

EVALUATION REPORT of Building Resilience of the Urban Poor (BRUP) project

Project period: November 2014-October 2017

Project Implemented by



CARE Bangladesh

Project Supported by



Study Conducted by



Development and Management Consulting
Niketan, Gulshan, Dhaka, Bangladesh

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Final Report on
End Evaluation
of
Building Resilience of the Urban Poor (BRUP) project

Implemented by
CARE Bangladesh

Supported by
C&A Foundation

Study Conducted by
DevResonance Ltd.

Submitted to

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Contents

- ABBREVIATIONS, ACRONYMS** 5
- EXECUTIVE SUMMARY** 6
- SECTION 2: ABOUT THE PROJECT** 16
- SECTION 3: OBJECTIVES AND SCOPE OF THE ASSIGNMENT** 18
- SECTION 4: METHODOLOGY** 19
- SECTION 5: FINDINGS** 24
 - 5.1 RELEVANCE.....24
 - 5.2 EFFECTIVENESS.....31
 - 5.2.1. Outcome 1: Enhanced resilience of households and communities 31
 - 5.2.2 Outcome 2: Empowerment of poor and extreme poor women 38
 - 5.2.3 Outcome 3: Responsive government institutions..... 46
 - 5.2.4 Project Interventions 50
 - 5.2.5 Project strategy..... 53
 - 5.3 EFFICIENCY57
 - 5.4 LESSONS LEARNT 63
 - 5.5 IMPACT 64
 - 5.5 SUSTAINABILITY AND SCALABILITY.....68
- SECTION 6: CONCLUSION AND RECOMMENDATIONS** 72
 - 6.1 CONCLUSION72
 - 6.2 RECOMMENDATIONS.....76



List of Table

| | |
|--|----|
| Table-4.1: Evaluation Framework..... | 19 |
| Table-4.2: Distribution of sample according to strategic goals..... | 21 |
| Table-4.3: Respondents for qualitative assessment..... | 21 |
| Table 5.2.1: Percentage distributions of respondents by preparedness measures undertaken..... | 32 |
| Table 5.2.2: Percentage distributions of respondents according to PEP women practicing of tools used against disaster..... | 38 |
| Table 5.2.3: Percentage of distribution of women who used IGA support for different activities..... | 40 |
| Table-5.2.4: Women’s Opinion/ intension/suggested measures against women oppression..... | 41 |
| Table-5.2.5: When women household members can stay outside..... | 41 |
| Table 5.2.6: Percentage of distribution of women who used IGA support for different activities..... | 45 |
| Table5.2.7: Percentage distribution of respondents by their participation in RRAP..... | 52 |
| Table-5.3.1: Number of Beneficiaries..... | 61 |
| Table-5.3.2: Beneficiary household involved in different groups..... | 62 |

List of Figures

| | |
|--|----|
| Figure 1: Concept of BRUP Project..... | 16 |
| Figure 2: Analysis Framework at a Glance..... | 22 |
| Figure 3: Affiliation by type of Slum;..... | 39 |
| Figure 4: Participation of EKATA Members in Meeting..... | 39 |
| Figure 5: Beneficiaries visited KIC by Slums..... | 43 |
| Figure 6: Women membership in different DRR platform..... | 43 |
| Figure 7: Percentage distribution of PEP women by support..... | 44 |
| Figure 8: Expenditure by specific goals..... | 62 |

List of Annexure:

- A. Terms of Reference (ToR) of the study
- B. Evaluation Matrix: Data Procurement Plan
- C. Sample of Survey Respondents
- D. Research instruments:
 - D 1 Survey Questionnaire- Quantitative Data Collection Tool
 - D 2 Set of Qualitative Data Collection Tools
- E. Additional Findings of Evaluation
 - List of additional tables
 - E 1: Relevance
 - E2: Effectiveness
- F. List of Respondents
- G. Progress At a Glance as per LFA



Abbreviations, Acronyms

| | |
|-------|--|
| BRUP | Building Resilience of the Urban Poor |
| CCDMC | City Corporation Disaster Management Committee |
| CDC | Community based Development Committees |
| DRR | Disaster Risk Reduction |
| DV | Disaster Volunteers |
| FGD | Focus Group Discussions |
| FSCD | Fire Service and Civil Defence |
| FT | Forum Theatre |
| GCC | Gazipur City Corporation |
| HFA | Hyogo Framework for Action |
| KII | Key Informant Interview |
| KIC | Knowledge Information Centre |
| MoFDM | The Ministry of Food and Disaster Management |
| PEP | Poor and Extreme Poor |
| PRSP | Poverty Reduction Strategy Paper |
| RRAP | Risk Reduction Action Plan |
| SOD | Standing Orders on Disasters |
| SFA | SAARC Frame work for Action |
| UCV | Urban Community Volunteer |
| URA | Urban Risk Assessments |
| URA | Urban Redevelopment Authority |
| VERC | Village Education Resource Center |
| WDMC | Ward Disaster Management Committee |
| WRRAP | Ward Risks Reduction Action Plan |



Executive Summary

Building Resilience of the Urban Poor (BRUP) of CARE, funded by C&A Foundation, is an integrated initiative that builds the resilience of targeted community to more effectively cope with seasonal and unanticipated disaster. The ultimate goal of the project **enhanced** resilience of six targeted urban communities and three targeted institutions, reaching a total of 8,000 individuals (directly and indirectly) who can prepare for, mitigate, respond to, and recover from shocks and stresses.

The expected outcomes of the project are-

Outcome 1-Household and Community Resilience: Enhanced resilience of targeted urban households and communities to prepare for, mitigate, respond to and recover from shocks and stresses .

Outcome 2- Women Empowerment : Poor and extreme poor (PEP) women are empowered to become better risk managers and influence decision making at household and community levels.

Outcome 3- Institutional resilience: Enhanced responsiveness of targeted institutions to address community needs to respond and recover from shocks and stresses.

During 2015-2017, CARE implemented the project through its partner, VERC (Village Education Resource Centre), in two wards- Tongi and Konabari of Gazipur City Corporation.

Building Resilience of the Urban Poor (BRUP) project started from November 2014 for three years and ended in February 2018. A baseline study was conducted at inception period and developed project M&E framework. Now the end line evaluation entrusted to verify the progress against baseline information. This evaluation study evaluated whether the project achieved the expected results as specified below with regard to relevancy, effectiveness, efficiency, impact and sustainability.

DevResonance Ltd. carried out the end line evaluation with the following objectives:

1. To document the changes occurred to enhance resilience of targeted urban individuals, communities and institutions through project intervention;
2. To document the constraints/challenges encountered, and lessons generated from project intervention;
3. To analyze and document added value of the project highlighting any unintended outcomes that benefits others;
4. Provide an opinion on the extent to which the results of the project are sustainable and saleable and also provide recommendations, if appropriate, of how sustainability can be improved;

For conducting this study Care has hired DevResonance Ltd. through maintaining a competitive process and finalized the agreement dated on 7-1-18. As per ToR and meeting with Care, DevResonance has completed this study following mixed methods- quantitative and qualitative . In-depth interview with direct beneficiaries using structured questionnaire, FGD with different beneficiary groups, key informant interview, direct observation and documents review methods



were used for data collection. The team analysed all data as per evaluation framework, containing relevance effectiveness/impact, efficiency and sustainability/scalability.

The key findings of the study are presenting bellow-

BRUP is an evidence based project and it has been gathered prior to the formulation of the project through study. The original evidence for the need of the project has been further corroborated by the findings of the baseline study conducted. The communities – or the beneficiaries of the project, where the project has been implemented has participated in identification of the respective hazards and risks that they face and their choices for remedial actions during the process of preparation of the Risk Reduction Action Plan (RRAP) that has provided a strong justification for the project’s theory of change and the interventions. All these process justify the project’s problem identification and site selection.

The key hazards and risks as identified from the RRAPs are-

- Lack of access to safe drinking water is the first ranked vulnerability
- Water logging caused by blocked drainage;
- Lack of sanitary latrines;
- Absence of any garbage collection system;
- Lack of opportunities for diversification of income sources particularly for women;
- The lack of availability of street lamps and its negative impact on women’s safety have been identified at all the communities

The policy frameworks on disasters articulated at national and international level to ascertain the alignment of BRUP to these policies. This included Seventh Five Year Plan, Sendai Framework for Action 2015-2030, SAARC Frame work for Action (SFA) (2006-2015, adopted in 2006), National Disaster Management Policy (January 2008), and National Plan for Disaster Management (2010).

BRUP project has been heavily involved in reducing risks to urban populations through structural and non-structural interventions. Strategically, it involved communities particularly women and children, local government institutions such as FSCD, Gazipur City Corporation, Ward Councilors and other government officials for identifying and reducing the underlying risks of disasters and strengthen the systems and procedure for effective response management. These are very much contributing factors towards policy implementation.

The BRUP project’s effectiveness is assessed with respect to the indicators of success contained in the project logical framework analysis.

OUTCOME-1: HOUSEHOLD AND COMMUNITY RESILIENCE

1.1 Adoption of preparedness measures at household:

Targeted beneficiaries undertook five preparedness measures to combat local risks factors for improving their resilience. Such as: savings for times of an emergency (38.6%), sandbag and water for firefighting(64%), portable stoves(47.2%), dry food stored in a safe place(38.6%), participation in mock drills(43.1%)..



These preferred measures for coping with disaster was somewhat influenced by the physical conditions of their respective settlements and differential ability of the respondents to afford a specific measure. Therefore, it may be concluded that future projects like BRUP need to place more emphasis on location specific disaster response measures.

1.2 Community Based Development Community (CDC) Strengthened to undertake risk assessment and planning

All (100%) CDC members received trainings from the project however their knowledge retention was found to be less as they had some difficulties in recalling all the subject matters included in the training. They explained that this was due to the long length of time elapsing since the training and the FGD sessions.

Regular meetings of CDC: Attendance at regular monthly meetings of CDC is at better in the communities on private land compared with in government land. The CDC members from private slums attended seven or more monthly meetings (77.8%) compared with government land (65.6%).

Annual updating of RRAPs: The study found out that all of the six communities have developed RRAPs which was reviewed twice and updated annually. CDC played an active role in the communities in mobilizing, coordinating for planning and implementing the plan. These plans have eight types of projects: street lighting, safe water, sanitary latrines, toilet renovation, community bathroom, drain renovation, footpath construction, and stair case.

Strengthening Urban Community Volunteers (UCV): Almost all (95%) UCV attended quarterly refresher meetings –for sharing new learning such as new methods and experience, regularly which was validated by the Gazipur regional chief of Fire Service and Civil Defense (FSCD) of the Government of Bangladesh. According to him, the attendance of the UCV at the refresher meetings is “very high”. They have participated in firefighting on two local fires and a large industrial fire that need more than two weeks to extinguish. They have assisted the official fire fighters in holding mock drills at the communities as well as at schools and industrial units in the Gazipur area.

1.3 Strengthened capacity of the community

Awareness raising through Children’s Forum: More than three-fourths (79.3%) of children have regularly participated in the fortnightly awareness sessions held during the last one year (against the log frame indicator of 80%). The children, gained knowledge on different issues, one of them was hand washing. The children at the FGD shared, ‘*we have gone door to door to make people understand usefulness of hand washing and demonstrate this to them. We told mothers and children to wash hands before eating, before feeding the children (to mothers), after using the bathroom, after playing outside, and after sneezing, coughing, or blowing one’s nose.*’

Mock Drills’ success: Two rounds of Mock Drills were held for each of the six project sites though overall participation at the Drills by the community members is low at 44.6% with better attendance reported for private land (53.1%) over government land (39.9%). They learnt how to face a fire incidence, rescue operation during fire, and preparation for earthquake.



Forum Theatre for mass communication: More than two-third respondents (69%) reported to have attended at least one of the 36 performances. They learnt a large array of subject matters (15 issues in the respondents' words). The more popular issues were: Prevention of early marriage (84.5%), proper and time of hand washing (74.7%), safe keeping of drinking water (73.8%), hygienic latrines (66.3%), preparation for fire risk (64.7%), women's empowerment (63.1%).

OUTCOME-2: EMPOWERMENT OF POOR AND EXTREME POOR WOMEN

2.1 Responsive towards disaster risk management:

The BRUP project has designed activities so that poor and extreme poor (PEP) women in the targeted communities have become more responsive to disaster risk management. As such, 360 women were trained on disaster risk management and hence, became responsive towards this by practicing the learning. The project aimed to raise women's participation in the disaster response team. Among 325 UCVs, 98 were women from two Wards (Tongi and Konabari) and the Project provided training facilitated by FSCD.

Capability and confidence through EKATA: Each EKATA group is comprised of 30 women. The women have learned about rights of women, how to prevent VAW, life skills, disaster risks, financial management, WASH through participating in the EKATA group sessions. This has made a significant difference to their ability to plan and manage their businesses, bank transactions and understanding differences between investment and profits and addressing different social issues. They have also learnt practical life skills, such as health and hygiene skills and prevention of fire. A slightly higher than three-fourth (75.7%) reported that they participated the awareness meeting regularly.

Ensuring active participation of women in CDC, EKATA, WDMC, and UCV of the Project has opened greater opportunity for women to exercise and develop their agency, structure and relationship. This, along with capacity development training has helped build the women's capacities for leadership skill, civic education and sensitization campaigns on gender equality.

At practice level, 72.6% EKATA members have become careful in using fire in their daily life, 69% of the survey EKATA group members keep sandbags and water in the cooking area so that they can use that when fire breaks out 30% do not keep flammable object at home and 20% keep the drains clean. The women now became more supportive to victims, and more than two-thirds suggested that they should work together to prevent VAW.

Women's mobility and safety: During last one year, 79% women went to hospital or clinic to get health service. Other places they visited and received services for different purposes are; school for child's admission (54.8%), knowledge information centre for training (52.7%), immunization centre to vaccinate children (42.7%), banks (39.8%), NGO/GO meeting (27%), city corporation or councilor's office (23.1%), police station (11.8%), and government office (9.5%). In addition, 46.5% reported that women can go and stay outside until night when they need to and they consider this as an improvement in the security and safety of the road because of installation of solar lights.



Access to information: The project established knowledge information centres in six communities. A slightly higher than three-fourth reported that they have visited the centre in their own community. Some of the information centres have also become the resource centre for centralized delivery of all available services beneath one roof.

Changed attitudes and relationships at home and in the community: The status and value of the women have increased to the eyes of their husbands as they have seen the increase in income. However, the women often experience "time poverty" as they shared that they have to balance between engaging in income generating activities, social work, attending meeting with caring for their family.

2.2 Participation in different DRR platforms and interventions

The project aimed to raise women's participation in the government disaster response team. Among 325 UCVs, 98 were women from two Wards (Tongi and Konabari) and the Project provided training facilitated by FSCD. Community people now have the contact number of volunteers and of local fire service, hospital and ambulance service, police station so that they can call them up in emergencies. It was found that 83% have contact information of local fire service station, 47% have hospital, 38.5% have ambulance service and 38% have police station contact number. The EKATA members are participating in different DRR platform at community level. Study also found that they have achieved membership in CDC committee (19%), in UCV (9%), in forum theatre (2.5%), in CF (24%) and in Ward Disaster Management Committee (2%).

2.3 Enhanced livelihoods opportunities:

The project supported women towards economic empowerment in two ways: a) by making women better risk managers at household and community levels and b) by providing women to diversify livelihoods and develop enterprises as additional income streams. It was found that more than one-tenth of surveyed EEP women who received cash and input support had skill development on IGA and business planning training. They used the money accrued IGA for different activities. It is noteworthy that four – fifth started new businesses with the cash and input support that they received. This has thus created an additional income source for their families over which they have a stronger degree of control. Few women in FGDs shared that they were generating higher returns than working for other people.

The income of the PEP women household has increased over baseline substantially. Fifty percent beneficiaries' income have been recorded ranging from BDT 15001 to 25000. Overall savings tendency at the beneficiary level have been well established over the project periods (about 90% respondents save) . The average monthly savings was found to be BDT 12708. More than two-thirds respondents utilized their savings for income generating activities.

A substantial number of PEP became loan worthy due to project support. The study found out that out of total 111 sampled PEP, more than two-thirds (69.4%) have access to loan. About four-fifth (79.3%) loan receiver took loan ranging from BDT 25000 to 50000 indicating their increase in capacity of utilization of bigger amount of loan and the growing confidence of loan givers on them. About two-thirds (63.7%) loan was utilized in productive sectors such as income



generating activities and purchasing /mortgaging of land. These in fact helped them in improving their income and the livelihood as well as repayment of loan.

Prior to the Project, none of the participants had bank accounts. Now they have learnt more about managing finances through the sessions with the EKATA group and have bank accounts where they have started depositing savings. Relation with formal financial institutions in terms of keeping their precious savings is strongly visible. Keeping savings at home or non- formal institution is almost absent.

OUTCOME-3: ENHANCED INSTITUTIONAL RESILIENCE - RESPONSIVE GOVERNMENT INSTITUTIONS

The government institutions – the City Corporation and FSCD, have indeed become more responsive to address community needs to respond to and recover from shocks and stresses as evidenced by the formation of WDMCs in all of the Wards and the fire service personnel arriving at fire locations “within 15-20 minutes”.

This included mainly department of FSCD and Disaster Management Committees at City and Ward levels. An MOU between FSCD and CARE Bangladesh was developed in combating disasters. The instructors from FSCD conducted project supported ToT for 113 mid-level officers: Inspectors, Station Officers, Staff, etc, who had basic training on search and rescue. The participants have come from five different fire stations while the original target was two fire stations. The training included upgraded new contents on search and rescue as well operation of equipment.

The newly trained officers provided three-day training to UCV and continue to meet every three months on day-long refreshers training including introducing any new equipment and methods. The UCVs received uniform (orange coloured shirt and trousers including for women, which also recognized by other professionals as signifying their status as trained volunteers), helmet, protective goggles, hand gloves, boots, whistle, cloth mask, etc.

The FSCD have worked with UCV on four occasions of actual firefighting since their training (large industrial fires and three fires that affected Uttar and Dakhin Tetultola in 2016, 2017 and January 2018). The community members have reported their satisfaction with the responsiveness of the fire station during recent disaster and pointed out that the fire vehicle arrived at the incidence spots within 10-20 minutes of making contact with them.

On the invitation of FSCD the UCVs joined them and Bangladesh Army to fight an industrial fire (Tampaco factory) that raged for 15 days during Eid holidays, and it took another week to bring under control/completely extinguished. The UCVs stayed at the incidence location for 22 days along with the Bangladesh Army and FSCD.

Two WDMCs were formed comprising 31 member each about two years ago and meet regularly on quarterly basis. Most of the members attended the meeting as per quorum spelled out in WDMC guideline and discussion documented. In some cases participants from the community other than WDMC members also attended the meeting. It has been found in the survey that members from 40 households have attended in one or more WDMC meetings.



Most of the members of WDMC have attended training organized and supported by the project. The training events were conducted by the resource persons from universities and the VERC the project partner. One CDC President who is a teacher, observed that the training “was somewhat difficult”, in response to question about what he thought about the training. Their discomfort at discussing the contents of the training suggest there are difficulties in knowledge retention.

The experience with the two WDMCs have galvanized the GCC (Gazipur City Corporation) in to action to form the City wide CCDMC and WDMCs for every Ward in its jurisdiction. Although, the original target for the Project was two WDMCs, they extended support for the formation of 55 additional WDMCs in GCC. Two fire stations are better prepared to respond to emergencies and to provide better services.

LESSONS LEARNT

UCV are more cohesive and committed because of their roots in the communities: The UCVs were selected from the project communities where they live and have family and friends and are responsible to be the first responders in their own communities.

There is no one size that fits all: The household adopted multiple prepared measures as opposed to single as they have different preferences and usefulness. The condition and the hazards experienced by the different slums are important to understand what the households require.

House and community priorities can be different from the project concept: The project originally budgeted for specific interventions such as waste management (ranking range between second to fifth) and input support for women (ranking range between sixth and ninth) but the communities identified and prioritized other hazards and risks ahead of these.

The urban working poor are unlikely to take part in project activities during day time: All of the urban poor are not available for project activities during office hours because of their involvement in earning income. The partner NGO faced this difficulty during implementation. The timing needs to be factored in to design of urban projects so that participation and attention levels are both high.

RECOMMENDATIONS

Recommendation-1: Advocacy with the government for developing and sustaining volunteers to assist the professional first responders.

Recommendation-2: Create a pool of UCVs –A pool of UCV who can continue working with the community, FSCD, DDM and GCC. However, there will be need for budget and an organizational framework for the UCVs function, either with FSCD, DDM or GCC.

Recommendation-3: Advocacy with the government to take over the infrastructure related interventions in low income communities:

Recommendation-4: A critical mass of evidence of its success needs to be created by CARE for influencing policy.



