

# Effective Utilization of Climate Change Trust Fund in Adaptation Programs in Bangladesh: A Focus on Stakeholder Participation

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By



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**Subject: Submission of Dissertation.**

Dear Sir,

As part of the partial fulfillment of MAGD, 5<sup>th</sup> batch, I would like to submit a dissertation titled ‘Effective Utilization of Climate Change Trust Fund in Adaptation Programs in Bangladesh: A Focus on Stakeholder Participation.’ The dissertation has been approved as to style and content by Dr. Niaz Ahmed Khan, Chair and Professor, Department of Development Studies, University of Dhaka.

I, therefore, request you to kindly accept my dissertation.

Sincerely yours



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## Declaration

I hereby declare that this dissertation titled “**Effective Utilization of Climate Change Trust Fund in Adaptation Programs in Bangladesh: A Focus on Stakeholder Participation**” is my own original work. It has been prepared as partial fulfillment of MA in Governance and Development of Institute of Governance Studies of BRAC University, Bangladesh.

I also declare that no part of this dissertation has been submitted to complete any Diploma or Master course at any other institution.

Furthermore, I authorize IGS (BIGD) authority to print or publish any part or whole of the dissertation as and when necessary.

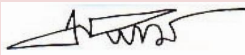


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## Supervisor's Certificate

I am pleased to certify that the dissertation - **“Effective Utilization of Climate Change Trust Fund in Adaptation Programs in Bangladesh: A Focus on Stakeholder Participation”** - is an original work of Syed EnamulKabir. To the best of my knowledge, he is the sole producer of it. He has completed it under my direct supervision.

I would also like to certify that I have gone through the draft and final version of the dissertation. I have found it satisfactory and fully ready to submit to Institute of Governance Studies, BRAC University, as the partial fulfillment of the requirement of MA in Governance and Development.



Dr. Niaz Ahmed Khan  
Chair and Professor  
Department of Development Studies  
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&  
Supervisor



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## List of Acronyms and Abbreviations

<b>ADP</b>	– Annual Development Plan
<b>AIG</b>	– Alternative Income Generation
<b>BCCRF</b>	– Bangladesh Climate Change Resilience Fund
<b>BCCSAP</b>	– Bangladesh Climate Change Strategy and Action Plan
<b>BCCTF</b>	– Bangladesh Climate Change Trust Fund
<b>CA &amp; AG</b>	– Chief Accounts and Auditor General
<b>CBA</b>	– Community Based Adaptation
<b>CCF</b>	– Chief Conservator of Forest
<b>CCT</b>	– Climate Change Trust
<b>CCU</b>	– Climate Change Unit
<b>CEGIS</b>	– Centre for Environmental and Geographical Information Services
<b>CFW</b>	– Community Forest Worker
<b>CSO</b>	– Civil Society Organization
<b>DEFRA</b>	– Department of Environment, Food and Rural Affairs
<b>DFID</b>	– Department of Foreign Investment and Development
<b>DFO</b>	– Divisional Forest Officer
<b>HSC</b>	– Higher Secondary Certificate
<b>ICCCD</b>	– International Commission on Climate Change and Development
<b>IFRC</b>	– International Federation of Red Cross and Red Crescent Societies
<b>IMED</b>	– Internal Monitoring and Evaluation Division
<b>IPCC</b>	– Intergovernmental Panel on Climate Change
<b>LDC</b>	– Least Developed Countries
<b>MOEF</b>	– Ministry of Environment and Forest
<b>NAPA</b>	– National Adaptation and Action Plan
<b>OECD</b>	– Organization for Economic Cooperation and Development
<b>PD</b>	– Project Director
<b>PIC</b>	– Project Implementation Committee
<b>PKSF</b>	– Palli Karma Sohayak Foundation

<b>PPP</b>	– Polluter Pays Principle
<b>PPR</b>	– Public Procurement Rules
<b>PSC</b>	– Project Steering Committee
<b>SPSS</b>	– Statistical Package for Social Survey
<b>SSC</b>	– Secondary School Certificate
<b>SSUS</b>	– SagarikaSamajUnnayanSangstha
<b>TB</b>	– Trustee Board
<b>TC</b>	– Technical Committee
<b>TIB</b>	– Transparency International Bangladesh
<b>TOR</b>	– Terms of Reference
<b>UNDP</b>	– United Nations Development Program
<b>UNFCCC</b>	– United Nations Framework Convention on Climate Change
<b>WB</b>	– World Bank
<b>WDB</b>	– Water Development Board

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## Abstract

*Climate change effects are the worst in Bangladesh stalling her economic growth and putting substantial barriers on her way to become a middle income country by 2021. Policies focusing mainly on adaptation as means of tackling challenges of climate change have been adopted. As flow of foreign assistance is nominal in this sector, Bangladesh, despite budget deficit, has allocated a block grant of \$300 million from its own treasury for implementing climate change projects. Adaptation to climate change and enhancing resilience of the people at the grass-root level are targeted through such projects. Therefore, the effectiveness of such expenditure as a whole and involvement of stakeholders in ensuring such effectiveness in particular are required to be justified. The study reviews the general fund allocation practice and procedure of BCCTF as well as it identifies the factors that determine effective utilization of climate change adaptation programs. It also examines the role, nature and extent of stakeholder engagement in the use and management of the fund in the implementation of climate change adaptation projects and points at the associated problems and prospects of effective utilization of the fund. In literature on public spending effectiveness in climate change adaptation and stakeholder participation, critics have opined that stakeholder participation produces normative benefits like inclusion of the marginalized, public trust, empowerment, fair decisions, transparency, etc. and pragmatic benefits like ownership creation, conflict resolution, sustainability, etc. Provided that proper participation is ensured, barriers like knowledge gap, political biasness, group conflict, etc. can be overcome. In climate change adaptation programs, stakeholder participation is suggested as an unalienable component as such programs directly influence the concerned people's very life and existence. Critics like Reed suggest psychological underpinning of stakeholder participation, early (continued to the end) engagement, clear knowledge of the objectives, adoption of appropriate methods, high degree of facilitation, local and scientific knowledge integration and institutionalization of participation as best practices. Again, better outcomes and value for money are proposed as determinants of effective spending. Besides, effective delivery of climate change finance is said to involve principles of legitimacy, coherence, transparency, ease of implementation, coordination, innovation and local anchorage. Studies conducted in climate change projects have found that low level of awareness, bypassing of the local people, top-down policies, lack of synergy among stakeholders, low level of information flow, political influence, etc. contribute to make climate change adaptation projects ineffective. Keeping in view the objectives and findings from the literature review, the analytical framework of nine independent variables (determinants of stakeholder participation) and seven outcomes has been drawn. The dependent variable is effectiveness of public spending in adaptation projects by BCCTF. The sample size is sixty of three projects executed by WDB, DOF and SSUS - an NGO in three upazilas of Cox's Bazar, Tangail and Noakhali districts. The study finds that a set guideline supported by acts, rules and policies promulgated in recent years is in place for the allocation and disbursement of climate change trust fund. A Trustee Board, Technical*

Committee and Sub-committees and BCCT manage and govern the overall fund allocation. Projects are segmented according to six thematic areas as spelled in BCCSAP'2009. Out of 270 projects, 23% is being implemented by NGOs. Of the projects implemented by GoB departments, it is WDB that implements maximum number. Allocation volume has been experiencing a gradual decline recently. Implementing ministries, BCCTF, IMED, CA &AG mainly perform their respective part of the monitoring, evaluation and auditing of the projects. The study also finds that informal media rather than formal medium like stakeholder meetings are more effective regarding project related information dissemination in projects implemented by government departments. An early engagement of the stakeholders acts as a lifter of generally prevailed suspicion among the community people about the successful completion of the project. It is also found that people consider that stakeholder participation is important more for the sound implementation of the projects rather than ownership creation. Again, such meetings might have nothing to do with projects with many technicalities. Then, stakeholders are inclined to get instant benefits like training, assistance in cash and kind, etc. as they also like to see that the project is successfully completed. Opinion inclusion functions as important tool for earning trust and satisfaction of local people though in technical projects satisfaction is less dependent on it. Rather, the lifesaving tangible outcomes of climate change projects on their own create satisfaction among the stakeholder. In addition, lack of transparency prevails in the projects as authorities generally do not inform the participants about the project cost in many stakeholder meetings. In most cases, local elites exert considerable influence over project implementation. Such influence might have both positive and negative results. Furthermore, problems like insufficient funding, decline of allocation volume, absence of feasibility study in many projects, late completion, political biasness, lack of sufficient project personnel especially in projects by government departments, weak culture of information flow and loopholes of monitoring deter proper implementation of climate change adaptation projects. In this backdrop, feasibility study in all such projects should be made compulsory. Then, projects should be less supply driven than as present they are. A holistic approach to all climate change projects should be adopted. In addition, availability of all kinds of information in every possible format should be in place. The practice of curtailing funds or insufficient funding should be avoided. For strengthening sound use of project allocation, third party monitoring and evaluation can be introduced. Besides, allocation in climate change adaptation projects should be included in the regular budgetary framework. Finally, as stakeholder participation exerts substantial influence over creation of people's ownership, their satisfaction, proper implementation of projects, transparency in fund utilization and thus over sustainability of projects, participation should be institutionalized.

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# Chapter 1: Context and Background

## 1.1 Introduction:

This chapter introduces the study topic in detail and sets the general background. It begins with a contextual description which pinpoints climate change hazards that Bangladesh has been burdened with and the impacts that climate change has brought upon the socio-economic life of Bangladesh along with the steps taken by the government in facing the challenges of it. After it, a problem statement has been provided to show the importance of undertaking the study concentrating only on the utilization of the allocated money from the BCCTF. Then, rationale and extent of the study are delineated. Next, the purposes, four in total, of the study and limitations of the research are presented. Finally, before concluding the chapter, a chapter outline has been provided.

## 1.2 The Context

Bangladesh has been listed among the most affected countries due to climate change. Like other LDCs, Bangladesh shoulders the burden of climate change though its contribution to causes of climate change is negligible. Climate change effects exerted devastating forces in the floods of 2004 and 2007 and in the two cyclones - 'SIDR' of 2007 and 'Aila' of 2009. Bangladesh feels the bitter bite of climate change and remote, marginal and vulnerable people especially women and children become victims of the bite. Along with people, the ecosystem has been damaging irreparably and many species of plants, animals, birds, insects, and fish are on the verge of extinction in this country. In addition, frequent floods and marine storms leave infrastructure devastated, crops damaged in the fields, homesteads broken, and cattle died. Again, floods, droughts, storm surges, saline intrusion hamper production of agriculture on which around 60% of the population still depends. People have been migrating from saline prone areas to fresh water areas especially in urban centers resulting in increase of slum dwellers. All these put an unbearable load on our national progress and pose challenges to our way to becoming a middle income country by 2021.

Both adaptation and mitigation are proposed for facing climate change effects. Countries like Bangladesh set policies focusing mainly on adaptation. There have been going on

many adaptation programs like construction of dykes and embankments, building cyclone shelters, rain harvesting, introduction of saline resistant crops, etc. in Bangladesh. Across the world, policymakers and development practitioners have embraced the need to adapt to climate change (Anderson S, 2011). For facing climate change challenges, adaptation is the best option for Bangladesh in the short and medium term (BCCSAP, 2009).

Addressing the climate change threats is of immense importance for Bangladesh. The 15<sup>th</sup> amendment of the Constitution of Bangladesh inserted Sub-article 18A which reads ‘The State shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, forests and wildlife for the present and the future generations’ (The Constitution of Bangladesh, 2011:6). To face the challenges, Bangladesh formulated NAPA in 2005. Later, in 2009 the Bangladesh Climate Change Strategy and Action Plan (BCCAP) was formulated providing detailed guidelines. BCCSAP is the first such document among the LDCs. It stipulates six pillars for braving climate change challenges. These six pillars are i) Food security, social protection and health, ii) Comprehensive Disaster Management, iii) Infrastructure, iv) Research and knowledge Management, v) Mitigation and low carbon development and vi) capacity building and institutional strengthening (BCCSAP 2009:xvii-xviii). In all these pillars, adaptation sits at the core.

Adaptation to climate change involves huge spending. More than £6.5 billion has been invested by Bangladesh government with support from international development agencies since the Independence. It is estimated by the World Bank that each year £75 million is needed for roads and other infrastructure to cope with the climate change impacts (WB 2010). The developed countries are reluctant to extending financial support to affected countries though ‘The Polluter Pays Principle’ obligates OECD countries in this regard (Lucia V.D. 2008). So, like other developing countries, Bangladesh has to depend mostly on its own resources along with looking for external options for facing climate change impacts. Bangladesh Climate Change Trust Fund (BCCTF) and Bangladesh Climate Change Resilience Fund (BCCRF) were formed in 2009 to finance mitigation and adaptation programs. Legal Framework to BCCTF was given by Bangladesh Climate Change Trust Fund Act’ 2010. BCCTF is being financed from the revenue budget whereas BCCRF is being financed by the UK, the USA, EU, Australia, Denmark, Sweden and Switzerland. Again, financing the climate change programs from its

own is a huge challenge for Bangladesh which faces budget deficit every year. However, Bangladesh is the first among the developing countries, which has established a Climate Change Trust Fund allocating \$300 million block fund from its own treasury for climate change adaptation and mitigation purposes for three consecutive years from 2009 to 2011. A CCU in the Ministry of Environment and Forest has been established to deal with the allocated fund. All other relevant ministries have set up Climate Change Cell. To date, 207 projects have been approved by the Ministry of Environment and Forest and approximately tk 190560.926 lac has been allocated against those projects from CCTF (BCCTF).14 projects were completed out of them by mid-september'2012(Hedger M & Rabbani, 2012).

As money mainly from the people's pocket is being spent to finance climate change programs, transparent, effective and efficient utilization of it is very much important. It is time to see whether the benefits of the climate change projects reach to the target people. 'One of the best ways to adapt to climate change is to involve people at the grass-root level' (Ali, 1999).A report (DFID, 2011) finds start-up delays and lack of appropriated coordination in DFID funded projects which has resulted in approximately one-sixths utilization of the fund within the stipulated time.Again, effective use of the fund will ensure sustainable adaptive capability of the people concerned. Beside this, effectiveness measurement of such projects is important to find indicators for proper implementation and setting benchmarks.

### **1.3Problem Statement**

Bangladesh government through the BCCTF allocates money for financing both GO and NGO projects on Climate Change Adaptation programs. Engaging stakeholders in the implementation of such programs is immensely important as it is one of the major preconditions of effective utilization of funds. It is also important for ensuring transparency in public fund utilization. It is explicit from available reports that the level and extent of stakeholder participation in climate change adaptation programs is generally insignificant, insufficient and weak. Information on the issue of stakeholder participation in climate change adaptation programs is not also that much available. So it is important to identify through systematic research how and to what extent stakeholder participation influences effective utilization of such fund.

## **1.4 Rationale**

Spending in climate change adaptive capacity and resilience has been gaining significance around the globe. Along with it, strong demand has been put to the forefront to assess with appropriate tools and frameworks the effectiveness of the outcomes of such spending. Like any developing country, funding from own exchequer for addressing climate change impacts is a new phenomenon for Bangladesh. The experience of ADP funded projects in different other sectors is not that much good in the context of Bangladesh. It is probable that the culture of traditional project implementation is also prevalent in climate change projects. So, understanding the process, priority and ways of utilization of climate change fund in adaptation projects is of immense importance for identifying the loopholes that need to be addressed. It would allow us to see whether the allocation could bring the results that have been targeted. Furthermore, such study would shed light on the governance issues related to utilization of fund. There have also been very few researches on this issue in Bangladesh. So, this study will contribute to the enrichment of this aspect besides showing areas for further study. Again, it would provide some policy proposals that might help framing better policies. By proposing some recommendations it might also contribute to more fruitful utilization of people's money in this relatively new arena of public expenditure. Finally, it will identify future detailed research needs on this issue.

## **1.5 Scope of the Study**

The research will explore the allocation process, types of projects selected, and amount of fund already allocated from the BCCTF in the climate change adaptation programs. The allocation in mitigation projects will not come within the purview of this study. It will also analyze the sufficiency of the amount allocated, their effective and efficient use, transparency, monitoring status, political and administrative culture, existing rules and regulations etc. in fund utilization.

## **1.6 Objectives of the Study**

The study aims

- i. to review the general fund allocation practice and procedure of climate change adaptation programs in Bangladesh with a particular focus on the BCCTF,
- ii. to identify the factors that determine effective utilization of climate change adaptation programs,



iii. to examine the role, nature and extent of stakeholder engagement in the use and management of the fund in the implementation of climate change adaptation projects, and

iv. to elicit the associated problems and prospects of the effective utilization of the fund.

### **1.7 Limitations of the study**

Typical to any empirical study, this one has some limitations. First of all, less than a quarter of a year allocated for the completion of a study is really little time. Data was collected from long distancing three different districts and the associated time constraint did put obstacle to reach to a wide ranging population. Secondly, the sample size is only 60 which might not look an ideal representation of stakeholders. Thirdly, around 25 types of government institutions and 55 NGOs have been involved in implementing around 194 and 55 projects respectively funded by the BCCTF. So, picking only three projects for research may not project a picture which can be generalized and applied for most other projects. Fourthly, some personnel involved in the project implementation showed indifference in guiding to reach the stakeholders as well as providing official documents badly needed for getting important information. Fifthly, in both the government projects, some of the personnel involved in the initial stage of the projects could not be contacted as they were transferred to other stations and therefore the original warmth was absent among the replaced personnel. Sixthly, the ratio of male and female respondents was less ideal. Seventhly, contractors, important stakeholders, of the WDB project were not interviewed though they executed the project work on behalf of WDB. Finally, though the researcher at the very beginning of each interview made the aim of the study clear to each respondent, it was found that in some occasions considering him a government official, respondents showed expectation of improvement of bad situations by expressing their grievances during interviews, which might have influenced their responses.

### **1.8 Chapter Outline**

The study comprises of five chapters. The first chapter provides introductory and contextual information about the topic. It also includes problem statement, rationale of

the study, scope and objectives of the study along with study limitations and a chapter outline. Next, the second chapter provides a detail analysis of the existing theories on adaptation to climate change, effectiveness criteria of fund utilization, meaning, nature, practices, barriers and benefits of stakeholder participation in different contexts and the importance of stakeholder participation in climate change adaptation funds. Then, chapter three elaborates methodology, the conceptual framework and provides an overview of the study areas. The following chapter deals with the findings of the study. Finally, chapter five suggests some recommendations emerged out of the findings of the study and also further study options.

## **1.9 Conclusion**

Bangladesh emphasizes on adaptation in coping with climate change challenges. It has adopted some policy measures and allocated a certain amount for financing projects relating to both adaptation and mitigation measures. Effective utilization of the allocated money in the projects especially in adaptation projects is very important for examining whether target people get the benefit, furtherance of similar projects as well as justifying expenditure from own treasury. Involvement of stakeholders meaning people at the grass-root level and near and distant beneficiaries as well as non-beneficiaries of the projects might have an important impact on the effectiveness of such expense. Effectiveness being comprised of a great variety of aspects is very difficult to measure but whether people are benefited from a project constitutes the vein of effectiveness. Therefore, it is worth measuring effectiveness in terms of involvement of stakeholders. There are studies that have stressed that effectiveness of such spending on adaptation projects depends on the fruitful involvement of stakeholders. Spending on climate change projects is a new phenomenon for Bangladesh. So, the study aims to deeply delve into the involvement of stakeholders in the adaptation projects so far undertaken and its nature and extent in ensuring effectiveness of utilizing Climate Change Trust Fund.

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## Chapter 2: A Selected Review of Literature

### 2.1 Introduction

This chapter reviews the major literature on climate change adaptation, determinants of fund utilization, effectiveness of such fund utilization, stakeholder participation in ensuring such effectiveness, different dimensions of stakeholder participation, etc. At the beginning, along with its extent, diverse and exhaustive definition of adaptation is provided. Then the steps of adaptation that Bangladesh so far has taken are dealt with. After it, concept and meaning of effectiveness and stakeholder are presented. In addition to this, different benefits and barriers of participation are pointed out. Then nature and scope of stakeholder participation in climate change adaptation programs are discussed. Along with it, the degree of role that stakeholder participation plays in effective utilization of fund is shown. Finally, before ending, a brief overview of the studies so far conducted in climate change adaptation projects is presented.

