneration received through LCS activities are attractive enough to outweigh alternative opportunities he/she (an LCS member) has to sacrifice.

Through addressing the systemic flaws to improve/ rectify, and offering the job during his/ her lean employment season can potentially increase the effectiveness of LCS modalities.

- ✓ For whom the LCS activities are still attractive (if at all)?

For ultra-poor men and women, especially women who prefer to work within the close vicinity of her household, with improved systems of engagement that too in lean employment seasons still can offer attractive packages for poor LCS members in the poverty-stricken areas where BGP works in the coastal belts.

While women’s LCSs have had a positive impact on poverty for some of the poorest households (detail discussion will be in CHAPTER FIVE), it can be argued that this may or may not be a cost-effective way to address extreme poverty. The lower cost of infrastructure built by machines means the same investments can be used for more rehabilitations works and will benefit more people, creating more long-term employment.

One way to address the issue is through ensuring local poor people’s participation in Contractors’ activities. ADB has been following such directives these days.

The National Social Security Strategy, 2015 (GED, 2015) says, people in Bangladesh need to move into decent, better paid jobs. Although working in LCS may give them a better wage and the opportunity of a share of profits, it is still hard manual work of low status. Mechanization is a reality. If machines are not allowed by LCSs with an assumption that it replaces human labor (which is a fact), subcontracting will eventually dominate the whole system and a number of influential WMG members will take the benefit out of it. It is time to allow use of machines by

LCSs, so that the number of target beneficiaries will be less, but whoever receives it can be better off.

### Summarized findings from Chapter Four

This chapter lists eight -often interrelated- challenges of the LCS modality as implemented under the Blue Gold Programme:

1. The delayed issuance of work orders by the WMGs to the LCS groups in late April / early May, often two months after the issuance of the WO document by BWDB, which was already late, due to alleged lack of manpower; however, also suggesting back-dating.
2. Therefore it is often not possible to complete the work before the monsoon rains start. These rains cause damages to the unfinished work, leading to extra work to address the damages once the work restarts. This not only forms an extra -not remunerated- burden, but LCS members also have to forgo better wages in peak aman season at that time.
3. Confusion on pre- and post- work measurements were found, including the absence of proof of pre-work measurements with the WMGs, and BWDB sometimes declaring earlier measurements as 'not correct', leading to a lower payment. LCS groups lack the strength to complain against this; grievance addressing mechanisms are missing.
4. Despite explanations in the LCS formation meeting, many LCS members were insufficiently aware of their expected net earnings and the estimated number of working days; often they were only aware of the total (gross) contract amount.
5. The impossibility to complete the works before the onset of the monsoon were found to lead to the hiring of "sardars", i.e. subcontracting the work to skilled foremen able to complete the work in time. They tend to hire outside labour and/or use machinery.
6. The LCS modality as an investment to reduce poverty often does not work, especially under the above conditions. At best, it provides temporary incomes.
7. The average wages from the LCS work are not competitive, often the same or lower than in the agricultural lean sector. Hence LCS work is not attractive, especially when the labour input coincides with the agricultural peak season.
8. Unlike LCS groups, contractors use machines, getting a lower contract amount (35-40% less) for the same amount of earth work. Thus using machines is more cost-efficient and leads to better quality work. With Bangladesh moving towards becoming a middle-income country, with less poverty and more employment opportunities, the question is whether or under which conditions LCS work is still useful. In particular, because more mechanization means that the same budget can be used for constructing /rehabilitating more works, which will benefit more people leading to more long-term employment.



## CHAPTER FIVE: IMPACT OF LCS ENGAGEMENT ON FEMALE LCS MEMBERS

To get more insight in the impact of LCS work on especially women LCS members, a survey was conducted among 167 female and 36 male LCS workers, see Annex I for the questionnaire. The interviews were held in early 2019.

### 5.1 Profile of Female LCS members

The survey interviewed 167 female LCS members in two of the working areas of BGP, Khulna and Patuakhali. The average age of LCS members was 38.3 years, the range was from 21 to 64 years. In addition to women, also 36 male LCS members were interviewed.

Most female LCS members are married; 25% are widowed or divorced, some of them living in a male headed household; others forming a female headed households. In total 14% of the interviewed LCS members are from female headed households. This means that women from female headed households are over-represented among female LCS members (on average 3.6% as per baseline study of 2018, see BGP Technical Report 23), which seems to confirm that female headed households belong to the poorest households.

**Table 9: Average age of sample LCS members**

	Number of members	Average age
Women	167	38.3

**Table 10: Marital status of LCS members and gender of household head**

	Number of members	
Married	125	75%
Widowed	26	16%
Divorced	16	9%
Total	167	100%
Male headed household	144	86%
Female headed household	23	14%
Total	167	100%

Table 11 shows that all households include one or more women; 98% include at least one adult man (above 16 years), meaning that most female headed households include a male person, who is not considered as household head (can be a son above 16 years, an elderly man, etc). 92% of the households have men who contribute to the household income and 82% have women who do so (apart from the LCS earnings, which 100% of the interviewed women do/did). 88% of the households have children of school age and 46% have younger kids. It is significant to note that in almost all households both men and women earn some income, which is probably this high because of the poverty status of the household. In 11% of the households there are

people who cannot work due to their age or due to being incapable or disabled. It is important to note that 96% of school-age children are enrolled in education.