Section 1: Introduction

Data from the World Bank and the Journal of Health, Population and Nutrition estimate urban population growth rates of 3.3%-3.5% for Bangladesh in 2016. In contrast, the average rate of the world is 1.9% and the South Asian average is 2.6%. This growth rate falls between the average growth rates witnessed in low income countries (4.1%) and in lower middle income countries (2.6%). Interestingly, the urban population growth rate of Bangladesh is most closely comparable to the average rates of growth seen in what the World Bank terms as ‘fragile and conflict affected’ regions, which also have an urban growth rate of 3.3%. Needless to say, this similarity in urban population growth rate alone is not sufficient to assume similarities or parallels between broader social contexts or in the factors driving the growth of urban populations between these regions and Bangladesh. These numbers however are instructive of the sheer scale at which urban population growth is progressing in Bangladesh.

Most of the growth in Bangladesh’s urban population is driven by migration from rural areas. The Bangladesh Bureau of Statistics estimates that the natural growth rate of urban population is only around 1.3%, indicating that the difference between this and the actual rate of urban population growth is accounted for by migration. Given this total rate of growth, the doubling time of urban populations stands at 20 years and tripling time at 31 years. Overall, Bangladesh’s population is estimated to reach 243 million by 2050 by United Nations Population Division’s 2004 estimates and 231 million in the same year by the Population Reference Bureau’s estimates. The population of the country is estimated to finally stabilize at 260 million in mid next century. Out of this projected growth, the rural population is estimated to stop growing by as early as 2025, adding 30 million more to the 108 million (according to 2008 data) before stopping. This means that urban centers will absorb the rest of the 70 million in population growth projected to happen by midcentury, expanding urban populations from 34 million in 2008 to over 100 million by 2050. The most alarming part of this growth is the rate of growth of urban slums, which were growing at 7%, or over twice the average urban growth rate. According to 2008 figures, over a third (37.4%) of Dhaka’s inhabitants lived in urban slums, with the national average among all urban centers being 35.2%. This rate means that out of the total growth in Dhaka’s urban population, three quarters go to the addition in the population of slums.

The most typically identified natural hazards facing urban centers in Bangladesh are flooding, earthquakes and fire hazards. Large numbers of slum dwellers in urban centers of Bangladesh are the most vulnerable to flooding. Since slums tend to be located in lower lying areas or bordering water bodies, they are especially prone to flooding with an estimated 26.5% being fully flooded, 27.4% partially flooded and only 46.1% being flood free. Overall, Dhaka and Chittagong are the only cities with piped, water-based sewerage systems. Even these are old and poorly maintained, leaving only 30% of residents living in areas properly served by the sewerage systems. 30% more have septic tanks and the others lack basic sanitation.

Dhaka, the most populous of Bangladesh’s urban centers, has been identified by Stanford University researchers as one of the 20 most vulnerable cities in the world to earthquakes. Even though Dhaka has not experienced a major earthquake in over a generation now, extremely poor building standards, closely built high rises constructed in the absence of properly formulated and enforced construction standards and improper maintenance of building structures make Dhaka



extremely prone to earthquake hazards. Many of these same problems also make the densely populated Dhaka prone to fire hazards. Yet again, slum areas tend to be especially at risk from fire hazards and are frequently victims of loss of property and even cost their lives.

Man-made hazards facing Bangladesh's urban centers include the rapid depletion of ground water sources, heavy contamination of surface water bodies from sewerage and polluting industrial runoffs, the increasing threat of airborne and waterborne diseases due to pollution and lack of adequate sanitation, rises in rates of violent crimes, disposal of solid wastes etc. More localized problems of rapid urban growth also exist in every urban center, for e.g. landslides in Chittagong, especially during the monsoon season, due to deforestation and human settlement of hills.

Infrastructural and often political economic factors contribute to an increased vulnerability of urban populations to cope with the hazards facing them. The specific and complex relations of *de facto* structures of authority within slums and the official governmental organizations and NGO's that operate within these places combined with the overwhelming incapacity of governments to support slum dwellers makes the vulnerability of the slum dwellers worse. Inadequate access to basic utilities like electricity, water and sanitation give rise to situations where up to 11 families are forced to share a single latrine and half (52.8%) of the population of slums use a pit latrine which significantly increases exposure to various diseases, etc. Lack of access to quality education and often to jobs and income generating activities, coupled with the often incredibly high prices of rent within slums also mean economic vulnerability and therefore reduces the ability to cope with potential hazards or shocks. Migrants in urban centers are frequent victims to vulnerabilities borne of climate change, like cyclones and flooding which strips their livelihood.

At the policy level, bare minimum focus has been given to addressing issues of urban vulnerability, poverty etc. Bangladesh's Poverty Reduction Strategy Paper (PRSP) initially had no plans or prescriptions for urban poverty. This was later added into the document but still in an insufficient capacity. The structure and nature of political and state institutions in urban areas have also given rise to challenges, voting rights for urban poor only being established in municipal governments in 1994 is one of the examples. The plethora of municipal electorates (of 100, 000 per ward) means that they cannot amply represent the rights or interests of the more vulnerable and still have to make politically decisive decisions. This is in contrast to the smaller rural electorates (about 27, 000 per union parishad) where candidates are more accountable to their constituents since stakes are higher in this case. Not representing their interests will assuredly cost them votes during election.

The *de facto* authority structures of musclemen in urban slums makes effective distribution of what supports do exist relatively more difficult. For example, only one of the 27 of the government's social safety net programmes, the old age benefit is available for the urban vulnerable. This scarcity of support programmes available to the urban vulnerable also means that NGOs are less willing to operate in these areas. This lack of a willingness and preparedness to deal with the urban vulnerable at every level leads to an overarching lack of adequate information on the specifics of hazards faced by urban center dwellers at large as well as lack of adequate training and experience of personnel and lack of inter-agency collaborations aimed to tackle these issues. Ultimately this also means a lack of resources allocated to deal with issues with urban vulnerability.



Literary work on women's involvement in decision making roles is also scarce as part of urban disaster management/resilience projects. Relatively more information on the vulnerability of women and children in rural settings is available. In the aftermath of the Indian Ocean tsunami of 2004, data collected by Oxfam in Indonesia showed that male survivors outnumbered female survivors by almost 72% in some places, 77% and 80% in other places. Similar numbers can be seen in Sri Lanka where 80% of victims in some places were women. And data from Bangladesh in the aftermath of the 1991 cyclone shows that 90% of the fatalities were women. Socially constructed roles for women require them to stay back and look for children or family members. Women might typically also be able to swim or climb to taller surfaces or platforms less commonly than men. In Sri Lanka, the tsunami struck when the women had gone out to the sea to bathe, prescribed as norm according to custom. In India, the tsunami struck as women were waiting by the shore for fishermen to bring their catch in for them to start processing. Therefore, the multitudes of ways in which women might be more exposed to disaster hazards may be due to their exclusion from not only decision making roles but also from ownership and access to properties. In addition, they are expected to inherently perform undervalued reproductive functions for the family and society and also still risk from bodily/sexual harm and are obligated to subscribe to standards of 'purdah', even in situations of disasters¹.

Their roles in disaster preparedness is typically envisioned as utilizing their knowledge for the purposes of envisioning policies and interventions, utilizing their local networks to disseminate information and training on issues of disaster preparedness, utilizing their ability to organize local communities and mobilize them, managing and conserving resources and therefore making them available for disaster scenarios. Women have, in various places, also played the roles of forming collectives immediately after disasters for the purposes of managing the effects which later went on to pool and leverage funds for grassroots innovations, pass on training they have received on various income generating activities and other forms of knowledge and work with local government bodies. They have also been sources of information about the effects of earthquakes and other disasters on their communities, which they collected in detail through mapping and interviews.

Resilience does not always require that the system will return to its previous state or equilibrium, but rather has the capacity to adapt and transform into a state that will allow it to survive further and future change and 'Urban Resilience' is defined as the capability to prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to public safety and health, the economy, and security of a given urban area. Humans are not born with resilience – we learn it, adapt it, and improve upon it.

¹ **Resources used:**

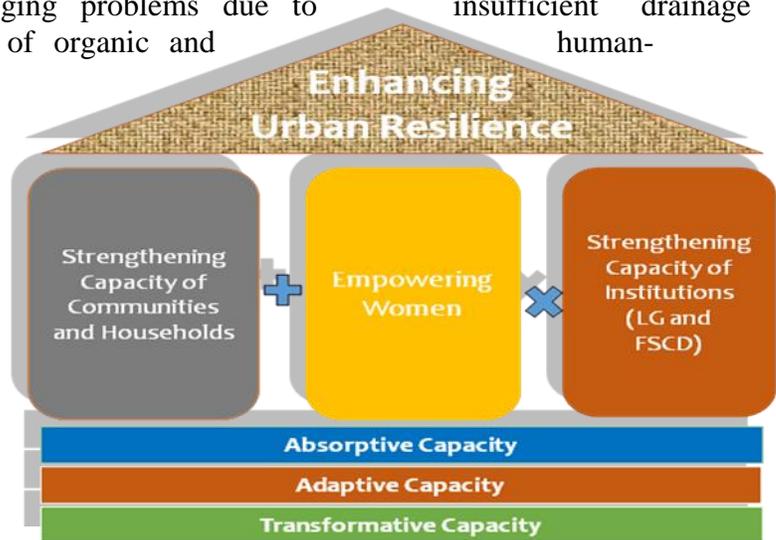
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<http://careclimatechange.org/women-force-disaster-climate-resilience-bangladesh-perspective/>
<http://lib.riskreductionafrica.org/bitstream/handle/123456789/1016/women's%20participation%20in%20disaster%20relief%20and%20recovery.pdf?sequence=1>
<http://www.dtic.mil/dtic/tr/fulltext/u2/1039317.pdf>
<http://blogs.worldbank.org/endpovertyinsouthasia/dhaka-ready-towards-urban-resilience-bangladesh>
http://www.icccad.net/wp-content/uploads/2014/05/publication_DhakkaUrbReportWEB_FINAL_29-April-2014.pdf
<http://journals.sagepub.com/doi/pdf/10.1177/0956247811417794>



Section 2: About the Project

The population of the Gazipur City Corporation rapidly increased for past several years because of establishment of many factories/ industries in this area and subsequently influencing to faster the rural to urban migration process. The other authorities faces the problems of insufficient money, technical personnel skills and many more. The private organization or industry can not able to create the job or services for the huge number of residence in those areas. Many of the natural disasters took places in Bangladesh which initiated human risks like as flooding, land sliding, earthquake, river erosion including settlement growth in hazardous locations as architectural downfall such as logging problems due to insufficient drainage system etc are the some example of organic and human-induced risk.

At the design phase CARE Bangladesh has been conducted a study titled ‘Urban Socio-Economic and Vulnerability Study of Gazipur City Corporation in poor communities within the geographic area of Gazipur City Corporation (GCC)’ for better understanding on resilience issues of the specific contexts.



Based on a study titled ‘Urban Socio-Economic and Vulnerability Study of Gazipur City Corporation in poor communities within the geographic area of Gazipur City Corporation (GCC)’, CARE Bangladesh designed and has been implementing a three-year project **Figure 1: Concept of BRUP Project**

Building Resilience of the Urban Poor (BRUP) with generously funded by C&A Foundation. BRUP started from November 2014 in two wards (Ward 55: Tongi& Ward 12: Konabari) of Gazipur district for 3 years time frame.

The project is an integrated initiative that builds the resilience of targeted community to more effectively cope with seasonal and unanticipated disaster. In conjunction, CARE is also strengthening the capacity of targeted institutions in the GCC to plan for and provide services that mitigate the impact of manmade and natural disasters on poor and extremely poor households.

Overall goal of the project is enhanced resilience of six targeted urban communities and three targeted institutions, reaching a total of 8,000 individuals (directly and indirectly) who can prepare for, mitigate, respond to, and recover from shocks and stresses in line with the Hyogo Framework for Action (HFA)² and the Bangladesh National Plan for Disaster Management³

²Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (United Nations International Strategy for Disaster Reduction)



The strategic goals/ Objectives of the project are:

1. **Household and community resilience:** 8,000 urban individuals (direct 2,000 and indirect 6,000) in six communities have enhanced resilience strategies to prepare for, mitigate, respond to and recover from shocks and stresses.
2. **Women empowerment:** 300 poor and extremely poor women in the six targeted communities are empowered to become better risk managers at the household and community levels, influencing decision-making related to Disaster Risk Reduction (DRR).
3. **Institutional resilience:** Enhanced capacity and responsiveness of three targeted institutions to provide services to the communities to prepare for, mitigate, respond to, and recover from shocks and stresses.

To achieve the goal and objectives, CARE with its partner NGO —Village Education Resource Center (VERC) — has been demonstrating its designed tools in their intervention activities in the targeted communities and institutions.

The expected outcomes of this project are-

Outcome-1: Enhanced resilience of targeted urban households and communities to prepare for, mitigate, respond to and recover from shocks and stresses

Indicator: At least 55 percent of the targeted beneficiaries are demonstrating preparedness measures and positive coping mechanism to minimize the impact of shocks and stresses

Outcome 2: Poor and extreme poor (PEP) women are empowered to become better risk managers and influence decision making at household and community levels.

Indicators:

- *At least 55 percent of targeted women beneficiaries are more responsive towards disaster risk management through enhanced knowledge.*
- *At least 55 percent of targeted women are actively participating in different DRR platforms and interventions.*
- *At least 25 percent of targeted women with enhanced livelihood opportunities.*

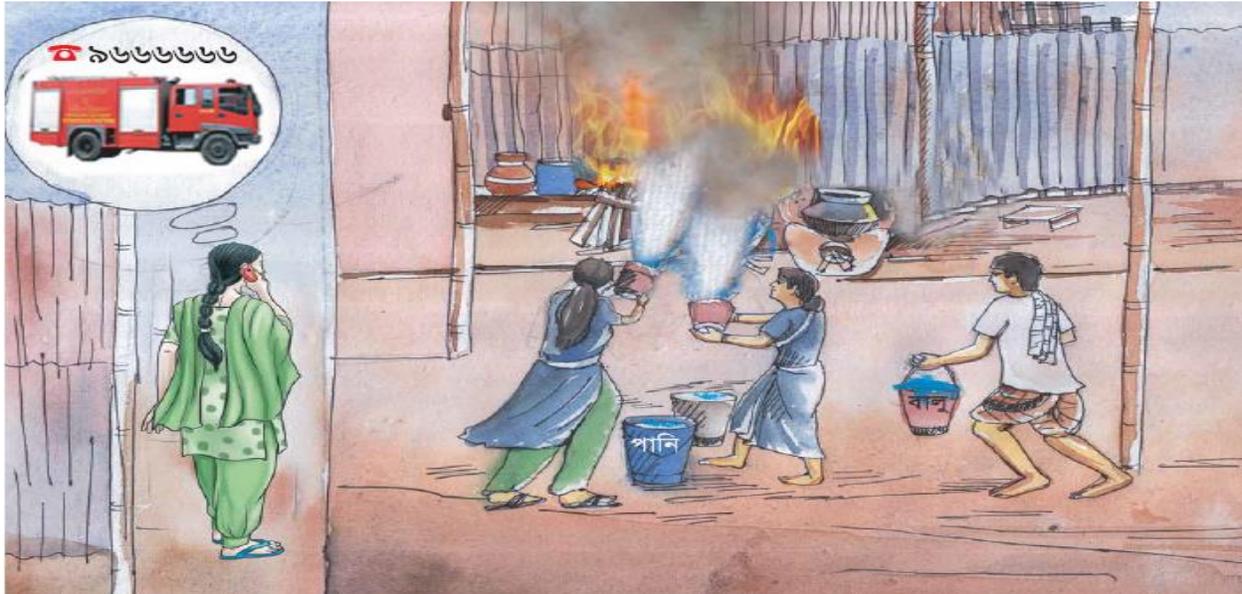
Outcome 3: Enhanced responsiveness of targeted institutions to address community needs to respond and recover from shocks and stresses.

Indicator: Gazipur City Corporation and two fire stations are better prepared to respond to emergencies and to provide better services to the communities.

³Bangladesh National Plan for Disaster Management includes a Disaster Management Matrix 2010 – 2015 addressing 7 major themes/areas. Hyogo Framework was adopted in 2005. The Hyogo Framework is a global blueprint for disaster risk reduction efforts during the next decade. Its goal is to substantially reduce disaster losses by 2015 - in lives, and in the social, economic, and environmental assets of communities and countries.



Section 3: Objectives and Scope of the Assignment



The specific objectives of the end line evaluation assigned are:

5. To document the changes occurred to enhance resilience of targeted urban individuals, communities and institutions through project intervention
6. To document the constraints/challenges encountered, and lessons generated from project intervention
7. To analyze and document added value of the project highlighting any unintended outcomes that benefits others
8. Provide an opinion on the extent to which the results of the project are sustainable and saleable and also provide recommendations, if appropriate, of how sustainability can be improved.

As per Terms of References the key questions of the evaluation are-

1. What has been the overall impact of the project interventions on the targeted communities?
2. How far the community resilience has been enhanced?
3. What is the level the community awareness has increased during the project period?
4. What extent women are empowered to become better risk managers at household and community level to influence decision making?
5. How effective have the stakeholders and institutions become in terms of their role to enhance community resilience?
6. What is the level of efficiency achieved in terms of the linkage developed between the community and the stakeholders?

The detail ToR is attached in the Annex-A.



Section 4: Methodology



8.1 The Evaluation Framework

The guiding framework of this evaluation has shown in the following table

Table-4.1: Evaluation Framework

| Question: | How have BRUP progressed towards achieving its goal and objectives | | | |
|--------------------------------|--|--|--|-----------------------------------|
| Evaluation criteria | Relevance | Effectiveness/ Impact | Efficiency | Sustainability |
| BRUP aspects of inquiry | Evidence/analysis base: identifying unmet needs | Inputs, activities, results | Project management: coordination and communication – decision making | Institutions (GCC & GOB services) |
| | Project location: needs | Institutional arrangements/ Stakeholder | Financial Management Procedures | Communities (EKATA, CDC) |
| | Targeting: who are they and why | Intervention strategies (including training) | Staff capacities | Women leaders |
| | Approaches and strategies: | Communications at different levels: how households, communities and institutions work together | Timeframe and intensity of implementation | |



| | Interventions | Knowledge management (M&E, research, etc) | Cost of results | Knowledge and practice (HHs and individuals) |
|----------------|--|--|---|---|
| Methods | LFA and baseline, management and staff consultations, surveys, FGDs, KIIs. | Project documents, HH and women's surveys, FGDs, KIIs, case studies. | Management and partner consultation, manuals, KIIs, expense report. | Survey, Staff Consultation and reflection, FGDs, KIIs |

The detail data procurement plan is attached in Annex-B.

8.2 Data Collection Methods, Sample and Respondents

Data Collection Methods:

The end evaluation has been conducted based on both qualitative and quantitative methods as per following methods.

Reviewing the existing literature on project documents: Project Proposal, Logframe, baseline study report, M&E framework, Progress reports, case study, training reports, guidelines, RRAPs etc..

Primary Data Collection: Along with documents review, the evaluation was mostly based on real time data collection from the actual field. To collect data from the field the study adopted both quantitative and qualitative research technique including household survey, Focus Group Discussion (FGD), Key Informant Interview (KII) and consultation.

Quantitative Sampling and Respondents:

It has been reported that there are 8,000 beneficiaries (2,000 direct and 6,000 indirect) from 6 targeted marginal communities in Gazipur City Corporation. Another 300 poor and extremely poor women from these 6 targeted communities have also been empowered as part of the project interventions. For this study, 2000 individual direct beneficiaries have been constituted the sampling frame. (The sample size calculation and procedure is attached in Annexure-3).

The study has been taken 318 samples from different types of individual direct beneficiaries. Further, due to multiple memberships of individuals, the study has covered a total of 750 beneficiaries (as per support categories, provided by Care) from 271 households (effectively new sample) and the respondent were total 271 (Female-178). The data have been analysed and reported in subsequent sections according to category wise respondents.

The distribution of the survey sample according to the strategic goals are summarized in the Table 4.2 below. The detailed distribution of the sample according to beneficiary type is presented in **Annex-C**.



Table-4.2: Distribution of sample according to strategic goals

| Type of Beneficiary | Total Number of Individual Beneficiaries | Sample Beneficiary Drawn (including 10% non-presence error) | Beneficiaries covered (as per each categories) from surveyed households |
|---|--|---|---|
| Strategic Goal 1 - Household and community resilience | 1185 | 179 | 431 |
| Strategic Goal 2 - Women's empowerment | 784 | 137 | 260 |
| Strategic Goal 3 - Institutional resilience | 254 | 38 | 59 |
| TOTAL | 2223 | 354 | 750 (271 HH) |

The total population of these surveyed households is 1174. ⁴

Qualitative Sampling and Respondents:

Purposive sampling has been taken for qualitative data collection from following categories of respondents.