### 2.2 Adaptation – meaning and scope

The word adaptation has evolved from ‘adapt’ meaning ‘to change something to suit different conditions or uses’ (Cambridge Advanced Learners Dictionary 2008). It also means ‘making things/conditions/situations better by changing’ (Ahmed 2006 Quoted in Pender 2008:43). Adaptation refers to both the process of adapting and the condition being adapted. ‘In ecology, adaptation refers to changes by which an organism or species becomes fitted to its environment’ (Lawrence 1995; Abercrombie et al. 1997 cited in Rashid 2009:12). In the social sciences, ‘adaptation refers to adjustments by individuals and the collective behavior of socioeconomic systems (Denevan 1983; Hardesty 1983 cited in Rashid 2009:12). It also refers to ‘changes in processes, practices, or structures to moderate or offset potential damages or to take advantage of opportunities associated with changes in climate’ (Rashid 2009:12). UNFCCC defines adaptation as ‘adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects and impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.’<sup>1</sup> IPCC defines adaptation as ‘adjustments in natural or human systems

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<sup>1</sup> <https://unfccc.int/focus/adaptation/items/6999.php>

in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.”<sup>2</sup> Six types of adaptation - anticipatory, autonomous, planned, private, public and reactive adaptation - are suggested by IPCC. Both adaptation and mitigation are pronounced simultaneously; actions and strategies of the former complement the later. While mitigation reduces the propensity of adverse condition, adaptation likely reduces the degree of climate change impacts if ‘adverse condition prevails. The process of adaptation reduces the level of damages that might have otherwise occurred’ (Rashid 2009:12).

In a paper, climate change adaptation is defined focusing ‘on how best to accommodate and prepare for the inevitable and the uncertain changes, minimizing the negative consequences and taking advantage of opportunities (defra 2010:5). ‘Adaptation to climate change is therefore the process through which people reduce the negative effects of climate on their health and well-being and adjust their lifestyles to the new situation around them (Pender 2008:43). Rahman (2008) concludes adaptation is ‘learning to live with’ climate change, ‘not fighting it’ (Quoted in Pender 2008:43). Adaptation management process depends on many factors, including who or what adapts, what they adapt to, how they adapt, what resources are used and how, and, many other themes (IPCC, 1998). Collaborative and open actions as well as effective actions are suggested among others as good adaptation principles. By ‘collaborative and open’ it means that adaptation to climate change ‘will require action from a range of individuals and organizations, within and across sectors working together’(defra 2010:15). Though adaptation is an essential overlooked part of climate change, it is not a substitute of mitigation actions. Rather, failing to control climate change, adaptation cost will soar and poor and vulnerable people will suffer worst. SaleemulHuq (2007), at the 2<sup>nd</sup> International Workshop on Community Based Adaptation to Climate Change, stated: ‘Mitigation is the best form of adaptation’ (Quoted in Pender 2008:44). Adaptation strategies cover ‘retreat, accommodation and protection’ in response to the effects of climate change. Retreat means resettlement of inhabitants away from affected area while accommodation means braving threats of climate change remaining in situ, and protection means defending the affected area by measures like erecting sea walls, making dykes, embankments, and other structures. They can be more comprehensive and be categorized like ‘bearing loss, sharing loss, modifying the threat, preventing

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<sup>2</sup> <https://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689>

effects, hanging use, changing location and restoration' (Rehman et al. 1999 Cited in Pender 2008:44).

### **2.3 Adaptation Measures in the Context of Bangladesh**

A wide range of measures is proposed for adaptation to climate change in Bangladesh which suffers simultaneously from drought, flood, sea storms, salinity, erosion and many other climate change effects. Measures vary from awareness building, early warning system, volunteer training to different physical interventions, etc. Proposed physical measures include creation and maintenance of polders and embankments, river dredging and excavation of blocked canals, construction of drainage, culverts and sluices, maintenance of roads, etc. Other measures include desalination of plants, building cross dams, making stronger homes raised on mounds, reviewing urban planning, elevated platforms for cattle, elevated food and seed storage facilities, designing and improving evacuation routes, building rainwater harvesting tanks or jars, conservation of mangrove or other trees for preventing saline intrusion and erosion, developing community 'seed bank', introduction and use of portable cooker, training local people as volunteers for evacuation assistance, introduction of alternative livelihood like 'cage fish culture', farming on 'floating garden', etc. (Cited in Pender 2008: 48-49).

### **2.4 Effectiveness – Definition and Concept**

The Business Dictionary defines effectiveness as “the degree to which objectives are achieved and the extent to which targeted problems are solved.”<sup>3</sup> Stadelmann et al (2012) observe that no universal metric for measuring adaptation effectiveness exists though in mitigation, measurement of effectiveness can be done through considering the “tones of CO2 equivalent reduced”. They put two assessment criteria for mitigation – 1. ‘Wealth saved from destruction through climate change impacts, and 2) disability-adjusted life years saved (DALYs)’. Trujillo and Nakhoda (2013) have identified some ten components of effective spending in international climate finance. Six of them are i) resource mobilization, ii) the governance of fund, iii) an investment strategy and fund allocation process, iv) disbursement of funding and risk management, v) monitoring, evaluation and learning processes and vi) an enabling environment. These components have been considered from the perspective of international climate change funding. In the paper titled ‘Measuring Adaptation to Climate Change – A Proposed Approach’, climate change adaptation actions are said effective if they are ‘context specific, implementable,

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<sup>3</sup> [www.businessdictionary.com/definition/effectiveness.html](http://www.businessdictionary.com/definition/effectiveness.html)

and enforceable’ (defra2010:15). It also stipulates adaptation to be aiming at ‘adjusting an activity, system or organization to account for the effects of climate change now and in the future in a manner that is efficient, effective and equitable.’

## **2.5 Stakeholder Participation – Origin, meaning and scope**

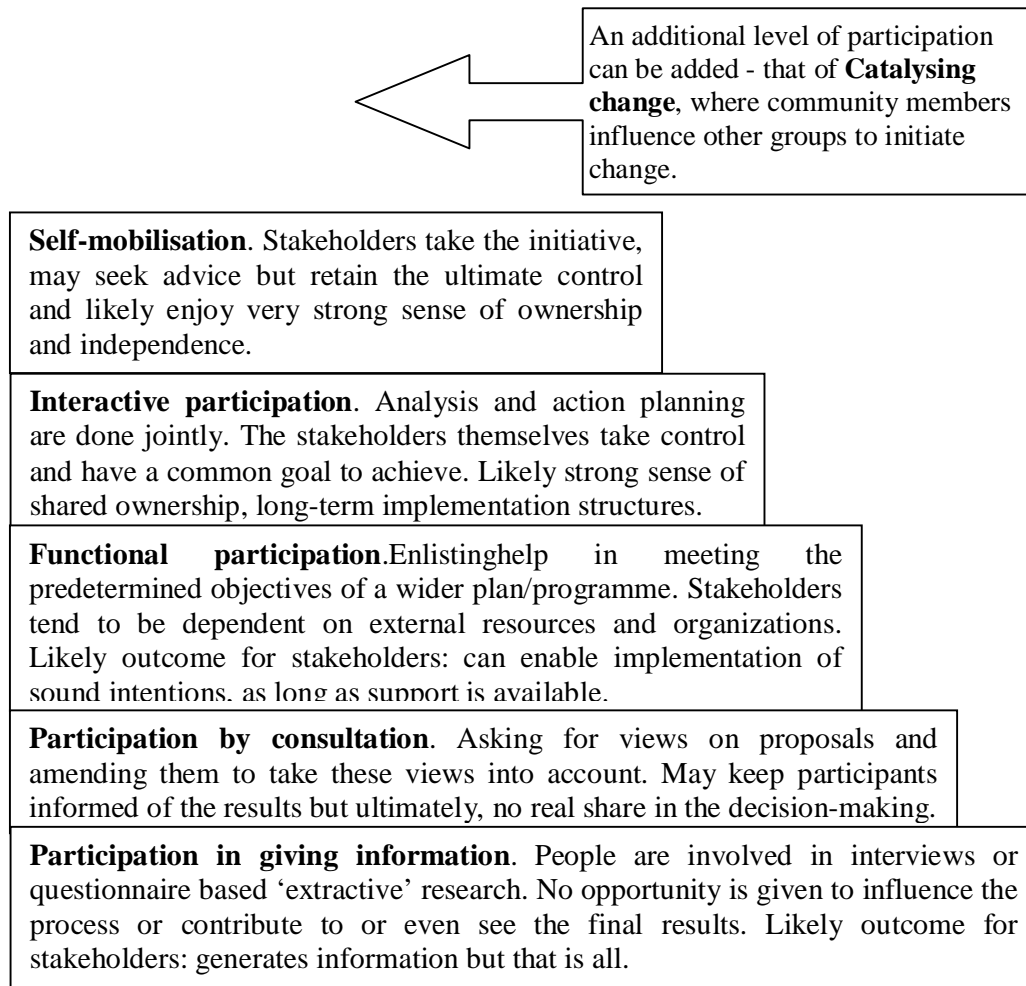
In any project, stakeholders are entities like organization or persons ‘who are actively involved in the project or whose interests may be positively or negatively affected by the performance or completion of the project’ (PMBOK 2008:23). Gliken (2000) defines stakeholder as ‘an individual or group influenced by and with an ability to significantly impact (positively or negatively) the topical area of interest’ (Quoted in ‘Stakeholder Engagement’:1). Stakeholders include a great range of people and institutions. It might include even those who have no direct stake in any project. There are stakeholders who are important because they are keys to the successful achievement of the project priorities. Again, there are influential stakeholders who have ‘power over a decision’ and may ‘control what decisions are made and how they are implemented or exert some other influence which affects the projects negatively (Cited in ‘Stakeholder Engagement’:1).

Stakeholder participation is an ever existing phenomenon of development practices. The advent of participation as an ideology in the third world development practices has its roots in 1950s and 1960s. At that time, the failure of most development projects incited the social workers and field activists to advocate for including concerned populations in development project design and implementation. The target was to reduce social inequality through empowerment (Armah F.A, Yawson D.O. and Johana A.O, 2009:76).

‘Participation is defined as a process where individuals, groups and organizations choose to take an active role in making decisions that affect them’ (Wandersman,1981;Wilox,2003;Rowe et al., 2004 quoted in Reed 2008:2419). Slocum et al, (1995) defines stakeholder or community participation as ‘the active involvement of people in making decisions about the implementation of processes, programs and projects which affect them’ (quoted in ‘Stakeholder Engagement’, p1). The given definition does not recognize broader public participation. It only considers participation of those who have any stake. On the other hand, van Asselt et al (2001) defines participation in terms of involving and count even ‘non-experts’ in processing groups (Quoted in ‘Stakeholder Engagement’, p1). VanAsselt et al also identify four possible goals of participation. These are discovering difference of opinion, ways of reaching to a single decision, democratization and advising.


As mentioned earlier, over a long period of time starting from the 1960s, the concept of stakeholder participation has been developing. It has crossed the stages of awareness raising, incorporation of local perspective in data collection and planning, participatory rural appraisal, extensive participation in the sustainable development agenda. Development as it was practiced in different but parallel geographical and disciplinary context, the term participation was interpreted in diverse ways.

Participation can be compared to a ladder signifying ‘a continuum of increasing stakeholder involvement’ and ranges from mere information dissemination in its lower rung to active engagement or citizen control in its upper rung (Arnstein 1969 quoted in Reed 2008: 2419). Borrowing from Arnstein, Pretty (1994) presents Typology of Community Participation shown below (cited in ‘Stakeholder Engagement’:6):



Twigg (2001) makes important distinction between ‘guided participation’ and ‘people centered participation’ (Cited in ‘Stakeholder Engagement’:7). The former refers captive participation where initiation, fund and control rest with professional external agency which might involve others. The later ‘addresses the issues of power and control’ and gives chance to others to make change on the basis of knowledge and other resources. A spectrum of participation is used by UK local authorities. This is as follows:

<b>Inform</b>	<b>Consult</b>	<b>Involve</b>	<b>Collaborate</b>	<b>Empower</b>
Provide stakeholders with balanced objective information to assist understanding	To obtain feedback from stakeholders on plans made elsewhere	To work directly with stakeholders throughout the process to ensure that their issues and concerns are consistently listened to and considered	To partner with stakeholders in the project including development of alternatives and the identification of the preferred solution	To place final decision making in the hands of the stakeholders
<b>Increasing</b>	<b>Level</b>	<b>Of</b>	<b>Stakeholder</b>	<b>Impact</b>



**Table 2.1: Spectrum of Participation**

[Adapted; Cited in ‘Stakeholder Engagement’:7]

The essential ingredient of participation is that it must be a ‘two-way communication’ and engage both participants and ‘exercise organizers’ in some sort of ‘dialogue or negotiation’. It means participation becomes successful when it comes out of mere information dissemination and information collection (Rowe and Frewer 2000 Quoted in Reed 2008:2419). Then in theories, normative and pragmatic participation in contrasted. The former focusing on the process identifies participation in environmental decision making as a democratic right on the part of the people whereas the later views it as ‘a means to an end’ which ensures higher quality decision. Habermass’ (1987) ‘communicative action theory’ suggests participation should be fair, representing the full range of relevant stakeholders and equalizing power between participants, in addition to being competent’ (Quoted in Reed2008:2419). Again, theoretically ‘planner-centered’ focusing on ‘outcome’ and ‘people-centered’ participation stressing ‘empowerment of stakeholders to define and meet their own needs’ are contrasted(Michener 1998 Quoted



in Reed 2008: 2419). Warner (1997), on the other hand, stresses on ‘consensus’ meaning ‘a condition in which all participants can live with the results’ and which is important for ensuring that objectives are sustainable (Quoted in Reed 2008: 2420). Participation in environment management involves expert knowledge as equally as it stresses on lay knowledge.

## **2.6 Benefits and Barriers of Participation**

One way of looking at the benefits of stakeholder participation is to categorize the benefits under normative and pragmatic groups. From normative point of view, participation is important for democratic society, citizenship and equity. From pragmatic point of view, it is to examine whether stakeholder engagement ensures quality and durability of environmental decisions. The normative benefits are inclusion of the marginalized, increasing public trust, empowering the stakeholders, guarantee of encompassing and fair decisions, ‘social learning’, etc. The pragmatic benefits are better adaptation of interventions and technologies to ‘local socio-cultural and environmental conditions’, availability of higher quality research information inputs, possibility of meeting local needs and priorities successfully by recognizing them at the early stage, higher quality decision making and anticipation of negative impacts, transformation of antagonistic position of stakeholders to trustworthy and learning-friendly situation, creation of ownership, enhancement of long-term support, and reduction of implementation cost ( Cited in Reed 2008:2420). Twigg (2001) finds that ownership ensures sustainability. Stakeholder engagement lets getting deeper insights into the community and thus enables more effective performance and better results. Strengthening community and enabling them to face other challenges, reinforcing local organizations, building up confidence, skills and capacity are some other benefits of participation. It also resolves conflicts, ensures equity and cost effectiveness as decisions taken through participation are ‘tried, tested and refined before adoption’ which is absent in externally driven or imposed initiatives. (Twigg, 2001 quoted in ‘Stakeholder Engagement’:3).

Diverse barriers exist in stakeholder participation. It has been observed that fearing of losing of authority and preferring full replace of ‘top-down’ process, people in power do not welcome participation. Existing power structure can hinder people from participating effectively (Reed 2008:2420). It may also happen that minorities in the group cannot express their opinion due to group dynamics. Again, ‘consultation fatigue’ may arise if

stakeholders are frequently asked to involve in discussion where they have little ‘reward or capacity to influence decision-making’ (Reed 2008:2420). In such situating, stakeholder participation events can relegate to ‘talking shops’ producing little result rather delaying decision making (Reed 2008:2420).

Then, powerful non-negotiable actors with veto power can change the decision taken by engaging all other stakeholders, which gives the entire process the look of waste of time and energy. After that, engaging stakeholders with zero or insufficient knowledge and expertise on technical issues can pose threat to the credibility of any decision. Pitfalls in participation include exclusion of key groups from consultation, involving ‘technical and non-technical communities in a common dialogue’, absence of prior thought and appropriate plan, failure in setting objectives clearly and ‘poor felicitation’ (‘Stakeholder Engagement’:3) .

## **2.7 Stakeholder Participation in Climate Change Adaptation Programs - Nature and Importance**

In climate change adaptation, stakeholder includes those groups and individuals who are affected if the adaptation process is not developed and also those who are not directly involved and affected but can influence the outcome of strategies taken for adaptation (‘Stakeholder Engagement’:8). Climate change adaptation is context specific. Therefore, involvement of local community is important. Helmer (2007) observes that as the local people notice deeply the changes occurring around them and cope with those changes, they are the ‘real experts’ on climate change (Cited in Pender 2008:43). Local people generally possess information of the place they live in, the impacts of climate change on that locality, the extent of vulnerability which develops through inherent practices to adapt to climate change challenges. Though this knowledge is not a substitute of scientific knowledge, it lays foundation for understanding human factors, people’s perception and ultimately to the best solution (‘Stakeholder Engagement’:2). The vulnerability of a community is not only driven by climate change, there are other factors like population growth and access to resources. So, ‘any adaptation strategies undertaken will need to be holistic and take other community needs into account. (Klein, 2005 quoted in Pender 2008:43).

Smith, Vogel and Cromwell III (2009) suggest nine components of government adaptation architecture and stakeholder participation is one important component of

them. It is argued by the writers that involvement of stakeholder is as necessary as leadership in implementing government projects. It is needed for mainly two reasons – for meeting the needs of the affected people and for ensuring that stakeholder engagement is identified in policies. To them, stakeholder participation ushers innovations in policies, ‘reduces sources of conflict, provides political cover to tackle difficult policy issues, and reveal unanticipated barriers to adaptation policies as well as unidentified opportunities’ (p56). The Aarhus Convention’1998 by the United Nations Economic Commission for Europe upholds participation as a democratic right in the decision-making of environmental issues. Involvement of stakeholders is argued to increase pragmatic benefits like quality and durability of decisions (Fischer, 2000; Beierle, 2002; Reed et al., 2008 Cited in Reed 2008:2419). But at the same time, it is said that the claimed pragmatic benefits have not been sufficiently tested. There is a lack of sufficient evidence of such benefits and therefore disillusionment prevails among environmentalist regarding such claims.

In a Technical Paper by IFRC (2009), the stress is given on the engagement of local authorities and community based organizations in developing strategies for climate change adaptation. The paper suggests ‘flow of both financial and technical support to local actors’ and promotion of ‘effective community based adaptation’ as two strategies among six strategies for climate change adaptation. In a paper titled ‘Climate Change Vulnerability in Bangladesh: Strategic Position of DSK/DCA in Field of Climate Change Adaptation Initiatives in Bangladesh’, it is observed that adaptation programs are controlled by politically biased decision making process which precludes the most vulnerable, the extreme poor and the marginalized people from playing crucial role. The reason behind this is that the minority political, bureaucratic and intellectual elites undermine the concern over adaptation of the most vulnerable that are deemed passive and recipient only(Rahid, Singha and Imam 2009).Jones and Rahman (2007) suggest that community based adaptation includes:

Allowing the community to make choices and not having them imposed from outside; enhancing the ability of the community to have a wider range of choices in the future; climate risks are addressed together in a broader development framework; and it is a process that evolves over time, not a set of static assessments(Quoted in Pender 2008:45).

Environmental decision making is complex and dynamic in nature. The prerequisites for this are transparency and flexibility which involve diversified knowledge and values shared by stakeholder participation. Therefore, national and international environmental policies seek and embed participation(Reed 2008: 2417).

Reed (2008) identifies eight attributes of best practice of stakeholder participation. These are adapted below:

a. Emphasizing trust, empowerment, equity and learning by a philosophical underpinning of stakeholder participation: Stakeholder participation requires that participants have the power and technical capability for participation. 'It is not enough simply to provide stakeholders with the opportunity to participate in decision-making though; they must actually be able to participate (Weber and Christopherson 2002 Quoted in Reed 2008:2422). Barriers to participations like power inequalities and inequalities of age, gender have to be lifted. Again, stakeholder engagement should be 'iterative and two-way learning between participants.'

b. Early recognition of it and continuing throughout the process: A common culture of projects is that stakeholders are involved not from the beginning but from the implementation phase. This trend de-motivates them as they often find that decisions taken either partly match or contradict to their needs and priorities. If, however, they can be engaged anyway, they find themselves in a 'reactive position' having little to alter any part of the decision though it might go against their interest (Cited in Reed 2008:2423). So stakeholders should be involved from the very inception of the concept of a climate change project through decision making, implementation, monitoring and evaluation.

c. Systematic analysis of relevant stakeholders: Stakeholders need to be analyzed in terms of individuals and groups who may or may not be affected by a decision. The interrelationship among the stakeholders, socio-natural impacts of a decision have to be considered.

d. Initial agreement among them about the objectives clearly: To avoid suppression of diversity of opinion and values while stressing on consensus, focus should be given 'on communication and argumentation rather than negotiation. (Dryzek 2000; Renn 2000 Cited in Reed's 2008:2424).

e. Selecting and tailoring methods to the decision-making context, considering the objectives, type of participants and appropriate level of engagement: Clear identification

of the objectives is the precondition of choosing participatory methods. Different methods can be adopted depending on the level of stakeholder engagement. Methods can vary from communication for example, information dissemination through leaflets or the mass media, public meetings, to consultation for example, consultation of documents, opinion polls and referenda, focus group discussions and surveys and to participation for example, consensus conference, task-forces, etc. While applying methods, attention has to be given that the applied method does not limit the voice of the marginalized; it considers socio-economic factors like inclusion of an illiterate person in a read-write situation, and it adapts to the situation.

f. Highly skilled facilitation: Stakeholder participation is highly dependable on encouraging participants and showing positive attitudes instead of domineering and offensive handling.

g. Integration of local and scientific knowledge: Integration of local knowledge and technological knowledge by stakeholder participation, information on an issue would be complete and lead to more robust solutions to environmental problems. While integrating, local knowledge should not be accepted without examination. Stakeholders can draw attention of project authority to such issues which despite importance, might be overlooked.

h. Institutionalization of participation: Successful stakeholder engagement requires that institutional structures facilitate participation and non-negotiable actors do not put barriers to implementing decisions taken through engaging the relevant stakeholders. It means that the importance of stakeholder engagement has to be rooted into the very structures of all related organizations.

