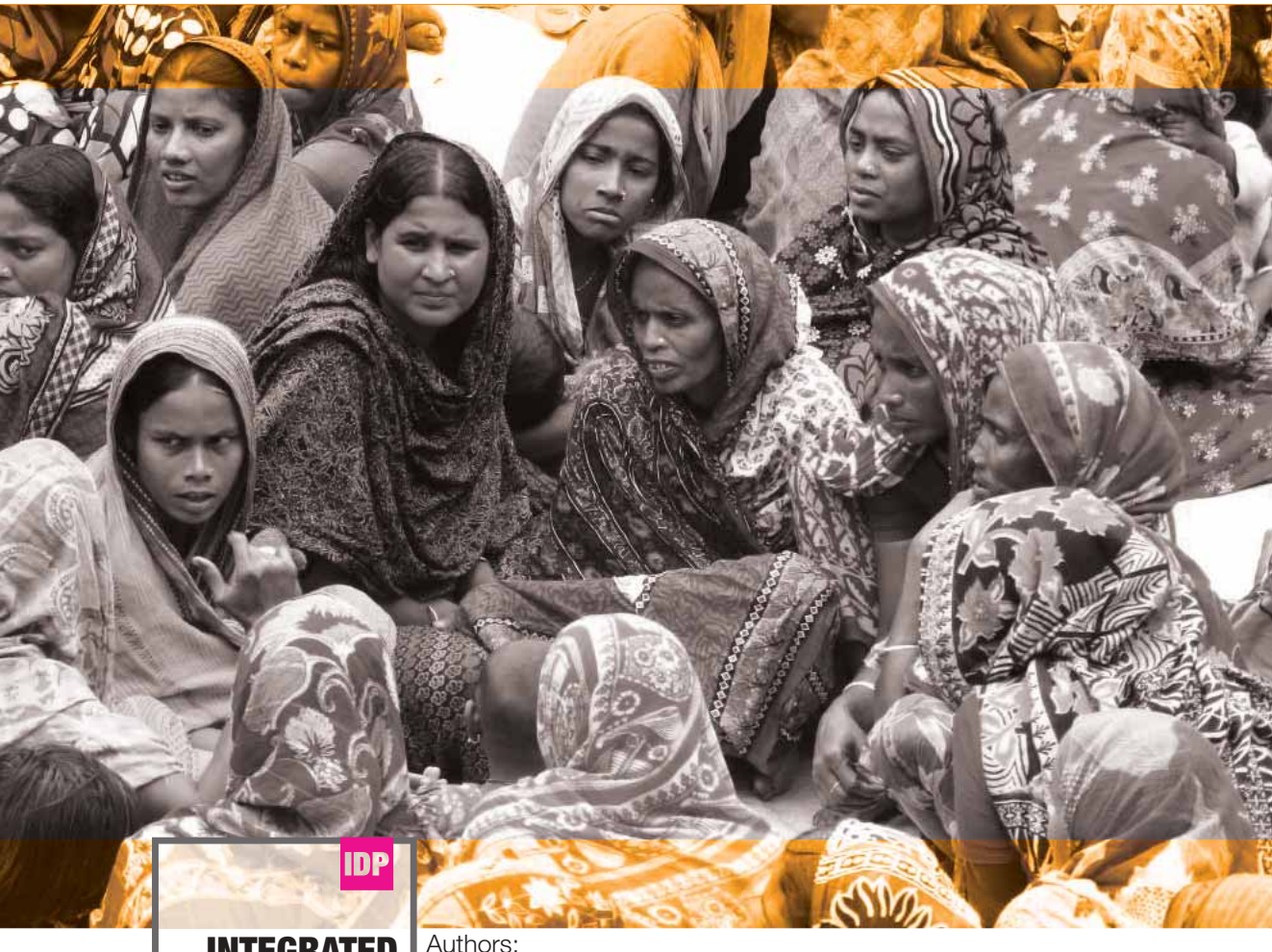
brac

Participatory action research

Reflection and learning



IDP

INTEGRATED DEVELOPMENT PROGRAMME

Authors:
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Ripon Kumer Acharjya

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CONTENTS

FOREWORD

BRAC's integrated development programme (IDP) in cooperation with all BRAC programmes has collated the organisation's development activities relating to haor peoples in Bangladesh. This publication aims to delineate IDP-Haor project innovations and initiatives on development issues for dissemination and referral use within and outside of BRAC.

A single development intervention is not enough to liberate haor people from the vicious cycle of multidimensional poverty. With 43 years of experience, BRAC launched its IDP-Haor project in 2013, for specific underdeveloped areas of haor on a pilot basis to improve the socioeconomic condition of haor dwellers and ensure sustainable livelihood through an integrated development approach. The programme tries to addresses the multidimensional aspect of poverty of haor dwellers by delivering BRAC's basic support and development intervention in a combination and holistic manner. These include 10 renowned programmes of BRAC, ie, community empowerment, education, health, agricultural and food security, gender justice and diversity, human rights and legal aid services, migration, microfinance, targeting the ultra poor, water, sanitation and hygiene. IDP-Haor project is spread across four sub-districts (upazila) – Baniachong, Derai, Itna and Khaliajuri under haor region of Habiganj, Sunamganj, Kishoregonj and Netrakona district in Bangladesh.

Action research is a subject of growing interest to practitioners who are seeking to conduct empirical researches which may help to provide answers to local problems. Especially, community empowerment, health, agricultural and food security, gender justice and diversity, human rights and legal aid services programmes are complex and sensitive issues and not always easy to document. For this reason, action research (AR) can identify new innovation and initiatives which are more applicable to the haor communities for more in-depth research and analysis to meet the programme goal and objectives.

FOREWORD

Such development practitioners may sometimes feel that internationally published research does not always deal with issues that affect the rural people's lives in their own particular learning and social context. Empirical researches have repeatedly found the social discrimination, economic exploitation and deprivation of human rights of haor dwellers comparatively in a more grievous condition than others.

Such a situation calls for a practical approach that combines 'affirmative actions' at the policy level in the spirit of human rights and action-oriented interventions by the programme with active participation of haor dwellers.

The eight research papers included here serve to set the scene of haor dwellers livelihood. Researchers look at action research from a logical perspective and examine how its aims and outcomes can be used in the programme.

The research papers has also sought to understand the livelihood conditions of the many different extremely poor haor people living in Bangladesh by analysing their livelihood constraints and opportunities that could be helpful to take any new innovation and initiative for the betterment of the haor dwellers' livelihood.

I hope these research papers will serve as an important reference for relevant planning and policy making within BRAC and also for other policy actors.

Anna Minj
Director of IDP, CEP & TUP
BRAC

PREFACE

BRAC is a development organisation dedicated to the alleviation of poverty by empowering the poor to realise their potential and bring about positive changes in their own lives. BRAC programmes covering wide range of sectoral areas have activities relating to *haor* dwellers. The publication has drawn a discussion on IDP-*Haor* project and its pilot innovations with a view of *haor* dwellers' livelihood.

The opportunity of publishing this research paper has been from a project, IDP-*Haor* being implemented by BRAC's integrated development programme. The project aims to contribute to the reduction of poverty and vulnerability and improve livelihood options in hard-to-reach areas like *haor* through an integrated development approach. This publication is an initiative as part of the knowledge management and lessons learnt for wider advocacy within BRAC and strategic partners.

The publication has necessarily involved IDP's research and programme personnel. So, I am very grateful to everyone who made our result on action research such a success. In particular, programme organisers, area development coordinators, sector specialists, *upazila* coordinators and all the colleagues at the IDP head office who made everything happen on the ground, during data collection and sharing of research findings and while finalising this paper as a publication. Thanks are due to all our contributors here, to Ms. Anna Minj, director of IDP, CEP & TUP and Mr. Masud Alam Khan, programme head of IDP for their suggestions and guidance for this research paper.

I would like to extend my sincere thanks to all the contributors to this publication. I hope that it will stimulate further exciting discussions about action research, both privately amongst readers and better still contributors.