Table-4.3: Respondents for qualitative assessment

| Type of Respondent | Methods |
|--|------------------|
| 1. Ekata members | FGD (2) |
| 2. CDC members | FGD (2) |
| 3. Urban Community Volunteers (UCV) | FGD (1) |
| 4. Children Forum Representatives | FGD (1) |
| 5. Ward Disaster Management Committee (Ward Councillor) | KII (1) |
| 6. FSCD Staff at FS Station | KII (1) |
| 7. FSCD authority at National level | KII (2) |
| 8. PNGO Management Staff | KII (1) |
| 9. Project implementation staff of PNGO | Consultation (1) |

8.3 Analysis Methods

At a glance the framework of overall evaluation process is shown in the following Figure.

⁴ Average population size is 4.33 which is lower than national average. Within this population female population is only 33.3% and 64.5% is living in government owned slum. (Table E-DP.1 and Table E-DP.2)



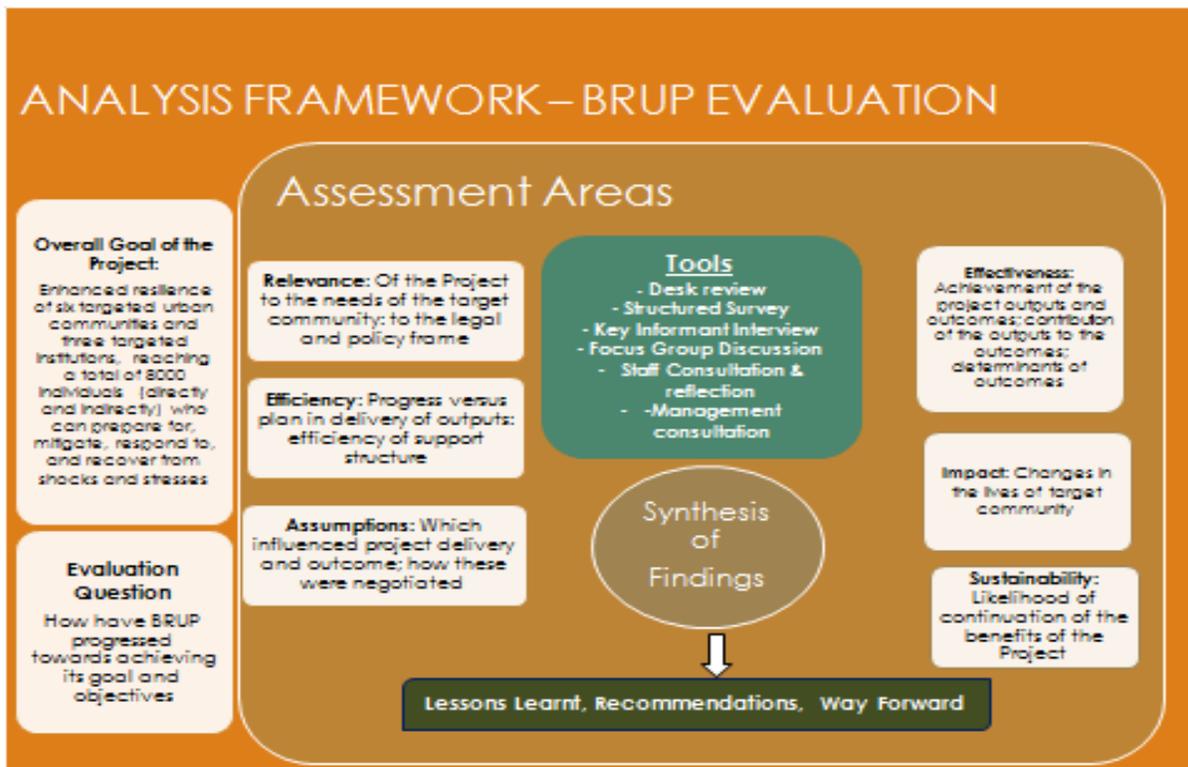


Figure 2: Analysis Framework at a Glance

Data Processing:

Field level information came back to Dhaka with the team. Initial data screening was done by an expert data editor. After screening is over, editing was undertaken to ensure that questionnaires were correctly filled-in, interviews conducted to the right respondents, items of information recorded or responses to questions obtained were consistent with one another. Editing was also involved categorization of the responses to the open-ended questions. Total of three (3) data entry operators were engaged for data entry from the questionnaires into computers. They were working for 5 days for editing, coding, entering and cleaning the data. Data were entered in EPI-2000 and each of the data were entered twice so that one set can be validated and cross checked with another set. Quantitative data were analyzed using SPSS and techniques of descriptive statistics were used to compare with the baseline information, and presented in tables, graphs etc. Qualitative data were cross checked against findings from different sources and triangulated. The study team also explored the possible linkages and relations between different categories of data.

8.4 Quality Assurance

During the recruitments of the field staffs specific criteria was followed to maintain the quality. For field level supervision and monitoring the QCO and the RA were responsible for ensuring proper site selection, quality of data, guiding research assistants during data collection, holding discussion meetings at the end of the day with the team members. Besides, the core team traveled and participated in the sessions moderated by the research assistants to ensure the quality.



Besides, a three day-long Dhaka based training was provided to all the field staffs. The training program was designed in such a way that the field staffs can learn and acquire the necessary skills to collect reliable data by efficiently administering the data collection tools. Training was conducted through classroom lectures, demonstration of interviews, role plays, field practice, and review of lessons learned, and suggested solutions.

8.5 Ethical Safeguards Limitations

The study strictly follows the terms of reference for the assignment with honesty in collecting, analyzing and presenting data and related information. Interviews, KII and FGD were done following highest manners and standards for polite communication with related respondents. An introducing addressed was given before every task of communicating with the respondents mentioning the reason of coming and seeking permission of interviewing. The interviewers did not make any undue promise during interviews but gave them assurance that their names and answers would be kept confidential and would be used for the research purpose only. All team members tried to maintain objectivity and tried to avoid any subjective comments that led to any biasness.

8.6 Limitations

Time is always valuable for any task to be carried out. Within 30 working days only, DevResonance went through large and important tasks like desk review of all relevant project documents etc. an intensive field works including one-to-one interviews, FGD, KII with stakeholders and beneficiaries etc. along with all necessary preparations, and other related activities using specific formats, drafting finalizing inception reports, prepare final report and so on. During this short period of valuable time, there was an annual international Islamic religious gathering crowded with millions of people called Tongi Bishawa Istima took place in the community for a week which put constraints on the research team to carry out data collection. Besides, there were only two CARE staffs and a few partner staffs busy with their closing activities at the project site, and thus had little time to cooperate and support the data collection team. [The limitation on quantitative data collection and its overcome strategy is separately attached in Annexure-G]



Section 5: Findings

5.1 Relevance



5.1.1: The context of the project: evidence base

Care Bangladesh BRUP is an evidence based project. The evidence has been gathered prior to the formulation of the project through research by an independent organisation with appropriate skills. The original evidence for the need of the project has been further corroborated by the findings of the baseline study conducted for the project by a third party. The communities – or the beneficiaries of the project, where the project has been implemented has participated in identification of the respective hazards and risks that they face and their choices for remedial actions during the process of preparation of the Risk Reduction Action Plan (RRAP) that has provided a strong justification for the project’s theory of change and the interventions. In the following, extracts from these documents are presented to establish the contextual relevance of the project.

A. “Urban Socio-Economic and Vulnerability Study of Gazipur City Corporation” (July 2014)

Study area: Slums in Tongi and Konabari Wards of the newly established Gazipur City Corporation (GCC)

The two studied communities prioritized as most pressing issues are *access to safe water, safe waste disposal and access to safe sanitation*.



Assessment team outlined three tiers of vulnerability and risks for the Tongi and Konabari. These are:

- Natural and manmade threats - pollution, poor sanitation, lack of safe water, poor building construction, fire, water-logging/flooding and earthquakes.
- Social risks- gender-based violence, drugs and gambling,
- Institutional risks- lack of provision of basic services (e.g. water and sanitation), and poor implementation of legislative related to employment, housing, disaster and fire safety.

Sanitation: Access to latrines and sanitation varies vastly between the two communities. Within Konabari, on average, for every 18 households there is one latrine each for males and females. Cleaning of the latrines varies and the landlords fail to empty full septic tanks on a regular basis.

Within Tongi public slums, there are only two communal latrines. Makeshift structures have been built over the open drains to allow for open defecation. Women in the community tend not to use these makeshift facilities during the day for fear of being overlooked by the surrounding buildings. Instead they utilize child potties or plastic bags in the privacy of their homes.

Access to water sources: In both communities, access to water is limited. In Tongi, a single person requires a minimum of US\$4/month to cover water costs for drinking, bathing and washing clothes. To save money, families often use grey water generated from washing vegetables to bathe or wash clothing. In Konabari private slum, landlords provide two buckets of water, the cost of which is included in the house rent paid by the tenants. Additional water for drinking and bathing can be purchased from private submersible pump operators for US\$0.12 per bucket.

Disease from contaminated water is common and particularly acute during the rainy season, when the two communities become water-logged. Diseases commonly found include diarrhea, respiratory infection such as coughs and colds, skin diseases, and infections impacting the kidneys and liver.

Fire hazard: Fire was identified as a very pressing concern for both the communities. High concentrations of housing, combined with narrow access pathways, limit the ability of the fire service to quickly respond to fires. The burning of polystyrene products, including plastic bags and jute scraps in cooking stoves, poses high fire risk. Poor and unauthorized electrical and gas connection lines are also seen as increasing fire risk. In both communities, residents are not aware of contact numbers for the local fire services and cannot provide strategies to reach the fire service in case of fire.

In both Tongi and Konabari, the fire service indicated a number of key concerns. Lack of sufficient water, limitations on physical access across the two slums, crowd control during emergencies, and awareness on how to contact the fire and police services are seen as substantial causes for concern.

Gender-based Violence and Other Social Issues Impacting Women: Women indicated that sexual abuse is common in the home, during movement to and from work, and at their workplaces. Sexual assaults and harassment by male colleagues are common. Women in both communities



talked about marriage scams, in which unmarried women are raped or forced into sexual affairs. Once the sexual contact occurs the perpetrators extort money from the women in exchange for their silence. Alternatively, the men force the women to marry, pay a dowry and hand over their monthly salaries.

Women indicated that their spouses harass them should they not adhere to the movement restrictions as well as being vulnerable to physical assaults. Across both Tongi and Konabari, rates of abuse and violence against women appeared high.

Early marriage of girls is an issue of concern. Girls aged twelve are seen as being at risk of having sexual contact outside of marriage due to the high number of single men within the community. As such, girls either are arranged to be married around age 12, or are sent to their ancestral villages to be cared for by extended family.

Drug abuse and gambling: Drug consumption - particularly yaba, and gambling increased risk of violence in the home for women and girls. The addictive nature of the pills has resulted in high indebtedness among users and their families, the stress of repayment of which often results in violence within the home, the depletion of cash reserves and the selling of assets to cover the high interest loan repayments

Water-logging: Seasonal water-logging is very common for both Tongi and Konabari during the rainy season between June and September and results in flooding of dwelling houses by up to a meter. In both locations, drains are narrow and lack the capacity to meet the high flow levels in the rainy season. Additionally, the disposal of plastic bags, as well as household and industrial waste routinely clogs the drains, resulting in water-logging in the low-lying fringes of the two communities.

Box 5.1: Community’s ranking of hazards and risks (July 2014)

| Tongi | Ranking | Konabari |
|---------------------------------|---------|--|
| Poor sanitation and open drains | 1 | Waste and sanitation services at the community and household level |
| Electricity supply and cost | 2 | Violence against women |
| School access | 3 | Water-logging |
| Water-logging | 4 | Pollution |
| Violence against women. | 5 | Health – children and women |
| Early marriage | 6 | High unemployment forces people into exploitative situations |
| Fire risk | 7 | Education |

B. Care Bangladesh BRUP project Baseline Report (July 2015)

Study Area: six project communities.

The major local hazards which are common for all the communities are water logging, fire and environmental pollution.



Waterlogging: Due to poor drainage system, water could not drain out fast enough causing water logging in the communities even after light rain. There is also mismanagement of garbage.

Fires: Fire is one of the common hazards in all the communities. As the houses are very closely located once fire starts, the probability of it spreading fast is very high. The main cause of fire incidents is industrial accidents and short circuit in electricity supply line.

Environmental pollution: As there are no designated spaces for garbage disposal people littered all over the community space. Vulnerability to environmental pollution due to mismanagement of garbage is very common in all study areas but acute in Baimail Nadirpar and Medical Slum. There are dyeing factories and power plant on the bank of the river Bangshai and dispose their waste in the river making the water polluted. This has affected on the inhabitant of Baimail Nadirpar community.

It should be also noted that Gazipur City Corporation is dumping the waste of the city in the north vicinity of Baimail Nadirpar community which is even far away from the other two communities of Konabari. A cursory glance of dumping site reveals that this is not a sanitary land filling. On the other hand there is a pharmaceutical factory (Asiatic Laboratories Limited) in the north-east boundary of Medical Slum which may dispose their waste in the community (according to the community members). There is also malodor in the air, when the factory is in production.

Violence against women and adolescent girls: The most common violence was found eve teasing is high, next to that is domestic violence . Domestic violence strikes women of all strata and age. Respondents mentioned about more mental torture as their partners are involve in extra marital affairs which is common in that area.

Hazards Perceived by the Communities: Though, five hazards (Flood, earthquake, water logging, fire and environmental pollution) were identified in different magnitude within the communities during the study, it was found that that the dwellers do not perceive flood and earthquake as hazard. Though the communities are located within one and half kilometer from the river they do not consider flood as a hazard though communities (Uttar and Dakhin Tetultola) faced flood of Turag in the last few years. Similarly when they were asked about vulnerability of their house and workplace to earthquake a little over one third considered their house is vulnerable and half thought their workplace is vulnerable to earthquake. The communities do recognize these as they faces the problems of environmental pollution and water logging regularly and more frequently in the form of diseases.

C Risk Reduction Action Plan: prepared by the communities

A summary of the vulnerabilities and risks that have been identified by the community members, when Urban Risk Assessments (URAs) tools are applied and incorporated in the respective Risk Reduction Action Plan (RRAPs) for implementation with the support of BRUP corroborate with the findings of the above studies.

The two independent studies and the community assessments of their own vulnerabilities and risks justify the project's problem identification and site selection.



The Annex Table E 1.1 presents the rankings of the hazards and risks as identified from the RRAPs.

Safe drinking water: Lack of access to safe drinking water is the first ranked vulnerability at all four communities on Government land, while being fourth and sixth in Moddho Baimail and Pukurpar respectively on private land. GCC supply of water is not available in Government land due its ownership status (leading to high risk of eviction) that leads to lack of private investment in water system while private owners of land are able to invest on their own land. Shortage of water availability also adds to the fire risks

Blocked drainage: Water logging caused by blocked drainage is the first priority for two communities in Moddho Baimail and Pukurpar followed by second placed ranking for the four communities in the southern (Uttor) and northern (Dakhin) parts of Tetultola and Nodirpar Baimail on Government land. Drainage in these slums are in dilapidated condition causing overflow of water during rains.

Unsanitary latrines: Lack of sanitary latrines is the second biggest problem Medical slum and third ranked in both parts of Tetultola and eighth ranked in Nodirpar due to lack of government interventions in slums on the Government land. Latrines are apparently of no or little concern in the private settlements as the land owners construct latrines for shared use by their respective tenants.

Garbage collection: Absence of any garbage collection system appears among the first five vulnerability identified by all six communities albeit at different ranks. It is ranked second in Moddho Baimail, third in Pukurpar, fourth in the two parts of Tetultola and Nadirpar, and fifth in Medical slum. The City Corporation does not provide waste collection services inside these low income areas but its health and social implications have been highlighted by the communities.

Lack of income sources: Lack of opportunities for diversification of income sources particularly for women, has been ranked as fifth priority at Uttor Tetultola and Pukurpar, while it is sixth in Moddho Baimail, and lowly ninth in Dakhin Tetultola and Nadirpar. Existing income sources in a growing City Corporation area with many formal and informal industries make it of less immediate concern. In the communities on private land more women work compared with Government land due their nearness to industrial areas.

Darkness at night: The lack of availability of street lamps and its negative impact on women's safety have been identified at all the communities but at lower ranks compared with the above.

5.1.2 The Bangladesh Policy Framework: alignment with BRUP

The Evaluation Team critically reviewed the policy frameworks on disasters articulated at national and international level to ascertain the alignment of BRUP to these policies. This included Seventh Five Year Plan, Sendai Framework for Action 2015-2030, SAARC Framework for Action (SFA) (2006-2015, adopted in 2006), National Disaster Management Policy (January 2008), and National Plan for Disaster Management (2010).



The SAARC countries underscored the importance of risks of disaster and developed a framework with following seven strategic goals:

- Goal-1: Professionalizing disaster management systems;
- Goal-2: Mainstreaming disaster risk reduction;
- Goal-3: Strengthening of community institutional mechanisms;
- Goal-4: Empowering community at risk particularly women, the poor and the disadvantaged ;
- Goal-5: Expanding risk reduction programming across a broader range of hazards;
- Goal-6: Strengthening emergency response system; and
- Goal-7: Developing and strengthening networks

The above strategic goals have been incorporated both into the National Disaster Management Policy and the National Plan for Disaster Management developed in 2008 and 2010 respectively.

In 2008, Bangladesh Government developed a National Disaster Management Policy and its strategic goals have been drawn from the SAARC framework with the broader objectives of reducing the underlying risks of disasters and strengthening the systems and procedure for effective response management. The specific objectives of this policy includes among others:

- Integrating disaster risk reduction approaches and climate change adaption in all programmes, and policies;
- Enhancing professional skills and knowledge of key personnel/agencies/community on risk reduction , preparedness , early warning and community alerting system, search and rescue capabilities, risk assessment skills for all types of disaster;
- Strengthening mechanisms to build Community based programming for risk reduction;
- Promote and facilitate the incorporation of longer term disaster risk reduction into disaster management;
- Promote livelihood strategies and options for poor that incorporate disaster management and risks reduction practices;
- Creating a legal institutional framework for effective response management;
- Strengthening national capacity for response management with emphasis on preparedness and support to disaster management committees at district, upazila and union levels;
- Introducing an effective response management coordination mechanisms including a relief management logistic system to handle different level of emergency response; and
- Establishing an electronic based information management system.

The National Plan for Disaster Management (2010-2015) includes a Disaster Management Matrix by taking in to cognizance the seven strategic goals of SAARC disaster Management Framework and National Disaster Management Policy. The National Plan for Disaster Management emphasized three broad-based strategies:

- Disaster management would involve the management of both risks and consequences of disaster that would include prevention, emergency response and post- disaster recovery;



- Community involvement for preparedness programmes for protecting lives and properties would be a major focus. Involvement of local government would be essential part of the strategy.
- Non-structural mitigation measures such as community disaster preparedness training, advocacy, and public awareness must be given a high priority, this would require an integration of structural mitigation and non-structural measures.

Disaster management system in Bangladesh

National plan for disaster management and National Disaster Management Policy are the guiding element of disaster management. The Government of Bangladesh through the Standing Orders on Disaster issued in January 1997 created a well-defined disaster management institutional mechanism. The Ministry of Food and Disaster Management (MoFDM) is overall responsible for coordinating national disaster management efforts across all agencies. Under SOD a series of inter-related committees, at both national and sub-national levels have been created to ensure effective planning and coordination of disaster risk reduction and emergency response management at all levels.

Under the guidance of the Bangladesh National Plan for Disaster Management all the relevant sectors and the disaster management committees at all levels will prepare and implement their area of roles and specific plans. Detailed Disaster Management Plan will be prepared by each District, Upazila, Union and Paurashava and City Corporations. A District Disaster Management Plan will be the compilation of the Upazila Disaster Management Plans of the district. Similarly a Upazila Disaster Management Plan will be the compilation of the union disaster management plans of that Upazila prepared by the Union DMCs. So DMCs at Union and Paurashava levels will be mainly responsible for conducting the risk assessments and prepare the ground level plans. Once developed those will be sent to the DMCs at one level higher – Upazila DMCs, whose role will be to verify and compile the union plans and identify the resource requirements for the Upazila.

Alignment of BRUP strategies with policies

BRUP project has been heavily involved in reducing risks to urban populations through structural and non-structural interventions. Strategically, it involved communities particularly women and children, local government institutions such as FSCD, Gazipur City Corporation, Ward Councilors and other government officials for identifying and reducing the underlying risks of disasters and strengthen the systems and procedure for effective response management.