## **2.8 Stakeholder Participation for Effective Utilization of Fund**

In the Economic Papers 301(Mandl 2008:1-3)of European Commission, it is observed that it is effective public spending that achieves better outcomes and thus earns value for money increasingly. As spending in the public sector has many objectives, its output is difficult to quantify. So, measuring effectiveness becomes difficult. This paper defines effectiveness as ‘the input or the output to the final objectives to be achieved, i.e. the outcome.’ As there is a link between outcome and welfare, various factors might influence it. It also observes that two factors make assessment of effectiveness more

difficult – influence of political choice on outcome and flimsy distinction between output and outcome. In the paper titled ‘Measuring Adaptation to Climate Change – a proposed approach’ (defra 2010), achieving maximum value for money in the climate change adaptation program is given huge importance. In ‘Measuring the effectiveness of public climate finance delivery at the national level’, it is observed that effective delivery of climate change finance involves principles of ‘legitimacy, coherence, transparency, ease of implementation, coordination, innovation and local anchorage.’ It also finds that there is an absence of internationally agreed definition of effectiveness of climate change finance, delivery at national level. Consequently, it makes measuring effectiveness a tough task. However, it stresses that legitimacy of climate change policies is ensured when it is recognized by stakeholders. The criterion set for this principle is that key stakeholders’ interest is reflected in the policy-making process (Bird 2013:2-6). It means, the paper recognizes the importance of stakeholder engagement at the very primary level of policy formulation of spending from public fund.

Enting K and Harmeling S (2011) suggest that accessing climate project finance by a country requires prioritizing the most vulnerable people and communities, improve stakeholder engagement at the design, planning and implementation stages of adaptation projects and increase the effectiveness of climate finance. ‘At the concept stage, an initial consultative process has to take place, with key stakeholders of the project/programme (Trujillo and Nakhooda 2013:19).Hedger& Rabbani (2012)point out the absence of embedding government-funded BCCTF into ‘national planning and budgetary systems – the Annual Development Plan and the Medium Term Budgetary Framework.’ Haque, Rouf and Khan (2012) in a TIB working paper had mentioned mention some BCCTF financed projects were approved ‘without prior justification and applicability of climate change rather under political consideration.’ The paper has also identified problems like lack of coordination, absence of consultation with the stakeholders, feasibility study, weak monitoring, etc in implementing climate change projects in Bangladesh.

Trujillo and Nakhooda (2013:9) offer five components of effective spending. These are interlinked and consider the integrity, efficiency and transparency of funding process. These components are: a. Resource mobilization, b. the governance of fund, c. an investment strategy and fund allocation process, d. disbursement of funding and risk management in support of approved programs, i.e. monitoring and evaluation. It is

argued that “fund should be governed in a way that it is transparent, inclusive and accountable.”

Anderson (2011) finds that measurable results in climate change investments are sought by governments, donor agencies and development partners. ‘Developing country governments need ways to assess the returns on their use of national funds, grants and loans.’ He categorizes adaptation projects into three groups: projects addressing existing ‘adaptation deficits’, projects managing incremental changes in climate-related risks and projects addressing longer-term impacts by transforming existing systems and practices. In a proposal by Global Leadership for Climate Action, it is observed that adaptation planning in most developing countries has been narrowed to building infrastructure intended to provide protection against extreme climate events while adaptation is much broader. Macro-level adaptation approaches might play important roles in reducing vulnerability but ignores the ‘concerns of the most vulnerable people.’ It stipulates that effective adaptation requires ‘participatory democracy, functioning institutions, and transparency at all levels. People at risk must have access to information, and be able to voice their views and concerns.’ Alluding to ICCCD, it mentions that ‘coherent and coordinated policies and cooperation among governments, civil society, and the private sector’ (UNF 2009). Kibebe and Mwirigi (2014) have identified six ‘social factors’ that influence effective implementation of Constituency Development Fund (CDF) projects in the context of Kenya. These factors are: corruption and misappropriation of funds, poor prioritization of community needs by the project management, poor decisions caused by skipping of community people, illiteracy and low level of awareness among community members and finally, apathy towards the projects.

## **2.9 Studies conducted on involvement of stakeholders in climate change adaptation projects**

Several studies have been conducted on different aspects of stakeholder participation in climate change adaptation projects. Here is presented three of them in brief. Haq (2013) identifies that for effective result in community-based adaptation programs, it is important influencing higher level policy and in-country decision-making by mainstreaming community level planning and adaptation practice to climate change which he terms as ‘scaling up’. He also mentions ‘scaling out’ meaning the horizontal expansion and replication of successful CBA within countries and between communities from local to national scale, as well as across national boundaries. His study area was a

sub-Saharan country, Namibia. It is stressed that for making community-based adaptation successful, vulnerable poor communities continued maintaining and building resilience after the completion of the project and they build adaptive capacity for long term climate risks as well as current risks. This study deals with replication of UNDP/GEF SGP CBA projects from micro to macro level in Namibia and comes up with some recommendations. As recommendation for scaling up and out, the study stresses on all stakeholder engagement in the pilot project in Toolkit training. The second and third recommendations delineate ‘empowering climate vulnerable poor groups to articulate to the scientific community the information they require for future adaptation planning and to collect climate-related information for them (p6).’ It shows that ‘bottom-up approach puts climate vulnerable poor groups in the driving seat of adaptation planning design through meaningful participation (p25). The study finds that empowering communities bring the following results: i) it supports unified community thinking process, ii) it enables them to learn from each other, iii) it opens up minds and allows sharing information with others especially to younger generations for sustainability of practices. But it focuses mainly on scaling up and out. It does not deal with effective utilization of public fund in adaptation projects and the role stakeholders can play in this regard. The regional context is also different.

Another study finds that the way stakeholders play their roles determines successful implementation of climate change adaptation management(Ngigi 2009). The study also finds ‘building synergies among different stakeholders working in the same geographical area and local community is a recipe for success.’ Such synergy helps prevent duplication of efforts and repetition of mistakes. It also observes that enhanced sustainability is achieved if it is possible to work closely with government departments. The study also was conducted in sub-Saharan African context and deals with mainly agricultural water management in smallholder farming and its impact on food production.

Armah, Yawson and Johana(2009) conducted a study on the factors feeding into conflicts in a lagoon management by stakeholder participation in Ghana. This study finds the following:

- a. Exclusion of any stakeholder hampers implementation,
- b. Marginalization of stakeholder results in conflict and antagonism.



- c. Low levels of information flow and communication among different stakeholders especially the project implementation authority and the community hinders participation.
- d. The composition of groups, level of literacy, existence of prejudice of the stakeholders, biasness towards a particular section, low level of awareness, factionalism and heterogeneity of population impose barriers to participation.
- e. Wealth condition, social position, political interference, and faulty selection of community representatives also hinder participation.
- f. Conceptual dualism can also hinder effective participation. Government can view participation as a means of decentralization, cost recovery and cost sharing while other stakeholders can consider it 'constituent of extensive consultation, capacity building, expressing a need and ownership.'

This study mainly deals with the determinants of conflict among stakeholders in managing a local lagoon in Ghana. The context is different. Again, it does not tell what impacts stakeholder participation has in ensuring the effectiveness of using money from public funds. So, along with the dynamics of stakeholder participation in ensuring effectiveness of such fund utilization, a penetrative study into the approval and implementation of climate change projects from government funding in the context of Bangladesh is needed.

## **2.10 Conclusion**

Adaptation to climate change embraces diversified types of meaning ranging from individual to collective efforts to reduce the effects of climate change on the social, economic and ecological aspects of human being in a given society. Bangladesh has adopted different adaptation measures which include climate change resilient infrastructure building, awareness raising, training, alternative livelihood generation, food security, etc. Effectiveness of such adaptation programs is difficult to measure. However, some important proposed criteria of effectiveness include governance of fund, enabling environment, risk management, monitoring, evaluation, etc. As the above literature on adaptation presents, stakeholders include persons and institutions having direct or indirect, positive or negative and even no influence on the outcome of a project. Stakeholder participation which has its roots in development practices since 1960s means active role played by stakeholders in the decisions that may or may not affect them. It, a

two-way traffic, starts from mere information dissemination to consultation and functional participation and may reach to interactive participation and self-mobilization stages. It can result in both normative benefits e.g. public trust and fair decisions and pragmatic benefits e.g. ownership creation and conflict resolution. However, there are barriers to participation, which are top-down process, group dynamics, consultation fatigue, absence of incentives, vested interest, insufficient knowledge, poor facilitation, etc. As climate change adaptation is context specific, its programs must be holistic. In government adaptation programs, theoretically participation is deemed a democratic right and is equated with leadership for producing quality policy solutions. For making adaptation programs fruitful, both technical and financial support should reach directly to the concerned community people. Specialists argue for maximum value for money of fund utilization in adaptation programs. Effectiveness of such utilization depends among others on transparency, ease of implementation and local involvement. In the international arena, though accessing to finance requires identification and engagement of stakeholders, fund utilization from BCCT is said to be politically considered, deprived of feasibility study and proper stakeholder consultation and exclusive of national annual and medium term budgetary framework. In this context, for ensuring effectiveness in climate change adaptation projects, it is suggested that projects should come out of the present trend of sheer infrastructure building. There should be consensus among government, non-government and civil society actors regarding project adoption. Different studies have been conducted on the importance of stakeholder participation in climate change projects, on their management, etc. Those studies suggest bottom-up approach, empowerment of the community people, building synergies, close work with government officials, etc. in such projects. But those have contextual and focal variance. So, a study focusing specifically on the importance of stakeholder participation in the context of Bangladesh in ensuring effectiveness of public spending in climate change projects is needed.

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## Chapter 3: Methodology and the Study Areas

### 3.0 Introduction

This chapter presents the methods that have been employed in conducting the research. Besides, a brief description of the three study areas is also provided. It starts with the description of the sources from which data has been collected. Then a justification of project selection is provided. After it, techniques of data presentation and analysis are detailed. Later, the analytical framework of the research is chalked out. Finally, before conclusion, operational definitions of the variables are presented and the project overview is detailed.

### 3.1 Methodology

In fulfilling the four objectives set to explore in the study, a predetermined methodology has been employed. The method has employed both qualitative and quantitative data utilization to unveil the research questions. It has been done keeping in mind the purpose of the research, the objectives and the time that was allocated for completing the research.

#### 3.1.1 Data Sources

Both the primary and secondary sources were used to collect data. Primary data were collected by interviewing the local community people through a structured questionnaire of 33 questions (Appendix A). Total number of respondents was sixty. Among them 24 were from the WDB project, 23 from the Forest Department project and 13 from the NGO project. Sample size was determined considering the size of the project area and volume of allocated money, components of the project and number of beneficiaries. Respondents were selected randomly and diversity in profession and age was attempted to maintain. Again, both males and females were tried to include in the interviews. Bangladesh Climate Change Trust officials, PDs and other project implementing officers and local elected running and previous public representatives were also interviewed through a structured questionnaire (Appendix B) for it. Then, all the three project areas were visited between 15 March to 15 April 2014 and information was also collected

through those field visits and observation. Secondary data were collected through reviewing project profiles, official documents, brochures, leaflets and websites of the projects. In this context, considerable data were collected from reviewing literature which dealt with governance and utilization of climate change fund.

### **3.1.2 Project Selection**

There were 207 government and 63 NGO projects to collect data for measuring effectiveness of utilization of fund in adaptation programs. There was huge diversity in the nature, location and volume of allocation of projects. So, the following considerations were given upper hand in selecting the projects:

- Projects implemented in the coastal areas which are most vulnerable to climate change;
- Projects of the Water Development Board which implemented more than fifty percent of the project;
- Project which involved a mentionable amount of allocation and a vast community of both ethnic and Bengalis and situated at the middle of the country;
- As the number of NGO run projects are almost one third of the Government run projects, two projects from the later and one from the former were selected;
- Projects which were evaluated by the different audit and monitoring bodies including the IMED and the BCCT were selected;
- Finally, time, distance and communication facilities were also considered in selecting projects.

Firstly, our ranges e.g. Sadar, Dokla, Modhupur and Oronkhola of the Forest Department project of Modhupur Forest of Tangail District were visited. Then two WDB project sites e.g. Mistripara village of Chakmarkul Union and Chhankhola of PM Khali Union under Sadar and RamuUpazila of Cox's Bazar District were visited. One site e.g. No 1 Horoni Union of HatiaUpazila of Noakhali District of the NGO run project was visited at last.

### **3.1.3 Data Collection**

A questionnaire of 33 questions translated in Bengali for the community people and another questionnaire of questions for key informants were prepared and borne with the

researcher. Questionnaires were not supplied earlier to the community people. Rather, respondents were asked questions face to face and their answers written and later interpreted in English. Some KIs were supplied with questionnaires. Project officials were contacted for interview and date and time were fixed over mobiles. Firstly reaching at the project sites/offices, the project officials were interviewed. Official documents were collected from the project offices and translated in English where necessary.

### **3.1.4 Data Presentation and Analysis**

The collected data were accumulated and processed using software like Microsoft Excel, SPSS and other convenient media. The quantitative data was reduced into descriptive statistics such as percentages and correlations. A validity test is executed to check the validity of the instruments. The standard deviation of each item is also calculated to check dispersion or variability of the data. In doing so, achieving the objectives was always kept in view. Data were presented through graphical media e.g. charts and tables to make them understand easily.

## **3.2 Analytical Framework**

The analytical framework of this study has been adopted and conceptualized from the literature reviewed in the previous chapter. As described in the review of the literature, effective utilization of climate change fund in adaptation programs involves priority setting, criteria for accessing the fund, transparent process, feasibility study, proper feasibility study of the projects, involvement of the stakeholders in the adoption and implementation phases of the projects, project's outcome, intensive monitoring during implementation, proper evaluation of the projects, etc. But in this study, the main thrust is to see the level and degree of the determinants of stakeholder participation in ensuring effective utilization of Climate Change Trust Fund of Bangladesh. There are many determinants of stakeholder participation. However, in this study, the determinants that are selected from the review of the literature are nine in total. These are awareness, flow of information, early engagement, inclusion of all stakeholders, proper communication, felicitation, voice in the meeting, opinion inclusion and empowerment. It means, in this study, these nine components of stakeholder participation are considered. Provided these nine independent variables are satisfactory in relation to any of the three projects, the project can be said to fulfill the condition for stakeholder participation which in turn ensures effective utilization of climate change trust fund, the dependent variable. Again,

as necessary outcome of stakeholder participation, these independent variables result in conflict resolution, cost reduction, transparency, accountability, public trust, ownership creation and sustainability of the project which if achieved bring effectiveness of such fund utilization. This conceptualization is shown in the following diagram:

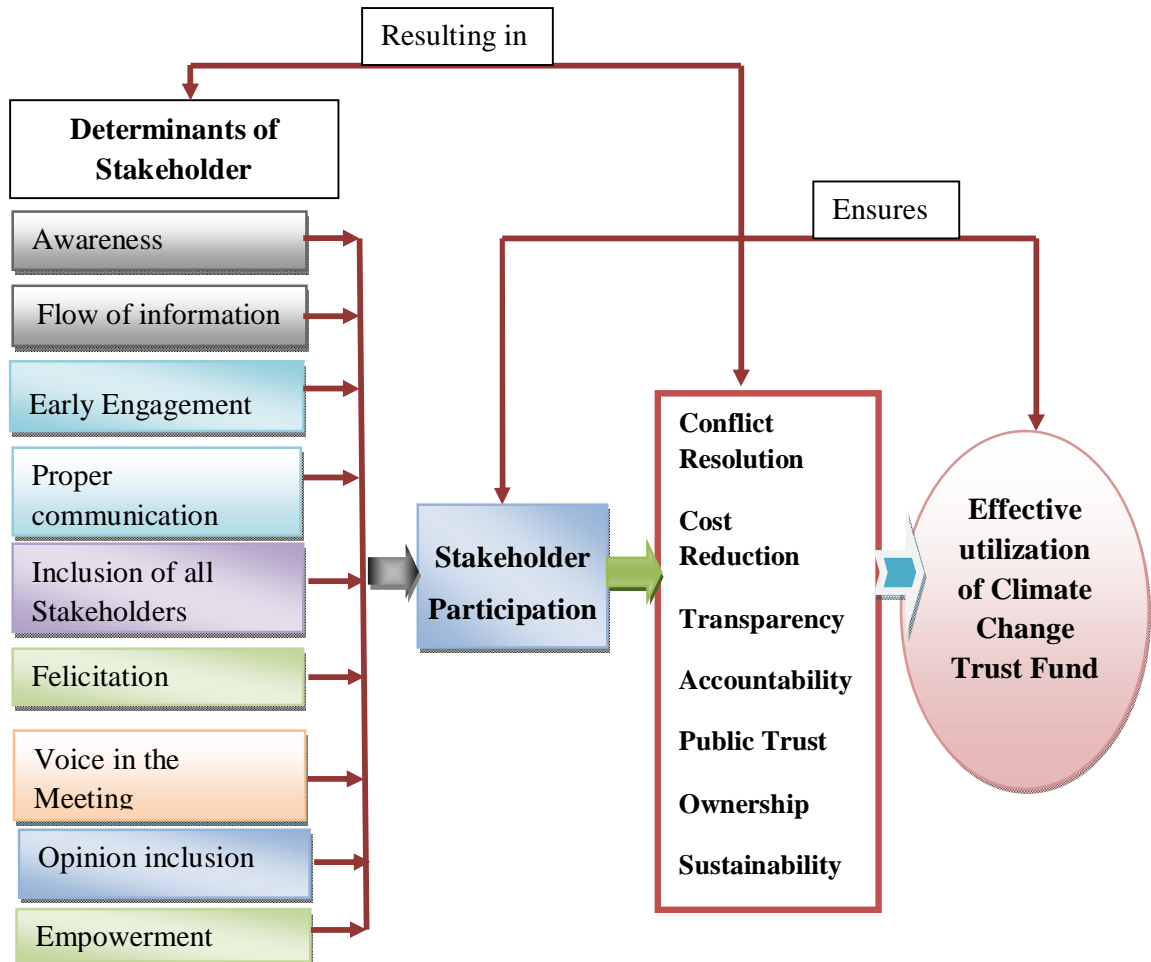


Figure 3.1: Analytical Framework

### 3.3 Operational Definition of the Variables

As mentioned earlier and shown in the diagram, the independent variable – stakeholder participation – consists of nine components, and seven outcomes. The dependent variable is effective utilization of climate change trust fund. These dependent and independent variables and the outcomes shown in the diagram might have extensive meaning. However, in this study their meanings are determined. The operational definitions of

them are provided and the terms of the analytical framework are used according to these definitions only. In this study, the above mentioned terms and determinants connote:

**Awareness:** The level of knowledge, understanding and sensitiveness of the targeted stakeholders regarding the main features of the project.

**Flow of information:**The availability of all the project related information like the project cost, implementing authority, project duration, funding authority, etc to the stakeholders from the beginning to the end of the project.

**Early Engagement:**Engaging the local stakeholders into the project planning and decisional process before the beginning of the project.

**Inclusion of all stakeholders:**The state of engaging at all the stages of the project all the sections of the people irrespective of their sexes, occupations and social standing, who are directly or less directly affected by the project.

**Proper communication:** The level of communicating project essentials through understandable and commonly used media to the stakeholders that can create a clear understanding of the project among them.

**Felicitation:**The degree of friendliness and cordiality from the side of the project authority towards the stakeholders in involving them in the project.

**Voice in the meeting:** The presence of environment that encourages participants in the project stakeholder meetings to express their opinions and counsels freely.

**Opinion inclusion:**The inclusion of stakeholders' advice and opinions in the project planning and execution stages.

**Empowerment:** Enabling the stakeholders in participating in the project implementation phases through different measures like providing training, etc. or the motivation of the stakeholders in participating in the implementation process.

**Conflict resolution:** The satisfactory ending of disputes between project authority and the stakeholders and among stakeholders themselves relating to the issues that affect them throughout the implementation of the project.

**Cost reduction:** Lessening the project cost as a result of considering the opinions of the stakeholders.

**Transparency:** The easiness, simplicity and accessibility present in different phases of the project in such level that stakeholders can recognize and evaluate these despite their limited knowledge on project technicalities.