**Table 11: Household composition of the interviewed LCS members**

	Percentage of households with people who				Average number per HH
	total	earning income	old/unable to work	in education	
Men	98%	92%	4%	4%	1.73
Women	100%	82%	7%	6%	1.47
Child 5-16 years	88%	0%	0%	96%	3.03
Child 0-5 years	46%	0%	0%	4%	0.86
Total	100%	87%	11%	87%	6.24

**Table 12: Education and literacy of LCS members**

women		
<b>Education</b>		
None	49	29%
Primary	92	55%
Secondary	26	16%
higher sec	0	0%
Degree	0	0%
N	167	100%

LCS members are relatively poorly educated. Still about 55% of female LCS members have completed primary level education, owing to the public investment to girls’ education. Among those who do not have any education, 69% of them can sign only.

## 5.2 Female LCS members’ employment and earning

### 5.2.1 Earning from the LCS engagement

Table 13 presents data on the average number of days worked in LCS and average daily earnings from LCS.

**Table 13: Earnings for LCS**

	Days worked	Earning per day worked Tk
Men (n=36)	65.6	362
Women, including FHH (n=167)	62.7	346
Female HH heads (n=23)	72.5	352
All (n=203)	63.3	354

On average LCS members have worked 63.3 days – slightly more by men than women, but female household heads worked significantly more (72.5 days) than average. Average reported wages were Tk 354 per day – being slightly lower for women than for men. It is not clear how accurate the reported earnings per day are, but it is remarkable that they are considerably higher than calculated incomes in the case study of Box 3 (Tk 135 and Tk 106 for men and women, respectively).

### 5.2.2 Use of LCS Income

### 5.2.3 Decisions on use of income from LCS

Table 14 shows that decisions on use of income from LCS are generally taken jointly by husbands and wives. It is likely that those women LCS members who took decisions on their own, are mostly the female household heads. It cannot be deducted to what extent joint decision-making means equally influencing the decision; neither to what extent the engagement of women in LCS work -thus contributing to household income- improved their participation in decision-making.

**Table 14: Decisions on use of income from LCS**

Gender of LCS member	Decision taken by:			Total (n)
	Member	Husband /father/Son	Both member and spouse	
Men	2	1	33	36
	6%	3%	91%	100%
Women	32	3	132	167
	19%	2%	79%	100%
All	34	4	165	203
	17%	2%	81%	100%

Female heads (of FHHs) usually take their own decisions, however, for greater decisions like seasonal migration, marriage of the daughter/son, they usually consult with senior relatives and/or neighbours.

### 5.2.4 Uses of income from LCS

Table 15 demonstrates that female LCS members use the LCS income primarily on food and other HH expenses, followed by education expenses, investment in income generating activities and buying household assets. The main secondary use of LCS income is in investments in IGAs, usually in productive resources, followed by education and food and household expenses.

**Table 15: Uses of income from LCS by all women respondents**

Uses of LCS income	Number of Female LCS members reporting				n	
	Main use of LCS income		Secondary use of LCS income		Overall use of LCS income	
food & hh expenses	109	65%	32	19%	141	84%
Education	32	19%	43	26%	75	45%
medical and health	5	3%	7	4%	12	7%
household assets	17	10%	4	2%	21	13%
IGA investment	26	16%	88	53%	114	68%
Savings	3	2%	4	2%	7	4%
house improvement	5	3%	16	10%	21	13%
repay loan	6	4%	14	8%	20	12%
Other	7	4%	8	4%	15	8%
n	167		167		167	

Note that some households report more than one main use of income

The pattern of use of income by female household heads is almost similar (see Table 16), with more emphasis on use for food and HH expenses, followed by education and repayment of loan. There is a significant pattern with FHHs to use LCS income on loan repayment, the loans are mostly taken through micro finance. IGA investment is the main secondary use for FHHs followed by expenses on education.

**Table 16: Uses of income by female household heads who are LCS members (FHHs)**

Uses of LCS income	Number of Female hh heads as LCS members reporting					
	Main use of LCS income		Secondary use of LCS income		Overall use of LCS income	
food & hh expenses	21	91%	1	4%	22	96 %
Education	7	30%	13	57%	20	87 %
medical and health	3	13%	2	7%	5	22%
household assets	3	13%	4	17%	7	30%
IGA investment	4	17%	14	61%	18	78%
Savings	3	13%	4	17%	7	30%
house improvement	4	17%	8	35%	12	52%
repay loan	8	35%	6	26%	14	61 %
Other	7	30%	6	26%	13	57%
n	23		23		23	

Note that some households report more than one main use of income,

Most of the female LCS members (68%) reported that they had invested some part of their LCS income on IGAs. About 82% of the female LCS members have started at least one new IGA (see Table 17). The most common IGA is poultry followed by homestead vegetables and livestock. In particular, LCS income allowed the purchase of a goat. About 47% of the women respondents invested (also) in non-farm activities, in most cases the female LCS members gave a part of her income to her husband or son to buy a rickshaw, start a small tea stall, and/or for the initial costs of a male family member to move to another place for income (seasonal migration).

It is important to note that 74% of the female LCS members received training on their IGA, apparently from Blue Gold, which must mean having participated in a Farmers’ Field School (FFS). Among those who invested on IGAs, 76% received IGA training. Evidently the IGA training has helped the female LCS members to invest. However, it cannot be deducted how crucial the LCS income was for those FFS participants to apply their FFS learnings by doing some investments, but at least LCS income did contribute.