Md Akramul Islam
Programme Manager
Action Research, IDP

ACRONYMS AND GLOSSARY OF TERMS

Acronyms

ADC	: Area Development Coordinator
AFSP	: Agriculture and Food Security Programme
ANC	: Antenatal care
AR	: Action Research
BDT	: Bangladeshi Taka
BEP	: BRAC Education Programme
BLC	: BRAC Learning Centre
BM	: Branch Manager
BPS	: BRAC Primary School
CEP	: Community Empowerment Programme
CSS	: Course on Supportive Supervision
DECC	: Disaster, Environment and Climate Change
DMC	: Development Management Course
DLS	: Department of Livestock Service
FDC	: Floating Delivery Centre
FGD	: Focus Group Discussion
FO	: Field Organiser
GJ&DP	: Gender Justice and Diversity Programme
GO	: Government Organisation
HNPP	: Health, Nutrition and Population Programme
HRLS	: Human Rights and Legal aid Services Programme
HSC	: Higher Secondary Certificate
Hatti	: Cluster or part of village
IDP	: Integrated Development Programme
IDI	: In-depth interview
IDP-*Haor*	: Integrated Development Programme for *haor*
IGA	: Income Generating Activities

IYCF	: Infant and young child feeding
MDG	: Millennium Development Goal
MF	: Microfinance Programme
NGO	: Non Government Organisation
NHW	: Newborn Health Worker
Nikari	: Impress/advance loan
OTUP	: Other targeted ultra poor
OMC	: Operation Management Course
OCV	: Organisational Culture and Values
PLEWs	: Poultry Livestock Extension Workers
PNC	: Postnatal care
Panchayet	: A social (value), structure, mostly represented and formed by the elite group
PO	: Programme Organiser
PT	: Popular Theater
RED	: Research and Evaluation Department
RTI	: Right to information
SK	: *Shasthya kormi* (health worker)
SS	: Sector Specialist/*Shasthya shebika* (health volunteer)
SSC	: Secondary School Certificate
TOT	: Training of Trainers
TUP	: Targeting the Ultra Poor
UDC	: *Upazila* Development Coordinator
Upazila	: Sub-district
UP	: Union *Parishad*
VO	: Village Organisation
VDO	: Village Development Organisation
WASH	: Water, Sanitation and Hygiene

Glossary of Terms

Khas : Government owned land or water bodies

Haor : *Haor*s are bowl-shaped depressions of considerable aerial extent lying between natural levees of the rivers or high lands of the northeast region of Bangladesh. In the wet season, the haors are full of water, but during the dry seasons, these are dried up and become arable land.

Shallis : Village court, usually dominated/represented by the local elites

Boro : Rice grown during the dry winter season

Waqfo : Property under the context of religious endowment in Islamic law, typically donating a building or plot of land or even cash for Muslim religious or charitable purposes with no intention of reclaiming the assets

Muezzin : The person appointed at a mosque to lead and recite, the call to prayer for every event of prayer and worship in the mosque

Bangla months and the seasons in Bangladesh:

Bangla months	Traditional season	Meaning in English
Baishakh	*Grishma*	Summer
Jaistha		
Ashaṛh	*Barsha*	Rainy/Monsoon
Shravan		
Bhadra	*Sharat*	Autumn
Aswin		
Kartik	*Hemonto*	Late Autumn
Agrayan		
Powsh	*Seet*	Winter
Magh		
Falgun	*Basanta*	Spring
Chaitra		

INTRODUCTION OF IDP-*Haor* project

In the beginning of 2013, BRAC implemented the integrated development programme (IDP) in the *haor* according to its strategic priority plan to reduce multidimensional poverty of the most remote, neglected and marginalised people. The main objectives of the programme are to develop the socioeconomic conditions of *haor* dwellers and to enhance their access to sustainable livelihood opportunities and sustainable development. *Hoar* people are isolated from the basic flow of the development initiative. BRAC creates opportunities for basic services, developed livelihoods, social awareness and empowerment, research, knowledge and data management through an integrated development that reaches 70% to 80% of people in the Baniachong and Derai *upazila*. In this integrated programme, BRAC implements its 10 renowned programmes, ie, education, health, nutrition and population, water, sanitation and hygiene, community empowerment, agriculture and food security, microfinance, targeting the ultra poor, gender justice and diversity, human rights and legal aid service and safe migration.

Goal

To contribute to the reduction of poverty and vulnerability, to improve the socioeconomic condition of the *haor* dwellers and to ensure sustainable livelihoods through an integrated development approach

Objectives

- to ensure *haor* dwellers have access to basic services like education, health, nutrition, population, water, sanitation and hygiene facilities
- to enhance access to sustainable livelihood opportunities with focus to increase of farm-based production, diversification and improvement of market linkages
- to enhance the local government capacity to ensure services and resources for the poor
- to develop leadership skills to raise voices, against exploitation and denial of rights in order to attain sustainable development
- to test a scalable model of “integrated development approach” to tackle multidimensional causes of poverty

To meet the above goal and objectives, IDP-*Haor* project has been implementing following strategies with a bucket of activities under the three themes, eg, access to basic services, poverty reduction through improved livelihood and social mobilisation to improve socioeconomic condition of *haor* dwellers and ensure sustainable livelihoods through an integrated approach.

Access to basic services:

- Health, nutrition and population
- Education
- Water, sanitation and hygiene

Poverty reduction through improved livelihoods:

- Agriculture and livestock development
- Financial services
- IGA /skills development
- Targeting the ultra poor
- Safe migration

Social mobilisation:

- Institution building
- Gender equality promotion
- Legal literacy and legal aid
- Knowledge management and advocacy

From the beginning IDP has been implementing all programme activities by the two pilot distinct approaches coordinated and combination or common platform approach. They are as follows:

Coordinated approach:

- Staffing and implementation process similar to mainstream programme;
- Programme specific branch managers (BMs) supervises respective programme organisers (POs);
- Area development coordinators (ADCs) supervise the BMs and *upazila* development coordinator (UDC) supervises the ADCs
- Respective sector specialists (SSs) ensure technical support to field; and
- Matrix management relationship between SSs, ADCs and UDC.

Combination approach (common platform):

- All programme interventions are delivered by single PO through village development organisation (VDO) - one stop service point;
- One VDO is formed with 25-40 members;
- One PO is responsible for 250-300 households; and
- Sector specialists provide technical support to field with similar matrix management with ADC and UDC.

Presently, IDP-*Haor* project has implemented all programme activities by following the combination or common platform approach since January 2015 in the four upazilas, Baniachong, Derai, Itna and Khaliajuri under Habiganj, Sunamganj, Kishoreganj and Netrakona districts of Bangladesh respectively.

Any pilot initiative or innovation would be needed to scale up through conducting action research and fine-tuning the programme activities as per community need and requirement. In this concern, IDP-*Haor* project has conducted action research on different initiatives and issues to find out new innovations and initiatives for better livelihood of *haor* dwellers. The following sub-sections give a short briefing about the eight action research reports.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Exploring the boat accessibility to school students in the remote *haor* village during monsoon

1. Exploring the boat accessibility to school students in the remote *haor* village during monsoon

Md Akramul Islam
Mohammad Nur Hossain Siddique
Abu Ansar Md Enayet Karim

Abstract

This study aims to explore the boat accessibility for school students in the remote *haor* villages/*hati's* during monsoon. A qualitative approach was used to collect data from the selected sample location and target population. The study reveals that many students from the remote *haor* villages/*hatis* were not able to go to school regularly during the monsoon because of regular and irregular boat inaccessibility. In the *haor*, a lot of poor households are living in remote areas and they do not have access to regular transports like ferry boats and small boats in monsoon. As a result, for this time period, they remain absent at school. They have to spend BDT 200 to 400 per month on boat fares per person. Poor and extreme poor families can not afford to pay this expense each month for their children's education. Therefore, students from these households are totally deprived of their basic education, especially girls, during the monsoon. As a result, many students drop out of school because they fall behind for irregular attendance. IDP-*Haor* project aims to reduce the number of dropouts and achieve 100% attendance in school. For this to be feasible, transport support like shuttle boat services during monsoon for the poor and extreme poor families' children who are living in remote *haor* village would need to be provided.

