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# **Research Paper**

# Guchchhogram Project at Rangpur District in Bangladesh:Issues, Strategies and Way Forward

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#### Abstract

Bangladesh is a country where natural disaster occurs repeatedly. Flood, cyclone, draught etc are the common occurrences in this country. Evantually, Natural disaster and climate change leading to misery got attention for rearrangement of the people existing in those helplessdwellings has conventional a lot of kindness from policy makers as well as academicians. Since the country became independentin 1971, people who have been landless or affected by river eroson, cyclones or floods have been relocated in Khas Lands called as cluster (bunch) villages. The present government has started a similar process called 'Guchchhogram'; cluster village. The study tried to unfold whether any improvement took place in their livelihood after relocation in Guchchhogram-1st phase (Climate Victims Rehabilitation Project) project started from 2009 and ends in 2014 and progress of relocation of Guchchhogram- 2<sup>nd</sup> phase (CVRP) project starting from July, 2015 and will ends up in June, 2020. This scheme not only has a makeshiftassociation of improving the livelihood of climate fatalities and ousted people, but also it has durable impact on societal development. Researchers used four Guchchhograms of northern Bangladesh. All the families of sample GGs were covered but a whole of 108 families were found to be measured from four bucngvillage or GGs. Qualitative approaches such as focus group discussions and in-depth interviews were followed to further develop the outcomes of families interviews. Based on an empirical study in two sample Guchchhograms in 1<sup>st</sup> phase, the study illustartes that there is a significant expansion in the living conditions of the displaced people. The study also gets insights into the problems or constraints regarding location, local employment market, training, micro-credit, co-operative, nearby grocery and so on in 1<sup>st</sup> phase. In 2<sup>nd</sup> phase, researchers studied relocation upto June, 2018. In two Guchchhograms in 2<sup>nd</sup> phase, researchers reveals that relocation process is going on according to the plan with very little exception, Analysis showsthat necessary training, micro-credit facility, health and medical facility, employment opportunity, Overall Infrastructural facility, childrens' schooling and development have highly significant influence on dependent variable. If the Government commitment, good policy making, and continuous implementation process goes on, vulnerable people may come to the main stream of the society and contribute a lot as a human resource in the

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#### I. Introduction

Relocation is related to povertymitigation and is one of the most vital challenges facing governments around the world (Powelson, 1987). Different revisions by academicians noticed that relocation of climate victims landless, homeless, addressless, river eroded, and natural calamities prone areas people which is a significant part of poverty lessening and the social development package (Nguyen et al., 2016). There are different reform strategies like institutional, sociopolitical, financial incentives and so on which were intended at

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declining the poor who may have requiredpossessions to acquire land. Of them, financial incentives proved much better result in number of studies (Nguyen et al., 2016 &Narh et al., 2016). They defined the dynamics of the ways land reforms in Ghana, Kenya, and Vietnam. They mentioned about Vietnam's land reform program which was based on monetaryinducements associated to Ghana and Kenya's land modification policy, was successful (Narh et al., 2016). The reasons they sued that the land reorganization method in Ghana perceives the normal land leases chemes as unproductive and supporters for overall state, however land reform packages to reallocate land amongst Kenyans based on marketplacevalues caused the same (Narh et al., 2016). So, implementation becomes challenging in the different context. This is also challenging in a developing country like Bangladesh, because it is highly densely populated country where land is the threatened commodity and its proprietorshipsuggests community and financial authority (Sen and Ali, 2015, p-3).

The Government of Bangladesh, has been executing different land alterationschemes to allocate homes to the evicted in order to decrease social inequalities and alleviate poverty (Das et al., 2012; Hossain, 2015 & Rahman and Rahman, 2015). The founding of 'Guchchhogram (GG)' for the dispossessed and for climate victims is one of the key programs that has been executed since the liberation of the country in 1971 (Guchchhogram, 2017; Momen, 1996 &Barkat et al., 2001). The study aims at both completed and ongoing Guchchhograms to get insight into the livelihood pattern (before and after) of the relocated people, identify their needs and wants, problems or constraints, challenges to improve their quality of life and have significant impact on societal development of Bangladesh. So, there is an ample scope to explore and focus on the above mentioned elements to justify GG project.