**Table 17: Investment in new income generating activities**

	Number of households		N
Invest LCS money in IGA	114	68%	167
Start a new IGA	94	82%	114
Type of new IGA			
field crops	11	12%	94
Homestead vegetables	72	76%	94
Livestock	64	68%	94
Poultry	88	94%	94
non-farm	44	47%	94
Got IGA Training (among those who invested on a IGA)	87	76%	114
Got training in IGA	124	74%	167

### 5.3 Savings and Credit

The women respondents reported that they could have increased the amount of savings. Before joining the LCS, 118 HHs (71% of 167 HHs) had an average of tk 4912 savings. At the time of the survey, 134 HHs (80% of 167 HHs) had savings with an average of tk 12,164. Considering all 167 women respondents, including households without savings, the average savings went up from tk 4168 to tk 11,238. This means that the overall amount of savings has increased by over two and a half times. It has not been investigated to what extent this can be attributed to the incomes derived from LCS work and/or due to increased incomes derived from IGAs. In particular, it is not measured to what extent IGA training / FFS participation of the respondents contributed to increased incomes, thus enabling increased savings, but this seems likely.

**Table 18: Savings by the women LCS member respondents and their households**

Savings with:	Now		Before LCS	
	number of hh	Average Tk	number of hh	Average Tk
NGO	127	8719	102	4321
Fixed Deposit	09	2130	4	1200
Bank	12	28712	2	48000
Other*	72	3474	48	830
Total	134	12164	118	4912
All LCS HH	167	11238	167	4168

\* other includes cash and informal local savings.

Table 19 demonstrates that most (159 of 167) female respondents (and/or their households) have micro-finance loans, e.g. from an NGO or WMG. A total of 78 female LCS members out of 167 (47%) reported taking loans after joining LCS. The average total loan amount per household is tk 28,364 (excluding the 8 households without any loan). In most cases they have taken loans for multiple productive investments. About half of them took loans for agriculture (vegetables and horticulture at the homestead) and/or for livestock/ poultry. One quarter of the HHs took loans for non-farm activities. Repayment of earlier loans is also exhibiting a significant proportion, among which releasing lands that had been mortgaged earlier is one major pattern. It has not been explored to what extent the participant in FFS was also a factor that promoted the respondents to take loans.

Interestingly the total amount of money borrowed per HH was tk 28,364 and the total borrowed by 159 HHs was tk 4.5 million, over 125% higher than the total earnings from LCS by 167 female LCS members of tk 3.6 million.

**Table 19: Loans taken by women LCS members / households**

Use of loan	no of hh	% hh
Agriculture	88	55%
Livestock	71	45%
Aquaculture	11	7%
buy land	2	1%
lease land	7	4%
non-farm enterprises	58	36%
repay loans	26	17%
on-lend	5	3%
House build and repair	14	15%
Consumption	24	15%
Total # of women / women's hhs with loans	159	
average loan amount Tk		28364

### 5.4 Land and other assets

65% of the female LCS members are from HHs who have farm lands. The number of HHs having farm lands increased from 44% to 65% since 5 years ago. One of the reasons for such an improvement by the HHs in terms of farm land ownership (with khatian) may be because of the fact that 12% of the women respondents' HHs used a part of LCS income in repaying debts, which could have led to releasing mortgaged land. At the same time, also the additional income generated from other Blue Gold benefits may also have contributed to the increase in land ownership.

**Table 20: Change in land tenure in the households of the women respondents**

Land tenure	Number of households			
	At present time		5 years ago	
Farm with khatian	108	65%	73	44%
Farm with no khatian	37	22%	72	43%
Homestead only	7	4%	12	7%
Live with relatives	15	9%	9	5%
Not living here before	0	0%	1	1%
Total (n)	167	100%	167	100%

There has been a remarkable shift in housing status. In particular, nearly two-thirds of the responding female household heads reported now having tin shed housing against about one-third 5 years ago. This is -at least partially- due to the LCS income, because in particular about half of the 23 FHH respondents reported to have spent LCS income on house improvements (see tables 15 and 16).

**Table 21: Changes in housing situation**

Type of house	Percentage of households	
	At present time	5 years ago
Hut	36.8%	66.7%
tin-shed	61.8%	32.4%
semi-pucca	1.4%	0.9%
Total	100.0%	100.0%
n	157	158

Livestock ownership by HHs of female LCS members is shown in Table 22. Ownership includes the HHs who own animals of their own. Shared ownership is where a poor HH will take care of an animal purchased by someone else, usually in return for 50% of production. This practice primarily relates to livestock, like cows. The average numbers of livestock, cattle, goats and sheep have significantly increased. Most of the HHs owning poultry, especially chicken, also increased the number. Again, the increase in number of animals appears due to the combined effects of LCS income and FFS participation.



Table 22: Changes in livestock ownership

	Percent of households with animals				Average number per household			
	Now		Before LCS		Now		Before LCS	
	own	share	own	share	own	share	Own	share
Buffalo	0.8%	0.0%	0.8%	0.0%	4.0	0.0	1.0	0.0
Cattle	58.7%	16.3%	42.1%	14.3%	2.7	1.3	2.2	2.5
Goat, sheep	46.4%	3.1%	29.3%	1.3%	5.6	3.2	4.3	3.5
Chicken	98.6%	1.3%	93.2%	0.5%	22.2	16.5	13.5	4.0
Duck, geese	87.8%	1.3%	82.5%	0.0%	11.3	12.0	9.4	0.0
Pigeon	14.8%	0.0%	10.1%	0.0%	7.8	4.0	6.8	0.0

## 5.5 Women’s position

66% of the female LCS members (respondents) opined that they are now enjoying improved social networks as a consequence of their exposure through joining LCS. However, as all LCS group members are also WMG member, and about three quarters participated in IGA training (supposedly FFS), these improved networks may be a joint effect of the LCS, WMG and FFS memberships, possibly also by participating in gender court yard sessions, which are organised in all WMG communities. The social networks made the women more confident in engaging in IGAs, apparently enhanced by the increased skills through the received IGA / FFS training.

78% of the female respondents acknowledged that they are having improved access to services such as health, education, energy, water, sanitation, financial and/or institutional. As they have been investing in IGAs their income level has started increasing.