Introduction

The BRAC's education programme provides educational support to poor and ultra poor children, particularly those affected by violence, displacement, discrimination and extreme poverty in both rural and urban areas. Even the education programme offered in the *haor* areas are seasonally submerged under water, therefore IDP made primary school education available to children through boat schools. But many poor households are living in remote *haor* areas and their children do not have access to regular transportation like ferry boats service to go to school. As a result, they remain completely absent from school during the monsoon. Sometimes, they use small or tiny boats to go to school, but it is a life threatening and risky transportation method system for them. Parents are often not interested in sacrificing their child's welfare for an education. So, if we want to achieve 100% education for children in *haor*, we need to rethink the way we can introduce to reduce the number of dropouts and gain 100% attendance at school. In this connection, we conducted an Action Research to explore the boat accessibility for school going children of the remote *haor* village/*hati* during the monsoon.

Objectives

Find out the solution to ensure boat accessibility for children attending school in the remote *haor* village/*hati* during the monsoon.

Specific objectives:

- to find the most remote *haor* villages/*hati* where students are unable to go to school
- to find the number of students who are absent at school during the monsoon
- to find innovative solutions for children attending school in the remote *haor* village/*hati*

Methods

The study followed a non-experimental design to understand the *haor* children's difficulties in continuing regular education and long-term effective solution, intervention and innovation. A qualitative approach was applied to collect information from the target population in the *haor* areas.

Study areas and targeted population

The main target population of this study were poor and extreme poor families in the remote *haor* villages who have children (Ages 6 to 16 years) attending school, school teachers, parents, community leaders, UP chairmen and members, and project staff in Baniachong and Derai upazila. Table 1 shows a detail of the study area and sample.

Table 1. Study area and sample

Particulars	Study area and sample		Remark
	Baniachong	Derai	
No. of Village/*hati*	4	4	Eight remote villages were purposively selected from Baniachong and Derai
Focus group discussion (FGD)	4	4	One FGD was conducted from each village or *hati in* both areas
In-depth interviews	8	8	Two in-depth interviews were conducted with parents/teachers/community leaders/UP chairmen/members from each village or *hati* in both areas
Group discussion with project staff	1	1	One group discussion was conducted with project staff, eg, UDC, ADC, SS, and BM in both areas; Baniachong and Derai

Sampling procedure

Statistical representation was not considered when determining sample size. A purposive sampling technique was applied to select the sample locations. The first set of target population, poor and extreme poor households, children and parents were randomly selected in the remote *haor* village/*hati* in both Baniachong and Derai areas. The second set of target population, community leaders, UP chairmen/members and project staff, were purposively selected in both areas.

Methods of data collection

Qualitative methods were used for data collection. Focus group discussion and in-depth interviews were used to gather information on selected issues. This study used a checklist to conduct group discussions and in-depth interviews. Two trained researchers directly assisted collecting information.

Data processing, analysis and presentation

The data were analysed manually and presented in narrative, descriptive manner using tables and a matrix. Narrative data were collected in Bengali and translated into English. Data were also categorised through the thematic issues by applying a coding and decoding process.

Findings and interpretation

Baniachong:

The *Chamakpur* pilot area in the *Kagapasha* union is one of the most remote areas in the Banichang upazila. There are 35 *hatis* of various sizes, which can easily be identified from the plain lands of Baniachong. As shown in the BRAC Research and Evaluation Department (RED) Census 2012, a total of 2,898 households represent a demographic view of Chamakpur areas. *Hatis* are small islands surrounded by water during the monsoon. In the dry season, these villages/*hatis* are 10 to 12 feet higher than the plain lands. From the focus group discussions with staff and local people, we found that 10 villages/*hatis* can be identified as the more isolated ones of the 35 *hatis* (in the context of distance to high school), eg, Haruni, Goalbogi, Lombabogi, Batakandi, Lohajhuri, Dhonpur, Holimpur, Makalkandi, Mokka and Alakandi in Chamokpur areas. In these areas, the majority

of the villagers were involved in non-skilled intensive physical labour occupations, eg, agriculture, day labour, fishing, fish drying, boat transport, small business (such as tea stalls, saloons and grocery shops). Very few of them who migrated temporarily/seasonally to the nearest local city and abroad had better income than the locals.

The wealth ranking provides a picture of different groups, which exists in the sample study areas. In accordance with the pattern of resources, like land ownership, the households or villagers identified five wealth groups/classes (rich, middle, lower middle, poor and hardcore poor) in the 10 villages of Chamakpur. A small portion of households (less than 1%) were categorised as the rich class yet they owned 800-1,000 decimals of land. In most cases, the wealthy class did not live in the local areas. Similarly, 5% of households were identified as middle class and they owned 500-799 decimals of land. 15% of total households were identified as lower middle class and they had 200-499 decimals of land. However, approximately 30% of total households were identified as poor and they owned 10-199 decimals of land. The remaining 50% of participants were identified as hardcore poor and they had nine decimals of land or less. So, 80 per cent of the families among the 10 villages that owned a small portion of land were only allowed single crop cultivation because of ecological difficulties. Therefore, most *haor* people suffer from extreme poverty and earn insufficient income.

In Chamakpur, BRAC is the largest NGO with active operations. In addition, Mamoni, Grameen Shokti and Patakuri operate a maternal health service and solar power system in these villages.

All villagers used ferry boats and tiny boats as modes of transportation to the main land during the monsoon (May to October). In the dry season (November to April), they used "*chander gari*" or old Bedford Jeeps. There are 2,044 students (1,050 girls and 994 boys) in various types of schools in Chamokpur area, eg, eight government primary schools, seven BRAC *shikkha tory* boat primary schools and eight BRAC primary schools (BPS). BRAC operates a total of 15 primary schools, which contains 445 students (girls 272 and boys 173) from different hatis in Chamakpur. BRAC *Shikkha Tori* collects students from different locations within the 10 *hatis in* Chamakpur areas.

But Akota high school is the only secondary high school in the Chamokpur area. It is the only opportunity for children to access secondary education in this area.

These *hatis* are almost 1-4 km away from the high school. In 2013, there were 290 students (188 girls and 102 boys) in various classes at the high school. After completing primary education, the majority of students of these areas are admitted to Akota high school. Normally, the dropout rate increases in high school because of the lack of boat accessibility during the monsoon, especially for girls, in both poor and extreme poor families.

Table 2. Number of students, distance to school and average cost per student by village

Name of union	Name of village/*hati*	No. of students study in high school	Distance of school from village (km)	Way of transportation in monsoon	Average transportation cost per student per month (BDT)
Kagapasha	Makalkandi	54	3.0	Boat	300
	Moka	50	1.8	Boat	210
	Haruni	25	3.5	Boat	400
	Lamba Bogi	25	2.5	Boat	250
	Goal Bogi	12	3.0	Boat	300
	Batakandi	12	2.7	Boat	250
	Halimpur	15	3.2	Boat	300
	Lohajuri	11	3.5	Boat	400
	Alakkandi	10	2.0	Boat	300
	Dhanpur	06	2.7	Boat	250

Source: FGD and in-depth interview

Table 2 shows the distribution of the remote village/*hati's*, the number of students who went to Akota high school in 2013, the distance from the school to *hati*, the main transportation methods during monsoon and the average monthly transportation cost per student during that time.

In the group discussions and in-depth interviews, the study found that the major causes of dropouts from the school were mass poverty, child labour and geographical difficulties. Here, survival is a major concern and rate of literacy comes next. Lack of awareness about education, child marriage, child labour, extra transportation costs and regular education costs were the major reasons students dropped out of school. The headmaster of Akota high school stated that at least 50% of students between classes 6 and 10 dropped out because of boat accessibility and expenses of transportation during monsoon.