BRUP also addressed the strategic goals of SARRC framework, national disaster management policy and disaster plan. The goal, outcome and outputs and other actions like enhancing community level capacity for disaster risk reduction (community level preparedness, response, recovery and rehabilitation), strong institutional/organizational involvement for addressing underlying causes of disaster, Promote livelihood strategies and options for poor that incorporate disaster management and risks reduction practices etc are very much contributing factors towards policy implementation.



5.2 Effectiveness



The BRUP project’s effectiveness is assessed with respect to the indicators of success contained in the project logical framework analysis (LFA), the interventions implemented and the strategy deployed. The LFA indicators have been found in the project’s Monitoring and Evaluation system that has been provided by Care Bangladesh.

5.2.1. Outcome 1: Enhanced resilience of households and communities

There’s now more trust and feelings for each other. . . in the past the 30 of us [women] never sat down together to talk, never discussed anything. Now we can share our thoughts, feelings, with the others. . .we talk about our hopes and fears, personal and family life. . . we have become close. Whenever there is need we help each other. . .people are more willing than in the past to help each other, particularly during fire and afterwards.

- FGD Participants, EKATA Group, Uttar Tetultola.

Adoption of preparedness measures at household level

The indicator for the outcome -1 reads as follows: “% of targeted beneficiaries are demonstrating preparedness measures and coping mechanisms to minimize the impact of shocks and stress”. The following definition for this indicator is found in the M&E system of the project:

“Targeted beneficiaries have preparedness measures to combat local risk factors, such as savings for times of an emergency, sandbag and water for firefighting, portable stoves, dry food stored in a safe place, participation in mock drills”.



The Table 5.2.1 below presents the findings from the survey on the question of the measures undertaken or preparation made at individual and family level to face hazards thereby improving resilience. The respondents were not prompted on possible responses, and in the table below data related with the five measures of preparedness noted in the definition of the indicator in the project's M&E system, are presented.

The frequency distribution for the different measures of preparedness suggest the sample respondents have different preferences, usefulness or need as not a single one measure is universally adopted by them. This is same for the two groups of households, with the exception of the difference in keeping portable cookers.

Table 5.2.1: Percentage distribution of respondents by preparedness measures undertaken

| Preparedness measures | Type of slum | | |
|---|-----------------|--------------|------------|
| | Government land | Private land | All Slum |
| Savings for emergency | 40.6 | 35.1 | 38.6 |
| Have sandbags and water safely placed at home | 66.5 | 59.8 | 64.0 |
| Have portable cooker | 55.3 | 33.0 | 47.2 |
| Keep dry foods in safe place | 31.8 | 30.9 | 31.5 |
| Took part in mock drill | 38.8 | 50.5 | 43.1 |
| N | 170 | 97 | 267 |

Includes multiple response

- *Sandbags and water* are most popular or needed among the respondents at 64 percent overall with a small locational effect of 6.7 percentage points for those living on Government land over those in private land;
- *Keeping a portable cooker* is the second most frequently cited measures undertaken by the respondents standing at 47.2 percent overall. Some differences in practice is observed with respect of portable cookers as more of those in Government land prefer it with a difference of 22.3 percentage points over those in private land;
- *Participation in mock fire drills* conducted by the Fire and Rescue services of the government (FSCD Department) as a measure of preparedness is cited the third most frequently at 43.1 percent of the respondents. This measure is more important for those in private land (50.5%) compared with in Government land (38.8%), with the difference being 11.7 percentage points.
- Having a *savings fund for emergency* purpose is preferred measure for 38.6 percent overall, with small difference between the two types of land ownership;
- *Keeping dry food in a safe place* has been preferred by just over a third of the sample overall (38.6%).

Although the frequencies for each measure promoted by the project do not cross two-thirds of the sample there might be some locational effects as can be judged by the somewhat large differences between the land ownership type for portable cookers and mock drills. Perhaps those communities living on Government land are at risk flooding and/or waterlogging, such as Nodirpar in Konabari is surrounded by Turag river on two sides, compared with the other slums on Government land where fire hazard are bigger threat due to presence of shops and factories dealing with inflammable materials such as in Uttor and Dakhin Tetultola in Tongi.



There has been reports of several fires at the Tetultola settlement since the start of the project, and as recently as January 2018. In December in 2016, 108 houses and 27 shops were burnt by a fire that took 2-3 days to be completely extinguished. The UCVs mobilized by the project were the first to the scene of fire and informed the fire services.

Therefore, it may be concluded that projects such as BRUP need to place more emphasis on location specific disaster response measures. The frequencies though appear low might suggest the respondents' 'preferred measures' for coping with disaster based on the physical conditions of their respective settlements. This could also be due to the differential ability of the respondents to afford a specific measure; although during FGD sessions lack of affordability has not been mentioned with respect to payment for the project installed services (waste management, water supply, etc). The process of RRAP with the participation of the communities has been successful as the Evaluation Team has been informed at the different FGDs with direct and indirect beneficiaries as well as the regional head of fire services in Gazipur.

Output 1.1.1 “Strengthened capacity of CDC to undertake risk assessment and planning”

Annual updating of RRAPs

The FGDs held with two CDCs and two EKATA groups at four of the six project communities have reported that their RRAPs have been updated twice as per requirement. This suggests that the RRAPs have been reviewed on annual basis and the necessary updates have been added to them. The original and updated resources and risks maps were displayed on the walls of the KICs where the FGDs took place.

The hard copies of RRAP documents have been made available to the Evaluation Team at one CDC (one original plan and two annually updated versions), shown at another CDC and a third was reported by EKATA leader to be available (the women at the FGD described the RRAP process and identified their priorities and status of implementation). This suggests that the project has achieved the output of production of the planning documents and the subsequent annual updating of the RRAPs.

Participation of CDC members in training

From the survey it is found that all 50 members of CDCs have participated in the planned trainings conducted by the project (therefore, no table is presented). These 50 members are sampled from 78 CDC members in total that would imply when extrapolated for the total, 100 percent of the membership. This achievement exceeds the 75 percent target in the indicator. It should be noted here that during the FGD sessions the participants were asked about the contents of their training and they had some difficulties in recalling all the subject matters included in the training (see also section 5.2.3 below). They explained that this was due to the long length of time elapsing since the training and the FGD sessions.

Regular meetings of CDC

Attendance at regular –monthly, meetings of CDC is somewhat better in the communities on private land compared with in Government land. The CDC members from private slums attended seven or more monthly meetings at 77.8 percent rate compared with 65.6 percent from



the Government land communities (Annex Table E 2.1). The target 75 percent attendance at CDC meetings is achieved at the Government land slums.

Output 1.1.2: “Strengthened capacity of the community through disaster volunteers (UCVs) groups to respond during disasters”.

“We [women] always had courage but we were not allowed to show it . . . we became encouraged and motivated [for training as DVs] because of our training on women’s empowerment”.

- FGD Participant, UCV in Konabari

Success of Disaster Volunteers

Indicator definition: “75 percent of UCVs attend meetings”.

Result: As the Annex Table E 2.2 shows the survey respondents have reported that the members of DV from their families attend the quarterly refresher meetings regularly (nearly 95% with at least two meetings last year). This is also corroborated by the Gazipur regional chief of FSCD that the attendance of the UCVs at the refresher meetings is “very high”, as well at the project staff consultation held with the Evaluation Team (for description and discussion see Annex Table D 2.2).

Output 1.1.3: “Strengthened capacity of the community”.

Awareness raising through Children’s Forum

Indicator definition: “At least 75 percent of the CF members participate in awareness [raising] sessions”.

Result: According to the Annex Table D 2.3 a large proportion (79.3%) of children have regularly participated in the fortnightly awareness sessions held during the last one year. Against the definition of the indicator the project has succeeded overall with marginally more in private land and little less in Government land (for details see AnnexTable D 2.3).

The children at the FGD shared that from the project’s hand washing ‘hands on’ demonstration, now they have become aware what germs can do and how they can avoid germs and stay healthy by washing hands. *‘We have gone door to door to make people understand usefulness of hand washing and demonstrate this to them. It was really a fun! We told mothers and children to wash hands before eating, before feeding the children (to mothers), after using the bathroom, after playing outside, and after sneezing, coughing, or blowing one’s nose,’* one representative of children group shared.



Output 1.1.4: Strengthened capacity of the communities through awareness building

Responsiveness in emergencies: Mock Drills' success

Indicator definition: “At least one Mock Drill is conducted at each community within project period”.

Result: According to the project staff two rounds of Mock Drills have been held for each of the six project sites and the participants at FGDs with CDC and EKATA have confirmed this. However, participation at the Drills by the community members is somewhat low at 44.6 percent overall with better attendance reported for private land (53.1%) over Government land (39.9%), the difference being 13.2 percentage points (details in Annex Table E 2.4).

The Table also shows the major issues that the respondents learned from attending the mock drills.

- *Preparation for fire risk:* Large majority of the participants (71.1%) learned about how to prepare for facing a fire incidence.
- *Rescue operation during fire:* They learned about rescue operation during fire as reported by 61.2 percent of the participants overall.
- *Preparation for earthquake:* Of those who participated in the mock drills, overall 43 percent recalled that they learned about how to make preparations for earthquakes with a difference of 22.5 percentage point for the private land (55.8%) compared with Government land (33.3%).

The performance of the respondents in private slum are better than those in Government land in terms of participating in mock drills and retention of the knowledge (Annex Table E 2.4).

Forum Theatre for mass communication: a popular tactic

Indicator definition: “Forum theatre (FT) performance show conducted by a trained FT group based on a script to build awareness about disasters”.

Result: A large proportion of the sample (69%) has reported to have attended at least one of the 36 performances. When the respondents are asked about the issues presented or dealt with in the Forum Theatre they reported a large array of subject matters (15 issues in the respondents' words), as shown in the Annex E 2.5. The more popular issues –measured by the frequency of respondents remembering them, include the following:

Prevention of early marriage (84.5%), proper and time of hand washing (74.7%), safe keeping of drinking water (73.8%), hygienic latrines (66.3%), preparation for fire risk (64.7%), women's empowerment (63.1%). These large frequencies that are not meaningfully different between the two types of slums suggest either the performances have been competent or the issues presented resonated with the respondents. It is more likely to be both.



Output 1.2: “Risk reduction action plan implemented by the communities”.

Implementation of RRAP interventions

Indicator definition: “At least five interventions identified in RRAPs are implemented in each community”.

Prior to the implementation of the minimum required number of interventions identified in the community RRAPs it is necessary to understand different aspects of community participation in the assessment and planning process. The process included the preparation of resource and risks maps, identification of vulnerabilities and risks, prioritization, and planning for implementation of interventions. After the preparation of the risks map by large groups the community members formed four groups – each comprising women, children, youth and elders, who identified their respective vulnerabilities and risks separately. Larger group led by the CDC prioritized the required intervention and shared the plan with the GCC Councilor for the respective Wards (see section 5.2.2 below).

The project provided a “summary of RRAP projects” to the Evaluation Team that shows eight types of projects: street lighting, safe water, sanitary latrines, toilet renovation, community bathroom, drain renovation, footpath construction, and stair case. It does not show the two budgeted support provided by the project, namely, IGA support for women and waste management, nor the climate smart technologies provided through separate co-financing. The summary also indicate the number of units of each type that has been implemented by the different communities. The indicator definition does not distinguish between the number of types and units.

Result: In terms of the number of units the project has produced the output across all six sites with different numbers of the different types of projects implemented by the communities. The highest number of units that has been implemented is 20 at Nodirpar Baimail, and the lowest number is six at Moddho Baimail. The community at Nodirpar has implemented four types of projects while it is a single type of street lighting at Moddho Baimail (see Box 5.3 below).

Box 5.3: Number of intervention implemented by the communities

Solar power street lighting systems have been implemented at all of the six communities, with varying number of units.

Medical slum: Street lighting system (3 solar units), Safe water system (one unit of submergible pump with overhead tank) and footpath construction (3 units): seven units in total.

Uttor Tetultola: Street lighting system (4 units), Safe water system (one unit of submergible pump with overhead tank), sanitary latrines (5 units), and drain renovation (one unit): 11 units in total).

Dakhin Tetultola: Street lighting system (4 solar units), Safe water system (one unit of submergible pump with overhead tank), sanitary latrine (4 units), toilet renovation (2 units) and community bathroom (one unit): ten 10 units in total.

Pukurpar Baimail: Street lighting system (7 solar units): seven units in total.

Maddha Baimail: Street lighting system (6 solar units): six units in total.

Nadirpar Baimail: Street lighting system (2 solar units), Safe water system (one unit of submergible pump with overhead tank), sanitary latrines (12 units) and staircase (5 units):20 units in total.



The Annex Table E 5.6 shows the different interventions identified in the RRAPs as well as those budgeted that have been supported by the project for implementation. The interventions are discussed below in order of the magnitude of frequency (from highest downwards)

Street lighting: Darkness of the streets at night and its consequent negative impact on women has been identified at all six communities but it received low priority in the RRAP processes – between sixth to eighth places below other vulnerabilities. However, given that overall 82.5 percent of the respondents identified street lighting as one of the project interventions in their communities suggest that the BRUP’s women’s empowerment considerations prevailed over communities’ wishes as solar power street lighting systems have been installed at all six communities.

Household waste management: The lack of garbage management has been identified in the RRAPs but with a wide array of prioritisations falling in second to fifth. Garbage management has been implemented at all six communities as more of a project policy as the intervention had been specifically budgeted for, rather than community prioritization. Nevertheless it has been welcomed by the communities including indirect beneficiaries in FGD sessions. Proportionally more have benefited in Government land (82%) compared with private land (67.3%).

Financial support for women’s IGAs: Another intervention that reflects Care’s women’s empowerment policy and the project’s aim of strengthening women’s role in resilience building, and that also received a budget allocation is financial support for women to engage in alternative income generating activities. This also received low prioritization in the RRAPs; between fifth and ninth out of a total of ten. It has been implemented in all six communities but only 43.3 percent identified it as a project intervention suggesting that the respondents may have identified those that benefit them directly. The large difference (21.6 percentage points) between Government land (51.2%) and private land (29.6%) slums indicate more women in the former received input support compared with the latter. From the FGD with CDC in Pukurpar (Government land) it is learnt most women in the did not have any income earning opportunities whereas in Uttor Tetultola women have been engaged in various industries and shops that exist next to the slums (FGD with EKATA)

Safe drinking water: lack of access to safe drinking water has received highest priority in the three communities on Government land, one community in private land, while it’s been ranked as fourth and fifth in two private slums. This intervention has been supported by the project at these four communities. The large difference (39.5 percentage points) in the frequencies of its identification between Government land (51.7%) and private land (10.2%) reflect the level of priority attached by the two types of communities. From the frequency for the Government land it can be interpreted that there’s a large unmet need for safe drinking water among the direct beneficiaries. Similar opinion of unmet need for safe water have been expressed at FGDs with CDC in Nadirpar (private) and with EKATA in Medical slum (government).

Sanitary latrines: Lack of availability of sanitary latrines in the slums is the second biggest problem Medical slum and third ranked in both parts of Tetultola due to lack of WASA interventions in the Government land. In terms of proportion of respondents reporting



implementation of sanitary latrines (construction and renovation), it stands at 31.6 percent. As the slums in private land did not plan for it apparently because house owners provide it but emptying of the septic tanks has been identified as a problem⁵ only government slums received the support from BRUP, with 48.4 percent reporting. As in the case for safe drinking water, there is a large unmet need for sanitary latrines.

Other interventions reported by the respondents include renovations of drains (25.7%) and streets/footpaths (22.3%), while the construction of staircase taken place only at one community in Nadirpar (private) as a one-off special intervention.

5.2.2 Outcome 2: Empowerment of poor and extreme poor women

2.1 Responsive towards disaster risk management

The BRUP project has designed activities so that poor and extreme poor (PEP) women in the targeted communities have become more responsive to disaster risk management. Such as, 360 women were trained on disaster risk management through managing EKATA platform and hence, became responsive towards this by practicing the learning. At the practice level, it is found that at least 69% of the survey EKATA group members keep sandbags and water in the cooking area so that they can use that when fire breaks out. Among them, slightly more than half of them (52.5%) have portable cooker which the project provided them. In addition, more than one third (38.5%) mentioned that they used to take part in mock drill during project period and also have savings for any kind of emergency.

Table 5.2.2: Percentage distribution of EKATA group members according to their practice of training on disaster risk management

| Examples of practices | Type of slum | | |
|--|-----------------|--------------|------------|
| | Government land | Private land | All Slum |
| Savings for emergency | 41.1 | 29.6 | 38.5 |
| Took part in mock drill | 43.2 | 22.2 | 38.5 |
| Have sandbags and water safely placed in kitchen | 71.6 | 59.3 | 68.9 |
| Have portable cooker | 57.9 | 33.3 | 52.5 |
| Keep dry foods in safe place | 38.9 | 11.1 | 32.8 |
| N | 95 | 27 | 122 |

Multiple responses

FGD participants appreciated the training they had received on responding to fire incidents as this is frequent within the community. They said, 'Usually in our community, fires are caused by cooking fires and poor electrical wiring. Fire starts from electrical shorts, lit cigarettes and mosquito coils, kitchen stoves, etc. and spreads rapidly destroying the densely packed dwellings made of inflammable materials'. Lack of fire prevention systems, overcrowding and unplanned settlements, type of construction materials used such as, corrugated iron and connected to hazardous electricity lines, and build-up of litter and waste make them particularly vulnerable to

⁵ Study report (2015): "Urban Socio-Economic and Vulnerability Study of Gazipur City Corporation", Care, Dhaka



fire. In addition, access roads are few and narrow, making passage difficult/impossible for fire trucks.

For this reason, they now keep water and sandbags in their cooking area 'to use if a fire breaks out'. They also added that now if they hear that a fire has started, they will rush to the place where the fire to try to put out the fire and prevent it from spreading, rather than going home to collect belongings and children and to escape the area. According to them, they are not afraid of this anymore. They also shared that they are now more prepared to deal with fire risks that might cause injuries and/or damaged to property.

Output-2.1: Increased Capability and Confidence through EKATA platform

EKATA groups comprised of 30 women. The women have learned about VAW, life skills, disaster risks, financial management and WASH through participating in the EKATA group sessions. This has made a significant difference to their ability to plan and manage specifically managing their businesses, bank transactions and understanding differences between investment and profits. They have also learnt practical life skills, such as health and hygiene skills and prevention of fires.

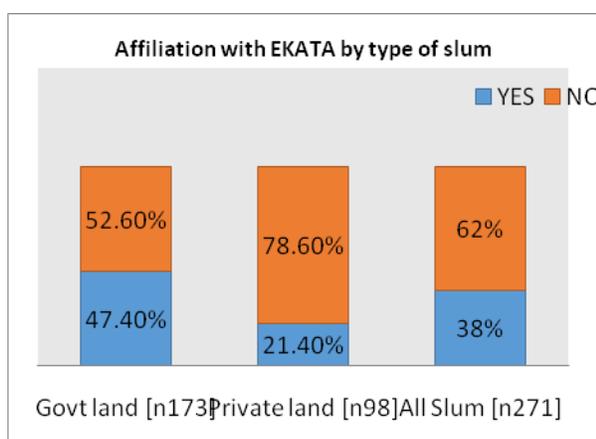


Figure 3: Affiliation by type of Slum

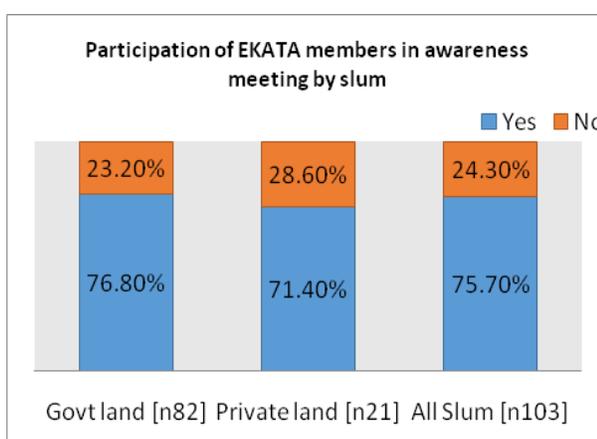


Figure 4: Participation of EKATA Members in Meeting

The study revealed that (Above Figure-3) among the surveyed households, 38 percent of households reported having a member in EKATA, it is to be noted that household's affiliation in Government land is higher (47.4%) than private land (21.4%). A slightly higher than three-fourth (75.7%) reported that (Above Figure-4) they participated the awareness meeting regularly and there is not much difference in Government land and private land members. The survey also asked the members the frequency of attending the meetings. About half of them (47.6%) of them recalled of attending more than 12 meetings. This percentage is almost double (52.4%) in Government land than private land (28.6%) frequencies (Table-E 5.10). One of EKATA members shared “*We meet fortnightly basis to discuss a range of social issues, including: security, savings, early marriage, WASH, hazards, disasters and violence and torture of women.*” Regular catch up and sharing during meetings creates a space to speak from the bottom of their hearts.