Most of the female LCS members perform their IGAs within the HH sphere, mostly within their homestead. A substantial number of female LCSs members also engage in day labor work.

The last questions of the questionnaire were meant to find out whether LCS membership enhanced women’s leadership in broader terms. Indeed, 7 female LCS members out of 167 (4%) were approached to participate in the local election as potential female UP member. Considering that the women LCS members are poor and have a low socio-economic status, this seems an interesting impact.

## 5.6 Key challenges faced by female LCS members

### 5.6.1 Distance to work place

In WMA meetings, after long negotiations among WMGs, LCS work is distributed among the WMGs. Generally, the WMG closest to a work site gets the work. Because LCS members are selected among WMG members, the work site is usually close by. Special consideration is given in case of female LCS groups to ensure that they can easily reach the working site by a relatively short walk. The site selection does not only depend on the WMA and BWDB, but also on the WMGs’ opinion.

In practice the distance is often 1 – 3 km, but some female LCS members reported to have to walk larger distances, up to 8 km. LCS members feel that they do not have a voice in the site selection process. However, the real problem appears to be that some LCS members reported to come to know about the location of the work site only after the work is beginning. This is a problem if the daily walk to the site is requiring considerable time.

### 5.6.2 Female LCS members and subcontracting

It was found that it is not uncommon to go for subcontracting in case of female LCS groups. Subcontracting does not necessarily imply that the subcontractors employ skilled labor. The laborers the subcontractors/*sardars* use to hire are, in most cases, experienced in earthwork. However, even the experienced labor for earthwork (other than the headman/*sardar*) is considered as ‘unskilled’ and the rate schedule is prepared with that assumption. The *sardars* are generally well experienced in managing labor and they understand the earthwork.

If there are women in the community who have experience in earthwork, the WMGs insist to get these women employed and the *sardars* usually allow it. These women may be or may not be in LCS.

In some cases the whole work is given by the WMGs as a subcontract and it is all done by men. There are other cases where a relatively smaller part of the work is designated to female LCS members and the larger portion of the work is designated to *sardars* to get the work completed by men. The rationale behind this is the perception of the WMG executive members (and all other stakeholders, including women themselves) that “*women’s efficiency in earthwork is much less than it is for men*” (each and every individual met gave the same statement). One interviewee reported that even for that smaller part of the work designated to female LCS members, a number of men get employed ‘*to help the women to accelerate the work*’ (FGD, Paira LCS).

However, there are also instances where female LCS completed the whole task. Usually women work for half a day, for example, starting from 8 AM to 12 or 1 PM. The precise timing differs across the regions.

### 5.6.3 Awareness about the contract and financial management

In most cases of female LCSs, the documentation (daily roaster, meeting minutes and others) is prepared and maintained by the President/Secretary/ Treasurer of the WMGs. Not all the poor female LCS members are literate (other than signing their name) and in most cases they cannot maintain the accounting. The WMG executive members help them to manage and maintain the documentation; often these WMG members do these by their own.

The female members were aware of the deduction of Tax and VAT from the contracted amount. However, they were not aware of the actual percentage of this Tax and VAT and the amount to be deducted. It is revealed that most of the transactions (in cases for bank transactions as well) are maintained/ managed/controlled by the male WMG executive members, though the Bank accounts of the LCS groups are operated by the joint signature of any of the three members (most likely the president, secretary and the treasurer) of the executive committee of LCS. Taking the advantage of poor and poorly literate women and their socially subordinate position, the male WMG executive members usually take up all the controls over the management of the work including the financial management.

For female LCS group members, the modality of work thus becomes more like ‘working as laborers’ in an activity managed completely by the WMG. There is no creation of women’s agency through this process. No management/ accounting related training is provided to the female LCS members. LCS work may contribute to some women’s (economic) empowerment if and when LCS income allows women to invest in productive resources, but it is also the IGA training (FFS) that seems a key factor in their empowerment.

### 5.3.4 Absence of sheds and latrines at work place

GPWM (2001), PWMR (2014) and guideline for LCS in Blue Gold Project refer to basic facilities but do not explicitly provide any clear directive to construct temporary toilets (separate for men and women) and sheds for the LCS workers. No such construction was found to be made in any of the work sites where the study team visited.

There are provisions for monitoring the social issues in BGP LCS guideline. The responsibilities are supposed to be shouldered by the TA team and the WMG; in cases if necessary, by the WMA. Creating provisions for a suitable work environment always helps the workers to exhibit higher efficiency. The female LCS members shared that they used to go to the neighbouring households’ toilets; and for that they had to request the family members asking permission. The women do have the issues with not having a toilet around; often women during her menstrual period cannot attend the work. Men LCS members also exhibited positive attitude towards building separate toilet facility for women, when asked.

The female LCS members revealed that they showed clear desire to work as LCS members for a number of reasons:

- ✓ The work place was close by.
- ✓ The physical infrastructure, once completed with good quality, would help them (the community and her family as well) to enhance their livelihoods and mobility. They clearly revealed their desire to be a part of this process of development of their community.
- ✓ Even if the remuneration is ‘*a bit less*’ than what they used to receive working outside the village/community, they intended to accept the job as LCS members. The rationale was, they could save the time of commuting and deploy the saved time to household chores or nurturing the productive resources they had (like chicken, ducks, goats, cows, homestead garden).

In this backdrop, when the WMGs offered them work, they preferred to join. In most cases they were not provided any training. No clear understanding on the engagement intensity (how many days with how much of hours per day engagement needed to complete the work) was provided. The total contract amount always appeared attractive for them, as they couldn’t calculate their share of income out of that ‘big chunk’. Some female LCS groups tried to do that, but at the end of the day, they were not in a position to prepare themselves for different types of challenges involved.