On the other hand, the study also found that poor and extreme poor *haor* dwellers who depend on day labour or agriculture-based subsistence had faced difficulties in fulfilling their daily needs. In the most cases, low income and high demand for consumption makes them vulnerable. As a result, child labour becomes a means to contribute family needs as boatmen, fishermen, day labourers, rice farmers, rice huskers, fuel collectors, tea stall helpers, dairy farmers and small businessmen in

the *haor* areas. Simultaneously, child marriage is another problem for children's education in the *haor* areas. Costly and risky transportation systems also discourage children from attending school during monsoon in the remote *haor* villages, especially girls.

Derai:

From the group discussion with staff and community people, we identified and worked with the four most remote villages in the three unions of Vatipar, Rafinagar and Jagdhal in Derai *upazila*. A total of 718 households represented the four villages and economic status of 40% of them was categorised into the poor and extreme poor classes. Most villagers were involved with unskilled income generating activities (IGAs), eg, agriculture, fishing, small business, boating, day labour (agri. and non-agri.) and household work. A small number of national and international NGOs have been working in these areas, eg, BRAC, Grameen Bank, Care Bangladesh, DASCHO, ERA and SHATHI.

In the four remote villages, there are two high schools (Jagdhal and Rafinagar high school), three government primary schools (Raibangali, Dhalpushi and Shingnad), one non-governmental primary school (Sechni), six BRAC primary schools (BPS) and two pre-primary schools and two *madrasas*. Table 3 shows the present status of the remote villages/*hatis, the* number of students who went to primary and high school in 2013, distance of the villages/*hati*s to the schools, major methods of transportation during the monsoon and average monthly cost for using a boat per student during the monsoon. On the other hand, *laguna* and motorcycle are the main transportations for villagers in dry or the winter season (November to April) in these areas, while boats are the major transportation during the rainy season or monsoon (May to October).

Table 3. Distribution of number of students, distance and average cost

Name of union	Name of village	No. of students in school	Distance to school from village (km)	Way of transport during the monsoon	Average monthly transport cost per student (BDT)
Vatipara	Dholkutup	Primary - 80	1.0	Boat	200
		High - 30	1.5	Boat	300
Rafinagar	Sechni	Primary -100	1.5	Boat	300
		High - 15	1.5	Boat	300
Jagdhal	Shingnad	Primary - 80	0.5	Boat	200
		High - 50	4.0	Boat	400
Jagdhal	Atphuria	Primary - 80	0.5	Boat	200
		High - 25	1.0	Boat	300

Source: FGD and in-depth interview

In the group discussions and in-depth interviews, we found that most students in these villages were not able to attend school regularly during the monsoon because they could not access the regular shuttle boat at that time. Many poor households live in the remote *haor* areas and do not have access to regular transportation, like ferry boats, which provide services on a rental basis. Therefore students, especially girls, from poor and extreme poor households are deprived of basic education during the monsoon. As a result, they remain absent at school. However, students from rich and middle class families are able to manage a boat as a mode of transportation to go to school during the monsoon and they spend BDT 200 to 400 per person per month on boat fares. Most of the time, the boys in the family get this privilege over the girls. Parents from poor households were not interested in educating their children because of the extra costs like boat fares. Therefore, many students in these areas were not able to attend school regularly and finally dropped out of school.

Many short periodic earning opportunities are created in the *haor* areas during the monsoon. Therefore, opportunities of child labour also increase accordingly. In particular, children often assist in fishing. They also assist in boat transportation with their families or work on the boat as child labour. They contribute extra income to their family and their parents encourage them to work rather than go to school. However, it is very important to ensure an uninterrupted and continued education for the children of poor and extreme poor households in the *haor* areas.

Through focus group discussions with parents, community leaders ie, UP chairman and members and the local people of the corresponding areas were given emphasise that, if transportation like boat services are available for students specially of poor and extreme poor families in the remote villages, the problems mentioned above like irregular child education could be solved.

Conclusion

The IDP-*Haor* project has initiated to develop the socioeconomic conditions and better livelihoods of the *haor* people. Simultaneously, the project has another objective to reduce the number of dropouts and achieve 100% attendance from the students. Therefore, if IDP can ensure boat accessibility for school students in the remote *haor* villages/*hatis* during monsoon, then it could be a unique and important initiative to promote uninterrupted and regular education for the *haor* dwellers' children.

Participatory action research

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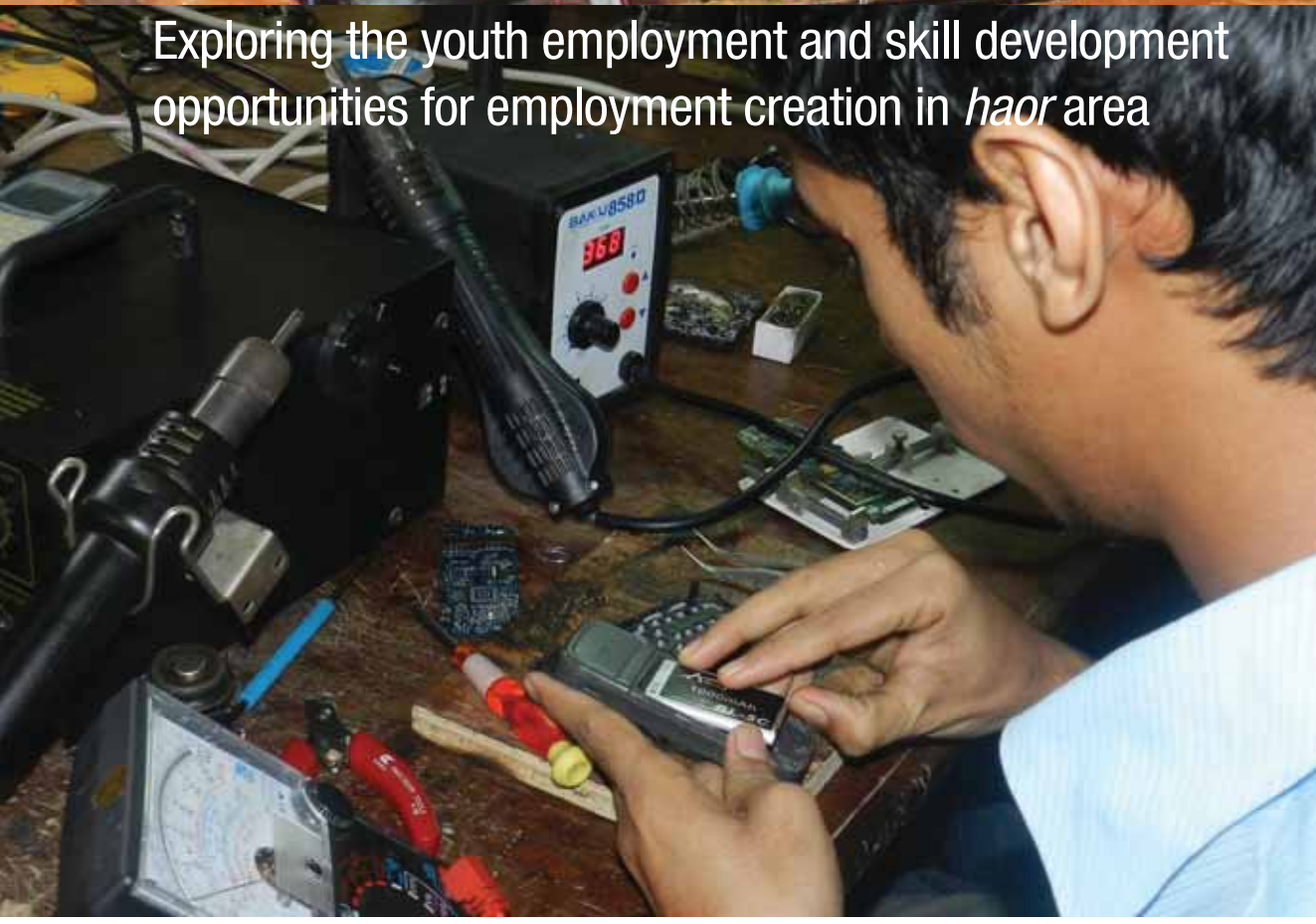
RESEARCH PAPERS