**Accountability:** The sense of responsibility and ability on the part of the project authority to give satisfactory explanation to any of the project essentials to the immediate upper authority or mainly to the stakeholders.

**Public Trust:** The confidence that the stakeholders rest on the capability and general goodness of the authority as well as the outcome of the project.

**Ownership creation:** The creation of belongingness that the stakeholders show in different ways towards the project outcome.

**Sustainability:** The durability and capability of the project outcome to serve the project purpose for an expected period of time.

**Effective Utilization:** The utilization of the project money in such a way that satisfies the stakeholders' needs, ensures the value for money and brings the targeted outcome.

### **3.4.0 The Projects and the Study Areas: A Brief Overview**

As stated earlier, three areas – Modhupur Upazila of Tangail District, Ramu and Sadar Upazila of Cox's Bazar District and Hatia Upazila of Noakhali District - have been selected for the study. Two projects by two different government departments were implemented in the former two areas and one project by an NGO was implemented in the later area.

#### **3.4.1 Project 1**

The project titled 'River retraining and agricultural development project at the Reju river and the adjoining areas affected by climate change' spread over Sadar, Ramu and Ukhia Upazilas of Cox's Bazar District. The district endures most of the challenges especially those arisen out of frequent and devastating sea storms as it stands on the coast of the Bay of Bengal. The three Upazilas also face the brunt of such natural disasters in the same way. Though in the title the Reju River is mentioned, another river the Bakkhali and its adjoining areas are also included in the project areas. These two rivers cause extensive erosion and flood during the Rainy Season as they are hilly rivers crisscrossing the downstream land before falling into the Bay of Bengal which pushes saline water into the interior part of three upazilas through tide in these two rivers.



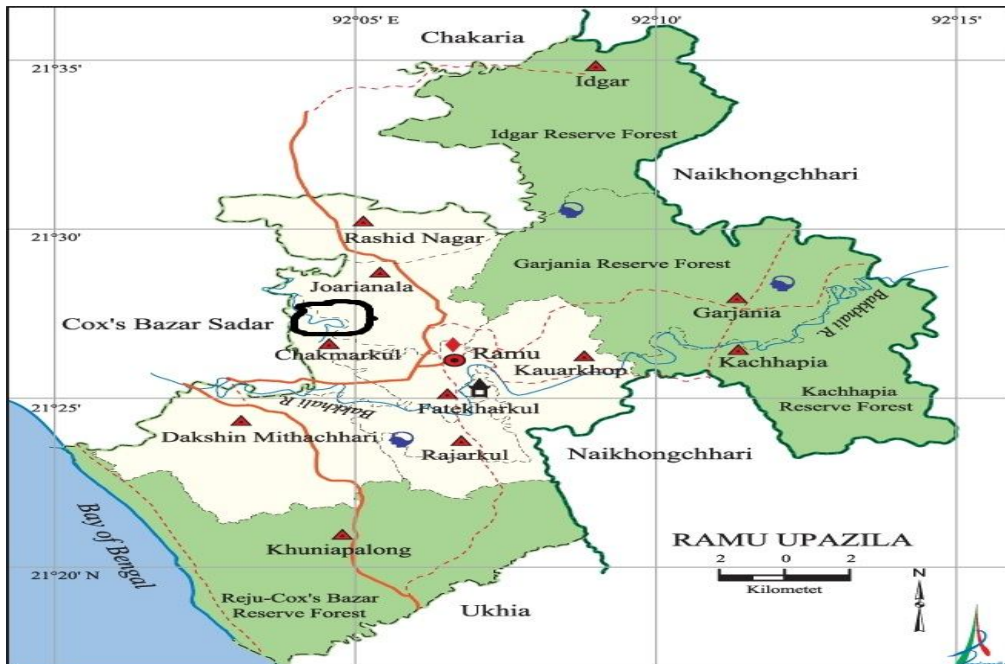
**Map 1: The study area (round marked) at Chhankhola of PM Khali Union of Cox's Bazar Sadar Upazila**



Source: [http://www.bpedia.org/maps/MC\\_0365.GIF](http://www.bpedia.org/maps/MC_0365.GIF)

The allocated money was Taka 2203.44 lac and the duration of the project was 2011 and 2012 fiscal years.

**Map 2: Study Area (round marked) of Project 1 at Mistripara of Chakmarkul Union of Ramu Upazila.**



Source: [http://www.banglapedia.org/HT/R\\_0147.htm](http://www.banglapedia.org/HT/R_0147.htm)



**Picture 3.1: Permanent river-retraining of project 1 at Mistripara of Chakmarkul union.**

The project activities included Permanent River retraining of 1800 meters of different lengths from 60 meters to 800 meters at eight points namely Ulubunia-Banglabazar and Muk tarkul of SadarUpazila, Monirjheel, Shikolghat, Lombori Para, Dewanpara, RajarkulerShikder Para and Mistripara of Chakmarkul in RamuUpazila and Downstream of ShaheedJafarSetu of UkhiaUpazila. It also included construction of two Sluice Gates, ‘Flood Control Dam Construction’ and ‘Dam protection and river retraining by 14 spars’ and ‘aforestation of 2.40 skm’. The executing agency and the administrative ministry of it were Bangladesh Water Development Board and Ministry of Water Resource respectively but the last mentioned portion of the project was said to be implemented by the local Forest Department.

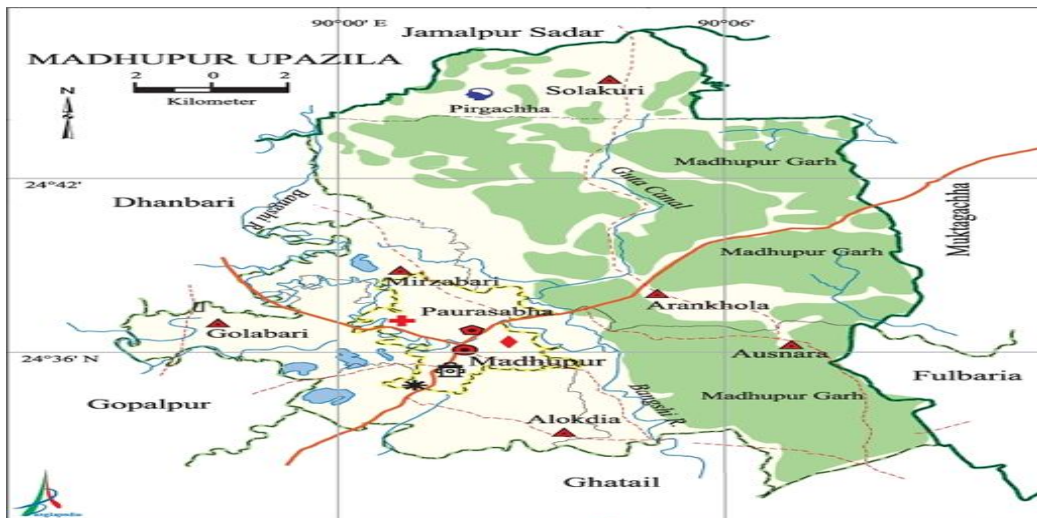
The aims of the project were protecting houses, crops, roads and locality from flood and river erosion, increasing agricultural production by preventing intrusion of saline water and flood water and by protecting people from river erosion through constructing embankments and removing water logging of vast area by river and canal retraining. The existing personnel of WDB of Cox’s Bazar were involved in implementing the project and no extra manpower was recruited for this. As mentioned earlier, most of the projects of BCCTF have been seen implemented by the WDB which executes the activities through contractors selected by open bids. This project was also completed by different contractors.

### **3.4.2 Project 2**

The title of the project implemented in the ModhupurUpazila is ‘Revegetation of Modhupur Forests through Rehabilitation of Forest Dependent Local and Ethnic

Communities.’ The project area included both ModhupurUpazila of Tangail District and MuktagachaUpazila of Mymensingh District. The duration of it was first projected from April’2010 to June 2011 which was later revised and extended one year more. The project was prepared by the Divisional Forest Officer (DFO) of Tangail and was submitted to the Chief Conservator of Forest (CCF) who sent it to the Ministry of Environment and Forest for submission to the Climate Change Trust. The estimated expenditure was Taka 1545.00 lac which remained the same in the revised expenditure. The regular personnel of DFO’s office and his jurisdiction were involved in the implementation of the project. No extra manpower was employed for it.

**Map 3: Study area (green shaded) of project 2.**



Source: Banglapedia

Modhupur forests are on the north-eastern part of the district and have an area of 45,565 acres of forest land in papers but an area of 8 -10 thousand acres of forest land physically. It is one of the biggest forests in Bangladesh housing a number of ethnic communities, containing thousands species of trees and scores of bird and animal species. The forest is on an alluvial tract of land originated in the Plyostocin period and is free from flood. Encroachment of the forest by different land grabbers and wholesale stealing of wood by some local professional wood-cutters who took it as a livelihood led the forest on the verge of destruction. It had a grave negative impact on the livelihood of both the ethnic and Bengali communities who had been living there for a long time. The deforestation also increased the vulnerabilities of the locals as they had little defense left to save their homesteads against increased number of storms which had been felt less

intensive earlier due to the huge forest. Again, locals mostly dependent on forest faced increased hardship as it had gradually been shrinking in size. Furthermore, as the number of trees had been decreasing day by day, the forest fell short of capacity to function as a carbon sink in a marginal forest holding country like Bangladesh.

As laid down in the project proposal, the objectives of the project were:

- Enhancing the livelihood of the forest dependent local and ethnic population;
- Reducing dependency on the forest of the local community and achieving self-dependence;
- Reducing climate change negative effects;
- Assisting in creating climate change resilience;
- Awareness creation among the people on climate change challenges and adaptation;
- Improving the living place of forest animals through planting fruit trees;
- Increasing adaptation capability;
- Reducing carbon emission;
- Transforming the existing homesteads into environment friendly complete farmhouse;
- Creating alternative employment opportunity for the forest dependent population through training.

The project activities were divided into three parts – re-vegetation, rehabilitation and training. Under the first head, in light with the nature of the soil and need of the local people, around 36, 32,000 plants have been planted. Then, as part of rehabilitation, around 5000 families were given cash support for buying cows and poultry as alternative livelihood introduction. Finally, 700 forest dependent local ethnic and Bengali persons – both male and females – who mostly had been illegal loggers earlier, were given two months training and a 10-15 days ‘Refreshers Training’ as Community Forest Workers (CFW) to prevent illegal logging all the time as well as bushfire from January to April of the year. From the project budget, these CFWs have been given monthly allowance of tk 2500 and one set of dress with a pair shoes each. They were among the persons who also received rehabilitation support.

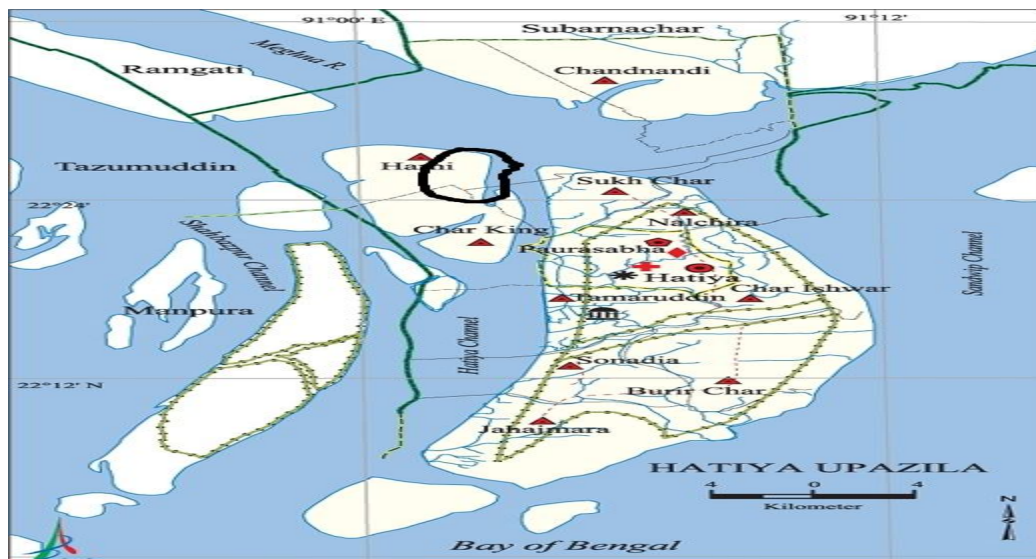
### **3.4.3 Project 3**

Unlike the first two projects run by government departments, this project titled ‘Climate Change Adaptation among Fishing Communities of Coastal and Charland Areas of Noakhali and Laxmipur Districts’ focused on the fishing communities only. This project



implemented by SagarikaSamajUnnayanSangstha (SSUS), a local NGO based in SubornacharUpazila of Noakhali District, aimed to secure the life and livelihood of the fishing communities of the coastal areas through introducing adaptation measures to climate change and also enhance resilience of the target group population mentioned in the project. The specific objectives included introduction of alternative income generation activities and along with distributing instruments for such income generation, awareness building on using lifesaving instruments while fishing in the sea. Protecting homesteads from tidal surges and promotion of appropriate adaptation measures and empowering the female section of the community were also described as the specific objectives. The idea that underlay the project was that the increase of income of the fishing community by alternative livelihood would discourage them risking their lives in fishing in the sea during foul weather. It would give them better opportunity to adapt with the changing climate condition. Again, if even they would venture to fish in bad weather, the use of lifesaving instruments like life-jackets and use of radio for getting signals would keep casualty to a minimum level.

**Map 4: Study area (round marked) of project 3 at Harni union of Hattiaupazila.**



Source: [http://www.banglapedia.org/HT/H\\_0115.htm](http://www.banglapedia.org/HT/H_0115.htm)

The project was a combination of three seminal components. These were – a. income generation from alternative source, b. saving the life of fishermen from cyclone and storm surge while they fish in the sea and c. saving homestead assets from storm surges. The project was said to address Programming Area P9 (Livelihood protection of

vulnerable socio-economic groups including women) of T1 (Food Security, Social Protection and Health) of BCCSAP 2009.

A good number of activities were included in the project. The focused group was identified and divided into groups of 10 members with a view to giving them access to micro-credit of SSUS. They were then provided training on alternative livelihoods like cow fattening, poultry raising, fish and grass culture, homestead horticulture, running small business, etc. It was planned to provide appropriate market linkages to the future produces by the fishing community. There was option for training to the women on health, sanitation and personal hygiene. Most importantly, the target groups were provided training on using lifesaving instruments. The activities of the projects are as follows:

- Identification of fishermen and formation of groups
- Capacity building of the groups through backstopping support
- Identification and prioritization of AIG options
- Providing livelihood skill development training
- Providing support for undertaking AIG activities
- Facilitate access to microcredit
- Facilitate marketing linkages for fishing community produces
- Training to women on health and sanitation
- Provide compasses to fishers
- Providing ID card to fishers
- Providing radio and life-saving instruments (life jacket) to fishing units
- Distributing awareness raising materials – posters and leaflets – on safety and vulnerability issues
- Assessment of vulnerabilities, coping strategy and development to adaptation strategies for fishing communities
- Planning and implementation of community level adaptation measures

The project included 500 members of the fishing communities as its beneficiaries. The duration of the project was from 1 November 2012 to 31 October 2013 and the total

allocated money was Tk 30.00 lac. There was option for separate one project officer, three site-facilitators and one accounts officer to implement the project.

### **3.5 Conclusion**

This study employs traditional methodology in collecting, processing, analyzing and presenting data. In selecting projects, a set number of issues have been considered. Basing on the literature review, an analytical framework showing clearly the dependent and independent variables has been concocted and operational definitions of the variables have been given. The three study areas of Cox's Bazar, Tangail and Hatia have been given a detailed description along with project cost, duration, activities and possible outcomes.

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## Chapter 4: The Study Findings and Observations

### 4.1 Introduction

Based on the major research objectives, the sections of this chapter are organized. Firstly, it sheds light on the practice and procedure of allocation and disbursement of CCTF. It includes details of the fund management body and their responsibilities, concerning rules and regulations, project selection and allocation process, allocation profile, and monitoring and evaluation. Then, a socio-economic profile of the respondents has been provided. After this, findings of survey are elaborated independent variable-wise. Besides, responses of the key informants are also penned. Findings from the researchers' own observations are also provided then. Next, the seminal findings are analyzed in detail. Lastly, Problems and prospects of effective utilization of fund are sketched out before the conclusion.

### 4.2.0 Practice and Procedure of Allocation and Disbursement of Climate Change Trust Fund

Allocation and disbursement of fund from the CCT is done through a set of specific guideline. There are different entities in different levels to deal with the project submission, project scrutiny, project approval, fund allocation and monitoring and evaluation.

### 4.2.1 Fund Management Body

There are a Trustee Board, a Technical Committee, two Technical Sub-committees and a Climate Change Unit which are involved in the management of the fund. Different ministries and departments, NGOs and research organizations as project implementing entities perform their respective roles according to set guidelines. Apart from these, there are IMED, CA &AG office and private auditing firms which monitor and evaluate the utilization of fund following the rules and regulations.

*The Trustee Board:* Comprised of 17 members and headed by the Minister, Ministry of Environment and Forest, the Board is responsible for the overall governance and management of the BCCT and its functions. The seventeen members include the



Chair, nine ministers or state ministers of different ministries, the Cabinet Secretary, the Finance Secretary, Member of Agriculture, Water Resource and Rural Institutions Division of the Planning Commission, the Governor of Bangladesh Bank , two eminent professionals from the civil society and Secretary of MoEF who functions also as the Secretary of the Board. The Board convenes generally once in every three months and at any time with the consent of the Chair.

The functions of the Trustee Board are among other:

- ✚ Approval of projects for utilizing 66% of the trust fund and interest from the rest 34% and allocation of fund against the approved projects recommended by the technical committee;
- ✚ Policy advice and directives for utilizing funded projects;
- ✚ Directives to the Technical Committee relating to adoption of annual work plan, finance and budget plan for long term projects;
- ✚ Corresponding to different donor countries and organization with a view to fund raising;
- ✚ Annual evaluation, approval of evaluation reports and settlement of disputes;
- ✚ Implementation of the climate change directives from the government

***The Technical Committee and Sub-committees:*** The Technical Committee is comprised of 13 members. The Secretary, MoEF is the Convener of it and Deputy Secretary (Environment 1) performs as the Member Secretary. Two specialist representatives from the Department of Environment, two climate change project specialists from CSO/NGO and one CEGIS representative are also members of the Committee. It is entrusted with formulation of annual budget, work plan relating to climate change challenges and submitting them to the Trustee Board for approval, implementing the directives of the Trustee Board, scrutinizing the submitted project proposals and advising the Trustee Board regarding selection of projects, formulation of sub-committees when necessary and carrying out any other duties conferred upon by the Board. Six sub-committees on six thematic areas of BCCSAP'09 have already been formed. Like the Trustee Board and the Technical Committee, there are representations of government, civil society organizations and academics in the Sub-committees.

***Bangladesh Climate Change Trust:*** For providing secretarial support to the TB and the Technical Committee, BCCT was established according to the Climate Change Trust Act 2010. It is headed by a Managing Director. There are a Deputy Managing Director, a Secretary and two Directors. It has three branches: i) Administrative and Finance, ii) Planning, Development and Negotiation; and iii) Monitoring and Evaluation. The Secretary is responsible for the administration and financial matters while two Directors lead the other two branches. The main functions of BCCT comprise of the following:

- Receiving and reviewing project proposals from different ministries and agencies;
- Implementation of decisions of the TB and the TC;
- Management of BCCTF;
- Disbursement of fund from BCCTF against the approved projects;
- Coordination and facilitation of among the functions of Climate Change Focal Points of different ministries;
- Maintaining liaison and establishing network with relevant stakeholders, CSOs, NGOs, international actors and other related entities working in climate change issues;
- Monitoring and evaluation of the projects financed from the BCCTF.