The women accepted the offer, thinking that they could manage the daily living with the help of their husband’s or son’s income and could use the income from LCS activities as savings or investments, as it was paid periodically/ thrice (excluding the final payment after a year). In

terms of social power relation, the poor LCS members, especially female members, were not in a position to negotiate on any of the issues.

The female LCS members clearly exhibited their dissatisfaction regarding the delayed receipt of payment and the lower payment than what they anticipated. While asked why they didn't ask for earlier payment, they replied that they were not sure whom they would need to address for such issues. Sometimes, they made complaints to the Engineer of the TA team whom they met on a regular basis in the work site. They only knew the WMG executive members whom they usually complained to, however, both the TA team members and WMG executive members indicated to them that it was the issue of BWDB, actually taking no responsibility towards facilitating the process.

Going to the BWDB at the regional office to negotiate on the payments usually involved cost for at least 4-5 people (male WMG and female LCS leaders). The female members could not travel to the regional offices by their own because of social norms which restricted their mobility and therefore they had to be accompanied by 2-3 WMG male members to help them reaching there, identifying the officials, making access to the officials and finally talking to them. Also, they could not earn any living for that day as they had to forego any gainful employment on that day. This cost appeared substantial for the poor LCS members, especially of the LCS executive committee. Moreover, the costs for travel and any food items would be deducted from the contract amount.

Female LCS members had to rely on the (male) WMG executive members for opening and managing bank accounts, going to the regional Head Quarters to take the checks, maintain the labor roaster documents. Usually the female LCS members were monitored and managed by the WMG members, LCS male members working nearby or *sardars* employed for this. In this sense, LCS work has little options for self-management and thus for empowerment.

Regarding work safety, access to latrines/sheds appeared 'utopia' for them. They never came across about such facilities elsewhere. And nobody from the TA team or the WMGs ever mentioned about these facilities.

### 5.6.5 Social considerations for the female LCS Groups

Although both male and female LCS groups are given defined tasks under the same legal and institutional provisions, the performances of the male and female LCS groups are not the same given the social norms and practices. However, the process treats the two types of LCS groups the same and demands the same delivery to be made under exactly similar contracts. The gender-related considerations are never brought to the fore while issuing contracts.

Female LCS groups are generally formed to include individual women representing poor households. Every woman has her household responsibilities, even when she is involved in an active LCS group. Inability to perform duties in household chores until certain time of any given day results in household chaos. They accept a task in anticipation of successfully utilizing the lean-season labour-days. However, women usually cannot continue to engage in contractual activities after 1 PM.

Since the males are socially regarded as bread earners for the household, they are not as obligated to show up in their respective houses in any given time of the day. This single factor plays a huge role in the delivery of contractual works under LCS arrangement.

Women groups generally start at around 7:30 in the morning. Since their labour-day is essentially a half day, their rate of delivery/progress is significantly slower than that for the male LCS groups. Moreover, when male LCS-groups see a remote possibility of completing the given task by working extra hours before the commencement of monsoon, they work harder and complete the task so that they do not have to work additional number of days after the monsoon due to erosion related damages (as indicated earlier). In such cases, male groups often exhibit 100% accomplishment of the task. However, this cannot be attempted by the female LCS group due to their differentiated social responsibilities prevailing in rural Bangladesh.

Thus a female LCS group leave the work only partially completed, allow monsoon hydrology to interplay its role in damaging the work and when they come back to the respective work sites following monsoon, the entire task requires longer time to complete. This is when the females reluctantly continue to work under the contract during a time-line when the opportunity cost is the maximum in peak agricultural activities (mid-November to mid-January). That is when the females feel that they are not being treated the same along with their male counterparts in the society. They feel exploited and dejected.

*Had the contracts been treated each type of such groups differently, had the contracting authority been mindful of social norms and gender-differentiated roles and responsibilities, such inevitable exploitations could have been minimized.*

### **Summarized findings from Chapter Five**

A survey was conducted among 167 women and 36 men LCS group members. 25% of the women were widowed or divorced and 14% were female household heads. This means that female household heads are over-represented as LCS members (baseline: 3.6% FHHs). On average women and men spent about the same number of days on LCS work (63 and 66 days, respectively), but female household heads spending more, i.e. 73 days on average. The reported average earnings were about 350 BDT per day, with little difference for men and women. LCS income is mostly used for: (i) food and other household expenses; (ii) IGA investments / productive resources; and (iii) education. Decision making on spending LCS income is usually joint, i.e. by husband and wife.

Common IGAs were poultry rearing, vegetable cultivation and livestock keeping. 74% of the women respondents received training in IGA skills, apparently as FFS participants. Average savings went up from about BDT 4100 to over BDT 11,200 since joining an LCS group; average outstanding loans amounted to about BDT 28,000 per household. Land ownership improved since 5 years before the survey, with 44% of the respondents' households owning land 5 years ago to 65% at the time of the survey. The increase is partially explained by using LCS income to repay debts to release mortgaged lands. The housing situation of the LCS members also had improved. Women's social networks increased, as did their access to services and their income (or the income of their households). The survey results do not allow to analyze to what extent any improvements can be attributed to LCS membership / LCS income and to what extent to the effects of other (Blue Gold) interventions, such as WMG / FFS membership.