Exploring the youth employment and skill development opportunities for employment creation in *haor* area



2. Exploring the youth employment and skill development opportunities for employment creation in *haor* area

Md Akramul Islam
Mohammad Nur Hossain Siddique
Abu Ansar Md Enayet Karim

Abstract

This study aims to explore the sociodemographic characteristics of households with young people and the skill development opportunities for youth employment in the *haor* area. A mixed method was used to collect the data. The study reveals that household incomes are small, family sizes are large and a good proportion of youth have no education. It was clearly shown that most of the youth were not involved with income generating activities. They were more interested to receive skill development training on duck rearing, cattle farming, driving, rice and vegetable cultivating, fish farming, and television, fridge and mobile servicing to get a job. On the other hand, young women were encouraged to receive different skill development training, eg, tailoring, block-*batik*, embroidering, paper or rexine bag making, homestead gardening, computer operating and beauty parlour activities. This was done so that the project can provide such skill development trainings for youth groups employment creation in *haor* areas. This will also help to improve the socioeconomic conditions of the *haor* dwellers and ensure sustainable livelihoods through the IDP-*Haor* project.

Introduction

Though Bangladesh has developed in many areas, a high poverty rate, with huge income and wealth inequalities still exist throughout the country. Bangladesh's regions have made considerable progress in increasing food production and socioeconomic indicators for their millennium development goals (MDGs). Despite this progress, Bangladesh is still one of the poorest and most food insecure countries in South Asia, due to income inequality, frequent natural disasters and social complexities. It is thought that income inequality and chronic poverty are the primary causes for wide spread food insecurity. Economic deprivation and social inequality have often been perpetuated by geographical isolation in regions of Bangladesh, such as the *haor* areas.

Youth are the main driving forces of accelerated development in any development country or community. To develop and accelerate growth smoothly, one must

develop youth skills, engage youth in income generating activities (IGA) and ensure sustainable income opportunities. Therefore, it is necessary to develop youth skills through IGA training, which are *haor*-friendly, cost-effective and community's need-based. In this concern, IDP-*Haor* project conducted an action research with active participation by youth groups, community leaders and others.

Objectives

Explore the skill development and employment opportunities for youth in *hoar* areas

Specific objectives

- Explore the demographic information of youth families in *haor* areas
- Assess the necessity and areas of skill development training for creation of youth employment

Methods

The study followed a non-experimental design to assess the necessity of skill development training to the creation of income generating activities for youth in the *haor* areas. Qualitative and quantitative approaches were applied to collect information from the target programme participants in the *haor* areas.

Study areas and target population

The study was conducted in the IDP-*Haor* project areas in two sub-districts, Baniachong and Derai. The study target population was youth between (male and female) 16 and 24 years old. Table 1 shows detailed information on the study areas and target population.

Table 1. Study areas and target population

Particulars	Study area/sample		Remark
	Baniachong	Derai	
No. of village/*hati*	4	4	Four remote and non-remote villages or *hati* were selected purposively from Baniachong and Derai
Semi-structure interview (SSI)	42	42	A total of 84 youth (male and female) was selected from Baniachong and
FGD	4	4	One FGD was conducted in each village or *hati* in Baniachong and Derai
In-depth interview	4	4	One in-depth interview was conducted with teachers, community leaders and UP chairmen/members from each village in Baniachong and Derai

Sampling procedure

Statistical representation was not considered when determining sample size. A purposive sampling technique was applied when selecting sample locations. The first set of target population was youth between 16 and 24 years old, selected from both Baniachong and Derai. The second sets of target population were parents of the youth, community leaders, and UP chairmen/members who were selected in both Baniachong and Derai.

Methods of data collection

Qualitative and quantitative methods were used for data collection. Semi-structure interview, focus group discussions and in-depth interviews were used to gather information on selected issues. Two trained researchers directly assisted in collecting information.

Data processing, analysis and presentation

The data was manually collected by using a set of structured questionnaires, checklist and specific questions conducted in SSI, group discussions and in-depth interviews. Collected data were analysed and presented in a descriptive narrative with tables and figures. Narrative data were collected in Bengali and then translated into English. They were then categorised into issue-based tables and figures through a coding and decoding process.

Findings and interpretation

The semi-structure interview addressed in the study concentrated on the four issues of youth and its families, eg, sociodemographic profiles, occupation, skill development and employment opportunities in the *haor* areas. Following description are given a short briefing on the mentioned issues.

Sociodemographic profile

The study focused on household size, monthly income per household, youth mean age, sex ratio, education year (mean), marital status, educational status and primary youth occupation.

Table 2 presents statistics on the sociodemographic characteristics of the surveyed youth and their household information in both areas (Baniachong and Derai). Analyses of data reveal that except for average household income, there were no statistically significant differences between the two areas. More importantly, data reveals that 90.5% of the youth from Baniachong and Derai were unmarried. The majority of youth were involved in non-IGA related work.

ie, household work in both areas. A small proportion of youth were involved in non-skilled, physical-labour-intensive occupations, eg, day labourers (agri and non-agri) and agriculture farmers in both areas. Additionally, a small proportion of youth were still unemployed in both areas (Baniachong 14% and Derai 16.7%).

Table 2. Socio-demographic profile of respondents' households (%)

Indicators	Baniachong (n=42)	Derai (n=42)	p value
Household size (mean)	7.4	6.8	.302
Average household monthly income (BDT)	6,062	7,048	.044
Sex of respondents/Youth			
Male	19.0	52.4	
Female	81.0	47.6	
Age of youth (mean)	17.7	18.5	.106
Education in years (mean)	5.0	5.2	.785
Marital status of youth			
Unmarried	90.5	90.5	
Married	9.5	9.5	
Educational status for youth			
No education	16.7	26.2	
Class 1 to 5	50.0	42.9	
Class 6 to 10	33.3	14.3	
SSC and above	0	16.7	
Occupational status for youth			
Agriculture	2.4	26.2	
Day labour (Agriculture)	16.7	0	
Household work	59.5	42.9	
Service	2.4	4.8	
Others	4.8	9.5	
Unemployed	14.0	16.7	

Table 3 shows that a large percentage of youth were found to be uneducated especially male youth in both areas (Baniachong; male 50.0%, female 8.8%, and Derai; male 50.0% female 0.0%). The data reveals that male youth are less likely to receive an education compared to female youth. Subsequently, the number of female youth who completed class 1 to 5 were higher than male in both areas.

From the FGD sessions, we found that a large number of schoolgirls dropped out of primary school after graduating class 5. Amongst the youth enrolled in the higher level education (SSC and above), schoolboys in Derai have better standing than those in Baniachong, because none of the students were going to school past class 10 in Baniachong.

Table 3. Distribution of youth educational status by sex (%)

Indicators	Baniachong		Derai	
	Male (n=8)	Female (n=34)	Male (n=22)	Female (n=20)
No education	50.0	8.8	50.0	0.0
Class 1 to 5	37.5	52.9	13.6	75.0
Class 6 to 10	12.5	38.2	4.5	25.0
SSC and above	0.0	0.0	31.8	0.0

Table 4 illustrates that a larger percentage of male youth were involved in agricultural day labour in Baniachong compared to Derai. Nevertheless, a smaller proportion of male youth were involved in agriculture work in Baniachong (12.5%) compared to Derai (50%). A large percentage of female youth were involved in household work in both areas (Baniachong 73.4% and Derai 90.0%).