#### **4.2.2 Allocation Legal Framework**

There are distinct laws, rules and regulations for the allocation and management of fund from the BCCTF. They are as follows:

- ▣ Climate Change Trust Act, 2010
- ▣ Bangladesh Climate Change Strategy and Action Plan 2009
- ▣ Climate Change Trust Fund Policy, 2010
- ▣ Guidelines for preparing project proposal, approval, amendment, implementation, fund release and fund use for government, semi-government and autonomous organizations under the Climate Change Trust Fund, 2012;

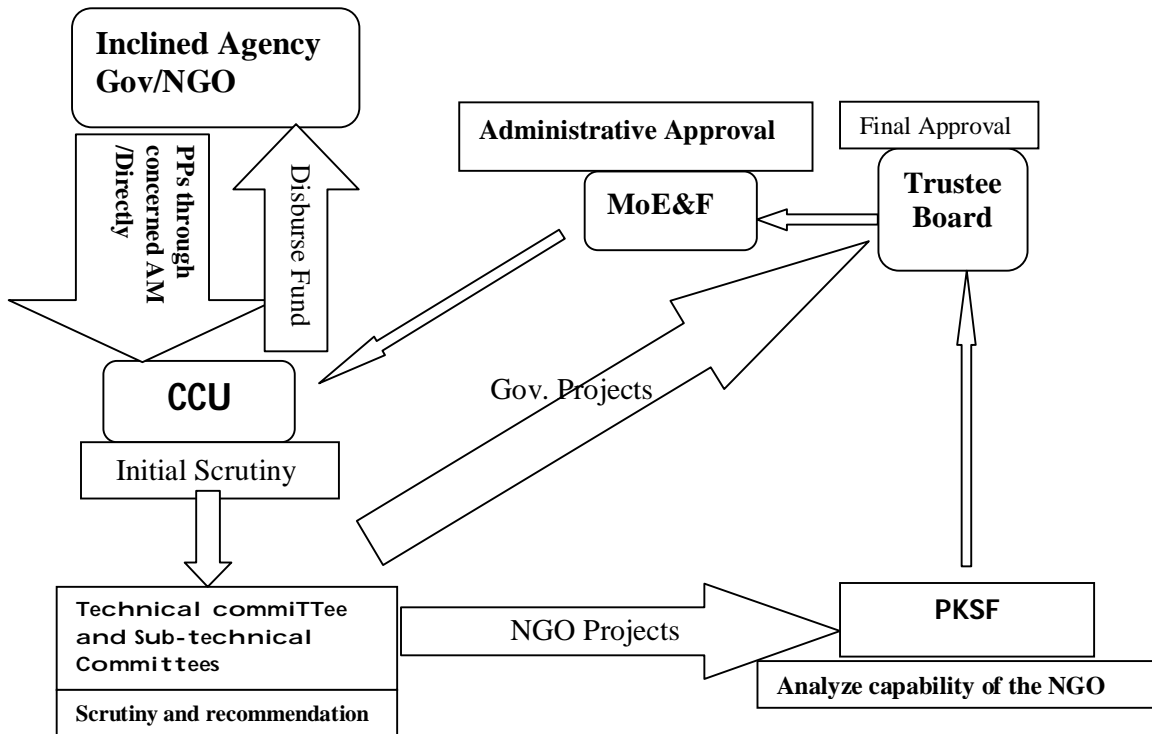
- ▣ Guidelines for selection of NGO (Nongovernment Organizations) and project implementation under the Climate Change Trust Fund 2010;
- ▣ Bangladesh Climate Change Trust (BCCT) Regulations 2013;

### **4.2.3 Project Selection and Fund Allocation Process**

Guidelines for preparing project proposal, approval, amendment, implementation, fund release and fund use for government, semi-government and autonomous organizations and Guidelines for selection of NGO and project implementation under the CCTF provide details of project selection and fund allocation process.

Projects can be submitted at any time of the year provided that they fall under any of the six thematic areas of BCCSAP'2009. The thematic areas are: i) Food Security, social protection and health, ii) Comprehensive disaster management, iii) Infrastructure, iv) Research and knowledge management, v) Mitigation and low carbon development and vi) Capacity building and institutional strengthening.

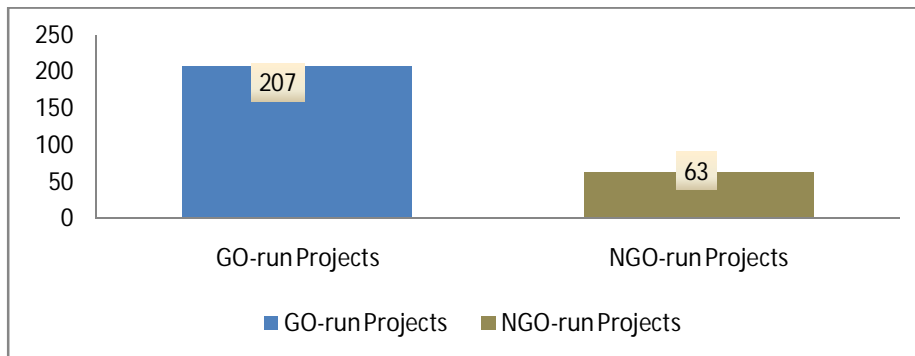
Though both the government and non-government agencies can apply for fund against submitted projects, there is a slight difference between the approval of government projects and non-government projects. In case of government, semi-government and autonomous agencies, projects are to be submitted to the Climate Change Unit of MoEF through the respective administrative ministry. The CCU performs the initial scrutiny. Then, the project is sent to the TC which scrutinizes and reviews the project and recommends for approval if fulfills the conditions. Then, the project is sent to the Trustee Board which gives the final approval and sends it to the CCU which disburses fund in four installments (July to September, October to December, January to March, and April to June) against the project. Before the disbursement of fund, the MoEF makes the administrative approval order of the project. In case of NGOs, before the final approval by the Trustee Board, projects are sent to the PKSf for analyzing the capability of the concerned NGO in implementing the project. After analyzing, the project is sent to the Trustee Board and the later procedure is same as government projects.



**Figure 4.1: Flow chart of project approval and fund disbursement by BCCTF**

The maximum time for the implementation of any project is three years which can be increased by the Trustee Board in special cases. The maximum amount of money that can be allocated against any single project is Tk 25 crore. Any inclined agencies can prepare the project on its own or jointly but the number of implementing agencies cannot cross three. Generally, new recruitment for the project purpose is discouraged. Again, employment of any foreign consultant in any CCTF financed project is not allowed.

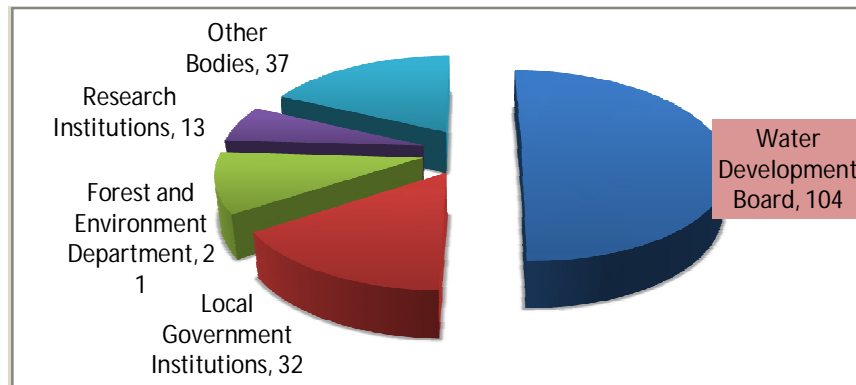
#### 4.2.4 Allocation Profile



**Figure 4.2: Allocation of projects to government agencies and NGOs**

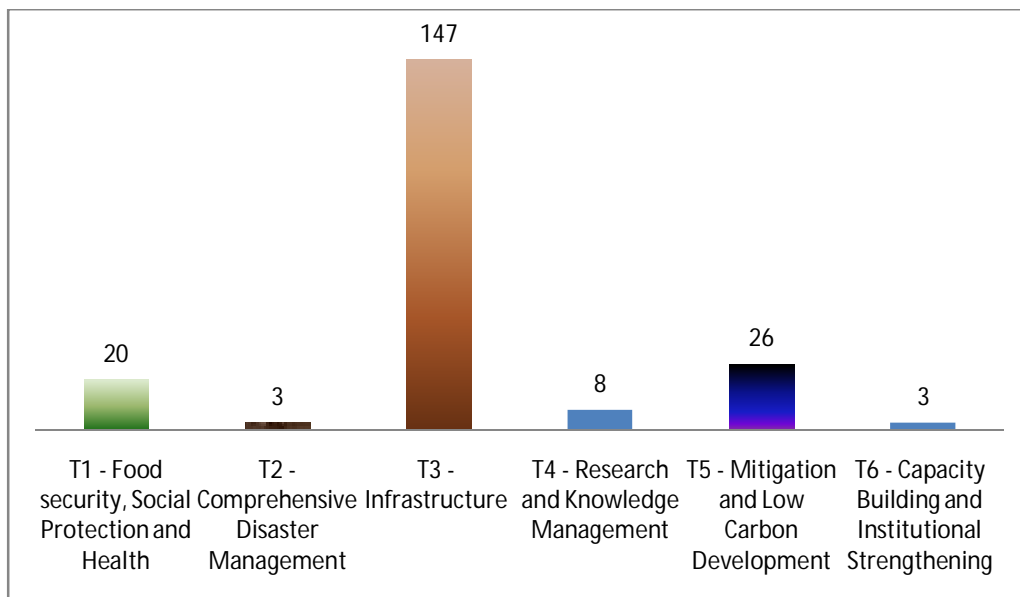
Until 2013-2014 fiscal years, total 270 projects have been given approval. Out of the projects, 207 projects have to be implemented by government bodies whereas 63 projects have to be implemented by NGOs.

Of the projects to be implemented by the government bodies, it is the Water Development Board that has been implementing the highest number. The next are different local government bodies and then the Environment and the Forest Departments. Distribution of projects among different government bodies is given below:



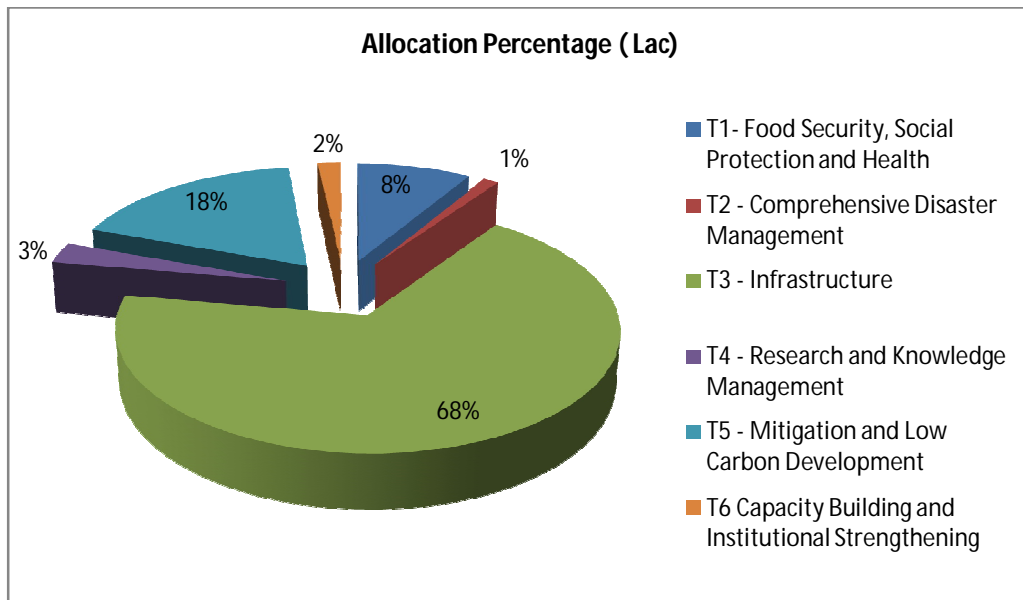
**Figure 4.3:** Government agency-wise project distribution.

Of the 207 projects approved by the BCCTF in five years, thematic area-wise distribution of them is shown in the chart below:



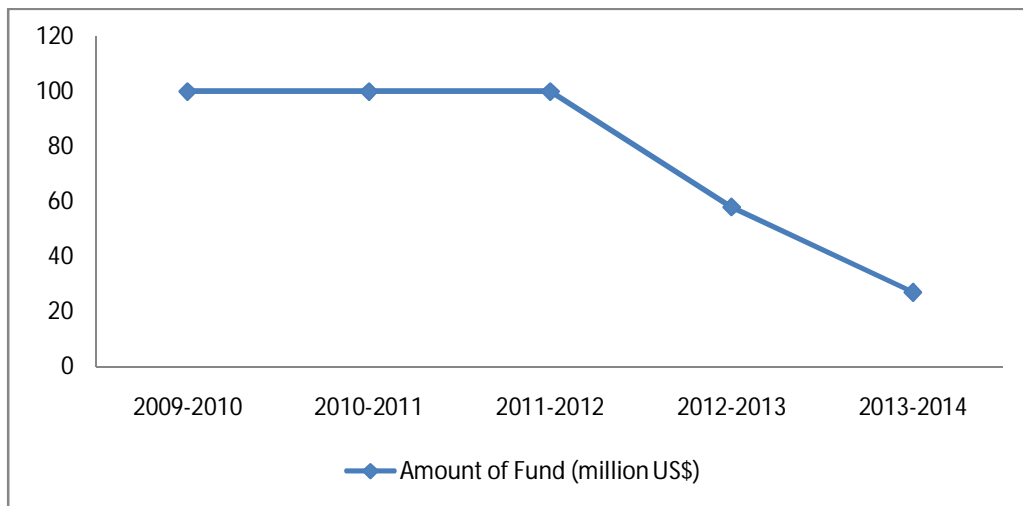
**Figure 4.4:** Thematic area-wise distribution of projects.

Total amount allocated against 207 projects was Tk 190560.926 Lac in the five fiscal years from 2009 – 2010. Percentages of the amount in six thematic areas are as follows:



**Figure 4.5:** Percentage of Thematic area-wise fund allocation.

Fiscal year-wise allocation of fund is given below:



**Figure 4.6:** Fiscal year-wise allocation of fund from BCCT.

From the above three charts, it is evident that most of the projects have addressed the third Thematic area that is infrastructure which is mainly a medium of adaptation. Comprehensive disaster management and capacity building have got the least number of projects. In consistenc with the number of projects, maximum amount of money has been allocated for implementing projects of the third Thematic Area. Again, though amount of money allocated was same in three consecutive financial years, in 2012-2013 there

occurred a sharp decline and the allocation was reduced to almost half. In the present fiscal year total allocation has been halved to the previous year. The above picture does not include allocation of NGO projects as it was not possible to collect total amount of money allocated against all NGO implementing projects.

#### **4.2.5 Monitoring and Evaluation:**

Regular monitoring and evaluation system of the CCTF financed projects is in place. By law, implementing agencies are responsible for the project implementation through PIC or PSC. Project implementing agency is obliged to follow PPR'2008 in all kinds of procurements of BCCTF projects. Again, Government financial rules have to be maintained in all such projects. All projects are audited annually by the Auditor General's Office of Bangladesh.

Three different entities monitor projects that are implemented by government agencies. These are:

- Implementing Ministry through PIC/PSC;
- BCCTF through regular monitoring meetings and field visits;
- District and Upazila administrations through District Coordination Committees.

Beside this, PDs of government projects have to submit monthly monitoring reports to BCCT. Again, PKSf monitors all NGO projects. On behalf of BCCT, Director (Monitoring and Evaluation), coordinates all monitoring and evaluation related activities. As the Central authority, IMED of the Ministry of Planning evaluates all the completed projects.

#### **4.3 Socio-Economic Profile of the Respondents**

Sixty randomly selected persons from the three projects were interviewed to know their opinions on different aspects of stakeholder participation. With a view to seeing any existing correlation between the socio-economic stand of the respondents and their participation as stakeholders in the effective utilization of climate change fund, respondents' gender, age, occupation, education level and income level have been identified. Out of the respondents around 12% were female and the rest were male. The highest number of them (31.7%) was above 50 years , 26.7% was between 41 to 50 years and the rest of them was between 21 to 40 years old except one person who was

below 20 year. 30% of them were illiterate meaning either devoid of any kind of reading and writing capability or only able to pen their own names with great effort and nothing more and most of them belonged to the third study area. Respondents who completed secondary level of education (28.3%) were 5% more than those who completed primary level. SSC, HSC and Graduate or above completing respondents were 6.7%, 5%, 6.7% respectively. The highest number (26.7%) of the respondents were of diverse occupations like share cropper, van puller, wood cutter, contractor, service holder, tailor, expatriate, politician, social worker, student and aspirant to be expatriate. 20% of them were farmers. All of the eight fishermen were from the third study area whereas the wood cutters belonged to the first study area. Again, all of the female respondents were involved in household activities. Most of the respondents (30%) were impoverished earning less than \$3 a day (less than Tk 5000 a month) and the females mostly fall in this category. Only 8.3% each of them earned above Tk 25000 a month. Again, except a few, all of the interviewed 12 key personnel of both the government and non-government were highly placed in social status and economic condition. They were also highly influential as it is natural in such position.

#### **4.4.0 Findings of the Survey**

The survey was conducted in the project areas of three different Districts. A structured questionnaire of thirty three questions was used to interview sixty randomly selected respondents. Another set of structured questionnaire was served to twelve key informants. The aim was to find out the respondents' and informants' opinions and examine their views on stakeholder participation as an important tool for effective utilization of climate change fund. The finding of the study is detailed underneath.

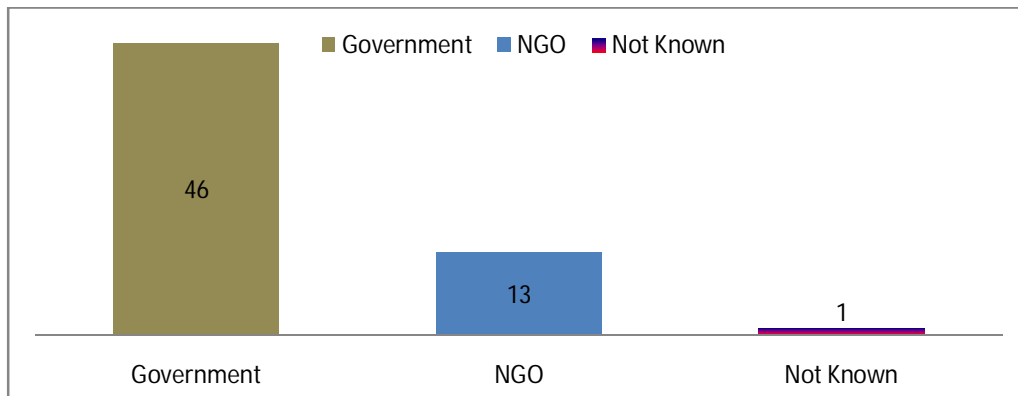
#### **4.4.1 Awareness**

With a view to finding the level of awareness of the respondents regarding the concerned project, questions were asked on the initiation of the project, the implementer of the project and the amount allocated for the project. An overall question involving their own assessment of their level of knowledge on the project was also asked.

Out of the 47 respondents of the government project areas, 46 respondents knew who the implementer of the project was and only 1 respondent who was a female did not know

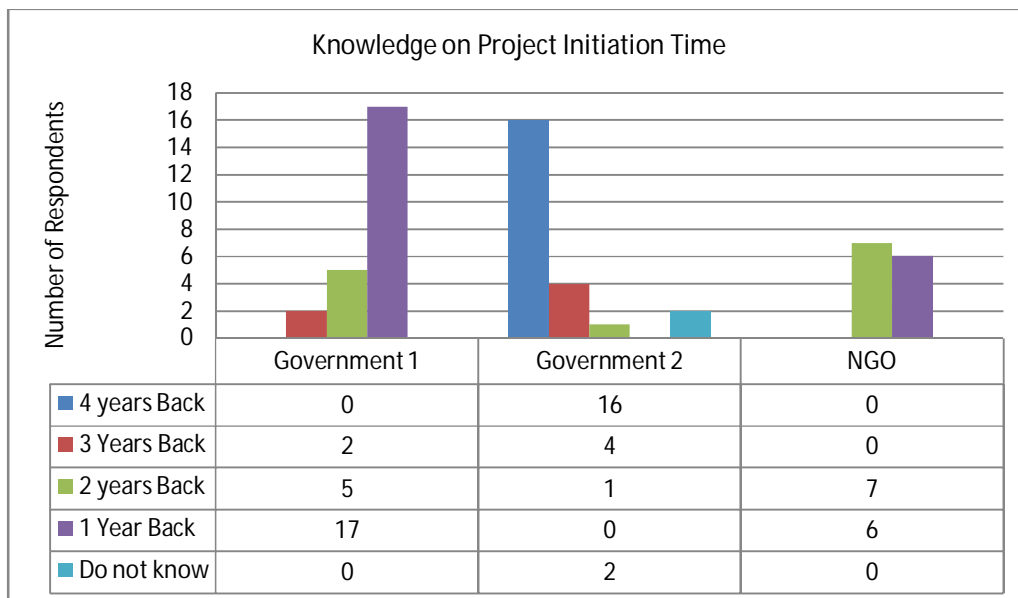


about it. All the respondents of the NGO project area knew exactly that the project was implemented solely by the NGO.



**Figure 4.7:** Respondents' reply about the implementer of the projects (from the feedback of the respondents).

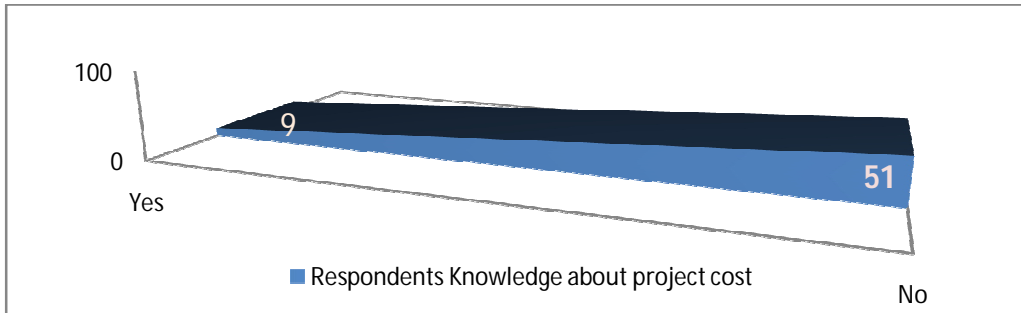
Then, three projects as labeled Government 1, Government 2, and NGO were started 2 years back, 4 years back and 1 year back respectively.