### Challenges for female LCS groups:

1. Some women reported to lose relatively much time in walking to the construction site, especially when further than 1-3 km;
2. More subcontracting is found in case of women's groups. Women usually can only spend half days on LCS work, as they need the remaining time for domestic work. Thus women groups have more problems than male groups (working full days) to complete the works before the monsoon and WMGs are therefore more inclined to consider subcontracting.
3. If not subcontracted, women's groups (more than male groups) have to complete the work after the monsoon season, thereby foregoing the high wages in the agricultural peak season.
4. (Financial) management tasks of women LCS groups are often taken up by male members of the WMG EC, such as managing the group's bank account. Women LCS group leaders therefore do not gain management skills; no women's agency is created.
5. Though basic facilities, as a toilet and shed, are required as per LCS guidelines, these are not provided.

## CHAPTER SIX: MAIN CONCLUSIONS FROM THE SURVEY AND PROSPECTS FOR FUTURE

### 6.1 Conclusions from the survey

- a. Current LCS approach and timing (including the late working orders) are disadvantageous for LCS group members for various reasons, including the fact that work cannot be completed in one season, letting monsoon rains cause extra damages which increase the total burden of work, which is not compensated for. This is disadvantaging women more than men, because the female LCS group members can usually only spend half days on LCS work due to their domestic tasks and therefore need a longer period to complete their work. For this reason, there also appears more subcontracting in women's groups, because subcontracting is especially deployed by WMGs when delay in completion is expected.
- b. Current timing of work orders results in the late start of the LCS work coinciding with peak demand for agricultural wage labour work with high wages. This report proposes a more suitable timeframe for LCS work in such a way that it can be done during the lean season, without monsoon rains causing extra damage. This timeframe requires preparation and working orders issued between July and September, allowing work to start in October/November (about 30 days) and continue (after a break for agricultural work) in mid-February for about 50 days (see figure 2 in Chapter Four). The conclusion deducted from the report is that only under such planning (plus addressing other weaknesses), LCS work could be a cost-effective way to address poverty reduction.
- c. There is insufficient explanation to and training of LCS workers, which makes that they overestimate the contract value (as no insight in the deductions from the gross amount) and they are not able to reasonably estimate the required amount of work needed (e.g. in person days). The brief technical training before the start of the LCS work, which was common in the first years of Blue Gold, has been replaced by on-the-job training, because it was difficult to get all LCS members together for such training.
- d. The survey found various systematic flaws related to the role of BWDB, but also -at least to some extent- to the role of the TA of BGP. In the latter case this concerns the lack of designated TA staff responsible for LCS matters as well as the overlooking or hiding of certain problems (at least in reporting), such as sub-contracting, use of outside labourers and excavators, because the completion of the concerned works has priority, no matter how the WMG completed their assigned works.
- e. Role of WMGs: The survey findings provide more insight in the role of the WMGs, especially in relation to managing the female LCS groups, with male WMG executive members taking responsibility for issues such as operating bank accounts. Hence, the report concludes that LCS work does not enhance women's "agency" (decision-making / leadership) and therefore limits the potential empowering effect of LCS work for women. Moreover, the survey found that apart from the service costs

WMGs are entitled to (5% of the contracted amount), the actual costs made by WMG (EC) members for managing the assignment, is additionally taken from the contract amount. This concerns costs as phone calls, copies and travel costs for several people (eg to bank), which in total can amount to another 10% or more of the contract amount. In this sense, the involvement of WMGs (since the PWMR 2014), does not seem to be an improvement for the LCS group members.

- f. The LGED LCS modality seems more beneficial to poor LCS members than the model used in BGP (i.e. by BWDB). In particular, this is true when LGED LCS groups engage in maintenance work, which may continue for periods of up to 5 years, which leads to substantial “forced-saving” amounts at the end of the LCS membership, apart from received subsistence salaries. However, the nature of the infrastructure and the relatively short construction duration of BGP / BWDB infrastructure seem not to allow copying such LGED model in all respects.
- g. BWDB does not engage LCS groups in projects that are fully GoB financed, only in donor funded projects, hence implying that for BWDB the use of LCS groups may be donor-imposed, and not reflecting an interest of BWDB / GoB. Moreover, construction work by LCS groups is more expensive (35-40%) than by contractors using machinery.
- h. Chapter 5 of this report is about the impact of LCS work on female LCS group members, demonstrating that –despite various flaws- the situation of women LCS members (and their households) improved since they joined an LCS group. However, it cannot be analysed to what extent such improvements can be attributed to LCS work and income, or also (or even mainly) to other Blue Gold interventions. For example, about three-quarters of the female LCS members received IGA training, which presumably is FFS skill training from Blue Gold. Even though part of the female LCS group members invest some of their LCS income in productive resources, the study could not deduct how essential this was for livelihood and assets improvements in the year(s) after the LCS work.
- i. Women appear to appreciate certain features of the LCS work, such as the work site usually being close by, the fact they contribute to community infrastructure and the lump sum cash that is received as payment and can be invested in education, assets, house repairs and/or repaying debts. At the same time, there are also many challenges, such as the absence of any grievance system. Other disadvantages include the fact that there are times during the LCS work that the women can earn better wages in agriculture, the rather demeaning nature of the work, and the apparent limited contribution of LCS work to women’s agency and empowerment.
- j. An interesting exception is the fact that 7 women respondents (4%) were approached to be candidates for the local elections; again, it is not clear whether these women developed leadership qualities due to being LCS member, or (also) due to other opportunities, e.g. as WMG EC member, for example, representing the destitute women.