Table 4 Distribution of youth occupational status by sex (%)

Indicators	Baniachong		Derai	
	Male (n=8)	Female (n=34)	Male (n=22)	Female (n=20)
Agriculture	12.5	0	50.0	0
Day labour (agri.)	87.5	0	0	0
Household work	0	73.4	0	90.0
Service	0	2.9	9.1	0
Others	0	5.9	9.1	10.0
Unemployed	0	17.6	31.8	0

From qualitative findings, the study found that most of the male youth were involved in agricultural activities eg, rice production during the dry season in the *hoar* areas. In monsoon, they were going to be fishermen, boatmen or net makers. A small number of young men cultivate vegetables during the winter season in certain areas of the *haor*.

Figure 1. Scoring the job opportunity for youth (male) in *haor* area

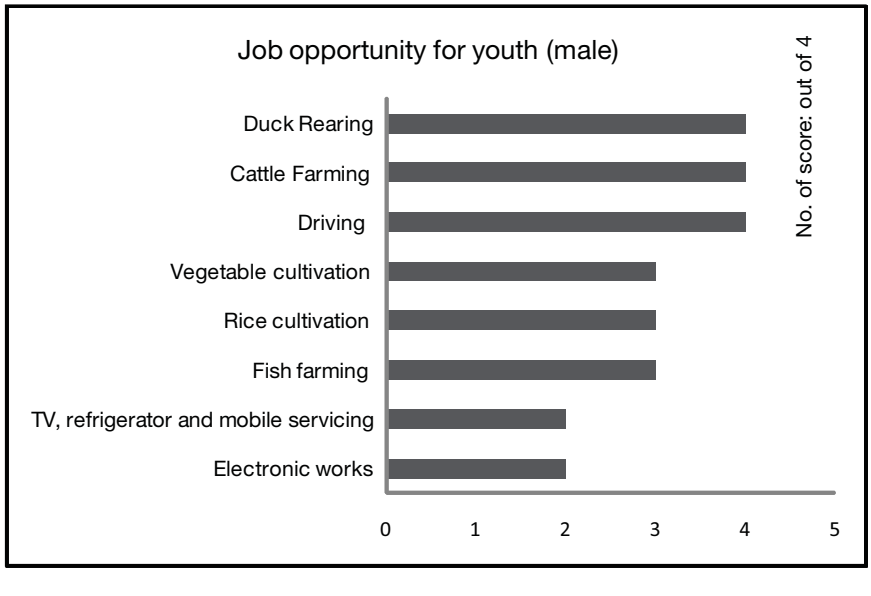


Figure 1 shows that male youth groups were interested to receive skill development training on duck rearing, cattle farming, driving, rice and vegetable cultivating, fish farming, television, freeze and mobile repairing and servicing, and electronic works. They also mentioned that they could earn extra money for their families in the winter season if they have training and skills on vegetable cultivation, specifically potatoes, radishes, maize and cauliflowers.

Figure 2. Scoring of the job opportunity for youth (female) in *haor* area

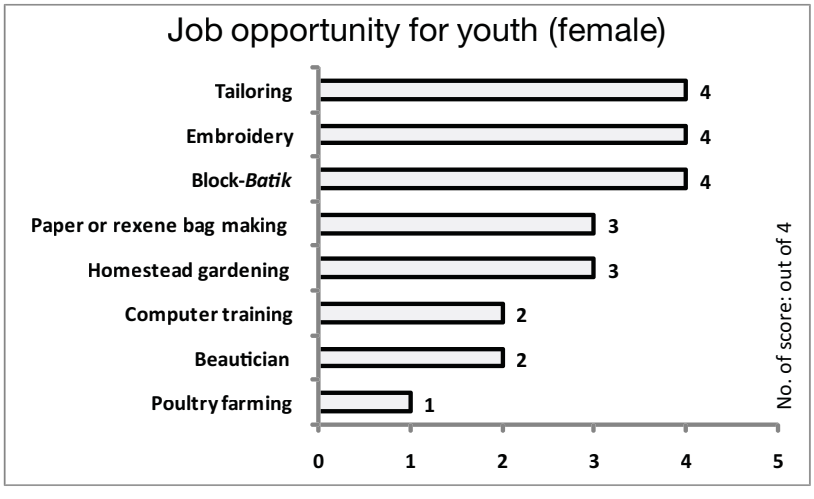


Figure 2 shows that female youth groups were interested to receive training on tailoring, block-*batik, nokshi katha* working, embroidering, paper or rexine bags making, homestead gardening, computer operating and beauty parlour activities. They were very ambitious and asked us to ensure basic services like training courses and market opportunities.

From the group discussion, the study found that a large number female youth were involved in domestic or household work. And they were also involved in rice processing work, ie, drying and boiling rice during the rice harvest season in *haor* area. Simultaneously, they were also involved with domestic work, such as, cooking, dish washing, children keeping and household cleaning. Some of the youth female were involved with stitching cloths for neighbours or wealthy people in *haor* areas. However, very few female youth were continuing their education in a high school, yet they were interested in receiving skills training, which would be helpful for creating employment opportunities for them. In addition, they also demanded sewing machines in order to become small entrepreneurs at community level in the *haor* area.

Interpretation

Most of the female youth were interested in income generating activities (IGA) that help young girls earn extra money for their families, eg, tailoring, embroidery, block-*batik* work on *nokshi katha*, punjabi (long shirt), *saree*, three piece, paper or rexine bag making. These IGA would provide high returns because only a small investment is needed. However, they demand respective training with market support from IDP-*Haor project*. The majority of female youth were interested in handicraft and tailoring enterprises because these occupations would be permitted by their families since they can work from home. They would also have several opportunities to sell their skills to local organisations like the Ayesha Abed Foundation, especially in Baniachong.

The study observed that a majority of male youth were interested in duck rearing and cattle farming. These jobs are *haor*-friendly and more suitable for them. In particular, they mentioned that in the dry season, they have a large open water and grass field to feed their cows and ducks. The *haor* becomes a natural resource, which has a good habitat for the ducks. They said that these type of training with technical support, small investments including a low risk of marketing. At the same time, it could be possible to generate a good income for youth in *haor* area.

Hybrid rice and vegetable cultivation is another big opportunity for the male youth population. They said that rice is the main cash crop in the *haor*. If they receive proper training on hybrid rice and vegetable cultivation, they can easily produce such crops by leasing land, as most of their families have a small portion of land.

The male youth also mentioned that driving would only require training, which could provide a good return by a small investment. They said that if they receive training in light vehicle driving, they can easily get a driving job such as auto rickshaws or small vehicles within or even outside their sub-district.

It is difficult to get quick returns by learning television, fridge, mobile servicing, electronic and electric wiring work. However, receiving such training would create positive outcomes for the male youth as they would generate a higher income. The male youth also said that these types of self-employment opportunities are locally increasing in the *haor* area. Therefore, if they have technical training, they can easily use those skills when migrating to other places or even to foreign countries.

Conclusion

The IDP-*Haor* project has initiated to improve the socioeconomic condition of *haor* dwellers and ensure sustainable livelihoods through an integrated approach. Therefore, it is necessary to include youth in income generating activities. So, skill development training for youth would ensure employment opportunities and create a positive change of youth families' livelihood as well as *haor* dwellers.