**Figure 4.8:** Respondents' knowledge about the initiation time of the project (from the feedback of the respondents).

Out of 24, 23 and 17 respondents in Government 1, Government 2 and NGO projects, 5, 16 and 6 respectively knew the exact time of project initiation. More than half respondents and two-thirds respondents of the NGO and Gov 1 projects respectively

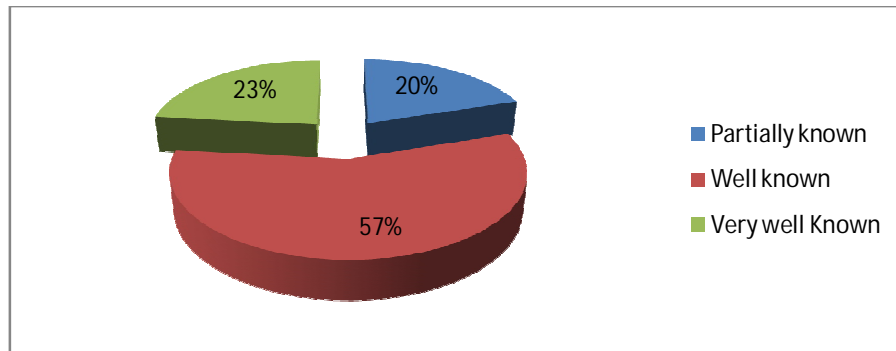
did not know the exact time and 2 respondents of Gov 2 projects did not know when the project was started.



**Figure4.9:** Respondents' knowledge about the project cost (from the feedback of the respondents).

About the project cost, only 15 % (9 respondents) gave positive response whereas the rest (85% respondents) expressed their ignorance.

In the self-assessment of the respondents about their own level of knowledge, 57% replied that they were well-known with the projects and 23% claimed to be very well known and 20% partially known. None of them expressed that the project was totally foreign to them.



**Figure 4.10:** Respondents' self-assessment of their level of knowledge of the project(from the feedback of the respondents).

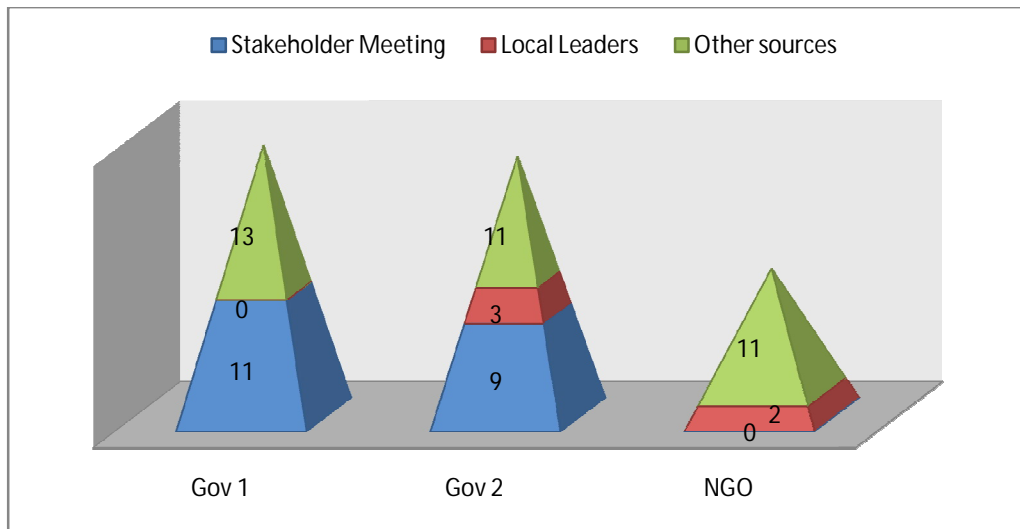
#### 4.4.2 Flow of Information

Respondents were asked about the medium through which they came to know about the project. The given media were newspaper, billboard, stakeholder meeting, local leaders and others.

Medium	Number of Respondents	Percent
Stakeholder Meeting	9	15.0
Local Leaders	16	26.7
Others	35	58.3
Total	60	100.0

**Table 4.1:** Media through which respondents learned about the project (from the feedback of the respondents).

It is found that most of the respondents (58.3%) learned it from other sources which include mostly concerned officers of the project. Only 15% learned about the project through stakeholder meetings. None learned from newspapers or billboards.



**Figure 4.11:** Stakeholders' medium of knowledge about the projects (from the feedback of the respondents).

Again, out of 47 respondents of the two government projects, 20 learned about the project through stakeholder meetings whereas it was through other sources in the NGO run project.

#### 4.4.3 Engagement of the stakeholders

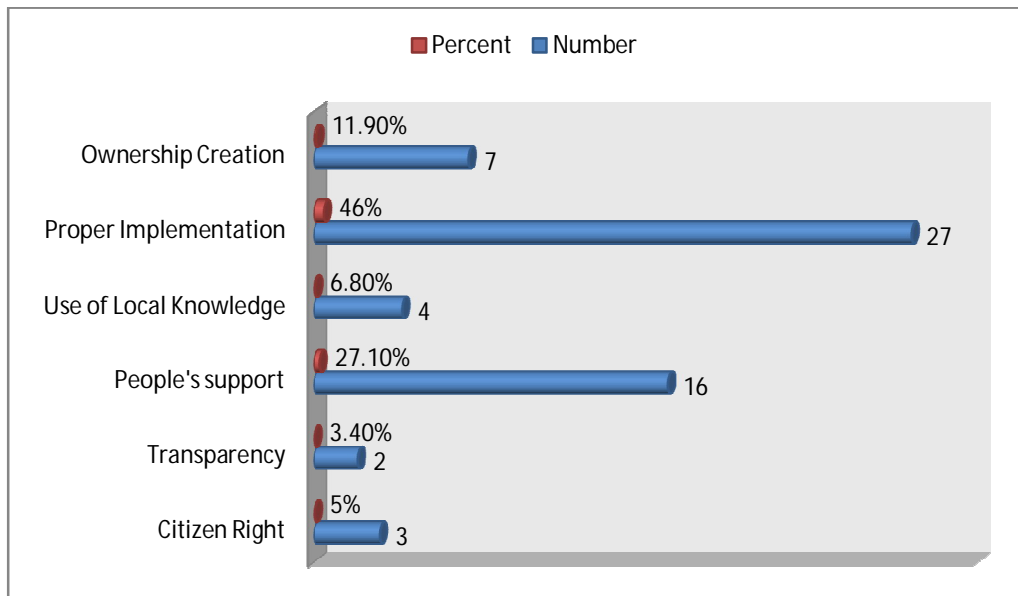
Respondents were asked about the importance of involvement, opinion seeking, stakeholder meetings and participation in the meetings of local community and time,

number and duration of such meetings to know the gravity of stakeholder engagement in the projects.

Response	Number	Percent
Yes	59	98.3
No	1	1.7
Total	60	100.0

**Table 4.2:** Response about the importance of stakeholder participation(from the feedback of the respondents).

Almost all the participants emphasized on the participation of stakeholder in project implementation. One respondent who did not recognize the importance of participation mentioned that there was nothing to consult regarding the project and the respondent belonged to the project by Forest Department.



**Figure 4.12:** Respondents' views on the importance of stakeholder participation (from the feedback of the respondents).

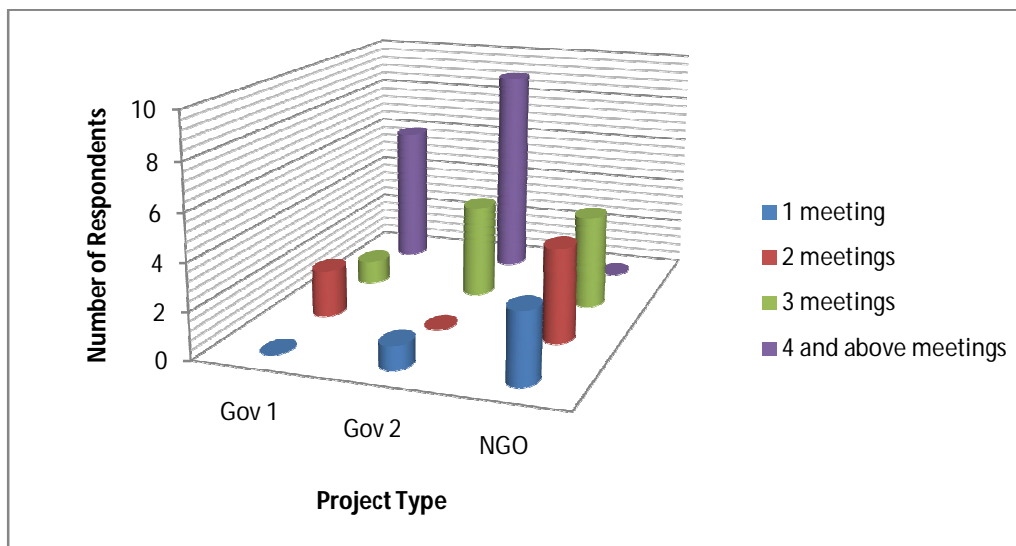
Twenty seven respondents (around 46%) opined that community people should be involved in projects for proper implementation and 27.1% stressed on it for gaining support from the local people. Only 3.4% thought it would ensure transparency while around 12% thought it would create ownership. Use of local knowledge was thought to

be important only by 6.8% and 5% replied that it was their citizen right to participate in the project implementation.

Response	Stakeholder Meeting	Participation in the Meeting
Yes	45 (M 38, F 7)	33 (M 30, F 3)
No	15 (M 15, F 0)	12 (M 7, F 5)
Total	60	45

**Table 4.3:** Holding of stakeholder meetings and respondents' number of participation(from the feedback of the respondents).

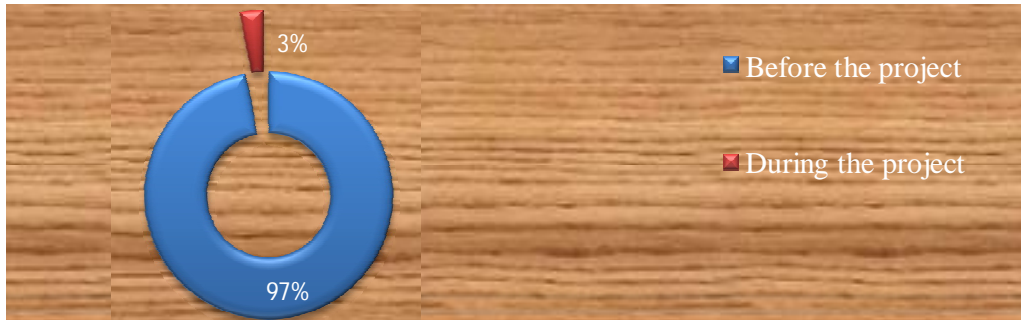
Seventy five percent mostly male respondents replied that there were held stakeholder meetings whereas 15% (all were females) replied that they did not know whether there was hold any stakeholder meetings. Again, out of 45% respondents with knowledge of stakeholder meetings, 73% told that they participated in the meetings and most of them were males. The rest did not participate in any meeting.



**Figure 4.13:** Number of meetings held in each projects (from the feedback of the respondents).

Thirty four respondents replied about the number of meetings held. In Gov -2 projects where the highest number of the respondents replied that 4 and above meetings were

held. Then, in the Gov-1 project, no respondent replied that only one meeting was held. In the NGO project, the number of meetings was between 1 and 3.

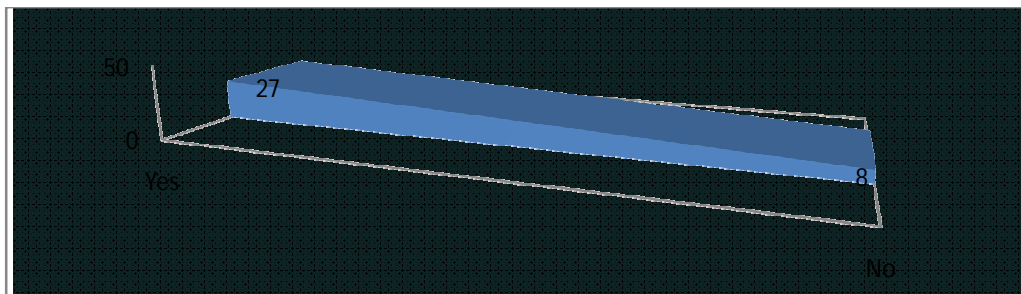


**Figure 4.14:** Respondents’ reply about the time of the first meetings(from the feedback of the respondents).

Again, the 33 respondents who had participated (1 did not participate but replied positively, hence total respondents is 34) in the meeting replied (97.1%) that the first meeting had been held before the project started. Only 1 participant replied it was held during the project work.

#### 4.4.4 Inclusion of stakeholders from all section of the community

Respondents were asked whether people from all walks of life participated in the meetings. Those who participated (33 respondents) and two respondents who did not participated answered it.



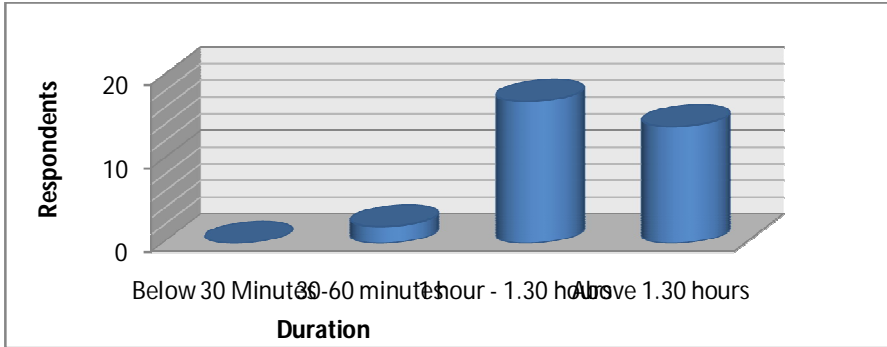
**Figure 4.15:** Inclusion of stakeholders from all classes of the community (from the feedback of the respondents)

The above figure shows that out of 35 respondents, 81.8% replied that stakeholders from all sections of the community participated in stakeholder meetings.

#### 4.4.5 Proper Communication

To know the level of communicating information by the project authority to the stakeholders, respondents were asked about the average length of meetings. Besides, they were asked whether they were informed by the project authority about some

primary information on the concerned projects. Respondents who (total 33) participated in the meetings replied to these questions.



**Figure 4.16:** Average duration of the meetings(from the feedback of the respondents)

51.5% respondents replied that average duration of the meetings was 1 hour to 1.30 hours while only 6.1% said it was 30 – 60 minutes. Again, 42.4% replied that the duration was more than 1.30 hours while none said that it was below 30 minutes.

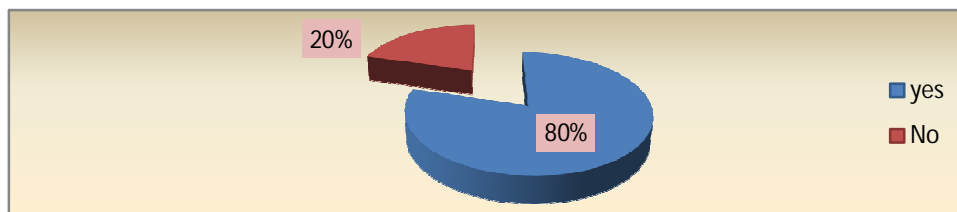
Aspects	Frequency	Percent
Purpose of the project	27	81.8%
Implementing authority	33	100%
Total Allocation	5	15.15%
Project Duration	0	0%

**Table 4.4:** Informing by the project authority about different aspects of the project(from the feedback of the respondents).

All of the respondents were informed which organization was implementing the project. 81.8% were informed about the purpose of the project. On the other hand, 84.85% were not informed about the total allocation of the project and none was about the project duration

#### 4.4.6 Felicitation

The respondents were asked to answer whether the project authorities were friendly and cordial to them. Though, 33 respondents participated in the meetings, total 54 of them answered to this question.



**Figure 4.17:** Felicitation by the project authority

80% (43) respondents found that the project authorities were friendly and cordial to them while rest 11 respondents expressed the opposite.

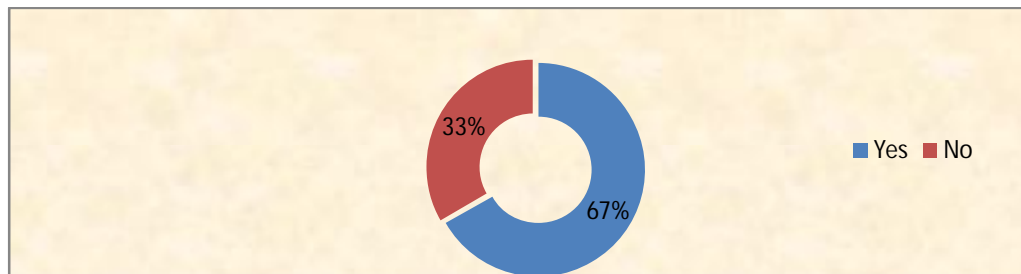
#### 4.4.7 Voice in the meeting

Respondents were asked about the average number of participants in each meeting and whether they gave any advice to the project authority. The target was to learn whether respondents had voice in the meetings.

Average number of participants	Frequency	Percent	Valid Percent
Less than 20	2	3.3	6.1
20-30	2	3.3	6.1
31-50	8	13.3	24.2
More than 50	21	35.0	63.6
Total	33	55.0	100.0

**Table 4.5:** Average participants in the meetings held by the project authority.

63% respondents replied that the number of participants in the meetings was more than 50 on an average, 24.2% replied it was between 31 to 40 and only 3.3% replied it was 20 -30 and less than 20 respectively.



**Figure 4.18:** Respondents' sharing opinion in the meetings

Again, out of 33 participants, 22 replied that they gave opinions/ advices in the meeting and 11 of them replied the negative.

#### 4.4.8 Opinion inclusion

Respondents were asked whether they thought their opinions were considered by the project authority.

	Frequency	Percent	Valid Percent
Yes	19	31.7	86.4
No	3	5.0	13.6
Total	22	36.7	100.0

**Table 4.6:** Consideration of stakeholder's opinion by project authority



86.4% of the respondents were of the opinion that their advice and opinions were considered by the project authorities and the rest replied the negative.

#### 4.4.9 Empowerment of the Stakeholders:

With a view to identify the level of empowerment of the respondents, their answer to an open ended question regarding the nature of their involvement in the projects other than stakeholder participation was sought.

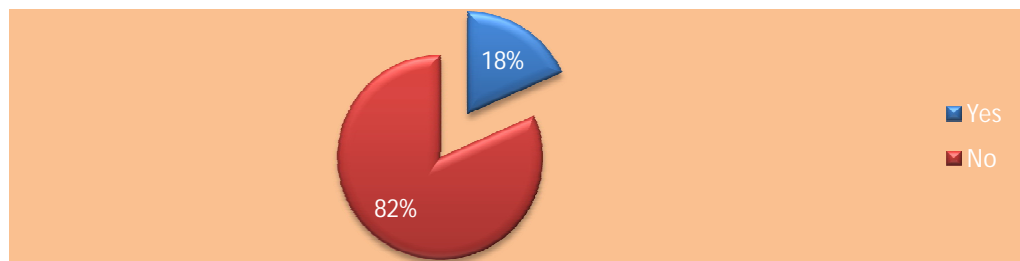
Project / Participation Type	Training	Visiting the site	Beneficiary of the project component	Contacting the Project Authority as part of self monitoring	No Involvement
Gov -1	0	6	0	3	15
Gov -2	16	0	16	0	5
NGO	9	0	9	0	4

**Table 4.7:** Empowerment of the stakeholders through involving in the projects(from the feedback of the respondents).

Out of 60 respondents, 24 persons did not get involved in the project in other ways. Among the rest, 25 respondents got training and 25 (there is an overlapping) benefitted from the project component. 3 respondents of the Gov-1 project contacted the project authority as part of self-monitoring of the projects.

#### 4.4.10 Conflict Resolution

To know whether there occurred any conflict among the community people or between the community people and the project authority, the respondents were asked about the existence of conflict and its medium of resolution.



**Figure 4.19:** Respondents' reply about the presence of conflict in the project (from the feedback of the respondents).

82% of all the respondents thought that there was no conflict in the projects whereas the rest 18% thought that conflict existed.