The Guchchhogram project is one of the priority programs of the Prime Minister's priority programs and it emphases on the reintegration of climate victims.to emphasize (Guchchagram, 2017). Under the GG project, a landless family gets a minimum of 0.04 acres of land for a dwelleing, a 300-sqaure-foot house, a kitchen and a hygienic latrine. There is no face to apply for or even get a house in GG adequate provision of safe drinking water has been amde through suitable tubewells. For every village, a multi-pupose hall is created for refreshment, working out and other soci-economic activities. The Bangladesh Rural Developement Board (BRDB) provides miro-credit and appropriate training to each familyfor conducting income generating activities. besides, adequate facilities for primary health care, education, family planning and social attentiveness are provided to the residents through various agencies (Guchchagram, 2017).

## II. Literature Review

As literature review enrich the knowledge, helps finding research gap, and provide the base of the research, researchers tried to find related work but found a very little.

BishawjitMallick and Zakia Sultana (2017) conducted a study (journal article) investigated that how and to what level the living of relocated homes has altered, and what the abilities and restraints of the rearrangedreceipts are in Guchchhogram project 1<sup>st</sup> phase. Based on an experimental study at four cluster or Guchchhograms of GopalganjSadar Upazila using 130 sample families, the study showed that there is a noteworthyprogress in the livelihood circumstances of the migrated people, but the locational shortcomings and access to cultivated production, the local labor market, and some of the under fire objectives of the project have not achieved. To particularscope, the transformedpeople have alike risks as they had before; yet, available agricultural lands and proper allocation maydecrease such livelihood risks.

Rehabilitation is linked with poverty alleviation (Powelson, 1987). Nguyen et al. (2016) in their study found that relocation of climate victims landless, homeless, addressless, river eroded, and natural calamities prone areas people is a significant part of shortagerelief and the human development platform. They also found that there are different reform strategies like institutional, sociopolitical, financial incentives and so on which were pointed at reducing the poor who may have neededpossessions to attainland. They described the changing aspects of the ways land modifications in Ghana, Kenya, and Vietnam. They mentioned about Vietnam's land reform program which was founded on fiscalinducements associated to Ghana and Kenya's land alteration policy, was successful.

Narh et al. (2016) demanded that the land restructuringapproach in Ghana observes the systematic land occupationschemes as unsuccessful and activists for entire state, whereas land reform programs to redistribute land among Kenyans founded on market principles bring about the same. (Narh et al., 2016). So, challenge is all about employment and keep going.

Lirature review provides some ideas about different land reforms in international level. But no research study found that can provide clear statement about GG project in Bangladesh in an empirical approach.

A review on the literature based on land reforms or relocation discloses that very little workhas been done in this field. Above all, the scholar has tried his level best but found no major study based on this context nationally and internationally except few journal articles and newspaper articles. However, some groundwork has been conducted like public health, sanitation, different awareness program and so on. Moreover, no such study found in the northern region of Bangladesh also. As no in-depth research work has been done on it and the

mentioned geographical area, there is an ample chance to conduct research on the above mentioned title to justify the Guchchhogram project, phase 1 & 2.

## **Research Objectives**

The key objective of this present study is to know the improvement curve of GG project; improvement of livelihood of GGs and overcome the challenges to become human resource in the mainstream of the society. To examining significant demographic characteristics of relocated people of Guchchhogramsthat settle livelihood pattern.

- To identify and evaluate the issues related to relocation in GGs.
- To explore the existing problems and constraints in GGs.

## III. Research Methodology

#### Nature of the Study

The study is exploratory specifically descriptive in nature. Both qualitative and quantitative approach used to meet the requirements of the objectives. Descriptive analysis used to refer to the characteristics of the variables and inferential statistics used to explain the nature of relationships between variables.

# **Sources of Data**

Both primary and secondary sources used to collect data in the following manner:

Table 1:Basis of information

Tuble 1:Busis of information				
		<b>Primary Sources</b>		
Secondary Sources	Focus Group Interview	* Denth Interview DuestionnaireSurv		
Published journals articles, dissertation,	Relocated people	UNO	Relocated family head or	
websites, various books, Regional		AC (Land)	other member	
Project Management Unit (RPMU)		UP chaiman		
Rangpur.		BRDB officer		
		Public Health Engeneer		