### 6.2. Prospects for the future

- a. The continuation of LCS work under the circumstances as described in the survey, i.e. with late working orders and as a consequence the tendency for subcontracting, seems not recommendable. Only in poverty-stricken areas (Satkhira and Khulna) LCS work can still be attractive given that the LCS modalities are improved.
- b. It is also foreseen that in the near future the use of machinery will eventually phase out earthwork completely done by manual labour, also because the costs are about half, the quality often better, and because of alternative (and often better paid) employment opportunities for the poor. Mechanization should be seen as a reality, as otherwise subcontracting will dominate the system. Nowadays already in some BGP areas contracts for earth works are awarded to execute 80% by machine and 20% by manual labour. It is expected that gradually the execution of all earth works will be shifted to 80% or more by machine, or even 100%. In particular, it appears that BWDB will engage machines for all earth works, especially for the re-excavation of khals, due to the above mentioned reasons (cheaper, better quality). This also avoids the hassle for time extension and carrying-over of work to after the monsoon season. It allows to higher value and volumes per contract, requires less supervision, and is more cost-efficient than manual work, requiring a lower total budget for such infra-structural works.
- c. Under the above circumstances it is better to find alternative approaches to supporting the local rural poor, ensuring that the work is decent and appropriate, especially for women. An example is turfing work through LCS, which is a task which cannot be done by machines. Engagement of LCS groups just for such work in August-September will allow the embankment for re-fixing of minor damages during the rainy season. This is also a slack season for agricultural work.

# Annex A

## ANNEX A - LCS QUESTIONNAIRE

### BLUE GOLD PROJECT UNDER BWDB

#### A. YOUR PROFILE

- Q1. Name of LCS member.....
- Q2. Location .....
- Q3. Ph No .....
- Q4. Age .....
- Q5. Marital status: married/ widow/ divorced-abandoned/single
- Q6. Status on Literacy/Education : (Pls fill in the table)

Literacy	Pls tick	Education	Pls tick
1. Illiterate		5. Primary completed (Class 5+, up to 10)	
2. Can sign only		6. Secondary completed (Class 10+, up to 12)	
3. Can read and write		7. Higher Secondary (HSC) completed	
4. Primary not completed		8. Graduation and above	

#### Q7. Land and Homestead tenure:

	Family owned property (in decimal)		Legal title under own name (in decimal)	
	Currently	5 yrs ago	Currently	5 yrs ago
1. Homestead with legal title				
2. Homestead with no legal title (Khas land)				
3. Having no house/homestead - living with relatives				
4. Farmland ownership with legal title				
5. Farmland managed/cultivated (Tenorial/leased land)				
6. Others (Pls specify) .....				

- Q8. Types of House: Now: Kaccha/ CI sheet house/ Tin shed building/ Pucca building/ Others  
5 years ago: Kaccha/ CI sheet house/ Tin shed building/ Pucca building/ Others

#### B. LCS ACTIVITIES

- Q9. LCS Name.....
- Q10. WMG Name.....
- Q11. Date joined LCS: Month/year.....

**Q12. Number of times engaged in LCS contracts so far.....**

	Contract 1	Contract 2	Contract 3	Contract 4
Year started				
Total amount under contract (Tk)				
Type of work (1 = Embnkmnt resectioning; 2= Khal re-excavation; 3=others)				
No of days of work rendered				
Working hours per avg day (timing)				
Wages received BdTk per day				
Total amount earned as wage (BdTk)				
In how many installments have you received wage				
Have you received any wage after one year of the completion of the LCS work? If yes, How much (Bd Tk)?				

**C. HOUSEHOLD DETAILS**

**Q13. Household composition**

	Total (number)	Income earning members (number)	Disabled (number)	Elderly 50+ yrs (number)	Student (number)
Men					
Women					
Children-School age					
Children-below school age					
Total HH members					

**Q14. Household head:** Male/ female

**Q15. LCS member** (Self)/ other person

**Q16. Main occupation of HH Head:** Now.....

**Q17. 5years ago**.....

**Q18. Is there any member outside country who sends remittance?** Yes/ No

**Q19. If Yes, pl. specify** Number/age/Country/amount of remittance the family receives (BdTk/annual)

**Q20. Main and other Occupation of LCS member:** Now

Occupation	Main	Secondary	Occupation	Main	Secondary
1. Homestead-based Agriculture			7. Petty trading		
2. Agriculture (outside home)			8. Old age/ disabled( unable to work)		
3. Livestock rearing			9. Begging/ Relief		
4. Aquaculture			10. House wife (no paid work)		
5. Domestic help			11. Salaried Job		
6. Fisherman			12. Others (Please specify)		

**Q21. What was YOUR main occupation before joining LCS? (Pls indicate the serial number as above).....**

**Q22. Has there been any change in main/secondary occupation after your LCS engagement? Yes/No**

**Q23. If yes, (Pls. narrate) .....**

**Q24. Please indicate the calendar month where you almost always find employment: .....**

**Q25. Please indicate the calendar month where you hardly find employment (i.e., the month of employment insecurity): .....**

**Q26. In which month/s your family faces income hardship? Why? (Pls narrate)**

.....

.....

**Q27. In which month/s your family faces food insecurity? Why? (Please narrate)**

.....

**Q28. Use of Income from LCS activities: Main use (M)/Secondary use (S)**

1. Food and other HH expense	M	S	7. Savings/ deposit acct/Pension fund	M	S
2. Education	M	S	8. Improve/ refurbish/build house	M	S
3. Health	M	S	9. Start a new small business	M	S
4. Purchase of HH Assets	M	S	10. Repay loan/Mortgage	M	S
5. Marriage	M	S	11. Others (Pls specify) .....	M	S
6. Invest in IGA (non-farm, Livestock, Poultry, agri. etc.)	M	S			

Decision making regarding expenditure of LCS income

**Q29. Who decided how to spend your income from LCS? Yourself/ husband or father / both**

**Q30. Who now decides how to spend your current income? Yourself/husband or father/both**

## D. MICRO FINANCE and IGA INVESTMENT

**Q31. Since joining LCS have you taken any loans from micro finance NGOs/ WMGs/ any other financial institutions? YES/ NO**