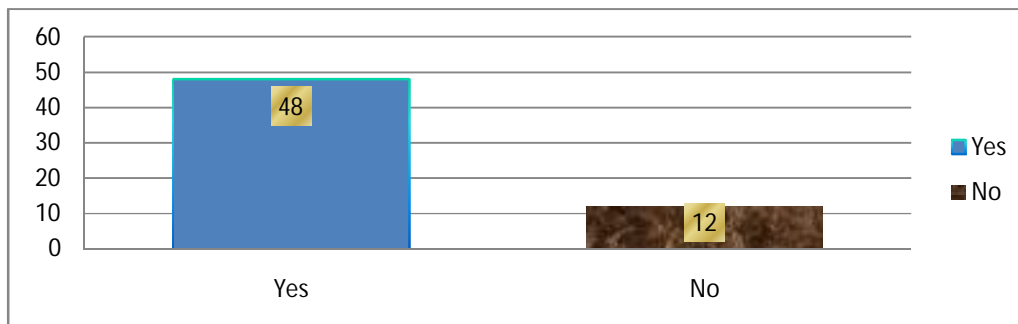
Medium	Frequency	Valid Percent
Mediation of the local elite	3	30.0
Mediation of the project authority	3	30.0
Not resolved	4	40.0

**Table 4.8:** Medium of conflict resolution (from the feedback of the respondents).

Again, only 10 respondents replied about conflict resolution. Among them, 40% denied that the conflict was resolved. The other 60% credited the mediation of the local people and the project authority equally in resolving the conflict. None mentioned about automatically resolution of the conflict.

#### 4.4.11 Ownership Creation:

To know the respondents' perception on the creation of ownership in the projects, they were asked the types of benefits they were getting from the project outcome, whether participation caused accelerated benefit, whether the projects should be continued or not along with the causes of such arguments and finally, their level of satisfaction.



**Figure 4.20:** Participation as accelerator of benefits for the community people (from the feedback of the respondents).

It is seen that 48 respondents (75%) thought stakeholder participation acted as accelerator to accrue benefit for the community. Again, in response to the open-ended question of the sort of benefits they were getting, replies of the respondents of one section (embankment along the river Bakkhali) of the Government project 1 (implemented by the Water Development Board) were:

- ◆ Protection from flood and saline water intrusion,
- ◆ Protection of crops, houses from flood;
- ◆ Quicker communication with the District Head Quarter.

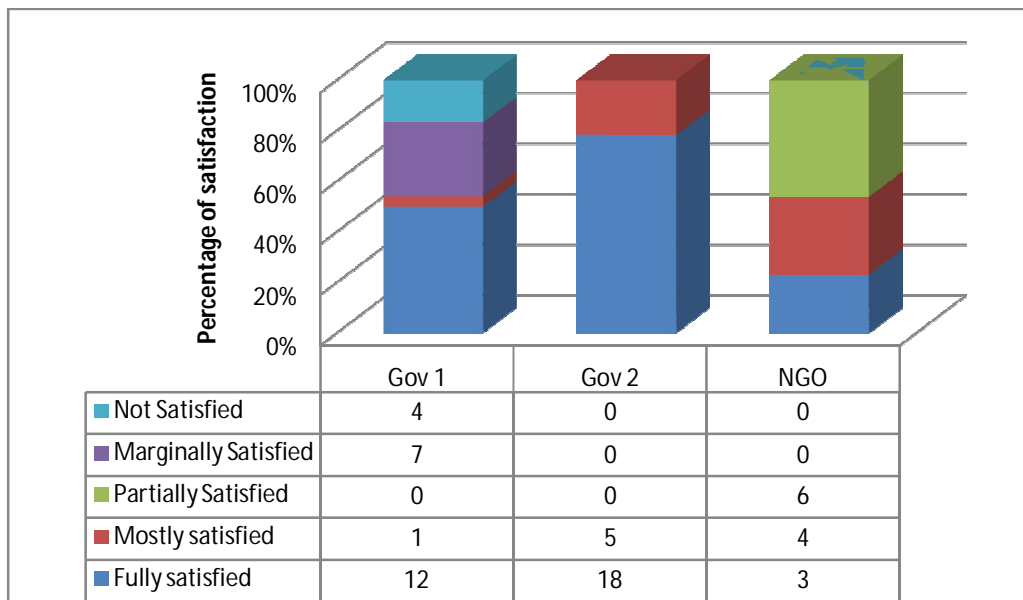
Three of the respondents expressed that benefit lessened due to weak implementation of the project. Again, replies of another section (concrete block along the bank of the Reju River) included mainly:

- ◆ Protection of houses, shops, orchards, crops, religious sites, cultivable land and a village road from river erosion and flood.

Respondents of the project (Government 2) implemented by the Forest Department of Modhupur identified benefits as:

- ◆ Skill and allowance through training,
- ◆ Temporary job creation meaning opportunity of alternative livelihood,
- ◆ Cash for planting, poultry and cattle rearing,
- ◆ Receipt of free environment friendly cookers,
- ◆ Availability of cooking wood, jungle fruits, and
- ◆ Better air, environment and more rain.

Then, the respondents of the NGO (SSUS) implemented project mentioned skill, allowance, seedlings, poultry, and life-saving instruments as benefits. Out of 13 respondents of this project, four mentioned that they did not get any benefit as the project focused only on the fishing community.



**Figure 4.21:** Level of satisfaction of the respondents about the projects (from the feedback of the respondents).

Level of Satisfaction	Frequency	Percent
Not satisfied	4	6.7
Marginally satisfied	7	11.7
Partially satisfied	5	8.3
Mostly satisfied	10	16.7
Fully satisfied	34	56.7
Total	60	100.0

**Table 4.9:** Satisfaction level of the respondents over the project outcome (from the feedback of the respondents).

Response	Frequency	Percent
Yes	60	100.0
No	0	0

**Table 4.10:** Respondents' views about the continuation of the project (from the feedback of the respondents).

All the respondents opined that the projects should be continued. Diverse arguments were given in favor of continuation of the projects. The respondents in the Government-1 project area mentioned mainly protection of houses, business centers, crops and agricultural land from flood and saline water and also better road communication as arguments of the continuation of the project. In the project (Gov 2) implemented by the Forest Department, respondents found better preservation of environment, employment generation, cash benefits, continuation of the benefits and better livelihood as the causes of their opinion for continuation of the project. The respondents of the NGO run project wanted it to be extended because they thought the benefit coverage would be extended, more benefits would be found and the stress on alternative livelihood enhancement would be intensified.

#### **4.5 Key Informants' Response on Stakeholder Participation**

Officials of BCCTF and project directors including personnel e.g. Range Officers and Bit Officers of the Forest Department, concerned officers of the WDB and officers and field coordinators of the SSUS involved in the implementation of the project were interviewed through structured questionnaire. Along with them, local public representatives (only in government projects) were interviewed also. The structured questionnaire contained eight questions and total respondents were twelve.

All of the KIs admitted the importance of involving community people in the climate change adaptation projects. They also presented some arguments in favor of their stance. These are using local people's knowledge, raising awareness, ensuring transparency, and important guideline for the implementing authority. Some (in the forest department project) of them also said that previous such project became futile simply because of non-involvement of stakeholders.

Except one respondent all agreed that it is important to include opinions of the community people. They felt that adaptation programs vary from region to region. Therefore project officials who are less informed about the need and nature of a particular area can be benefitted by recognizing community people's opinions. But it was also opined that opinions relating to technical issues must not be accepted naively. The respondent who did not agree also pointed to this point as he thought the project was too technical for the stakeholders to give opinions. Again, identifying and addressing the local needs properly and creating ownership were included in the arguments in favor of opinion inclusion.

Again, other than stakeholder participation, respondents identified proper feasibility study, sufficiency of fund, GO and NGO monitoring, proper training to all team members of the project, project knowledge, periodical and ending evaluation, expected support from public representatives, extensive circulation about the project among the mass people, awareness, administrative support, presence of income generating component in the project profile and involvement of relevant departments in government projects as important issues for the successful implementation of the climate change adaptation projects.

In answer to the sorts of benefits the stakeholders got, KIs of the WDB project mentioned protection of houses, crops, inter-village communication, access safely to river water by the women and irrigation as benefits. KIs of the Forest Department project mentioned both intangible benefits e.g. rapport and trust building with evading illegal loggers, changing life style (from loggers to CFO), changing mindset and sense of well-being, training and skill and tangible benefits e.g. employment generation, socio-economic development, recreation spots, increase in land fertility, and availability of more fuel wood and fodder for domestic animals. In the NGO project, benefits were training and skill, lifesaving instruments to fishermen, seedlings, house-base raising and poultry distribution.

Maximum of the KIs responded positively regarding the presence of conflict though not very significant in their eyes. The reasons were political interference in selecting beneficiaries in the Forest Department and NGO projects and obstacles of the forest land encroachers in planting trees, all of which were however managed and solved. In the WDB project, the conflict was regarding building the embankments in the proper place, which was not solved.

Regarding external barrier to adaptation project implementation, KIs mentioned proper completion of work by the contractor (in the WDB project), reluctance of the ethnic community in sharing their knowledge and opinions, political pressure, top-down rules and regulations, land grabbers infestation and motivation problem. Again, except one KI (WDB project), all believed that the local community owned the projects.

KIs also thought that without funding from the CCTF, it would be impossible to start such climate change projects. These projects on the whole increased resilience against climate change among stakeholders. So, in these sense, they found the projects very successful in ensuring climate change adaptation in Bangladesh through using CCTF allocation.

#### **4.6 Findings from observations**

##### **◆ The Transformation of the Illegal Loggers as Community Forest Worker**

Modhupur Forest had been shrinking rapidly in size due to illegal logging and land grabbing by influential vested sections of the area and also outsiders. A good number of the respondents had been illegal loggers before they were turned into Community Forest Workers and Fire Workers who were vested with the responsibility of protecting the forest from illegal logging and bush or accidental fire during dry seasons (January to April). The total number of CFWs stood 700 and they received weekly allowances from the project for their duty. It is really remarkable to observe that such a huge number of destroyers of the forest turning into preservers. While interviewing them, it was easily understood that they were enjoying their social recognition that they got from the project though they were intimidated through criminal cases under the Forest Act due to their past illegal activities. A negotiation process was underway to relieve them from

punishment. It was also found that CFWs were expectant of getting more allowances as they chiefly depended on it for their livelihood.

#### ◆ **Protection of the last resort from river erosion**

The Reju River causes huge loss of crops, riverside houses and shops of the inhabitants of Mistripara of Chakmarkul Union of RamuUpazila, Cox's Bazar during the monsoon season. The local representatives contacted the WDB officials for taking preventive measures. The authority after visiting the site and consulting with the affected people prepared a Project Profile and submitted it to the BCCTF. It was accepted and finally the most erosion prone area of the river bank was wrapped with cement block. While interviewing with one of the respondents whose only recourse was a shop still standing on the brink of the river bank, it was learnt that his house along with other houses of his brothers were destroyed in the river due to erosion. Shafiullah (54) became grief-stricken while telling his story between the interviews. He however was happy that his small grocery-cum-tea shop was saved so that he could earn a livelihood. The shop was the sole living place of him and his family as he had no land left.

#### ◆ **Dissatisfaction of the community people**

The people of the Chhankhola village of PM Khali Union were found to be showing resentment regarding the embankments built by a contractor of the WDB of the same project. It was around 12.15 p.m. when interviews of respondents were begun. People thinking the researcher could report to the higher official regarding any anomalies committed in the project showed much interest. Their common objection was that they were neither consulted before the project nor their justified counsel regarding the course of the embankment was considered. After visiting the site, it seemed evident that there were some deviations e.g. insufficient earth filling, not filling earth in some places along the bank, etc. in the making of the embankments. Local people feared that it would not hold saline and flood water during the monsoon. The project officials reported 75% work completion and presented land related problems for such course change. It could be inferred easily that the involvement of the local community prior to or at the early stage of the project could resolve such problem.

### ◆ Working with the Most Affected

The five hundred beneficiaries were all members of fishing communities living on the bank of the mighty Meghna just merging in the Bay of Bengal. The area was a newborn char land sparsely occupied with shoddy houses with no protection from the sea storms and flood water which are very common in deltaic Bangladesh. Some of the fishermen were found making and mending boats and other were idling as it was a lean season. Some have their own boats while most of them work at other boats on daily basis. Their average income in the season is not negligible but during lean season many of them face harsh reality and have to receive loan on high interest to survive. The frequent onslaught of storms and flood devastate their houses and eat up the money they earn during the season.



**Picture 4.1:** A house raised high to avoid sea water at Horni union

Many, of course, lose their lives as they are ignorant of weather warning and are not in the habit of or even ignorant of using lifesaving instruments. The project targeting solely these fishermen brought some changes to these conditions. Some houses were raised higher; fishermen were trained to use lifesaving instruments, were made aware and trained to pay heed to weather forecast; were made aware about alternative livelihood during the lean season. But the allocation was found to be too meager to deal with these things perfectly.

### **4.7 Analysis of the Seminal Study Findings**

The project implemented by the Forest Department focused one single aspect involving improvement of many other relevant and influencing sub-components. The total project area was a single unit and all the main stakeholders were inhabitants of the area. Therefore, the project authority could be able to manage the stakeholders properly. In the



project of the WDB, Cox’s Bazar, the project had diverse components like river retraining by concrete block installation in one site, making embankments in another site with an emphasis on agricultural production. There was an urgency of completing the project to protect loss of property from the immediate flooding and consequent river erosion and saline intrusion.

All the projects are mostly supply-driven, top down and suffer from insufficiency of fund along with lack of proper if at all feasibility study.

Significant and interesting results on determinants of stakeholder participation in three different projects and also other factors of effective utilization of climate change fund emanate from the analysis of the findings of the study.

■ The respondents’ feedback shows that though 97% and 100% respondents of GO and NGO projects respectively were aware about the implementing agency, their knowledge about project initiation was staggering and about the project cost was tantamount to ignorance.

		Informing by the project authority			Total
		Purpose of the project	Implementing authority	Total Allocation	
Respondent's knowledge about the project cost	Yes	4	0	1	5
	No	26	2	0	28
Total		30	2	1	33

**Table 4.11:** Respondents knowledge about the project cost and Project Authorities’ informing the stakeholders about cost of the projects.

From the above table, it is clear that project authorities did not inform the community people who attended the meetings about the project cost as only 1 respondent gave the positive response about it. It points at the lack of transparency in the projects. It can also be said that this lacking hampers effectiveness of fund utilization.

■ Local elite play a very significant role in the project selection, earning public support and implementation. They include mainly public representatives and leaders of the political party in power. They use their network and power in ensuring that climate change projects are taken in their locality as they know very well that there is more demand than supply of fund. Then, officers and staff of the implementing agencies act as important information disseminators of the project as they work closely with the

community people. So, formal medium like stakeholder meeting is less effective for disseminating information on the adoption of government project. But, in case of NGO projects, as part of feasibility study they hold stakeholder meetings, it does not apply.

■ Highest percentage of the respondents thought stakeholder participation was important to ensure proper implementation and to get people’s support for the projects. It reveals that people are skeptic about the project delivery. Again, 11.90% respondents thought stakeholder participation is important for ownership creation. So, the claimed benefit cited in Reed that participation ushers ownership creation may not apply in every case. It may be that ownership can be created if people get benefit from the project whether or not they participate in the project. Then, the claim that participation enhances use of local knowledge is not strongly proved as only 6.8% respondents thought so. Many technical projects have little to do with use of the knowledge of the community people.

■ People’s involvement in the climate change adaptation projects can be of diverse forms. Stakeholder meeting is not the only form through which people can take part in projects. Many people may prefer to observe the project implementation, get training and skill that such project provide and even there are always some people who on their own monitor and report the implementing agency if there occurs any deviation.

■ Early involvement of the stakeholders can contribute in reducing conflicts.

		Conflict among the local people		Total
		Yes	No	Yes
Time of the first meeting	Before the project start	4	29	33
	During the project work	0	1	1
Total		4	30	34

**Table 4.12:** Cross tabulation on Time of the first meeting and Conflict among the local people(from the feedback of the respondents).

The above table reveals that respondents negated the idea that stakeholder meeting which starts before the project start could promote conflict among the community people. Rather, a pre-project meeting can successfully play role in eliminating suspicion among the community people and make them positive to the project.

It is necessary that people from all walks of the community have a say about a project through stakeholder meetings.

		Participation brings more benefit or not		Total
		Yes	No	
Stakeholder participation from all sections of people	Yes	26	1	27
	No	8	0	8
Total		34	1	35

**Table 4.13:** Cross tabulation of Stakeholder participation from all sections of people and acceleration of more benefit or not through participation (from the feedback of the respondents).

The above cross tabulation reveals that maximum respondents replied positively about participation of different levels of people in the meetings and that such participation accelerated benefits. Again, wide range of stakeholder participation reduces conflict.

		Conflict among the local people		Total
		Yes	No	
Stakeholder participation from all sections of people	Yes	5	22	27
	No	0	8	8
Total		5	30	35

**Table 4.14:** Cross-tabulation of Stakeholder participation from all sections of people and Conflict among the local people (from the feedback of the respondents).

The above cross tabulation illustrates that most of the respondents who replied that stakeholders from all sections of the community attended the meetings, replied negatively about the existence of conflict in the project. It validates the claim of Armah, Yawson and Johana's (2009) opinion that marginalization of stakeholders creates conflict.

Inclusion of stakeholders' opinion in the preparation and implementation of projects is said to be important ingredients of empowerment.

		Project authority's facilitation condition		Total
		Yes	No	
Inclusion of stakeholder's opinion by project authority	Yes	19		19
	No	3		3
Total		22		22

**Table 4.15:** Cross-tabulation between inclusion of stakeholders' opinions and project authority's facilitation condition.

The above table shows that maximum of the respondents who replied that project authorities included their opinions seemed to be positive with the overall dealing of the project authorities. However, those who replied that the project authorities did not include their opinions seemed to be satisfied with the project authority's felicitation condition. It might be likely that inclusion of opinions of stakeholders may not be important in some projects where there is much technicality and in those projects other aspects of project authorities might satisfy the stakeholders. Again, it is clear that stakeholders develop trust on the project authorities. So, opinion inclusion might be seen as a tool for creating trust among the people.

		Level of satisfaction			Total
		Partially satisfied	Mostly satisfied	Fully satisfied	
Inclusion of stakeholder's opinion	Yes	0	3	16	19
	No	2	0	1	3
Total		2	3	17	22

**Table 4.16:** Inclusion of stakeholders' opinion and stakeholders' level of satisfaction

Opinion inclusion influences level of satisfaction. The above table reveals that those who replied that opinions were included were either mostly satisfied or fully satisfied with the project outcome. But, the level of satisfaction declined considerably in case of the respondents who replied negatively.

Climate change adaptation projects create a sense of ownership among the community people. There are a variety of reasons for this. Firstly, some of the projects are essential for the very survival of the community people. Then, the outcomes of such projects are tangible. Out of the three projects, two projects had training and skill enhancing options, direct benefit like allowances, seedlings, dress, radios, poultry and life-saving instruments and alternative livelihood options. Moreover, people think that the continuation or extension or replication of such projects would benefit people who are in the same ordeal. It is interesting to observe that all the respondents stressed that the projects should be extended or continued though some respondents were not satisfied at all with the project.

The study does not fortify the idea that stakeholder participation reduces cost of projects. Cost reduction has been shown as an outcome of stakeholder participation in the analytical framework. Then, the statement that stakeholder participation in climate

change adaptation projects contributes in resolving conflicts has weakly been examined as the respondents did say little existence of it. It is early engagement of stakeholders in the three studied projects that deterred the rise of any conflict. Transparency, another assumed outcome of stakeholder participation, can be said in weaker condition in the projects because it has been found that in stakeholder meetings, flow of information was weak and many did not know about the project cost. Lastly, it could not be proved that accountability, another assumed outcome shown in the analytical framework, can be ensured by stakeholder participation.

#### **4.8 Problems and Prospects of Effective Utilization of Fund**

Climate change adaptation projects have been funded from the BCCTF only for five years. However, there have surfaced some problems which can hinder effectiveness of it if is not addressed at the beginning. Again, obviously the prospects of fund utilization are tremendous and handling them adroitly would contribute to lessen vulnerability arising out of climate change.

Climate change adaptation projects seem to be insufficiently funded. It applies mainly to NGO implemented projects. Due to insufficient allocation, important components are curtailed from the project proposal, which hampers effectiveness. The total amount of allocation is found to be declining gradually which is also alarming. Then, in many cases feasibility study is not done. Projects proposals are submitted by different departments and then fund is released after scrutiny by technical committees and approval by the Trust. Lack of proper feasibility study might result in project failure or delayed implementation or damage. After this, all government adaptation projects are not undertaken after consultation with the local people. It would lead to people's indifference and result in poor implementation. Beside this, there is a lack of strong mechanism to check excess political influence. In all the three projects of the study, it is an ever-present disturbing problem. It enhances wrong selection of project location and beneficiaries and also fortifies the path of corruption. Then, projects are found to be not timely completed. Therefore, people suffer as their immediate needs sometimes are not met. It also contributes to wastage of time and money and to increase people's dissatisfaction. In addition to this, there is found no existence of TOR between PKSf and BCCTF for selecting NGOs and monitoring activities. Then, projects are less strongly monitored during the implementation. There is a shortage of personnel to do this. This lacking

contributes to poor implementation of projects. Lastly, neither the BCCTF nor the PKSF has the strong culture of information flow of climate change projects. It discourages interested people from getting information that are necessary for them for different purposes. Such low flow of information is a barrier to transparent utilization of fund.