## **Sampling Process**

Guchchhogram project has been implementing in all the four regions of Bangladesh. Researchers purposively selected Rangpur district as all the GGs are almost similar in terms of nature During phase-1, from 2009 to 2014, 520 families under 11 GGs and in phase-2, from 2015 to June, 2018, 611 families under 18 GGs rehabilated in Rangpur district. Data collected from household heads or any member depending on their availability during the data collection period. So, the total population was 1131 heads or any member of a family. From phase-1, under 11 GGsand phase-2, under 18 GGs selected randomly. Finally, 2 GGs from each phase drawn randomly. Four sample GGs have a total of 120 families each of 30 families. Head or any one member of the family who can respond to the survey with questionnaire selected from each family. So, study population is 120. Researchers wanted to ignore sampling and cover the total study population to have more than 100 samples to fulfill the requirement of using Exploratory Factor Analysis (EFA). Finally, 108 respondents were found to be interviewed because rest of the families were absent during study period due to work elsewhere or unknown reasons told by GG people.

 Table 2: Sample Distribution for Quantitative Data

Guchchhogram	Survey Respondents	Unavailable respondents
Shankardah, Gangachara, Rangpur (phase 2)	26	4
Saddopuskorini gar (phase 1)	25	5
Boidyabati, Dhamurhat, Naogaon (phase 2)	29	1
Joenpur, Sadullahpur, Gaibandha (phase 1)	28	2
Total =04	Total = 108	Total = 12

Table 3: Sample Distribution for Qualitative Data

Local Administration	Depth Interview
UNO	$4 \times 1 = 4$
AC (Land)	$4 \times 1 = 4$
UP chaiman	$4 \times 1 = 4$
BRDB officer	$4 \times 1 = 4$
Public Health Engineer	$4 \times 1 = 4$
	Total = 20

Researchers used depth interview of UNO, AC (Land), UP chairman, BRDB officer, and Public Health Engineer of each sample GG area. For more meaningful findings, 01 Focus Group Interview (FGD) consists of 10 household heads in each sample GG has been completed.

# **Sampling Technique**

Researchers used simple random sampling to complete questionnaire survey of the study population. Convenience sampling method used to conduct depth interview for selecting officials.

#### **Data Collection Technique**

Primary data have been togetheredthrough questionnaire survey (quantitative data), depth interview, and focus group discussion (qualitative data). Primary data collected for seven days on October2018 except pre survey two weeks back.

## **Questionnaire Survey**

Quantitative primary data for this study collected from 108 GG family members through pre-tested structured questionnaire.

# **In-depth Interview**

Qualitative primary data collected from UNO, AC (Land), UP chaiman, BRDB official, and Public Health Engineer from each of the study area. Total of 20 interviews completed by researchers each taking not more than 30 minutes.

# **Focus-Group Discussion**

Researchers used eight people to form a focus-group from those who are interested and have ability to provide in-depth data. Total of four has been completed, one for each sample GG of 30 minutes.

## **Data Analysis, Results and Findings**

According to samples, all are married including 4% widow. In samples, 90% of the defendants were Muslim and 10% of Hindu. 16% completed class five, 2% SSC education. Family size of two 7%, four 67%, five 23%, and rest 3% respectively. Age of 25 to 35 is 42%, 35 to 45 is 36% and, rest 22% is more than 45 among the samples. 16% people is un-employed, 22% student, 67% employed. 12% people is engaged with begging, 3% with auto driver, 78% with agriculture or day labourer, and rest 7% in other activities. Household size and total landis approx. 0.05acre in phase-1 and 0.03 to 0.04 in phase-2.For 95% families, expenditure is higher than income. It was obvious that approx. 3% people hired their houses to renters, and reaimingthe GGs. 1% people do not reside in GG as they work in a distant places. 4% widow, and 96% 'husband-wife jointly' got ownership of land and house free on cost along with sanitation, jointly getting drinking water, tree plantation or home gardening, aquaculture, training on different income generating activities of two from each family who has the ability and capacity (Field survey, 2018).

Generally, training for income generating activities provided to those whose age ranging from 18 to 55 years. Though more than 35 types of training are available, more or less 10 types are used as they demand (handicrafts, livestocking, nursery, foresting, poultry farm, tailoring, vegetable business, mechanics, laundry, and others) for these economic activities. Training allowance per day is TK. 200 for phase-2, and TK. 150 for phase-1(Field Survey, 2018).