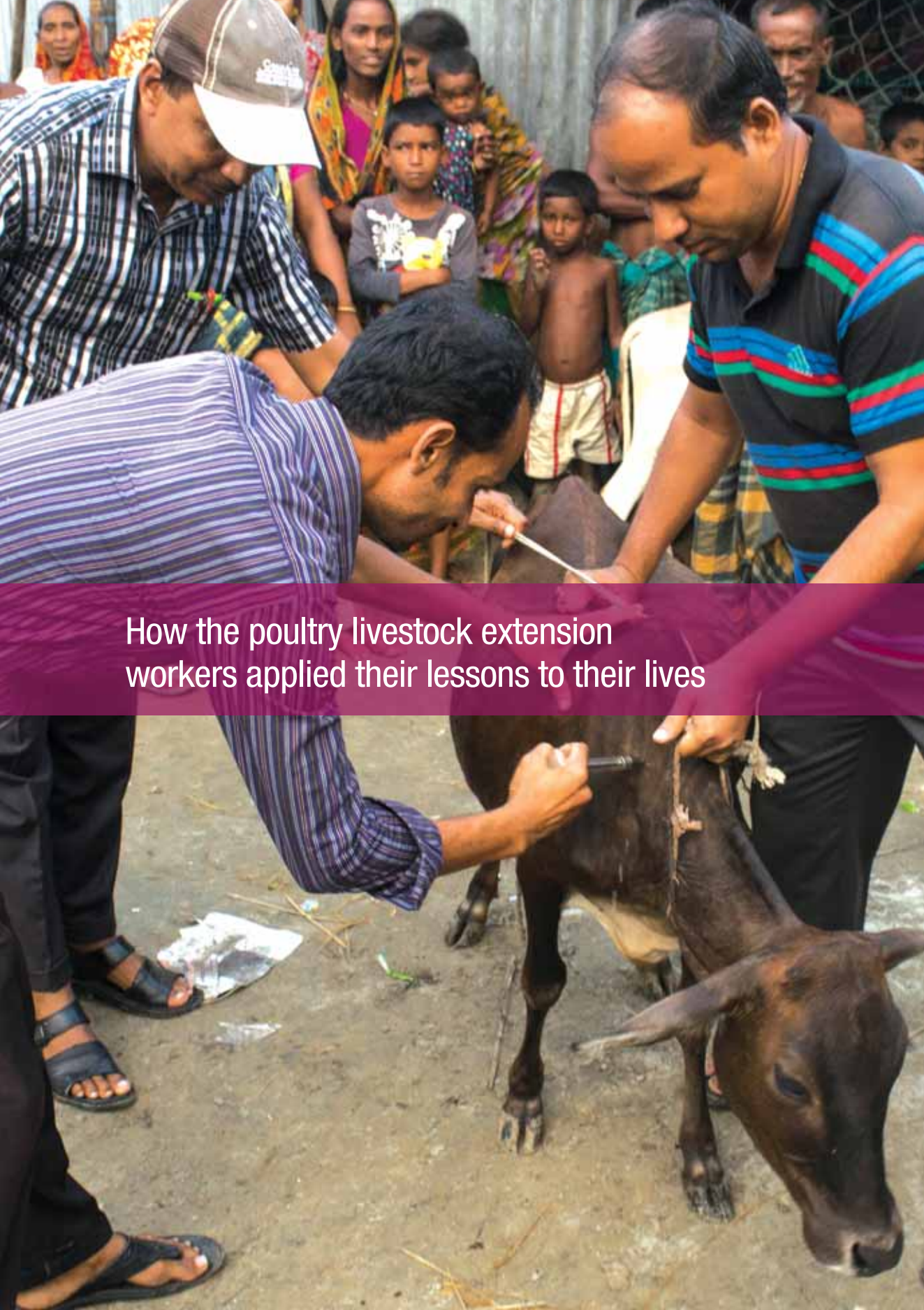
Recommendation

- IDP-*Haor* project can provide IGA training for youth on duck rearing, tailoring, embroidering, cattle and poultry farming, hybrid rice and vegetable cultivating, driving, electronic, TV, refrigerator and mobile servicing for skills development and creating employment opportunities. This would provide better livelihood opportunities and reduce poverty in the *Haor* areas.
- Technical and financial support are also needed to start new IGA for youth, especially for duck rearing, hybrid rice and vegetable cultivating, fish and cattle farming.
- Market linkage for new young entrepreneurs would be necessary to ensure that their products sell.

Participatory action research

Reflection and learning

RESEARCH PAPERS



How the poultry livestock extension workers applied their lessons to their lives

3. How the poultry livestock extension workers applied their lessons to their lives

Md Akramul Islam
Mohammad Nur Hossain Siddique
Abu Ansar Md Enayet Karim

Abstract

The study aims to measure the changes in the type and depth of knowledge of the poultry livestock extension workers (PLEWs) as an effect of training. Both qualitative and quantitative methods were applied in the research. The study finding reveals that the average monthly household income and expenditure were poor when compare nationally, family size was large, the average years of education for PLEWs was nine and the mean age of PLEWs was 31 years old. More than half of the PLEWs were involved with poultry livestock extension services as main occupation. A good number of PLEWs reported that the training course was good in terms of course outline and trainer's quality and skill. A good proportion of PLEWs mentioned that they were able to increase their average monthly income from BDT 5,000 to 7,000 after receiving the PLEWs training. The study suggested that BRAC intervention should continue with additional measures to ensure the financial support to the PLEWs for a sustainable change in *haor* dwellers livelihood.

Introduction

The poultry and livestock sector is an integral part of farming in Bangladesh and contributes tremendously to poverty alleviation, self-employment, nutritional enhancement and agricultural resource development. Less capital and time are required to adopt the programme and it generates a substantial return for the households engaged in this sector. Approximately 70% of the landless women are directly or indirectly involved in traditional poultry rearing activities. It is a good source of income for rural women because they already have some experience in poultry rearing. Poultry rearing could be more effective if poultry mortality could be reduced through the improvement of the local breed. Additionally, the nutritional levels of the family would be enhanced (BBS, 2010).

In Bangladesh's *haor* areas, poultry and livestock are one of the main source of high protein, as well as a great means of income generation for poor families. In the *haor*, a remarkable number of households are involved in small scale farming activities, such as raising cows, chicken, ducks, sheep, goats etc. BRAC's CFPR-TUP programme, under the IDP-*Haor* project, also provides one cow and

five to 10 birds (chicken and/or ducks) to the poor and ultra poor households in the *haor* areas. In most cases, women play major roles in poultry and livestock rearing activities. Duck rearing is a feasible option because of the ecological support of the *haor* areas. Homestead duck and chicken eggs are available in the local market and they contribute a considerable amount of cash income to the poor *haor* families (Huque KS, *et al*, 2011).

In the *haor*, November to April is the dry season and May to October is the rainy season. All but the homestead land is submerged under water during monsoon. Due to ecological difficulties and geographical conditions, the *haor* weather is not contusive to livestock rearing, especially during monsoon. However, a general scenario shows that many cattle are moving to the *haor* lands in the winter season. Most of them are in poor health and poor hygienic condition. Due to the lack of skills and difficulties of transportation, poultry and livestock extension workers are not available in the remote *haor* areas. Although a few PLEWs have been able to work in the area, they do not have proper training related to their profession. Most of them are self-taught and practice their indigenous knowledge, which are not scientific or modernised. The community has no access to artificial insemination, housing and hygiene, disease control and vaccination, food and nutrition and animal husbandry techniques. Realising this situation, IDP-*Haor* project has initiated to develop a team of skills poultry livestock extension workers (PLEWs) in *haor* areas for helping the poor dwellers through providing a 15-day training course. The training courses of the PLEWs were facilitated by a group of skilled and specialised people on poultry livestock rearing. A total of 82 project participants (Baniachong 50 and Derai 32) was participated in the PLEWs training. The aim of the training course was to enable the *haor* dwellers to increase their household income through better livestock productivity and minimal livestock losses through disease prevention and mortality control. As a follow-up to this activity, an action research was conducted which explored the training impact with limitations to the services at community level in *haor* areas.

Objectives

Explore the poultry livestock extension workers knowledge, skill and applied learning in *haor* areas.

Specific objectives

- Find the PLEWs knowledge and skills which were applied to their lives in *haor* areas
- Find the procedure of the regular service delivery of PLEWs at community level in *haor* areas

Methods

The study followed a non-experimental design to explore the PLEWs services at community level in *hoar* areas. Both quantitative and qualitative methods were applied to collect information from the target audiences, like PLEWs, service recipients and community people in the *haor* areas.

Study areas and target population

The study was conducted in the IDP-*Haor* project areas - Baniachong and Derai *upazila.* The first set of target population were PLEWs who received training from the IDP-*Haor* project and second set of target population were service recipients or community people in *haor* areas. Table 1 gives a short description of the study area and target population.