There is a huge demand for climate change fund. There are many areas where financing from this fund is needed. Again, being a multi-dimensional issue, climate change involves a lot of organizations. Then, there are set laws, rules and regulations for the overall funding. Therefore, a demand has steadily been created for this fund. After this, mass people have developed a sort of affinity for climate change adaptation projects. As the results of climate change adaptation projects are immediate and tangible, people can weigh the benefit. As a result, people's support is easily found.

#### **4.9 Conclusion**

Stakeholder participation in climate change adaptation programs exerts considerable impacts on the effectiveness of fund utilization. From the above study findings and analysis, it becomes clear that proper fulfillment of different determinants of stakeholder participation can ensure ownership, reduce conflict, expedite transparency and , lessen fund wastage and earn sustainability and public trust. All the three projects of the study engaged stakeholders in varied ways and at different depth. Though stakeholders were engaged, they were kept in ignorance about crucial information like project cost and if engaged, they were not empowered because their opinions were not considered in all the projects. Again, as climate change projects had very immediate positive impacts on the lives of the community people, they developed a sort of ownership for those projects despite their limited participation. Furthermore, it is interesting to notice that stakeholders might not be satisfied with all the outcome of the projects but they hope the continuation of such projects. However, the project that involved the stakeholders at earlier stage, sought and considered stakeholders' opinions, maintained a healthy relationship with the community people, kept necessary information open, provided with both tangible and intangible benefits and fulfilled immediate needs, became able to achieve public trust and ownership. So, these determinants of stakeholder participation deserve special attention for effective implementation of adaptation programs in the context of Bangladesh.

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## Chapter 5: A Way Forward and Conclusion

### 5.0 Introduction

Measuring the extent of stakeholder participation in ensuring the effectiveness of spending for climate change adaptation programs from CCTF is crucial in the context of Bangladesh as it is the community people who are directly affected if such projects go wrong or poorly implemented and money for such projects is spent from the small pouch of our own treasury. Therefore, extensive and inclusive involvement of the stakeholders from all sections of the community should be ensured as it let them voice their opinions and share their knowledge which in turn satisfy them and create ownership among mass people. Ultimately, transparency is ensured, public trust is earned and sustainability is achieved. Effectiveness of fund utilization from CCTF can be said to be ensured if all these things are at a satisfactory level.

### 5.1 Recommendations

Bangladesh Climate Change Adaptation Trust Fund has been formed with a view to addressing climate change challenges and fulfilling in adaptation and mitigation needs on a priority basis. The ultimate goal is to alleviate the sufferings of the mass people through creating adaptive capability and resilience among vulnerable communities. So, without ensuring effectiveness of fund utilization, it is tough to achieve the goal and stakeholder participation is one of the major components for achieving such effectiveness. Keeping in view the findings and implications of the study, the following recommendations are presented to ensure effectiveness of fund utilization in climate change adaptation projects:

- ④ **Feasibility study:** The importance of feasibility study in any project is beyond debate. In case of climate change adaptation projects, its necessity is also undebatable. There is a tendency in maintaining statuesqueor routine work in project adoption in Bangladesh. Projects are adopted hurriedly as if it was more important to spend the money whatever the outcome might be. It is also found

that the lack of feasibility study in adaptation projects creates public mistrust and sometimes also affects people. So, it should be made mandatory to perform feasibility study in all climate change adaptation projects.

- ④ **Early engagement of stakeholders in all projects:** It is a trend in Bangladesh that people are consulted in a project when any problem arises. Projects are not demand-driven. Rather number and area of projects are determined by the adequacy of fund. It is found in the study that stakeholders' trust and satisfaction are more achieved in the projects where they are involved at the planning stage of the projects. The opposite occurs where they are not consulted or late consulted.
- ④ **Dissemination of all information openly to the stakeholders:** Now-a-days, a culture has steadily been developing to involve and consult the focused people in projects. But still, the flow of information is very unsatisfactory. In many cases, project officials are satisfied with having some conversation with the stakeholders. Such conversation misses the very important information about project allocation, duration and project components. Such practices keep the stakeholder in ignorance and darkness which bars empowerment of stakeholders. So, all related information should be made available to the stakeholders through billboard, leaflets, web portal, newspapers and other media like radio and mobiles. Beside this, stakeholders should be guided to get such information. It will increase transparency.
- ④ **Sufficient allocation in the projects:** The allocation in the climate change adaptation projects should meet the project demand. Allocation should be sufficient enough to fulfill the project requirements. The present declining trend of allocation should be avoided.
- ④ **Reducing undue political pressure in selecting beneficiaries:** Proper mechanism should be in place so that political components cannot exert undue pressure on project implementation. In this context, political persons can be included as important stakeholders in the projects and clear bylaws can be devised to treat them.
- ④ **Third party monitoring and evaluation of the projects:** Besides monitoring by the IMED, BCCTF authority, NGO monitoring can be introduced for the better implementation of such projects. NGOs who work with environment and environmental degradation can be enlisted for such monitoring and evaluation.



- ④ **Inclusion of allocation in the regular budget framework:** Allocation for climate change adaptation projects should be included in the regular budget framework.

## **5.2 Further Research Options**

This study has been undergone to learn the nature and extent of stakeholder participation in ensuring effectiveness of the expenditure of money from the Climate Change TrustFund. Innumerous number of studies can be carried out on the aspects and importance of stakeholder participation in climate change adaptation programs. Extensive research including more projects from the coastal belt of Khulna and Barisal regions and draught prone areas of Rajshahi and Rangpur regions can be undertaken. It can be focused whether poor and marginalized stakeholders are benefited from such projects. Again, comparative studies of stakeholder participation between GO and NGO implemented projects can be undertaken. In this case, separate studies can also be undertaken focusing only the projects implemented by NGOs. Furthermore, studies can also be conducted to see the regional and gendered variation of stakeholder participation and effects in alleviating poverty and reducing unemployment at the community level in climate change adaptation projects. Besides, study can be undertaken to see the role and extent of stakeholder participation in ensuring sustainability, transparency and accountability of the projects from CCTF. Furthermore, whether participation can reduce cost of such projects can be deeply delved with. Finally, it is also important to study the nature and extent of impacts of weakness in coordination and overlapping of projects over fund utilization and stakeholder participation as there are a good number of local and foreign bodies who spend on climate change adaptation projects.

## **5.3 Conclusion**

Adaptation programs have got upper hand in government's policy measures for addressing climate change challenges. Stakeholder participation in those adaptation programs has been found very important ingredient for the transparency of fund utilization and creation of people's ownership and trust and thus the sustainability of such programs. So, strong stakeholder participation in every climate change adaptation

program is immensely needed. But as stakeholders of such programs are mainly rural people with low education level and awareness, they cannot efficiently participate in such programs. Therefore, participation of the local community has to be institutionalized in every climate change project. Projects without early and extensive engagement of stakeholders should not be undertaken at all. There should be specific guidelines for including stakeholders' opinions prior to project adoption. In fact, it is stakeholder participation that can ensure effectiveness in utilizing money from CCT fund.

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## Appendices

## Appendix A

### Questionnaire 'Ka' - English Version

“Effective Utilization of Climate Change Trust Fund in Adaptation Programs  
in Bangladesh: A Focus on Stakeholder Participation”  
(For stakeholders)

[Dear respondents, the questionnaire has been prepared for collecting first-hand valuable information about the climate change adaptation project in your locality. Data and information will only be used as inputs to prepare a dissertation as part of my Master Program in Governance and Development at BRAC University. I honestly and sincerely declare that your name or identity shall not be disclosed in any means. I would like to thank you in advance for taking pains in responding to the queries.]

1. Name (Optional):  Male  Female

2. Address: Village - Union -

3. Age :  20 or below 20 Year  21-30 Year  31 – 40 Year  
 41 – 50 Year  51 and Above

4. Occupation:  House Managing  Day Labor  Farming  Business  
 Tilling  Fishing  Teaching  Other (Please mention)

5. Education Level:  Illiterate  Primary School  Secondary School  
 SSC  HSC  Degree and Above

6. Monthly income:  Below Tk 5000  Tk 5000– 10000  Tk 10000 – 15000  
 Tk 15000-20000  Tk 20000-25000  Above Tk 25000

7. Do you know about the project?

Fully aware	Mostly aware	Partially aware	Marginally aware	Not aware at all
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[If not aware at all, please go to Question No 12]

8. How have you come to know about the project?

Community Leaders  Bill Board  Newspaper  
 Stakeholder Meeting  Other (Please mention)

9. When Was the project started?

4 Years back  3 Years back  
 2 Years back  1 Year back  I do not know.

10. Who has implemented it?  The Government  NGO  
 I do not know

***[Please go to the next page]***



11. Do you know how much money has been allocated for the project?

Yes

No

12. Do you think that local people should be consulted when such project is undertaken?

Yes

No

**[If your answer is Yes, go to Question no 13, if No, go to Question no 15]**

13. Why do you think that local people should be consulted?

Citizen Right  Transparency  Ownership Creation

Proper Implementation  Support of the People

Use of the knowledge of the local people

14. Why do you think that local people should not be consulted?

Waste of time

Opinions are not considered

Nothing to consult

Formality

15. Was there any stakeholder meeting organized by the project authority?

Yes

No

16. Did you participate in any such meeting?

Yes

No

**[If Yes, please go to question no 17, if NO please go to question no -26]**

17. How many meetings were held?

One

Two

Three

Four and above

18. Were all sections of the community involved in the meeting?

Yes

NO

19. When was the first meeting held?

Before the start of the Project  At the time when work started

During the implementation  At the end of the project

20. How many local people were present in the meeting(s) on an average?

Less than 20  20 – 30  31 – 50  More than 50

21. How long was each meeting?

Less than 30 minutes

30 - 60 minutes

1 – 1.30 hours

More than 1.30 hours

22. Did the meeting organizing authority tell you about the following? (If you think important, you can tick more than one)

Purpose of the project

Project Cost

Project Duration

Implementing agency

***[Please go to the next page]***

23. Did you or any person in the meeting give any opinion or advice regarding the project?

Yes  No

**[If Yes, please go to question no 25, if NO please go to question no -26]**

24. Do you think the opinion was considered by the project authority?

Yes  No

25. Was the attitude of the meeting organizing authority cordial and friendly?

Yes  No

26. Mention any other mode of participation other than stakeholder meeting.

27. Was there any conflict among the local people regarding the project?

Yes  No

28. If yes, how was it resolved?

Local leaders' mediation  Project authority's mediation  
 Automatically  Not resolved

29. What benefits are you getting from the project? (Please mention at least two).

30. Do you think that the benefits have increased due to the involvement of the local people?  Yes  No

31. How satisfied are you with the outcome of the project?

Fully satisfied	Mostly satisfied	Partially satisfied	Marginally satisfied	Not satisfied at all
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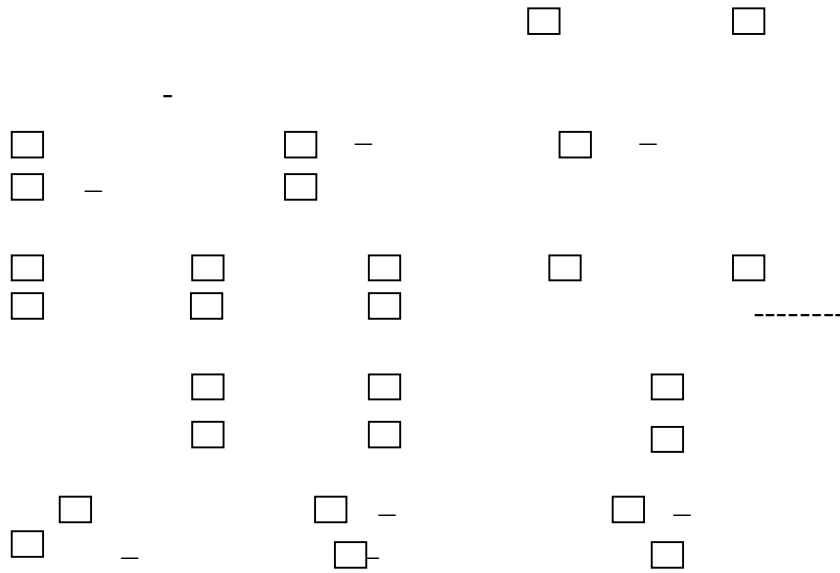
32. Do you think that the project should be continued or extended?

Yes  No

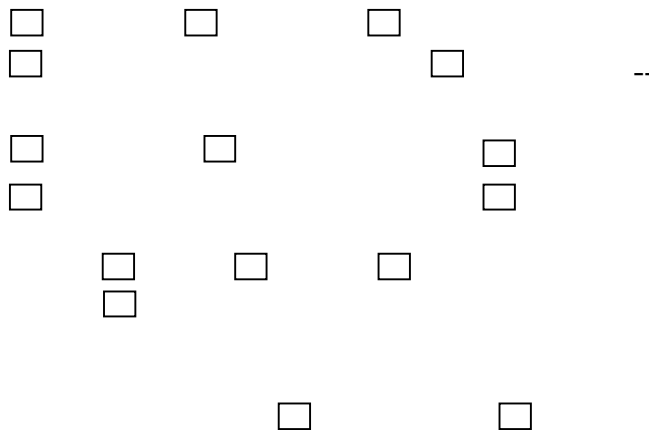
33. Please mention the reason in favor of your answer to question no 32.



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১২. আপনি কি মনে করেন প্রকল্প বাস্তবায়নের স্থানীয় জনসাধারণের অংশগ্রহণ দরকার?

হ্যাঁ  না

[উত্তর 'হ্যাঁ' হলে 1৩ নম্বর প্রশ্নে যান, উত্তর 'না' হলে ১৫ নম্বর প্রশ্নে যান]

১৩. কেন মনে করেন যে, প্রকল্প বাস্তবায়নে স্থানীয় জনসাধারণের মতামত নেয়া দরকার?

নাগরিক অধিকার স্বচ্ছত্র  জনসংগঠন স্থানীয় জনগণের জ্ঞানের ব্যবহার  
 সঠিক বাস্তবায়ন  মালিকানা বোধ সৃষ্টি

১৪. কেন মনে করেন যে, প্রকল্প বাস্তবায়নে স্থানীয় জনসাধারণের মতামত নেয়া দরকার নেই?

সময় অপচয়  লোক দেখানো  মতামত বিবেচনায় আনা হয়না  তামতের কিছু নেই

১৫. প্রকল্প কর্তৃপক্ষের আয়োজনে কোন স্টেকহোল্ডার সভা হয়েছিল?

হ্যাঁ  না

১৬. আপনি কি কোন সভায় অংশ নিয়েছিলেন?

হ্যাঁ  না

[উত্তর 'হ্যাঁ' হলে 1৭ নম্বর প্রশ্নে যান, উত্তর 'না' হলে ২৬ নম্বর প্রশ্নে যান]

১৭. মোট কতটি সভা হয়েছিল?

১টি  ২টি  ৩টি  ৪টি বা তার অধিক

১৮. সভায় (সমূহে) সমাজের সব শ্রেণী-পেশার মানুষ অংশ গ্রহণ করেছিল?

হ্যাঁ  না

১৯. প্রথম সভা কখন হয়েছিল?

প্রজেক্ট শুরুর আগে প্রজেক্টে শুরুতে  প্রজেক্টে মাঝামাঝি  প্রজেক্ট শেষে

২০. গড়ে কতজন স্থানীয় জনগণ সভায় অংশ নিয়েছিল?

২০ জনের কম  ২০-৩০ জন  ৩০-৫০ জন  ৫০ জনের অধিক

২১. সভাসমূহ গড়ে কতক্ষণ পর্যন্ত অনুষ্ঠিত হয়েছিল?

৩০ মিনিটের কম  ৩০-৬০ মিনিট  ১-৩ ঘন্টা  ৩ ঘন্টার বেশী

২২. প্রজেক্ট কর্তৃপক্ষ সভায় নিচের বিষয়গুলি সম্পর্কে অংশগ্রহণকারীদের অবহিত করেছিল কি?

প্রজেক্টের উদ্দেশ্য  বাস্তবায়নকারি কর্তৃপক্ষ  বরাদ্দে পরিমাণ  মেয়াদকাল

২৩. সভায় অংশগ্রহণকারীদের কেউ কি কোন মতামত বা পরামর্শ দিয়েছিল?

হ্যাঁ  না

[উত্তর 'হ্যাঁ' হলে ২৫ নম্বর প্রশ্নে যান, উত্তর 'না' হলে ২৬ নম্বর প্রশ্নে যান]

(অনুগ্রহ করে পরের পৃষ্ঠায় দেখুন)

২৪. যদি দিয়ে থাকে তবে কর্তৃপক্ষ কি তা বিবেচনা করেছিল বলে মনে করেন?

হ্যাঁ  না

২৫. প্রজেক্ট কর্তৃপক্ষ আপনাদের প্রতি আন্তরিক ও বন্ধুত্বপূর্ণ ছিল কি?

হ্যাঁ

না

২৬. স্টেকহোল্ডার সভা ছাড়া অন্যকোনভাবে প্রজেক্টে অংশগ্রহণ করলে উল্লেখ করুন।

২৭. প্রজেক্ট নিয়ে স্থানীয় জনগণের মধ্যে কোন বিরোধ সৃষ্টি হয়েছিল?

হ্যাঁ

না

২৮. যদি হয়ে থাকে, তবে তা নিষ্পত্তি হয়েছিল কিভাবে?

গণ্যমান্যব্যক্তিদের মধ্যস্থতায়

প্রজেক্ট কর্তৃপক্ষের মধ্যস্থতায়

কারো মধ্যস্থতা ছাড়া

নিষ্পত্তি হয়নি

২৯. এ প্রজেক্টের কারণে আপন কি কি সুবিধা পাচ্ছেন? (কমপক্ষে দু'টি সুবিধা উল্লেখ করুন)

৩০. আপনি কি মনে করেন স্থানীয় জনগণের সম্পৃক্ততার কারণে প্রজেক্ট হতে সুবিধা বেশী পাওয়া যাচ্ছে?

হ্যাঁ

না

৩১. আপনি প্রজেক্টের ফলাফল নিয়ে কতটুকু সন্তুষ্ট?

পুরোপুরি সন্তুষ্ট	বেশ সন্তুষ্ট	মোটামুটি সন্তুষ্ট	কিছুটা সন্তুষ্ট	সন্তুষ্ট নই
৫	৪	৩	২	১

৩২. আপনি কি মনে করেন প্রজেক্টটি অব্যাহত থাকা উচিত?

হ্যাঁ

না

৩৩. কেন মনে করেন প্রজেক্টটি অব্যাহত থাকা উচিত বা উচিত নয়।

আন্তরিক সহযোগিতার জন্য আপনাকে আবারো ধন্যবাদ।

## Appendix - B

Questionnaire 'Kha' - English Version  
“Effective Utilization of Climate Change Trust Fund in Adaptation Programs in  
Bangladesh: A Focus Stakeholder Participation”  
(For Key Informants)

[Dear respondents, the questionnaire has been prepared for collecting first hand valuable information about climate change adaptation project under your jurisdiction. Data and information will only be used as inputs to prepare a dissertation as part of my Masters course in Governance and Development at BRAC University. Anonymity regarding your identity will be maintained if requested. I would like to thank you in advance for taking pains in responding to the queries.]

Project type:

1. Name (optional):

2.  Male  Female

3. Designation:

4. Service Length:

1 – 5 years

6 – 10 years

11 -15 years

16 – 20 years

Above 20 years

5. It is thought that involving the local people is important for implementing climate change adaptation projects. What is your opinion?

6. How important is it to include community people’s opinions in decision making?

*[Please go to the next page]*

7. Other than stakeholder engagement, in your opinion, what other issues are important for such project implementation successfully?

8. What benefits is the community getting from the project?

9. Was there created any conflict regarding the project? If yes, how was it dealt with?

10. Was there any external barrier in implementing the project? If yes, what?

11. Do you think that stakeholders own this project? If yes, Why?

12. How successful is the project in ensuring climate change adaptation in Bangladesh through using BCCT fund?

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## Appendix C



Image 1: Interviewing Chakmarkul UP Chairman of project 1 implemented by WDB at RamuUpazila of Cox's Bazar



Image 2: Interviewing the local people at of project 1 implemented by WDB at Chhankhola of SadarUpazila of Cox's Bazar



**Images 3 and 4:** Interviewing a tribal community member (on the left) at Modhupur forests and a local Bengali female (on the right).



**Images 5 and 6:** Interviewing a fisherman (on the left) dressed in traditional cloth as it was lean season and there is little fish in the river) and Assistant Director (on the right) of SSUS of project 3 at Harni Union of HatiaUpazila.

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