# Chi-Square (χ²) Test

**Table 4:**Chi-Square Tests

	cin bquare rests	
Particulars	Value	Asymp. Sig. (2- sided)
Pearson Chi-Square	169.332 <sup>a</sup>	.000
Likelihood Ratio	162.382	.000
Linear-by-Linear Association	84.711	.000
N of Valid Cases	108	
a. 4 cells (13.3%) have expected count less than 5. The m	inimum expected count is 1	1.01.

**Table 5:** Symmetric Measures

	Value	Approx. Sig.
Phi Nominal by Nominal	.478	.000
Cramer's V	.528	.000
N of Valid Cases	108	

Chi-square test examined the relationship between livelihood in Guchchhogram and influencing factors. It can be perceived from the table that the level of implication is .000 at (p<.05). On the basis of this result, hypothesis is accepted. It means livelihood in Guchchhogram is positively influenced by some categorized factors. Similarly, in the symmetric measure table, researchersdignified the link between the independent and dependent variable. The Phi and Cramer's V directs a moderate association exists between dependent and independent variables.

#### Factor Analysis (EFA)

The results of EFA are summarized and explained in this section:

Table 6: Factorability Test (KMO and Bartlett's Test)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.89
untlettle Teet of Subonicity	Approx. Chi-Square	887.910
Bartlett's Test of Sphericity	Sig.	.000

Result shows (Table 6), the total measure of sampling adequacy (KMO) is 0.893 which is higher than the cut-off point of 0.6 according to recommendation of Field (2006). Correlation matrix shows that there were many considerable correlations above 0.30 as recommended by Pallant (2010:155). In the present study 06 incompleted questionnaires were let off dueto an extreme number of one-sided questions. Scatter plot was used in preliminary analysis for foremostfactors and no key outlier was found. According to Anderson et al. (2008), if outliers do signify an element of the population, these outliers should be reserved in order to confirm generalizability. Therefore, the study did the same to the entire population.

## **Normality and Muticollinerity Test**

Kline (2005)p-77proposes that the total value of skewness greater than 3 and the utter value of kurtosis greater than 8 show problems with normalcy. Theoutcomes relating to the normality test for the sample used in this study indicated that the maximum values of skewness was 1.081 and kurtosis was 3.432 respectively. If the determinant is bigger than 0.00001 then there is no muticollinerity (Field 2000: 445). In this analysis the determining factorremains 4.0003 which is more than the cut-off value of 0.00001.

# EFA results with interpretation

The outcomes of the EFA with primary components factor extraction methods are presented below:

**Dependent variable:** Livelihood in Guchchhogram.

**Independent variables:** Independent variables are as follows:

**Table 7:** Independent variables

G1=Housing and	G7=Micro-credit Facility	G13=Earning source and	G19= Neighbor Relation
Accomodation	G8=Internal/external Pressure	Savings	G20= Childrens' Schooling and
G2= Land Ownership	G9=Migration Costing	G14= Relation with External	Development
G3= Education level	G10= Acquelture Facility	People	G21= Social Conflict
G4=Existing Occupation	G11=Religious Harmony	G15=Employment Opportunity	G22= Social Interest
G5= Necessary Training	G12= Social Class	G16=Health and Medical	G23= Water Facility
G6= Social orientation		Facility	G24= Electricity availability
		G17= Agriculture Facility	G25= Overall Infrastructural
		G18= Social security	facility
		-	

Rotated Component Matrix shows (Table 7),the factor loadings retained twenty two variablesuinder seven factors. Based on the factor loadings, independent variables fell under the following factor groups:

**Table 8:** Grouping of factors

-			or orouping or		1	•
Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Necessary Training	Employment opportunity	Housing and Accomodation	Migration Costing	Internal/external Pressure	Neighbor Relation	Education level
Micro-credit Facility	Agriculture Facility	Land Ownership	Existing Occupation	Social Conflict	Social Class	Childrens' Schooling and Development
Social orientation	Social security	Electricity availability	Earning source and Savings	Religious Harmony		
Health and Medical facility	Acuaculture Facility	Overall Infrastructural facility				

All the factors are equally significant and inter-related to move on the livelihood of the families of Guchchogram. These factors significantly affects the success of the project further and taking them into the main stream of the society gradually and in a sustainable manner.

## **Multiple Regression Analysis**

Table 9: Multiple Regression Table

Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.911ª	.787	.696	.4135
	a. Dependent Variab	le: Livelihood in Guchchhogra	m

Value of Adjusted R square indicates that independent variables can explain 69.6% of the variability of dependent variable (Table 9).