The women in FGD shared that as a result of their participation in the EKATA group sessions, their confidence to cope with the challenges within their local environment increased. They are



now more capable to plan and manage their financial resources and are more prepared to deal with disaster risks in their local environment that may lead to unplanned financial expenditures as well as harming well-being.

The women have gained confidence from the activities and discussions and achieved negotiation skills which helped them to identify solutions for the problems that they face in the local community, inadequate street light, pollution due to lack of waste disposal facilities and lack of clean water. Having identified the solutions, the BRUP project has responded to the community requests for support, by providing solar street lighting, carts for rubbish collection and submersible water pumps to improve water supply. The participants have also learnt more about their rights as women and are more confident to move freely in the local community, *‘now we go to shops and buy things and take children to school. We didn’t do this before.’*

A number of young women participated the project initiated training to prepare for and respond to disasters as they occur. One of the trained women shared that how the participation in these activities her communications skills. *‘Now I can come to a place and talk with people and this is new. I have learnt how to communicate with others.’*

Ensuring active participation of women in CDC, EKATA, WDMC, and UCV of the Project has opened greater opportunity for women to exercise and develop their agency, structure and relationship. This, along with capacity development training has helped build the women’s capacities for leadership skill, civic education and sensitization campaigns on gender equality.

It is found that at the practice level, the 72.6% EKATA members have become careful in using fire in their daily life, 30% do not keep flammable object at home and 20% keep the drains clean (Annex Table E 5.11). It is to be noted that a slightly more than half of them have been trained as community volunteers from the project. In Government land, this percentage is 55.3% and in private land, this is 34.8%.

The training from the project and the interaction they had with other women helped them to come up with a set of measures against women oppression. The findings show (Table 5.2.3) that about 70% women think that they should support (at least mentally) woman when she is victimized. According to them, shame of being victimized continues to be a barrier in women feeling comfortable seeking either formal or informal support. *‘We support them in that case rather blaming her which is a common attitude in the society’.*

About 65% suggest (Table 5.2.3) to work together to prevent VAW. In this case, they also consider working with men, adolescent girls and boys and influential persons in the community. *‘The training and interaction in EKATA and other meetings have assisted us in thinking these issues constructively’, one woman in FGD shared.*

Table 5.2.3: Women’s Opinion/ intension/suggested measures against women oppression

| Measures Against Women Oppression | Type of slum | | |
|-----------------------------------|-----------------|--------------|----------|
| | Government land | Private land | All Slum |
| Work together to prevent VAW | 63.6 | 68.4 | 64.6 |
| Aware all to honour women | 27.3 | 31.6 | 28.1 |
| Change attitude of men | 27.3 | 10.5 | 24.0 |



| | | | |
|--------------------------------|------|------|------|
| Motivate family and society | 16.9 | 10.5 | 15.6 |
| Support victimized women | 68.8 | 73.7 | 69.8 |
| Try to ensure women's right | 28.6 | 26.3 | 28.1 |
| Do not impose failure on women | 9.1 | 5.3 | 8.3 |
| N | 77 | 19 | 96 |

Multiple responses

The training and orientation on VAW also made the women knowledgeable on the procedures and actions. For example, 71% believe they would get support from women affairs officer in the government and more than half of them consider putting pressure on the perpetrator by forming a group would be helpful to get justice for the violence [Table E 5.12]

During last one year, 79% women went to hospital or clinic to get health service. Other places they visited and received services for different purposes are; school for child's admission (54.8%), knowledge information centre for training (52.7%), immunization centre to vaccinate children (42.7%), banks (39.8%), NGO/GO meeting (27%), city corporation or councilor's office (23.1%), police station (11.8%), and government office (9.5%) [Table E 5.13].

According to FGD participants, women garments workers and other women living in the slums are now safely returning home from work in the evening. Installation of street solar lights at the slum areas has changed the safety and security of these women, specifically their mobility. *'This was quite difficult a few months back as they had to face harassment due to darkness. Lack of lighting increases the risk of sexual harassment for women as they are vulnerable in dark. On top of that, during load shedding situation became worse. In addition, slum dwellers often used to become victim of mugging in their own locality.'* According to the survey results, 46.5 percent reported that women can go outside until night when they need to and they consider this as an improvement in the security and safety of the road because of installation of solar lights (Table 5.2.5).

Table 5.2.5: When women household members can stay outside

| Time | Type of slum | | |
|------------------|-----------------|--------------|----------|
| | Government land | Private land | All Slum |
| Day time only | 9.5 | 12.0 | 10.4 |
| Until evening | 23.8 | 30.4 | 26.2 |
| Until Night | 47.6 | 44.6 | 46.5 |
| Until late night | 19.0 | 13.0 | 16.9 |
| N | 168 | 92 | 260 |

Through BRUP project, 16 street solar lights at both community and ward level have been installed covering all the six targeted communities and two wards. One participant shared that this happened because the women actively participated in the risk assessment process.

The women were asked individually to list community hazards. *'We admit that earthquakes and fire are dangerous; but poor street lighting and insecurity are just as dangerous for us women and girls. That is how darkness was included as hazard for the first time. As a solution, it came as a recommendation to install street solar lights in the risk reduction action plan.'*



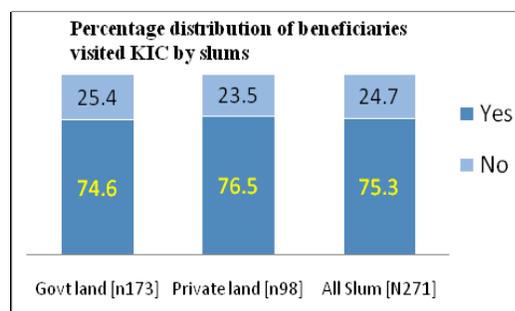
The women, being members of WDMC, raised community's important issues to draw elected representatives' attention such as, adequate lights in the roads.

One EKATA member shared, *'BRUP has fostered us as better risk managers with knowledge, access to social and political platforms and economically empowering them to manage risks.'*

The women still face difficulty when they go out of home alone. The mostly reported problems they encountered during last one year are: unable to board in public transport as these were overcrowded (40.2%) and men sit in women's seat in the bus (35.4%). The women also stated of pulling up cloth to manage waterlogged road (23.6%), touch by creepy men in the transport (18.1%), men's stand leaning to them in the bus (16.6%) and pervy comments (11.4%), from the perspective of discomfort and insecurity perspective (Annex Table E 5.14).

Output-2.2: Increased Access to Information

Access to information is required to empower women in order to improve their socio-economic status, to be able to cope and also contribute effectively in this period of different types of crisis. The women in this project particularly need information on issues affecting themselves, their children, and their businesses. The project established five knowledge information centres in six communities. A slightly higher than three-fourth reported that they have visited the centre in their own community.



During the project period,

some of the information centres have also become the

Box 5.2.2: List of learning documents and Emergency Equipment Available in KIC

Emergency and fire extinguishequipment

- Stretcher, gloves, fire extinguisher, first aid box

Education materials:

- Pictures, leaflet. Maps of children's problems prepared by CDC and children. Expectation trees, maps of women problems, women education, risks and resources maps. Books on women and children education, novels for adolescents. White board, marker, flip- charts, table, chair, book shelf, trunk, registry khata, calculator
- Information charts/banners containing different slogans and messages on violence against women, dowry, prevention of child marriage, protection against fire, garbage management, waste materials management, goal and objective the project, vulnerability analysis of women and children, harmful of smoking,
- List of children and EKATA group members etc

Other materials:

- Duster, broom, dustbin, hand wash materials, triple, Notice board

Musical instruments:

- Dhole, Khanjani

Game Instrument

- Ludu Board

resource centre for centralized delivery of all available services beneath one roof. These were being used as a local hub for basic community services. Representatives from a number of health service providers used to offer service to the communities.

Figure 5: Beneficiaries visited KIC by Slums

2.2 Participation in different DRR platforms and interventions

The project aimed to raise women’s participation in the disaster response team. Among 325 UCVs, 98 were women from two Wards (Tongi and Konabari) and the Project provided training facilitated by FSCD. Few of them were the responders as Urban Community Volunteer (UCV) when a devastating fire out broke at Tampaco Foils Limited on 2016. The project arranged professional training for FSCD professional including female Instructors. In August 2016, for the first time government has given a chance for women to apply for the position of Station Officer and three women have been selected for this post.

The women shared that there are a number of steps to be followed when during fire which are known as fire safety instructions such as, call the fire brigade, break into neighbouring house, factory, or break fencing, extinguish the source of fire, gather water from ponds to extinguish fire, use water from reservoir tanks, use water from 5,000 litre tanks, splash water by using pipes to extinguish fire, remove all flammable substance, use sand to extinguish fires to help with gear and there is some basic management like 'do not run'. According to them, *'it does not matter whether I'm a woman. We usually do these to extinguish fire.'*

The project has shared the list of the contact number of these volunteers with the community. The Project also emphasized and demonstrated community people to have contact phone numbers of local fire service, hospital and ambulance service, police station so that they can call them up in emergencies. It is found in the survey that **83% of women respondent** have contact information of local fire service station, 47% have information of hospital, 38.5% have ambulance service contact, and 38% have police station contact number (Annex Table E 5.7). More than one third have trained volunteers’ contact information. It is to be noted that the percentage of having contact information is higher in people living in Government land than that of private land.

The study also found that (Figure-6) the surveyed women or EKATA members are participating in different DRR platform at community level. They have achieved membership in CDC committee (19%), in UCV (9%), in forum theatre (2.5%), in CF (24%) and in Ward Disaster Management Committee (2%).

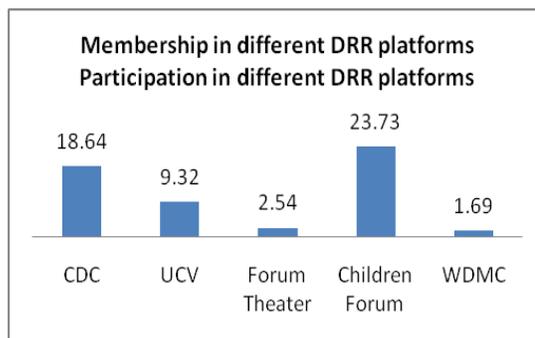


Figure 6: Women membership in different DRR platform



2.3 Enhanced livelihoods opportunities

The project aimed to support women towards economic empowerment in two ways: a) by supporting women become better risk managers at household and community levels, so that they can prepare for and mitigate risks and disasters before they happen and reduce related financial shocks and stresses; b) by providing support to vulnerable women to diversify livelihoods and develop enterprises as additional income streams.

To achieve this, the project assisted 300 poor and extreme poor (PEP) women and provided cash and with input supports. The study found that 100 percent sampled PEP women (total 111) received cash and input support to undertake their initiatives for their economic development. Of them, about three-fourth (78.38%) were from Govt. land and rest (21.62%) from private land and more than one-tenth got skill development and business planning training from the project (figure-7).

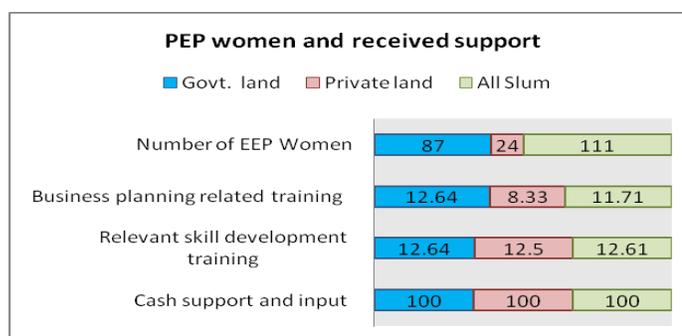


Figure 7: Percentage distribution of PEP women by support

The women who received IGA monetary support from the Project used the money for different activities. It ranges from treatment for illness, education, health, loan repayment, investment in own planned IGA, as well as others', and savings. It is noteworthy that more than two-thirds (67.57%) started new businesses and another 13.51% invested in other's business with the cash grants that they received (Table 5.2.6). This has thus created an additional income source for their families over which they have a stronger degree of control. Few women in FGDs shared that they were generating higher returns than working for other people. One woman shared, 'Now as I am earning, I can buy things for my business and things I need for myself. I don't have to depend on others to buy my personal belongings.'

Some women invested the cash grants in their existing businesses. Thus, the additional funding has increased their capital base, assisted them with stock replenishment and/or helped them expand their existing businesses to great extents.

Table 5.2.6: Percentage of distribution of women who used IGA support for different activities

| Use of IGA support in different area of activities | Endline | | |
|--|-----------|--------------|------------|
| | Govt land | Private land | All Slum |
| 7 Invested in own IGA | 65.51 | 75.0 | 67.57 |
| 8 Invested in current other IGAs | 14.94 | 8.33 | 13.51 |
| 1 Health and treatment | 4.59 | 4.17 | 4.50 |
| 2 Education | 8.04 | 4.17 | 7.21 |
| 3 Savings | 10.34 | 20.83 | 12.61 |
| 4 Household immediate needs | 16.09 | 8.33 | 14.41 |
| 5 Repay loan | 3.44 | | 2.70 |
| 9 Other | 1.15 | | 0.90 |
| N | 87 | 24 | 111 |

Multiple responses



Enhanced income of the PEP women: The study revealed that the mean income of PEP women for all slums is **BDT 15886**, which is 15% higher from baseline (BDT 13,859)(Table E 5.15.1). In baseline, about one-fifth (21.4%) households belonged to the category of monthly income group of BDT 15001 to 25000 +, whereas in end line it was (41.6%). That means the percentage of highest income group have increased by almost double in end line compared to the baseline. In baseline, only 6% respondents had income BDT 20,000 plus, whereas in end line, it was more than 16%. Regarding the two slums, mean income of the respondents were found to be higher in private land by 4.46% over their govt. land counterpart. This was probably due to the fact of higher income range, more steady income, and more income from villages in private land households than Govt. land slums (Table E 5.15.2).

Increased savings: In the FGD, the women with savings (generated from IGAs) hope that their savings will help them to cope with unexpected events. Prior to the Project, none of the participants had bank accounts but all of them had been part of NGO savings groups and had saved regularly with these groups in order to access loans. They used to make purchases for their businesses or to cope with unexpected financial demands. Now they have learnt more about managing finances through the group sessions and have bank accounts where they deposit savings regularly. The study found out that overall savings tendency at the beneficiary level have well established over the project periods. In baseline, only 23.6% beneficiaries reported of savings whereas in end line this has increased as much as 86.5%, an increase of almost four-folds (Table E 5.15.4). The mean saving of the respondents was found to be **BDT 12708** in all slums. However, more than one-tenth (11.5%) respondents reported that they have the savings ranging from BDT 25001 to BDT 50000 or more and about one-third (32.3%) ranging from BDT 10001 to 25000 (Table E 5.15.5). The respondents have strongly established their solid bonds with formal financial institutions in terms of keeping their precious savings. The Table E 5.15.6 demonstrated that more than half (54.2%) of the respondents deposited their savings in NGO management and another half (46.9%) in Bank. Keeping savings at home or non- formal institution is almost absent.

Control over Savings: The control over savings by PEP women has changed significantly over the traditional culture of Bangladesh due to the intervention of the project and mindset of the beneficiaries. Overall, nearly ninety percent (89.6%) women are the owners of their savings which gave them extra economic power in controlling their household issues (Table E 5.15.7).

Benefited from Savings:One cannot avoid the raising concern of benefit of the savings because only half (57.3%) respondents reported that they received benefit from the savings. The utilization of the savings should have been more productivity oriented in order to maximize its benefits (Table E 5.15.8). Those who benefited from their savings were investment on IGA mentioned by about two-thirds (63.6%) respondents followed by treatment and house construction (27.3% each) loan repayment (21.8%) and purchasing household items and meeting education cost (18.2% each) (Table E 5.15.9).

Increased access to loan: A substantial number of PEP women became loan worthy due to project support. The study found out that out of total 111 PEP, more than two-thirds (69.4%) took loan. Of the slums, people residing in Govt. land got loan by 14% more over those in private land. (Table E 5.15.10). About four-fifth (79.3%) loan receiver took loan ranging from



BDT 25000 to 50000 indicating their increase in capacity of utilization of bigger amount of loan and the growing confidence of loan givers on them (Table E 5.15.11).

Utilization of loan: There were as many as 12 reasons mentioned by the respondents for taking loan from different sources. More than half of them (51.5%) informed that they used their loan in income generating activities and 12% used for purchasing or mortgaging of land. Together, about two-thirds (63.7%) of loan was utilized in productive sectors. These in fact helped them in improving their income and the livelihood as well as repayment of loan. Slightly less than one-third used their loan in house construction (Table E 5.15.12). The major sources were the NGO from where about three-fifth (73.5%) respondents took loan followed by bank (7.4%). It appears that most of the women have established their strong bondage with formal financial sectors in terms of obtaining loan (Table E 5.15.13).

5.2.3 Outcome 3: Responsive government institutions

The statement for the indicator for outcome-3 is as follows: “Gazipur City Corporation and two fire stations are better prepared to respond to emergencies and to provide better services”. The definition used for this indicator include the following two statements:

- “Regular meeting of the CCDMC in place and downward linkage with two WDMC”, and
- “Targeted fire stations demonstrate readiness to respond to disasters with skilled fire fighters, equipment, and UCVs in the communities”.

Forming and Functioning of CCDMC

The Evaluation Team has not been able to assess the indicator of regular CCDMC due to the unavailability of the CEO of GCC for a meeting. All efforts made by the project staff to make an appointment with CEO went in vein. However, it has been informally learnt that ‘several’ meetings have been held but the frequency could not be verified by the Evaluation Team. The fact that GCC has set up WDMCs at all of its Wards is in itself is a success.

Fire stations respond with skilled firefighters, equipment and Urban Community Volunteers (UCV)

The above quote sums up the relationship developed between the FSCD and the UCVs – it

*The fire service is very enthusiastic about improving our skills/capacity . . .
When there’s a fire elsewhere in the city they call us for support; this shows
their confidence in us.*

- FGD Participants, UCV, Konabari.

suggests the former view the latter as committed, dedicated, and courageous. Since the FSCD provided the training to the UCVs they are the best placed to evaluate them, and their own confidence in the FSCD provided.

Training for FSCD: Originally BRUP project had planned to provide support for the officers of two fire stations in GCC area. Following discussions held at the HQs of FSCD it was decided to



expand the number of participation fire station to five and the participants to 50 Officers, from the Gazipur region of FSCD. Officers of these stations had not been provided training on search and rescue previously.

The Training Cell at FSCD HQs was set up in 2010 with the support of CDMP project (led by UNDP) with the aim of developing 62,000 urban volunteers to support the eight thousand professional firefighters of FSCD. Under CDMP training modules were developed included 'modified search and rescue' (presumably due to lack of equipment). The contents of training is the same for professionals and volunteers. Of the 100 volunteers developed in Gazipur under CDMP, 80-90% have dropped out - according to KIIs with FSCD personnel in Gazipur and in Dhaka.

Under an MOU between FSCD and Care Bangladesh the project will support capacity building of the fire stations in Gazipur district including training on advanced course on search and rescue operations for officers. FSCD Instructors with experience of international training and assignments conducted the training for 50 mid-level officers: Inspectors, Station Officers, Staff, etc, who had basic training on search and rescue. The BRUP supported training included upgraded new contents on search and rescue as well operation of equipment.

Training for UCVs: The newly trained officers conducted the three-day training for the UCVs and continue to meet every three months on day long refreshers training including introducing any new equipment and methods. UCVs received the following for their use during emergency work: uniform (orange coloured shirt and trousers including for women, which also recognized by other professionals as signifying their status as trained volunteers when the ID is not at hand), helmet, protective goggles, hand gloves, boots (one DV enthused about the boots: "like those used by the officers!"), whistle, cloth mask, etc.

Response in recent times: The FSCD have worked with them about on four occasions of actual firefighting since their training. One of those fires was a large industrial fires, and three fires that affected Uttor and Dakhin Tetultola in 2016, 2017 and January 2018. The community members have reported their satisfaction with the responsiveness of the fire station during recent disaster and pointed out that the fire truck arrived at the incidence spots within 10-20 minutes of making contact with them.

Tampaco fire: On the invitation of FSCD the UCVs joined them and Bangladesh Army to fight an industrial fire that raged for 15 days during Eid holidays, and it took another week to bring under control/completely extinguished. The UCVs stayed at the incidence location for 22 days along with the Bangladesh Army and FSCD.

Equipment for fire station: The Station Officer at the Gazipur Regional Offices identified the names of following equipment: Rotary Round Saw for cutting through buildings, Chain Saw, Chipping Hammer for cutting walls and roofs, Rotary Drill Holes for drilling holes, portable generator. In addition they have been provided with accessories and spares for the equipment. These are stored in a large container inside the office compound. He reported that they or the volunteers have not faced any difficulty in operation and handling of the equipment.