**Q32. If Yes, Details of Loans**

	Source of loan	Loan Amount (Tk)	Main purpose of loan (Consider the options from Q-28)
1 <sup>st</sup> loan			
2 <sup>nd</sup> loan			
3 <sup>rd</sup> loan			
4 <sup>th</sup> loan			

**Q33. Did/do you have any savings? YES/ NO. If YES,**

Savings with	Approximate savings amount before joining LCS (Tk)	Current balance (TK.)
NGO/GOB credit group		
Fixed deposit/ Pension		
Bank/post office		
Other/ cash		

**Q34. Since joining LCS, have you started an IGA? YES/ NO**

**Q35. If YES, What type of IGA is it? (Pls tick)**

Field crop/ Homestead garden/ Livestock, Poultry/ Aquaculture/ Non-farm

**Q36. Did you get any IGA training from BLUE GOLD for the above activities? YES/ NO**

**Q37. If NO, do you think training is necessary for further improvement of your IGA engagement? YES/ NO**

**Q38. If you had received IGA training as an LCS member, for how many days/ Hrs you have received the training?**

**Q39. If you had received IGA training as an LCS member, do you think you need further training? YES/ NO**

**Q40. If YES, what type of training you need?**

**Q41. Did you receive any IGA training from other sources than BLUE GOLD project? YES/ NO**

**Q42. If YES, What training have you received? Please narrate**

.....  
 .....

## E. ASSETS and INCOME

**Q43. What assets does your HH have now and before joining LCS?**

Asset Types	Now	Before joining LCS
1. Wooden Cot		
2. Almira/ showcase		
3. Chair/ table		
4. <i>Shinduk</i> (Box/ Trunk)		
5. Ceiling/ Table Fan		
6. Solar Home System		
7. B&W TV		
8. Color TV		
9. Mobile Phone		
10. Sewing Machine		
11. Bi Cycle		
12. Rickshaw/ VAN		
13. Mechanized boat		
14. Power tiller/ Pump/ Thresher		
15. Jewellery		
16. Others		

**Q44. What livestock/ poultry does your HH own or share-own (*bhag*) now and before joining LCS?**

Type	Current ownership (number, #)		Ownership before joining LCS (#)	
	Own	Shared ( <i>Bhagi</i> )	Own	Shared ( <i>Bhagi</i> )
Buffalo				
Cow				
Goat and sheep				
Chicken				
Ducks and geese				
Pigeon/ Turkey				
Others				

**Q45. What trees and fruit/ medicinal plants does your HH have?**

Source	Number of trees	
	Now	Before joining LCS
1. Fruit trees		
2. Palm trees		
3. Banana plants		
4. Papaya plants		
5. Timber and fuel wood items		
6. Medicinal trees and shrubs		
7. Others		

**Q46. Does your HH currently have/own/manage pond? Yes/No**

**Q47. If Yes, how many?** Please indicate number .....

**Q48. Please indicate approximate size (in decimals) of each of those assets (Plz convert acres into decimals)**

1	2	3	4	5	6	7

**Q49. Before joining LCS, did you have/own/manage pond? Yes/No**

**Q50. If Yes, how many?** Please indicate number .....

**Q51. Please indicate approximate size (in decimals) of each of those assets (Plz convert acres into decimals)**

1	2	3	4	5	6	7

**Q52. In the currently owned/managed pond(s), does your HH culture fish? Please indicate in which ones:**

1	2	3	4	5	6	7



**Q53. What is your total ANNUAL household income now, and what was the HH income before joining the LCS?** *[note: income from farm and other enterprises should have the associated costs deducted]*

Sources of income	Total HH income per year (BDTk)	
	Now	Before joining LCS
Daily labor		
Field crops (deduct net input cost, hired labor and machinery)		
Vegetables/ homestead gardens/fruit trees(net of inputs)		
Petty trading (net of costs)		
Rickshaw pulling (net of rental and other cost)		
Pond aquaculture (net of input)		
Rearing of livestock/ poultry (net of input and expenses)		
Fishing		
Handicrafts production (net of input cost)		
Job/ salary (considering monthly take home amount in Tk)		
Remittance (Average in Tk)		
Pension and social benefits		
Begging/ relief		
Other (specify)		
Total		

**Q54. What is your ANNUAL household expenditure now, and what was it before joining the LCS?**

(note – information can either be recorded as monthly or yearly)

**Q55. Please define wealth category of your HH (self assessment)**

**Now:** Rich/ medium/ poor/ very poor

**Q56. Before joining LCS:** Rich/ medium/ poor/ very poor

F. STATUS OF EMPOWERMENT

Q57. Do you think, you now have improved social networking as a consequence of your LCS engagement? Yes/No

Q58. If Yes, please narrate how do you feel so.

.....

Q59. Do you think you/your HH members have improved access to services (health/education/energy/ water/sanitation/financial/institutional ...) as a consequence of your LCS engagement? Yes/No

Q60. If Yes, please narrate how do you feel so.

.....

Q61. Have you enjoy improved mobility due to confidence gained through your LCS engagement? Yes/No

Q62. Can you now move freely (i.e., without someone’s permission) to get things done outside your homestead? Yes/No

Q63. Do you think you have been approached towards accepting any social leadership position following the LCS engagement? Yes/No

(Example: as conflict mediator/as marriage arranger/advocacy for assisting a needy neighbor ....)

Q64. Do you think you have now better contacts with elected members of your neighbourhood as a consequence of your engagement with an LCS? Yes/No

Q65. Do you have any plan to compete in an open election/electoral process? Yes/No

G. Observations from enumerators

Date of interview.....

Name of enumerator.....

Comments and observation