Table 10: ANOVA table

	Model	Sum of Squares	Mean Square	F	Sig.
	Regression	31.132	1.824	7.762	.000°
1	Residual	5.72	.212		
	Total	36.852			
		b. Predictors: (co	nstants), G1-G22		

The Table 10 shows that, p < .0005 (i.e., the regression model is a good fit of the data) which means the independent variables statistically significantly predict the dependent variable.

**Table 11:** Coefficients Table

Model	Unstanda	ardized Coefficients	Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	1.196	1.099		1.088	.285
G5= Necessary Training	.472	.219	.620	2.159	.039
G7=Micro-credit Facility	514	.185	363	-2.778	.009
G15=Employment Opportunity	.458	.202	.604	2.262	.031
16=Health and Medical Facility	635	.268	875	-2.373	.025
G20= Childrens' Schooling and Development	415	.189	558	-2.190	.037
G25= Overall Infrastructural facility	.230	.113	.265	2.037	.051

Analysis shows (Table 11) that necessary training, micro-credit facility, health and medical facility, employment opportunity, Overall Infrastructural facility, childrens' schooling and developmenthave highly significant influence on dependent variable.

## IV. Discussion and Conclusion

# **Summary of Findings and Observations**

On the basis of this analysis of this present study, some basic outcomes and explanations have been derived. Of these, some may have policy relevance and some of them point the way to forthcoming course of exploration. The crucial findings and remarks of this study are highlited below:

- 1. Hypotheses substantiated significant that means independable variables have significant impact. But, in few issues they have much more influence than others in degree.
- 2. Multiple regression dictates independent variable can explain 69.6% of the dependent variable. It means these variables have significant contributing strength on dependent variable. This findings can lead the policy makers, and experts to change their policy by examining more intensely on these problems.
- 3. In this investigation, there were 22 variables under07 factors becamepredominantly assumed to be significantly important andmost contributing factors in the livelihood of GGs.
- 4. Throughoutleading focus group interviews for this examination, two foremost issues came up; employment opportunity, and need to increase credit and decrease interest rate to survive easily and make minimum savings. In the statistical findings these issues came as significant influencer.
- 5. During depth interviews, no. of UNOs opined about discrimination of selecting benefeciaries ranging from 1 to 5% due to local influence in the bottom of the selection process. Up chairmans are co-operative to the

project. ACs (land) along with UNOs are trying to get back khas land captured and used by local influential people. BRDB officers claimed about credit recovery and mobilization of it in proper time. There is no major issues related to health, told by Public Health Officers.

6. Through the depth-interview and focus-group interview, it is found that 5 to 10% micro-credit holders do not repay the money. So, they do not get credit further and falls in trouble. As BRDB makes base survey and make some groups to recover credit, in Gaibandha, they do not pay credit further until previous loan of every member of the team repay credit. But in other study areas it is not followed. Again, surprisingly 100% recovery is done in Naogaon, but in rest of the study areas, it is 70 to 80% approximately.

Therefore, administration would remain more aware to make thefuture policy and assigning the national resource. These are some key findings and overall clarifications that occurred throughout this investigation. Might be, in future policy makers, consultants and/or academicians may grip these concerns in their study, policy or strategy.

## **Concluding Remarks**

Guchchhogram project has been contributing significantly to reduce the scarcity level of the climate victims, dispossessed, and nomadic families of the study area. People of GGs are very happy to a permanent address of their own. The study appearances that particular land and coveringshow an important role in generating income prospects. There are some problems that hinders the project aim. Some creativities to escalation the livelihood base for the recipients, would lessen their helplessness to deficiency and upsurge their level of security and wellbeing. Still, inadequate agricultural land, acuaculture, micro-credit, employment opportunities are inadequate that may hinders economic prospects as well as social isolation and introduce new forms of poverty. Researchers need to readdress these issues and give the highest priority to ensuring the quality of life resettled families. These problems need to be addressed and specified the highest priority to ensure the quality of life of assimilated families. Researchers estimate that the results of this importnat process are indicative of any community distribution process in Bangladesh.

Some useful observations are presented to strengthen socio-economic betterment of climate victims, and poor landless residents of GGs.So, it can be decided that the considered GGs project has performed an imperative role in humanizing the livelihood condition and of the rehabilitated families. Thus, it can be concluded the GGs project studied has played an important role in improving the living conditions and rehabilated households.

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