Maintenance and repair work are conducted by the station staff. For major repair, which the field staff cannot carry out the equipment are sent to the Central Workshop in Dhaka (Station Officer).

The equipment supplied by the project have been used in training and in actual firefighting. As the magnitude of the disaster determines the use of the different equipment those that are needed in situations of building collapse have not been used since the Rana Plaza disaster.

Output 3.1: Enhanced capacity of City Corporation through the Ward Disaster Management Committees

The definitions of the four indicators for output 3 are as follows:

- CCDMC members attend the as per quorum spelled out in SOD and discussions are documented;
- WDMC members attend the meetings as per quorum spelled out in project guidelines and discussions are documented;
- At least twenty members of each WDMC participate in at least one training event conducted by the project;
- RRAP developed and annually updated in each targeted Ward, [for which] a diverse number of community members participate in the development stage.

Attendance at CCDM meetings: The Evaluation Team has been unable to assess this indicator for Output 3.1.1 as it has not been possible meet with the CEO of GCC. Repeated efforts by the project making an appointment with CEO have been unsuccessful. Therefore, it is unable to assess if the quorum for the meeting set out in the SOD has been maintained or not. However, the fact that the GCC has setup WDMCs in all of it Wards with support from the project is in itself a success for the project.

Attendance at WDMC meetings as per quorum: There are two representatives from the project communities –president of CDC and a woman making it six in total at each of the two Ward Disaster Management Committee (Konabari and Tongi). The WDMC s have been formed about two years ago and meet regularly on quarterly basis.

As per the guidelines WDMCs comprise of 31 members. Most of the members attend the meeting as per quorum spelled out in WDMC guideline and discussion documented; the quorum being one-third of the membership. In some cases participants from the community other than WDMC members also attend the meeting, it being an open meeting (KII with the Ward Councilor of Konabari). It has been found in the survey that members from about 40 households have attended one or more WDMC meetings.

As per survey data, six households have reported to be members of the respective WMDCs, and of them five have attended the meetings regularly while the other twice in 2017.

The responsiveness of the DMCs is suggested by the openness of the meetings, and the participation of non-members from the communities in those meetings.

WDMC members participate in training conducted by the project: All the representatives of the project communities and most of the other members of WDMC have attended training



organized and supported by the project according to the two Presidents of the CDC in Konabari visited by the Evaluation Team. The training events were conducted by resource persons from Department of Disaster Management, Universities, and VERC the project partner. One CDC President who is a teacher, observed that the training “was somewhat difficult”, in response to question about what he thought about the training. Their discomfort at discussing the contents of the training suggest there are difficulties in knowledge retention.

Output 3.2: Linkage Established Between National and Local Stakeholder

The project has established linkages with National and Local stakeholders successfully which was revealed during KII with project personnel and also reviewing of secondary information (annual report of CARE year-2).

Formation of City Corporation Disaster Management Committee (CCDMC): In 2016, the project facilitated Gazipur City Corporation for the formation of City Disaster Management Committee (CCDMC) and 57 wards Ward Disaster Management Committee (WDMC), following the Standing Order on Disasters (SOD) of Disaster Management Act, 2012 in close coordination with the Department of Disaster Management and Gazipur City Corporation.

National Level Advocacy on Urban Resilience Issues : In order to combat urban resilience issues effectively, CARE Bangladesh became the member of Urban INGO Forum- a consortium of 14 prominent INGOs working different issues in urban areas. In 2016, 4th Urban Dialogue, a national level advocacy workshop was jointly organized by the project, Forum with Center for Urban Resilience and Department of Disaster Science and Management of Dhaka University. BRUP engaged the Urban INGO Forum as a potential platform for pro-poor resilience advocacy. BRUP organized 4 parallel sessions with focused priority in the following areas: Towards a Resilience City; Healthy and Cleaner City; City for Children, Youth and Women and Pro-poor Urban Governance. The relevant ministries, departments and other stakeholders involved in urban disaster management took part in the workshop. All these events were aired through electronic media – MY TV, ATN news and printed media at local and national level.

With the theme of “Enhancing urban community resilience” the 10th International Conference on Community Based-Adaption (CBA) took place in Dhaka. From this conference, 53 international participants visited three communities of BRUP to observe what they considered benchmark execution of CBA in urban context. Exploring the newer advocacy and networking opportunities, BRUP also attended indoor conferences and Global poster completions- highlighting its resilience approach by putting women at the center.

Formation of Alliance with HBRI for disaster Resilient Building Construct: BRUP engaged HBRI to provide technical assistance in developing a resource pool of GCC engineers and planners from all zones to be trained on “Safe Construction Building Code”.



5.2.4 Project Interventions

The effectiveness of the project interventions – both structural and non-structural, are assessed in this sub section that have strong bearing on the logical framework indicators as well as shedding light on the interventions from the beneficiaries’ perspective. These indicators show positive effectiveness of the project in terms of disaster resilience of the communities. This is done in terms of knowledge retention, level of participation in the RRAP processes, benefits derived by the community members from the infrastructure interventions.

Improvement in awareness of disaster management

Awareness raising for the targeted households is the first step in improving their overall resilience against hazards and risk factors that they face living in low income settlements. The regular meetings of the CDC, EKATA, and Children’s Forum have been the vehicle through which the knowledge was imparted by the project. For the Disaster Volunteers refresher training are held every three months at the Gazipur Regional Office of Fire Service and Civil Defense. (see sub section on institutions below).

The Annex Table E 5.15 presents the frequency of the knowledge areas that the respondents in the survey are able to mention without any prompting from the data collectors.

The table shows that the most frequently recollected awareness subjects are as follows:

- *Preparedness for firefighting* has been identified by 67.3% without any difference between the two groups from the Government land and the private land;
- *Preparedness for earthquake* is the second most frequently identified area of training that they received, with nearly 38 percent overall and more respondents (49%) in private slums recollected it compared those (31.6%) living on Government land;
- *Risk assessment and planning for action* (RRAP process) is identified by the third highest proportion of the sample that stands at 27.1 percent with marginal difference between the two groups (28.1% in Government land and 25.5% in private land);
- *CDC operation and leadership development* is fourth most frequently recalled by overall 14.9% with marginal difference between the two groups (15.8% in Government land and 13.3 in private land);
- *Relief operation during disaster*, an intervention the project carried out when fire broke out at one of the communities in 2016, is not as surprising as a training area because the community members themselves carried out their own relief operation after another fire later in the year (as reported by EKATA group FGD in Tetultola in Tongi). It is the fifth (14.1%) highest with marginal locational difference (15.8% in Government land and 11.1 in private land).

Although the overall frequencies may appear low except the one for firefighting, the direct beneficiaries have been exposed to a large number of awareness topics over the project period, and those met in different FGDs (two CDCs and two EKATA) were also unable to recall many of the topics. One EKATA facilitator – who is responsible for facilitating the awareness raising



sessions at one of the two monthly meetings of EKATA group, pointed out that during her training over three days they were exposed to 14 topics. In fact the project has informed the Evaluation team that the number of topics on which awareness has been provided stands at 25.

The low retention of knowledge may be due to the sheer number of topics to which the respondents learning). However, when the beneficiaries meet together as groups they are able to support each other with recalling the topics, as the Evaluation Team found at the different FGD sessions.

Participation in RRAP process: community leading over beneficiaries

In the survey the respondents, who are drawn from the lists of direct beneficiaries of BRUP, are asked about their participation in the process and the benefits that they are currently enjoying as result of the implementation of the interventions identified in RRAP. Although the RRAP processes have been led by the CDCs both direct beneficiaries and other community members participated in the four groups (based on age and gender) tasked with risk assessment, identification of interventions, etc. The formulation of the respective community plans have been conducted at open meetings, where it appears not many direct beneficiaries participated as suggested by results presented in the following Table 5.2.7.

Table5.2.7: Percentage distribution of respondents by their participation in RRAP

| Participation | Type of slum | | |
|--|-----------------|--------------|------|
| | Government land | Private land | All |
| Participated in the preparation of RRAP at community | 53.0 | 43.2 | 49.4 |
| Participated for the preparation of RRAP at ward level | 19.6 | 21.1 | 20.2 |
| Participated in annual RRAP updating meeting | 28.6 | 30.5 | 29.3 |
| Not participated in any of the above | 35.7 | 38.9 | 36.9 |
| N | 168 | 95 | 263 |

Includes multiple response

- *Non participation:* Slightly over one-third of the respondents (36.9%) reported that they have not taken part in the process of RRAP formulation. Similar proportions from the two types of slums are found to have refrained from involvement (35.7% and 38.9% in Government land and private land respectively). The type of slum has not been a factor determining participation. Selection for the four groups and time availability are more likely factors to explain this.
- *RRAP process at community level:* Very close to one-half of the respondents (49.4%) are found to have taken part in the RRAP process for their respective communities. The proportion of respondents taking part in RRAP process in slums on Government land (53%) is nearly 10 percentage point higher than that in private land (43.2%). Availability of more work opportunities around private slums for women and men may explain the difference in number of beneficiaries and in the sample compared with Government land.
- *Annual updating of RRAPs at community level:* The high rate of participation in the planning process is not maintained for the annual reviews of the implementation of the interventions identified in the RRAPs. Overall participation in plan updating meetings



among the sample is 29.3% with marginal difference between Government land (28.6%) and private land (30.5%).

- *RRAP process at Ward level:* One out of every five respondents (20.2%) reported to have participated in preparation of RRAPs for their respective Wards (two Wards comprising three project communities) with little locational effect.

Level of participation in the preparation of RRAP by different groups

The respondents have been asked to identify the level of participation in RRAP process on a scale of four points: very active, moderately active, less active, and not active. They are to identify the level of participation on this scale for themselves, perceived/observed for women and perceived/observed for children. The findings from the survey are presented in Annex Table 5.16 presents the findings.

Respondents' own participation level: The majority of the respondents from the two types have made self-assessment of moderate activeness with 47.8% in Government land and 59.3% in private land. However when the top two levels of very active and moderately are combined a dramatic picture emerge: there is a large difference of 20.4 percentage points in the level of participation between Government land (62.6%) and private land (83%). Although there is lower proportion of participation in RRAP the respondents in private land appear to have been more engaged relative to those in Government land.

Women's participation level: Combining the top two levels of activeness women's participation in RRAP process has been assessed to have been of slightly higher involvement (6.5 percentage points) in Government land (82.3%) compared with private land (75.8%).

Children's participation levels: Assessment of children's level of participation by the respondents skewed towards the lowest two rungs of less active or not active. The assessment of children's participation level for in the two types of land is identical in terms of combined top two rungs (in Government land it is assessed at 39.5% and it is 39.6% in private land).

Level of benefit from the project support: scaled responses

The survey respondents have been asked to express the benefits of the different interventions implemented in their respective communities on a scale with four levels of benefit for the different members of their family. The levels of benefit are: high, medium, low and none. They are asked to choose a level for the men, women, children, and the disabled separately. The frequency with which the 'high level' is chosen is rather low standing at 8.5% for men, 27.5% for women and 12% for children, as shown in the Annex Table D 5.17. However, when the top two scales of high and medium are combined it produces dramatic results.

When the frequencies for high and medium are combined, it shows that the interventions have benefited men for 67.8% of the respondents, women for 87.2%, and children for 42.6%. That a vast majority of the overall respondents feel that the interventions have been more beneficial for women is not surprising as women are responsible for cooking, fetching water, and targeted by the project to support diversification of income sources for economic resilience.



There are very little differences when the two types of slums are compared with the combined frequencies, in terms of benefiting men and women – they follow very closely the overall frequencies.

It is surprising that the frequencies of level of benefit for the children are relatively low at overall (42.6%), with some difference (of 13.3 percentage points) between Government land (57%) and private land (46.7%). It has been pointed out at the FGD sessions that there have been reduction in diseases suffered by children (water borne, skin), they are able to move freely through the clean roads, can play under the street lights in evenings, female children do not have to fetch water.

5.2.5 Project strategy

The three-pronged overall project strategy that is also the basis of the project’s theory of change, includes enhancing household and community resilience, empowering women, and strengthening institutional resilience.

5.2.5.1 Household and community

Knowledge level of CDC members: resilience leaders

During the survey the CDC members have been asked about the issues or subjects that they have learned in the training. Their recollection is somewhat low, as above for the entire sample, but not entirely discouraging for the project because they have not been given any hints by the data collectors.

Overall, no single subject name has been identified by all of the CDC members or even by 70 percent. The results are presented in the Annex Table E 5.18.

Preparations for fire: Just under two-thirds (64%) of them is able to recollect that they received training on how to face fires. It is surprising that more of them –particularly in private land living next to shops filled with highly combustible materials like cotton, has not been able to recall what they had identified as a major risk in the baseline. The difference between the two types of land ownership is less than five percent in favour of the private land.

CDC operation and leadership: The second highest frequently subject was CDC operation and leadership that is recalled by 40%. The two types of slum cannot be separated because of the paper thin difference from the overall frequency.

Disaster risk identification and planning: It may be disappointing for the project that only 38% of those who provided the leadership on the ground for enhancing the communities’ resilience, are able to name the subject of their major work area. There is some difference between the two types of on recalling that they were provided training on disaster risk identification and planning, 7.3% more CDC members in Government land recalled this.

Preparation for earthquake: Overall, just under one-third (32%) has identified that they received training on how to prepare for earthquake (and presumably what to do during an occurrence).



subject matter must have appealed to those in private land as 19.4% more of them recalled this subject. perhaps they perceive earthquake as a threat more than those on Government land.

5.2.5.2 Disaster Management Committees

Beneficiaries' knowledge of CCDMC

The sample have been asked about their knowledge of the activities of CCDMC although it is not an indicator in the project's M& E system but it suggests success of the project in disseminating the information to the communities as part of their preparedness as are also delineated in the Standing Orders on Disasters (SOD). There is three fold rationale for assessing the knowledge level of the beneficiaries regarding activities/service of CCDMC: (i) level of retention of project imparted knowledge; (ii) without knowledge retention the beneficiaries are unlikely to be expected to demand the services/activities; and (iii) the service providers or supplier of the services/activities should be made aware of the communities' expectations from them. The impact is likely to be felt in the responsiveness of government institutions.

The results are presented in the Annex Table E5.19 that shows that 34.7% of the overall sample is not aware of the activities of CCDMC with near identical frequencies when data is disaggregated by the types of slum: Government land (35.7%) and private land (34.1%). Those have offered a response on the activities of CCDMC are discussed below based on annex Table E5.19.

Organisation of rescue operations during disasters [clause 3.1.5.3: During disaster onset period of Standing Orders on Disasters -SOD]: The highest proportion of those who are aware of the activities (72.3% overall) reported search and rescue operations. There is some difference (11.2 percentage points) between the two groups of respondents with those living on Government land (76.3%) performing better than those on private land (65.1%).

Publicity of warning signals (under clause 3.1.5.2: Warning period of SOD): Overall 55.4% has identified 'dissemination of warning/forecast' as an activity of CCDMC. Similar to the first but of bigger magnitude, there is difference (17 percentage points) between the two groups of respondents with those living on Government land (61.4%) performing better than those on private land (44.4%).

Organisation of relief operations (clause 3.1.5.3: During disaster onset): Just over one-third of the respondents (36.7%) identified relief operation related activity such as 'coordination of all relief activities (GO-NGO)'. There is marginal difference between the Government land (38.6%) and private land (33.3%).

Awareness raising on Disaster Risk Reduction (clause 3.1.5.1: Risk reduction): A touch higher than one-third of the respondents (36.2%) thought making people aware of DRR is an activity of CCDMC. There is nothing much to choose between the two types of communities in terms of difference in knowledge on this activities.

Other activities: the respondents have also identified two other activities that are delineated in the government's SOD, namely, training on disasters (clause: 3.1.5.1: Risk reduction) by 29.9% and risk identification and reduction planning (clause: 3.1.5.1: Risk reduction) by 11.9%.



Since the formation the first two WDMCs as per project activity and target, the GCC has formed WDMCs for all of the Wards under its' jurisdiction that was not planned or targeted by the project but required by the SOD of the government. This suggests not only responsiveness but also success of the project's approach and strategy.

5.2.5.3 Fire Service and Civil Defense

The Disaster Volunteers: supporting national policy

The men and women, who participated in BRUP supported training, were initially selected by the respective Councilors of Wards 12 and 55, and then finalized by FSCD. They received training on techniques of search and rescue, firefighting and first aid, through six courses developed by FSCD's internationally trained and experienced trainers.

The criteria used for selection did not emphasise educational qualification only that they are able to read and write. In order to avoid the experience of CDMP trained UCVs – who were mostly students that left the area for work or higher studies, BRUP selection emphasised those with manual and other skills, who are more likely to remain in the locality over long term. The project selected electricians, masons, tiles worker, medical related skills, religious practitioners (for mobilizing the mosque goers), etc. they also needed to be of sound health, and willing to undertake the risks firefighting requires.

One-half of the UCVs is women –it was 20% in CDMP, who performed admirably during training and the 3-4 fire incidences of different sizes that have broken out since their training, according to the DAD of Gazipur FSCD. He also noted during KII with the Evaluation Team, that women were 'more attentive during training and practice' and that they 'do the duties assigned to them without fuss. He pointed out that women were the first to reach a fire site in Konabari, and when the fire-brigade arrived at the site about 30-40 UCVs were already there performing their roles. He informed that "more than 95% of the UCVs worked through the night, including women".

When the women came forward to volunteer for the training many men expressed their usual skepticism: "*what can women do? They can only start fire and not fight them*". The performance of the women UCVs during the mock drills and more importantly during the several fires in Konabari, have been widely admired, as reported by DAD of FSCD, CDC and EKATA members, etc. During a fire at a large garment factory in December 2016 the men and women worked closely with the FSCD and Bangladesh Army to fight a huge fire at Tampaco factory.

For the operation at Tampaco that was led by Bangladesh Army, the UCVs were split into three groups with specific responsibilities. They supported the professionals in search and rescue using concrete cutting and drilling equipment, directly fighting fire with water hoses, and providing first aid to the victims. Women participated alongside men UCVs, and they did not receive any remuneration for their efforts.

Talking with the UCVs, fire service, and observing pictures of training and Tampaco incident it evident that BRUP supported UCVs were provided training of very high standard, and their



performance met expectations. Gleaning words from different sources including one GCC Councilor: UCVs showed commitment, dedication, discipline and most notably courage.

It is noteworthy that there is some difference in their respective approaches between FSCD and BRUP. The FSCD approaches the need for training women as UCVs from the perspective of the need for providing first aid to female victims (patriarchic), whereas BRUP project views it from the perspective of disproving women are vulnerable and creating space for women in leading resilience building (empowerment).

Beneficiaries' knowledge of FSCD responsibilities

It is expected that with improved knowledge of the roles and responsibilities of FSCD the project beneficiaries will have improved their understanding of institutions that can be accessed in order to strengthen their resilience in with respect to different types of hazards. The effectiveness of the third component could be gauged by the knowledge base of the beneficiaries regarding institutions.

The Annex Table E5.20 presents data relating to level of understanding of the beneficiaries regarding FSCD.

Firefighting: Overall 77.8% of the respondents are aware of the responsibility of FSCD to respond quickly after receiving call for firefighting. There is a small gap (8.1 percentage points) in the knowledge level regarding the firefighting role of FSCD between the two groups with better knowledge in Government land (80.7%) compared with private land (72.6%).

Provide training on fire prevention and firefighting: Overall 59.4% of the respondents are aware of FSCD responsibility for providing training on fire prevention and firefighting. There is little difference between Government land (60.8%) and private land (56.8%).

Conduct mock drills: Overall 55.2% of the respondents are aware of the responsibility of FSCD for conducting mock drills. There is a small difference of 10.9 percentage points for Government land over private land.

Provide advice on fire prevention and firefighting: overall 54.8% of the respondents has identified the advisory function of as one of its responsibilities. There is a small difference of 11.6 percentage points for Government land over private land.



5.3 Efficiency



Efficiency of the project is normally measured by the relationship between inputs and outputs or how successfully and efficiently the inputs being transformed into outputs. It is about project making optimal use of resources to help satisfy changing wants and needs while minimizing waste and inefficiency.

The field level information and in depth analysis of the progress documents, financial documents and project proposals of BRUP project provided the review team a robust picture on the level of efficiency of the project. While looking into the efficiency of the project the following area were being taken into consideration:

5.3.1 Implementation of major activities

Beneficiaries Selection

The project reached the targeted beneficiaries-the urban slum dwellers, through following steps (Figure-5.3.1):



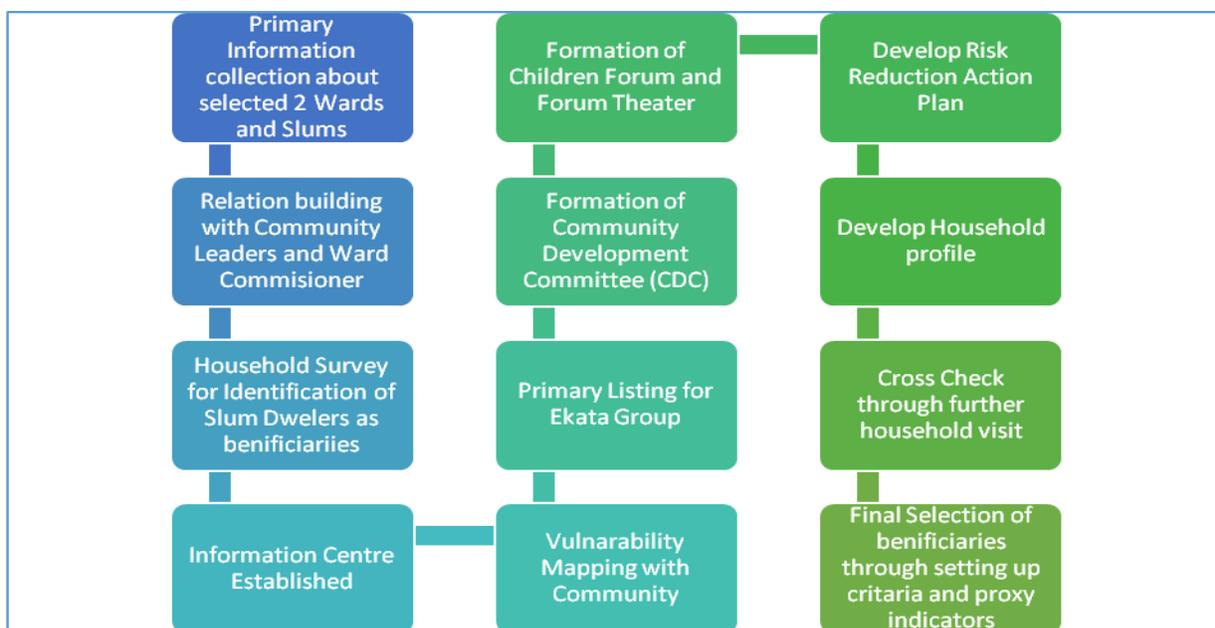


Figure 5.3.1: Beneficiary Selection Process

In the whole selection process, involvement of City Corporation was the key factors for selection the beneficiaries. Other factors were maintaining the community participation process for identifying the nature of hazard and vulnerability of slum dwellers and the poor and extreme poor women at the project sites.

The project was supposed to select 8000 beneficiaries from two wards. The progress report and beneficiary list of BRUP demonstrated that the project reached the targeted direct individuals beneficiaries (Table-5.3.1), however the list of indirect beneficiaries have not been properly documented.

Table 5.3.1: Number of Beneficiaries

| Beneficiary | Target | Female | Male | Total |
|------------------------|--------|--------|-------|-------|
| Direct Beneficiaries | 2000 | 1,138 | 902 | 2,040 |
| Indirect Beneficiaries | 6000 | 3,198 | 3,034 | 6,232 |
| Grand Total | 8000 | 4,336 | 3,936 | 8,272 |

The project team was unable to specify how many households have been covered by this project because the indicators did not target households as beneficiaries rather it targeted individual members of the household as beneficiaries. In most of the cases, members from same households became project beneficiaries for different activities/groups.

The study revealed that, in all slums, more than half (50.9%) of the households were involved in more than three groups/platforms, about one-fourth (23.6%) in single group or types. In Government land, two in three households (63%) were involved in more than three groups/types (Table 5.3.2).



Table 5.3.2: Beneficiary household involved in different groups

| Involvement with | Percentages of households by type of slums | | |
|----------------------|--|--------------|-----------|
| | Government land | Private land | All slums |
| One group/ type | 15.0 | 38.8 | 23.6 |
| Two groups/ types | 22.0 | 31.6 | 25.5 |
| Three+ groups/ types | 63.0 | 29.6 | 50.9 |
| N | 173 | 98 | 271 |

Intensity of implementation of the project interventions within timeframe

The project has addressed three key strategic goal efficiently. – Strategic goal-1: Household and Community Resilience; (ii) Women Empowerment and (iii) Institutional Resilience

The first strategic goal encompassed the formation and development of Community based Development Committees (CDC), Risks Reduction Action Plans (RRAP) to identify, plan for and respond to natural disaster, Urban Community Volunteer (UCV) for responding to disaster, Community based garbage management for managing garbage in slums; Children Platform for awareness on children issue, Theater Forum for theater groups for creating mass awareness on social, environmental and disaster risks, and mock drills on how to fight with fire.

Through identification of community leader and involving them into CDC, the community felt strong bond between themselves in both the slums (selected for CDC FGDs). In the private slum, the positive roles of land and house owner played a key role to forming the different committees and functioning of these. On the other hand in Government land the previous experience of evictions and connection between political elite and slum dwellers expedited the forming and managing the community based organization at community level. The provision of Community Volunteers as mentors of Ekata group was the helpful action for achieving the related results of this strategy.

The second strategic goal covered formation of EKATA groups, vulnerability analysis for women and girls for exploring status of women in each slum, input supports to the most vulnerable women for creating livelihood options/skills building/entrepreneurship; Awareness/sensitization on VAW for men, women and children; establishment of knowledge and information Hub for providing information on services from other organisations.

The process of functioning of EKATA groups were being hindered at the beginning due to the presence of various industries and job opportunities. The women analyzed their vulnerability and needs in this context. Business planning and input support for IGA has increased the family income. In some cases women had experiences on IGA operation. This experience expedited the better utilization of resources.

Under the third strategic goal Gazipur City Corporation Disaster Management Committee was successfully formed and their capacities were developed through meetings and orientations. Other major activities include: formation of Ward Disaster Management Committees (WMDC), preparation of Ward Risks Reduction Action Plans (WRRAPs) based on Community developed RRAPs for addressing risks at ward level; development of masons for promoting safe construction and carrying out of advocacy works.



The project progress and other documents demonstrated that all of the activities have been implemented very successfully and timely addressing all logframe targets. In many cases it even exceeded the target for example: 325 volunteers were developed against the target of 200; 57 WDMCs were developed against target of only two.

Under this strategy the following mainstream service delivery institutions are targeted by this project.

- Gazipur City Corporation
- Fire Service and Civil Defense (FSCD) Office

Institutions that formed/ developed following committees/ groups for providing better service to urban people:

- Gazipur City Disaster Management Committee.
- Ward Disaster Management Committees.
- Urban Community Volunteer Groups.

The Standing Order on Disaster (SOD) has influenced City Corporation for developing WDMC and CC. Although the decision making process was slowed at the City Corporation Office due to the long absence of elected Mayor but the supportive roles, positive intension and good leadership of Ward Commissioners accelerated the whole implementation process.

On the other hand existing fire service policy and experience from CDMP on development of community volunteers were very much effective for implementation of this project strategy. Due to women's attachment in Police and Army in Bangladesh presently, the girls and young women feel encouraged to take part in any special force under government, like FSCD. They feel that the Volunteer Group can be a window or preparation for joining the forces. FSCD also working with Private Companies and Industries for conducting Mock Drill at the working place, the project helped to them to implement their activity with the private industries within project areas.

5.3.2 Management and Coordination

The project was implemented by CARE Bangladesh and VERC in collaboration with local communities, Gazipur City Corporation and established a good example of ownership of project activities by the local communities. CARE introduced the overall concept based on their experience elsewhere

The lead partners, sub-partners, government department especially fire service, city corporation and above all communities worked as one unit particularly with respect to RRAPs, DMCs and UCVs. Committees at different levels were formed with requisite number of members, meetings held on regular basis and performed well.

CARE played the lead role for overall program management, coordination, process design, regular monitoring, technical support and knowledge dissemination to the community and PO staff through its Field office at Gazipur. In addition, CARE-Bangladesh office provided oversight to the whole project including donor reporting, financial management, audit and compliance. In some cases, CARE-Bangladesh office was involved in the national level advocacy and liaison with the line departments (DG's Office of FSCD) for achieving the project goals in time.



Under the close supervision and guidance of CARE, VERC implemented all activities at the community level, i.e; community and beneficiaries selection, routine visit, stakeholder mobilization, awareness creation, hardware delivery and installation etc.

In each quarter a coordination meeting with the presence of senior management staff of CARE and VERC were conducted regularly at CARE Dhaka Office. In each month, the field team of CARE and VERC met together at Gazipur CARE field office or VERC field Office as regular basis for progress review, regular planning, reporting and knowledge sharing.

Coordination at Community level

At community level the project established six community information centres in six communities under two wards of GCC. They called it knowledge information centre (KICs). These centres have been used as meeting place of community based organization i.e CDC, Ekata, Children Forum and Forum Theater. One community volunteer was responsible for community mobilization and conducting session for EKATA groups.

Capacity building of project staff

For improving the staff capacity, CARE has developed training modules for the PO staff and provided training in one batch. The training subject matters included urban resilience, women's empowerment and project strategy. Although hands on orientation and regular feedback process practiced by Care field office for the implementing partner's Staff and volunteers.

5.3.3 Monitoring and Information Management

CARE Bangladesh has followed its M&E system for this project. The M&E staff of CARE has developed an M&E Framework as per following the Logical Framework of the project. A baseline survey has been conducted by external consultants at the beginning of the project.

In each quarter CARE formulated monitoring report for the Donor agencies using qualitative and quantitative data. But due to absence of these quarterly reports the evaluation team is unable to analyze the quality and usefulness of the reports at project level. The project had no plan to conduct mid-term review. At field level VERC also appointed two monitoring officers responsible for analyzing monthly data and effectiveness of activities. An M&E Officer was appointed by CARE at their field office for analyzing the data and field reports on regular basis. The Evaluation Team found that excel based data management system have been used for MIS. The documentation process was unable to deliver household wise and beneficiary category wise information through a uniform way. Even regular income gaining data were not digitized in the data management system, although the female IGA operators kept their income data as regular basis through passbook. Availability of digitized business data would have enabled the Evaluation Team to assess the sustainability of the IGA through simple profitability analyses.

The indicators in the log frame and M&E Framework are not aligned properly. The M&E plan was not reviewed by the evaluation team due to unavailability of this document.



5.3.4 Financial Resource Utilization

The total budget of project was EURO 1,400,000 and as per data provided by CARE Bangladesh the total expenditure for this project as of 31st October 2017 is only EURO 260,519. As per this information only 18.61% resources utilized from total budget. The study also found that most of the amount (80.5%) was utilised by implementing partner VERC and only one fifth (19.5%) amount utilised by CARE for implementation of this project. Per beneficiary cost (Calculated direct and indirect beneficiaries both) of this project is only EURO 31.00.

Within the specific goals or strategic area the distribution of expenditure is shown in the following graph (Figure-5.3.2). According to following figure, more than half of the budgets spend for achieving strategy-1: Household and Community Resilience; more than one-fifth for Strategy-2: Women Empowerment; and more than one fourth (28.5%) for Strategy-3: Institutional Resilience.

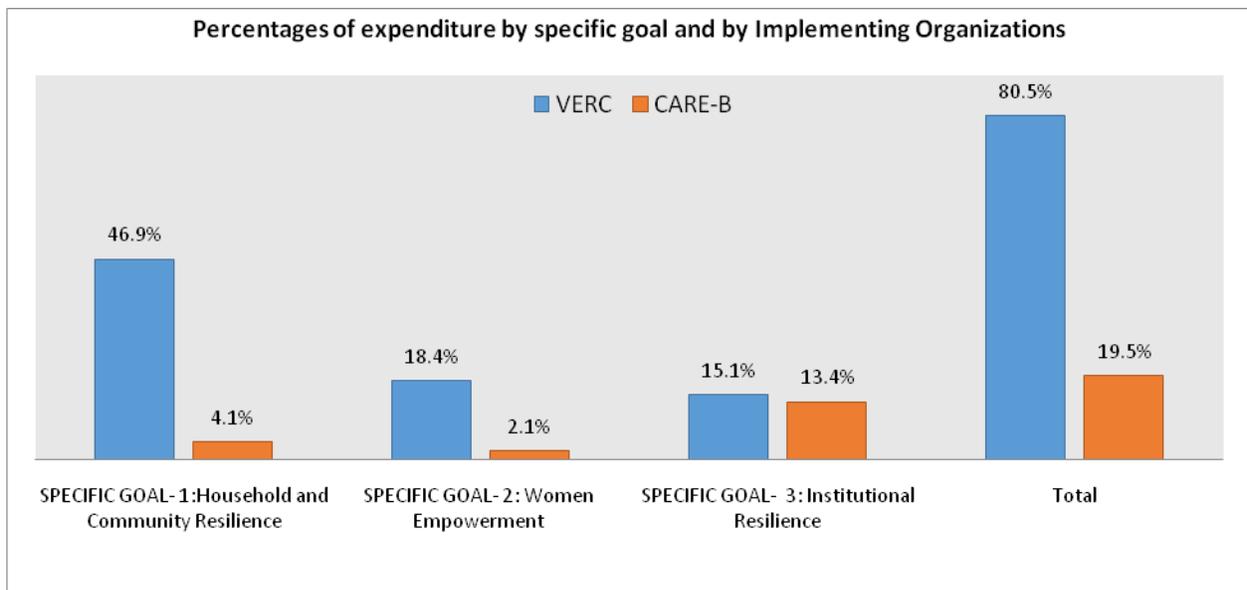


Figure 8: Expenditure by specific goals

The study team found that the project provided direct financial support to the following for carrying out project related activities: Gazipur City Corporation for DMC formation, FSCD for training of both Officers and UCVs, and CDCs for implementation of RRAP interventions; in order to address the project objectives. Due to lack of information the study team faced difficulty to calculate the other's contributions for achieving this project objectives or specific goals.



5.4 Lessons Learnt



There is no one size that fits all: The frequency distributions for the different measures of preparedness suggest the sample respondents have different preferences, usefulness or need as not a single one measure is universally adopted by them. This is same for the two groups of households, with the exception of the difference in keeping portable cookers. The condition and the hazards experienced by the different slums are important to understand what the households require.

House and community priorities can be different from the project concept: The project originally budgeted for specific interventions such as waste management (ranking range between second to fifth) and input support for women (ranking range between sixth and ninth) the communities identified and prioritized for interventions other hazards and risks ahead of these. Though street lighting has been implemented across all six communities the issue of darkness received low rankings () from the communities perhaps due to domination of men in finalization of RRAPs. Similarly, input support for women's IGA have been a low priority for the communities ranking between sixth and eight. Though both of the pre-budgeted interventions have been highly appreciated some feeling of lost opportunities have been expressed.

The urban working poor are unlikely to take part in project activities during day time: The level of beneficiary participation at community level –at one-third, at any level and half at community level any suggest the urban poor are not available for project activities during office hours. This is an oft faced difficulty faced by most if not projects implemented in urban context. Those who do are likely to be less attentive thus lower knowledge retention. This needs to be factored in to design of urban projects so that participation and attention levels are both high.

UCVs are more cohesive and committed because of their roots in the communities: Unlike the volunteers of CDMP, the UCVs of BRUP have been selected from the project communities where they live and have family and friends. Their families are involved in in various project activities and benefit from the interventions implemented. Some of them have participated in such project activities as transect walk and survey of households along with project staff, in RRAP preparation, etc. They are responsible to be the first responders in their own communities.

5.5 Impact



The project is an integrated initiative that builds the resilience of targeted community to more effectively cope with seasonal and unanticipated disaster and hazard. In conjunction, The Project has strengthened the capacity of targeted institutions in the GCC to plan for and provide services that mitigate the impact of manmade and natural disasters on poor and extremely poor households. The project has fostered women as better risk managers with proper knowledge, promoted access to social and political platforms and economically empowered them to manage risks.

There's now more trust and feelings for each other. . . in the past the 30 of us [women] never sat down together to talk, never discussed anything. Now we can share our thoughts, feelings, with the others . . . we talk about our hopes and fears, personal and family life . . . we have become close. Whenever there is need we help each other . . . people are more willing than in the past to help each other, particularly during fire and afterwards.

-FGD Participants, EKATA Group, Uttar Tetultola

The success of the project in disseminating the information to the communities as part of their preparedness are delineated in the Standing Orders on Disasters (SOD). Prior to the project, no garbage management system was operating in low income communities to clear away household or community waste. Failure to regularly clean out side drains resulted water logging and particularly acute during the rainy season. BRUP facilitates community based garbage management system in overall 6 communities. The project's garbage and waste management system has encouraged the community to practice this regularly. In addition, household level disaster preparedness has helped combat with local hazards (fire, water logging).

“After BRUP promoted awareness to preserve sandbag and water, a positive change has observed. On 17th May, 2016 a fire broke out at Kolabagan Slum when Sandbags were found in most of the houses. That's why people could throw water and sands from all the sides to extinguish fires and brought the fire under control before get spreading.”



-Sufia Begum, (CDC president, EKATA member and Disaster Volunteer) from Uttar Tetultola.

Reference to community, water logging is a major issue of concern. Storing dry food and a portable cooker to cope with seasonal water logging or flood, is one of the best tools. The community people also reserve dry rice, chanachur (local dry food) and portable stove in their houses for emergency.

Information about emergency services refers to whether or not people know what emergency services (Fire Service, Police etc) do and whether they have the contact number of these services.

“All we have emergency contact numbers saved in our phones. I can recall the Fire service phone number anytime.” –Aleya Begum.

In addition, mock drill is an advance way to proactively response to disaster, especially during fire and earthquake. The community consider mock drill as the best way to combat disaster. BRUP facilitate Aleyad a number of mock drills in public places, schools, in front of factories etc.

“Mock drill is the best part of disaster awareness initiative, as it creates the opportunity to experience it live.” - Selina, EKATA member from Nadir par community

The children as change agents also aspire to create a safer and enlightening environment for their peers, family and community.

Input support to vulnerable women beneficiary and their engagement in different platforms enables women to actively participate in household and family level decision making and established an ownership over their income. The status and value of the women have increased to the eyes of their husbands as they have seen the increase in income. Developing a habit of savings increase resistance against idiosyncratic shocks, unanticipated disaster or sudden financial shocks. Being the account holder and having an ownership over the accumulated savings, women’s decision making power and importance has increased.

Jhorna from Nadir par said- *“My husband helps me in household chores as after getting input support I have to dedicate more times to push up my business.”*

Rina said- *“Participation in community meetings, Govt. forums and being an earning member, increased my importance in family. My husband does consult with me about family affairs.”*

Another area of flourishing women leadership was seen through engagement with FSCD volunteer group. After BRUP intervention and facilitated a number of platforms (e.g. CDC, EKATA) to get engaged with, women participation in different forums has increased and they enjoyed the knowledge sharing. They participated in formal platforms (e.g. WDMC, CCDMC) and utilized the scope of giving opinion.

“In WDMC meetings we raised the demand of more solar light and staircase for safe movements of women and aged person. Councilor assured us that he will take care of this issue.”

- Rokeya Begum, (CDC Chairperson and WDMC member) from DaskhinTetultola



“Previously we, women were not allowed to talk, giving opinion. Now have the courage and get the scope to talk. Even, we can directly communicate and talk to Councilor when feel necessary.”
- Jhorna (CDC+ EKATA+WDMC member) from Nadirpar community.

Not only women, overall community acceptance has increased through this initiative. Daud, CDC Chairperson expressed his feelings- *“My acceptance as a local leader has increased. Now can achieve the designated work nearly 90% while could do only 10% before. The success rate increased cause, direct and regular communication with ward Councilor has been established. Now Ward councilor and City corporation respective persons know me. They communicate with me over phone if needed.”*

However, the women often experience "time poverty" as they shared that they have to balance between engaging in income generating activities, social work, attending meeting with caring for their family.

Financial access facilitates day-to-day living, and helps families and businesses plan for everything from long-term goals to unexpected emergencies. As accountholders, people are more likely to use other financial services, such as credit and insurance, to start and expand businesses, invest in education or health, manage risk, and weather financial shocks, which can improve the overall quality of their lives. It is recognized that diversifying income source and reducing dependency on one single person is crucial in terms of economic resilience. BRUP provided support to the most vulnerable 300 women with additional livelihood opportunity. After BRUP provided the input support, dependency on single income source has been reduced while multiple income source has been increased. In addition, practice of personal savings proved highly beneficial in times of an emergency. BRUP promoted financial inclusion for low income community by untangling the complexities.

“We feel it safe to preserve money in bank; it has reduce our dependence on high interest loans on mohajons and moneylenders”- Nuri from Nadir par community. “We keep going to deposit money by our own, have a good business relation with bank officers. It’s amazing! Previously we thought that they will not count us as customer as we are not rich and our amount of money is not that much” she added.

As a result, number of active users of formal financial services specifically women have been increased after the project implementation.

Beneficial effects for family members due to project interventions: qualitative responses

Many different benefits that the beneficiaries reported they are enjoying as result of the interventions of the project, outside of the structured questionnaire that has been designed more for assessing the project indicators, are not quantifiable in a meaningful way. Those open-ended responses have been categorised in to broader areas of benefit that are relevant for the project concept and underpinning.



Environmental benefits: There is reduction in air pollution; slum is much cleaner due fixed place for garbage disposal; reduction in smoke (from cooking); waterlogging situation has been improved; no longer face problem with cooking during floods;

Physical benefits: movement around the slum after dusk is possible; there's been reduction in snatching after dark; staircase made it easier move outside of slum; it is easier to walk around the slum due to road renovation; no more afraid of movement after dusk; women don't have to bath in open dirty river; supply of safe water has been most beneficial;

Economic benefits: Earn income from rearing poultry; making savings from income; family income have increased; families have diversified income sources; started own business (women) with money from the project; can use income from IGA for health care/treatment;

Institutional benefits: Can go to government offices directly; fire service trust the UCVs;

Social benefits: Never done anything like a group in the past; people are more cooperative with each other; women are now close to each other; community people respect the UCVs.

Benefits for women and children: women's empowerment has improved; women are engaged in income earning/self-employment; reduction in eve-teasing; women's work load have been reduced; women have benefited from gender equitable bathrooms; reduction in child marriage; have access to lot of emergency phone numbers; don't have to go far to fetch water;

Behavior change and health: have learned about cleanliness and hygiene; it has been useful to have learnt about hand washing; there's been reduction in diseases due to cleanliness; there's been improvement in health situation; children wash their hands after using toilet; women ensure children's hygiene; taking better care of disabled; take more care dealing with fire in kitchen; husband doesn't litter the hose after the way house is cleaned; storing sandbag and water in kitchen/house; storing dry food properly; entertainment for children at the KICs; men are more attentive to their household work;

Reduced vulnerability: Can easily put out fires; learnt what to do in case of fire; learnt how to face hazards/disasters; learnt what to do during earthquake; learnt how to be risk free in the kitchen/house; learnt first aid and practice it when needed; can directly get in touch with the fire service.



5.5 Sustainability and Scalability



5.5.1 The hardware: Physical resilience

The management of hardware including maintenance and repairs, such as water system, garbage bins and vans for carrying, sanitation units, renovated drains and streets and the case one specific community staircases, are highly likely to be continued by the communities. The communities have organized their own management systems including operation of bank accounts, collection of revenue, payments to employees, etc in which the beneficiaries and other community members have faith participatory nature. CDCs are likely to lead the processes.

It is however, unclear as to the likelihood of the CDC offices or the KICs continuing to function as there's some doubt over payment of rent for the these premises. Some communities are looking for alternative such as use of premises for activities of other NGOs (such as Brac's primary schools that are not needed in the evenings), use of a member's room that is relatively large or who is a house owner, renting of rooms at lower cost or sharing the rent with other users.

There is promise of support for the communities from the Ward Councilor of Konabari, who has championed the cause of the project with his active support and cooperation, to provide help for the smooth functioning of the management systems for the physical structures and materials funded by the project.

The biggest source of encouragement for the continued functioning and management of the infrastructures and materials is the positive experience of such community-led management of common assets available in some urban contexts. One of Care's water and sanitation project is continued by community-led management in Gazipur. There are other such positive experiences in Dhaka such those of DSK's water and sanitation interventions in Kalyanpur porabosti and Korail in Mohakhali.



Furthermore, as the communities' willingness to pay for such facilities have been proven elsewhere (Gazipur and Dhaka) and in some of the project communities that have started to raise revenues for water system and garbage collection before the closure of the project. The communities as a whole agreed to increase the fees for garbage collection in anticipation of loss of project funding from January 2018.

At one community it is reported that more families are joining the water supply system even though they have been somewhat skeptical about it early on.

5.5.2 The software: Awareness of beneficiaries

As has been seen in section 5.2 the awareness and participation levels of the beneficiaries varies quite greatly. At the FGD sessions the participants struggled to remember the topics on which they have been provided awareness and the survey results show low frequencies of recall except a very few topics, it suggests lack of depth in the knowledge base of the beneficiaries. The exceptions being CDC and EKATA members having good knowledge regarding their platforms, and some of the resilience related subjects. The survey shows knowledge of social issues are very poorly recalled.

The lower level of the education of the beneficiaries meaning they had little experience of structured learning, may be a factor. The large number of topics introduced to them in a short span of time with probably little scope for revision or refreshing the memory available to them and the project. Both of these have a bearing on the extent of attention the beneficiaries have been able to give in the awareness sessions. The attention level is likely to fall if had other more pressing concerns such as work or family matters.

On the other hand, not every single beneficiary need to be a master of all the topics including the social ones; even if they have not identified for example child marriage as a topic of awareness, they are likely to know the required action as and when such things occur. Also, as their social interaction and cohesion have reported to have increased during the course of the project they can easily share their knowledge among themselves. Few individuals support the others with information or knowledge at a time of need.

The awareness raising sessions are needed and have not been wasted as the beneficiaries have highly appreciated the scope for learning. Regardless of individual knowledge recollection capacity sessions on the whole range of awareness topics are needed so that collective knowledge bank is enriched and used.

5.4.3 The Disaster Volunteers

The experience with the volunteers created under the CDMP is not good as vast majority have dropped out. It has been argued by the fire service personnel that at the time of recruitment for volunteers to be trained under CDMP the memory of the devastating Rana Plaza was fresh in the minds of the people particularly young people. The advertisements for recruitment of volunteers attracted large numbers of young people particularly students of secondary and higher levels in 2010 but after their training over the course of time the vast majority ceased to respond to calls by the local fire service. It has been reported that most have left Gazipur area for further education or in search of jobs. Another reason for the discontinuation of volunteers is that there



was no scope for “nursing” the volunteers post training; in other words there was no regular contact with them from FSCD.

Both recruitment policy and design issues have been addressed in the BRUP project on the basis of previous experience (another example of the project being based on evidence). The recruitment policy for volunteers has been such that it has focused on those who have longevity in terms of residence of the area and high likelihood of continuation. The minimum educational requirement has been withdrawn. The Ward Councilors have also been involved in the recruitment process because of their detailed knowledge of the constituents that they represent.

The WCs made the first selection and the fire service the final one. They considered those with manual skills who have self or paid employment in the locality; such as electricians, drivers, masons, teachers, tiles workers, skills related with medical or health care, imams (to mobilise mosque goers), tailors, etc. They needed to have the right ‘mentality for this kind of work’. They also needed to be of ‘good health’. However, three of the nine UCVs participating in one of the FGDs have no such skills but may have other strong reasons: two are housewives and one student both of whom have been active during recent fires in Tongi and the industrial fire at Tampaco.

In terms of project design that differed from CDMP, the UCVs of BRUP project have received regular ‘nursing’ since training as they attend refresher sessions conducted by the FSCD officers on a quarterly basis. As noted earlier all of those surveyed attended the four refresher sessions held in 2017. These regular contacts with FSCD not only enhanced and deepened their skills – as evidenced by their work at Tampaco fire alongside Bangladesh Army but also a heightened sense of duty as disaster volunteers.

There remains some concern in the minds of FSCD regarding continuation of nursing for the volunteers as the Department does not have any budget of their own for conducting the refresher sessions. The Department may be able to make a venue and resource persons available but are not in a position to provide transport allowance or even refreshments to the volunteers. Enthusiasm and sense of responsibility alone on the part of UCVs may not be enough.

Whether or not VERC the implementation partners have the budget for supporting this nursing process is not clear to the Evaluation Team.

On a positive note, the current time, a month after the closure of the project may not be appropriate juncture to question the commitment of the UCVs to their responsibilities; there may be a slack in attendance at refresher sessions they may well continue to respond to call to duty at times of fire in the locality or other emergencies. They are highly likely to be the first responders to emergencies in the project communities.

5.4.4 Unmet needs

There is considerable extent of unmet needs or needs were under-met in the areas of safe drinking water, drain renovation and sanitary latrines but interventions are useful and provide value for money. From the survey it may be interpreted that around a half of the sample does not have access to project supported safe water systems and sanitary latrines, at some communities



water logging has been highly ranked hazard no remedying interventions have been implemented.

At the FGD with CDC one Konabari community they feel that there's still need for a second water system with 5000 liter capacity storage tank (in addition to the one they have), 25 more community latrines (in addition to the 12 supported by the project). In addition, renovation of drains and footpath have not been supported by the project as a result of which drains overflowed and flooded their home during the rains in 2017.

The gap among the direct beneficiaries with and without unmet need clearly a need for the expansion of the project, since the project has proven largely successful in identifying and implementing intervention.

5.4.5 Policy implications/support needed

Support from both FSCD and the public representatives and the CEO of GCC suggest similar cooperation and support will be forthcoming if the project is expanded in Gazipur or replicated elsewhere. There is also acceptability of the project at the higher levels at FSCD Headquarters. The government's policy of training 60,000 urban disaster volunteers across the country has yet to achieve the target. In addition, the governments Standing Orders on Disasters require the formation of DMCs at all urban locations.

Neither the FSCD nor urban representatives and administrators are likely to be able to achieve the government targets on their own or sustainably. Scaling up of the project in Gazipur and/or elsewhere in the country likely to support the relevant institutions to achieve the government targets and that creates a scope for Care Bangladesh to support the policy of the government, which will contribute to good governance as well as resilience building.

BRUP has proven that there are justification and rationale for undertaking a similar project, it has also proven the strategy and the interventions to enhance living quality of households and communities,



Section 6: Conclusion and Recommendations



6.1 Conclusion

The overarching conclusion of the Evaluation Team is that BRUP project successfully implemented an intervention that support national policy, programme and Standing Orders on disaster management in microcosm. It resonates with global guidelines as well as South Asia framework on urban resilience to hazards emanating from human, natural or climate change sources. The project has been successful in proving that women can lead resilience building connecting the households and communities with state institutions.

The Evaluation Team's conclusions regarding the specific achievements of the BRUP project are presented below with respect to the project's three-pronged theory of change and the associated outcomes and outputs of project from its Logical Framework Analysis.

Outcome -1: Enhanced resilience of households and communities

The community members' knowledge and adoption of hazard preparedness measures have improved none of the measures promoted by the project appear have universal appeal among the individual households; even with the presence of CDCs, EKATA, CFs and UCV, all of whom carry out mobilization and motivational activities. It is to be expected that the households' – when individually resilient the community resilience improves, choice of preparedness measures is contingent upon their perception of what constitutes a threat is based on their experience. For example more households in Tongi attended mock drills, while portable stoves more likely to be preferred in Konabari; in the former there is higher probability of fire while the Turag river present a bigger flood threat in the latter. The fire is also perceived in Konabari and hence both preferred sandbags and water buckets.

Although, in general the project has successfully enhanced household and community resilience to hazards as 55 percent of the households has already adopted at least two measures at both type



of slums (mentioned earlier) the consideration of individual perception based on locational experience and choice of preparedness measures need to be highlighted.

At the community level the CDCs have demonstrated their enhanced capacity to develop and implement RRAPs at all the 12 communities (100% achievement). For this achievement all CDC have followed a participatory process in formulation and annual updating of their respective RRAPs. This they have achieved with 100 percent participation in training organized by the project, have maintained a reasonably high attendance rate at the regular meetings with CDCs in Government land exceeding the indicator target but CDCs in private land are closely behind.

Community resilience has been further enhanced through the formation of CFs who remain safe themselves and motivate others, and development of UCVs to act as the first responders as well as provide support to professional responders at times of emergencies. For their respective responsibilities they were provided training, at which both have participated at high rates: attendance CF meetings nearly touched the indicator target while it is near universal for the UCVs (the target being 80%).

In addition to the above platforms the project strategy included the holding of events for mass communications such as mock drills and Forum Theatre in there targeted numbers of 12 and 36 respectively. These events have had the desired effect on the community in terms of awareness of what to do during emergencies and the latter addressed social (early marriage, women's empowerment, child rights) and behavioural issues (hand washing, safe water, hygienic latrines, etc) that have been highly appreciated and recalled by the beneficiaries. The Forum Theatre appears to be a very effective medium of mass communication because large numbers of beneficiaries have been to recall many of the topics/subjects.

In terms of implementation of the interventions delineated in the six RRAPs, the project has been successful in achieving the output. The communities having completed the hazard, vulnerability and risk assessment and prioritization of interventions, have duly completed the implementation activities. The number of interventions implemented at each community range from the lowest of five in Pukurpar Baimail (private) to the high of nine each at Dakhin Tetultola (government) and Nadirpar Baimail (private). All the communities have received the following: household waste management, input support for women's IGA, solar street lighting system, drain renovation, and improved cooking stoves. This reflects project's policy (garbage collection) and their approach to women's empowerment (women's IGA, street lighting) and these have had the desired effects. These have contributed to four of the five components of urban resilience: environmental resilience (waste management), social resilience (working together), physical resilience (street lighting, drain renovation) and economic resilience (IGA for women).

The women in the communities have benefited most from these interventions to due to economic empowerment, reduction in gender based violence perpetrated during darkness, cleanliness of the slums as well as health benefits.

It need to be noted that only the Ward Councilors of the project locations have been indirectly involved in implementation: in Nadirpar Baimail slum one much smaller capacity water system was provided by the Councilor of Ward-12. The GCC, the WDMCs or FSCD have not been



involved in the implementation process (this had been communicated to the Evaluation Team by the project management).

Outcome -2: Poor and extreme poor women are empowered to be better risk managers and influence decision making at household and community levels

In the Project, first and foremost, women were noticed, recognized, and had their own voices. The concerns and needs (such as, darkness) of the women were taken into account by the Project during implementation. They were able to engage in project activities and meeting including garbage collection, water initiative, training of urban community volunteers, cash grant for income generating activities. Through this project, the women have shown their rights to act and claim, legal rights, rights to access social services and even when they were in emergencies (such as, going to Member of Parliament for relief when a fire incident happened in the slum). There were no barriers to attend different drama and cultural show organized from the project. Furthermore, group activities have provided a valued new opportunity for the women to meet together and to discuss issues relating to their families, their financial situations and the wider community.

In the CDC, more than half of members are women. However, it is found from the visits to CDC for the evaluation that the men hold the higher position such as, president and general secretary in CDC and thus, play decision making role. The project staff shared that in other CDC, if president is male then general secretary is female. Most of the members in CDC are also land owners. EKATA consists of all women and they were provided training on awareness on different social issues. More holistic strategies can be adopted in future programming, such as, involving men and adolescent boys, community members and other key stakeholders, to raise awareness of women's rights and burden of unpaid care work and motivate changes in behaviour.

From the Project, 7 (seven) staircases were constructed for Person with disabilities, old aged, pregnant women and children. This is not the scenario of all communities. One of the greatest difficulties mentioned by the community people is the actual census of population of Person with disabilities and hence, they remain uncounted and therefore invisible.

The project considered the issues like: protection from gender-based violence (addressed 'darkness' as a risk and vulnerability for girls and women), effective participation in decision making in activities to reduce risks (Ensured that the views of women are listened to and their priorities acted upon in social vulnerabilities and disaster risk management decision making which affect their wellbeing), greater access to technical training (Enhanced their knowledge, skills and capacity to adapt and reduce disaster risks, raising awareness their prospects to pursue more resilient livelihoods and to safeguards their future through UCV and other training activities).

The Project tried to establish that gender equality and equity are not only a question of fundamental rights and social justice but also are prerequisite and community's assets for resilience. The transfer of knowledge on disaster preparedness and risk reduction, specifically on fire had a transformative impact in the community. Some women experienced backlash to the changes to traditional social norms brought about by project interventions, mostly in the form of



negative talk about the women and the project activities in the community. Experiences in these cases indicate that some of these problems can be overcome as the benefits become more visible. However, this may take time and so strategies should be in place to support women to cope with backlash.

The Project conducted separate community mapping with women and girls to identify vulnerabilities as well as existing resources and services (e.g., local medical service providers). Hence, engaging and empowering women were beneficial means of strengthening resilience to disaster risks. The hazards like darkness, lack of safety, insecurity did not come out while doing RRAP with men while these were major issues for the women when they were consulted. Gender roles and relations thus shaped the vulnerability to disaster, conversely they also shaped community's capacity to prepare, withstand, and recover. Due to their role as primary caregivers within the family and often within the wider community, the women have shown their particular experience and skills to contribute to disaster risk management. They have strong local knowledge of natural resources, surroundings, and valuable links with others in the community (such as, whom to go to for getting immediate relief).

Besides these safety and security issues solar lights also has a positive impact in climate change footprints, it reduces pressure on electricity and fossil fuels. It also has DRR implication. Since Gazipur City is highly vulnerable to Earthquake and Fire hazard, solar lighting could be a good source of emergency lighting system during disaster period. As an example, on 7 February 2016 at 2 am a devastating fire started in a factory close to the Daskhin Tetultola slum in the Millgate area of Tongi, Gazipur. The whole area was disconnected from electric grid. Emergency response also got interrupted due to blackout. It is also a prerequisite for any rescue operation in fire hazard to cut off the electric connection. In this case, emergency lighting is very essential for rescue operation. Solar-powered street lights can be a good way to illuminate evacuation routes during power outage.

Outcome -3: Enhanced responsiveness of targeted institutions to address community needs to respond and recover from shocks and stresses

Moving on to the outcome of responsive government institutions, this has been a resounding success for BRUP project in terms of the formation of the project target of two WDMC, and capacity building of and the supportiveness of FSCD at both local and HQs level. An increased number of officers from five fire stations (originally targeted 2) received advanced training on search and rescue with the support of the project. In their turn, they conducted a three-day training for the UCVs, provided two-day-long refreshers once a year and they nurture the UCVs through quarterly meetings where revisions of earlier training take place or new methods and equipment are introduced. The FSCD personnel are dedicated to the development of the capabilities of the UCVs.

The UCVs – local men and women, in their turn regularly attend refreshers and the quarterly meeting at very high rates of participation that is indicative of their dedication and commitment. The UCVs have been involved in support of the fire service in fighting three local and a large industrial fires. Their performance, commitment and courage have been highly appreciated by the FSCD and the communities. Their performance during the industrial fire has been



exceptional in three aspects of emergency response on which they have been trained: search and rescue, firefighting with water hose and first aid on the ground.

By participating in the development of UCVs BRUP has supported a government decision/policy to create 60,000 urban volunteers across the country. The UCVs thus far have been a stand out success.

The second component of strengthened institutional resilience involves the public representatives and civil administration in urban governance. The project has successfully produced the output of formation of two WDMCs and CCDMC. This entailed successful completion of training attended by the majority of the members of WDMC that also includes representatives from the six CDCs. The meetings of WDMCs have been held on regular basis and been well attended by the members, as per the guidelines.

The experience with the two WDMCs have galvanized the GCC in to action to form the City wide CCDMC and WDMCs for every Ward in its jurisdiction (numbering 55 out of 57, including the two project targets). Although, the original target for BRUP has been two WDMCs they extended support to the GCC for the formation of 53 additional WDMCs.

6.2 Recommendations

Advocacy with the government for developing and sustaining volunteers to assist the professional first responders:

Care Bangladesh might consider under a future project engaging the government with a view to creating a fund from which to make payments to volunteers in emergency operations, and provide budget to FSCD to meet the costs of transport allowance for the volunteers and food for the refresher sessions. The FSCD official in Gazipur gave the example of China where volunteers are provided remunerations after the first three days' of voluntary work during and in the aftermath of emergencies.

Create a pool of UCVs –who are older and physically restricted for active search and rescue activities and firefighting, who can provide training to other volunteers. Initially they can assist FSCD instructors, then gradually conduct refreshers and subsequently become lead trainers. However, there will be need for budget and an organizational framework for the UCVs function, either with FSCD, DDM or GCC.

Advocacy with the government to take over the infrastructure related interventions in low income communities:

Building resilience to disasters particularly the infrastructure construction and maintenance, and disaster management capacity are ultimately the responsibility of the government. The SOD has delineated a wide range of responsibilities and activities for urban local government, which the project has implemented using its own budget. Government should allocate resources for infrastructure and disaster management in its budget. This budget can be managed by the urban civil authority (responsible for disaster management) or the DDM (responsible for infrastructure among other).



A critical mass of evidence of its success needs to be created by Care for influencing policy:

It should be noted that successful lobbying of government is a time consuming process, may take years, and the policy makers would need evidence that the BRUP approach and strategy is workable. The evidence – regardless of its positives, from six communities in one newly formed City Corporation is unlikely to be given serious consideration by the policy makers. Larger body of evidence will be required to convince the policy makers with the support of policy influencers. The absence of involvement of relevant policy influencers – in the government, in Civil Society, among professionals and academics, for advocacy purpose in BRUP is perhaps the single most important missed opportunity for Care Bangladesh.