Table 1. Study areas and target population

Particulars	Study area and sample		Remark
	Baniachong	Derai	
Semi-structure interview (SSI)	15	15	A total of 30 PLEWs were selected randomly for SSI in both Baniachong and Derai areas
In-depth interview	5	5	A total of 10 in-depth interviews were conducted with PLEWs and service recipients in both Baniachong and Derai areas

Sample and sampling procedure

Statistical representation was not considered when determining sample size. Simple random sampling techniques were used for selection of the first set of target population, eg, PLEWs and service recipients in both Baniachong and Derai areas.

Methods of data collection

The study used both quantitative and qualitative methods, eg, in-depth interviews and semi-structured interviews for data collection. Two trained researchers assisted directly in collecting the information.

Data processing, analysis and presentation

This study generated some effectiveness tools and techniques, ie, questionnaire, checklist and issues for survey and in-depth interviews. The survey data was analysed by SPSS and in-depth interview data were analysed manually. Both findings were presented in tables, figures and graphs in a narrative manner.

Findings and interpretation

To meet the study objectives, we concentrated on various development issues regarding the PLEWs families' socio-demographic profile, ie, household size, average monthly income and expenditure, mean age and education year of PLEWs, occupation, knowledge and understanding about the training course, place, duration, quality of training and trainers, service delivery process and increased average monthly income of PLEWs.

Table 2. Socioeconomic profile of respondents' households (%)

Indicators	Baniachong (n=15)	Derai (n=15)	p value
Average household size	6.6	7.5	0.001
Average HH monthly income (Tk.)	17,600	17,000	0.065
Average HH monthly expenditure (Tk.)	14,333	12,933	0.001
Age of PLEWs (mean)	31.1	31.6	0.365
Education in years (mean)	9.7	9.5	0.366
Main occupation of PLEWs (%)			
Agriculture	26.7	22.0	
Business	6.7	4.7	
PLEWs	60.0	65.0	
Others	6.6	8.3	

Table 2 presents a summary statistics of the socio-demographic characteristics of surveyed household in both areas (Baniachong and Derai). Finding reveals that there was no significant difference between respondents of the two areas, excluding household size and average monthly income.

They study observed that the majority of PLEWs were involved with poultry livestock extension services as main occupation in both areas (Baniachong 60%, Derai 65%). Correspondingly, a small proportion of PLEWs were involved in agriculture farming as main occupation in both areas.

Knowledge and understanding of PLEWs about the training course

Three thematic areas were observed, to see if respondents in both areas: 1) correctly respond to the name of training course, 2) respond to the name of the training place and 2) respond to the duration of training course.

Figure 1. Correct response about the training course name, place and duration (%)

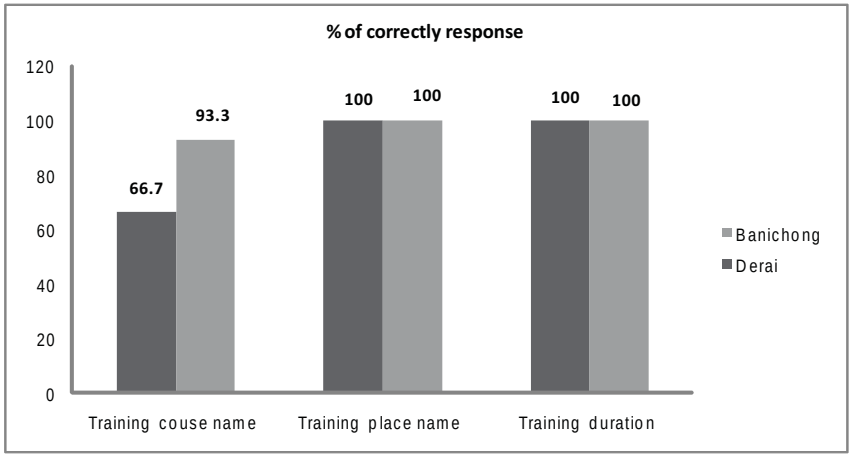


Figure 1 shows that a good proportion (100%) of the respondents correctly named the training place and duration in both areas, Baniachong and Derai. However, a greater proportion of respondents in Derai (93.3%) correctly named the training course compared to Baniachong (66.7%). From the in-depth interviews, the study found that most of the participants applied their learning to enhance their knowledge and skills that positively changed their livelihood.

Table 3. Training course subjects or issues correct response by respondents (%)

Subjects of training course	Correctly response (%) (n=30)
Treatment and prevention of livestock diseases	30.7
Modern/hybrid grass farming for cattle	11.3
Basic information on artificial insemination/ cross breeding	9.8
Livestock vaccination	17.4
Beef fattening	8.2
Molasses production /grass preservation for rainy season	4.1
Worm related problem and vermicide application	3.6
Livestock (duck, poultry, buffalo) farming	8.8
Balanced food for livestock	3.1
Livestock age and weight determination	2.6
Others (livestock habitation management, instrument using in livestock treatment, livestock temperature determination)	5.0

Multiple responses considered

Table 3 shows the respondents' knowledge and responses about the training course subjects and issues. About 20 subjects or issues were discussed in the 15-day PLEWs training. The highest correct responses were regarding livestock diseases treatment and prevention (30.7%) among the 20 issues of training courses. And the second highest correct response was livestock vaccination (17.4%) observed. However, 18 other issues did not get sound responses (all most less than 10%) from the respondents in both areas (Baniachong and Derai).

In the qualitative findings, the study observed that most PLEWs who participated in the training course on poultry-livestock rearing and management were able to give details about the training courses and they strongly provided their services at the community level. However, they faced a few difficulties when raising awareness about poultry-livestock rearing and seeking proper treatment for diseases prevention at the community level. The problems were sourced in the community's perception about the indigenous knowledge on poultry-livestock rearing and management.

Figure 2. Distribution of the trainee's opinion about the quality of training course (%)

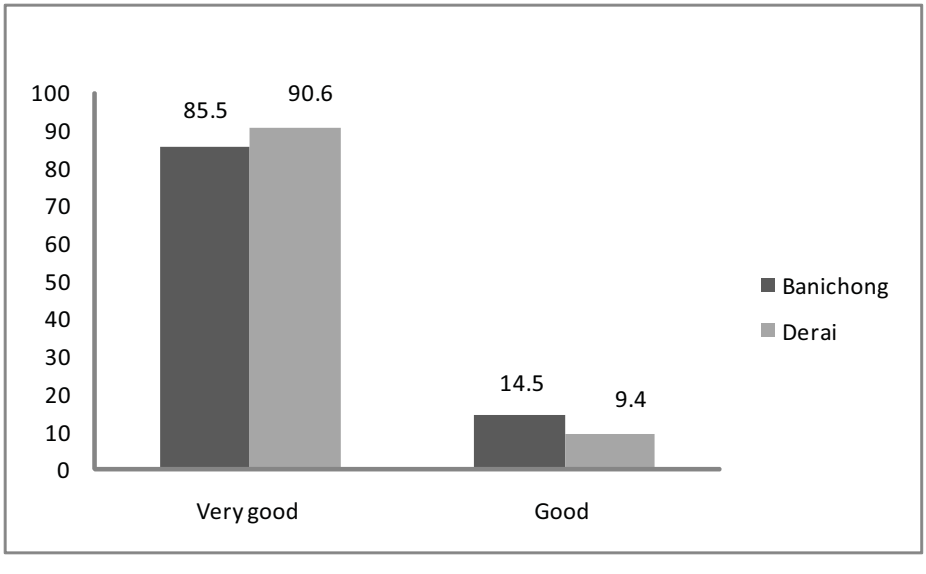


Figure 2 shows that a large proportion of respondents said the quality of training course was very good in terms of course design, trainers' skill and the training environment in both areas (Baniachong 85.5%, Derai 90.6%). A small proportion of respondents said that the training quality was good regarding the same condition of training course in both areas (Baniachong 14.5%, Derai 9.4%).

Figure 3. Why training course quality was good and very good (%)

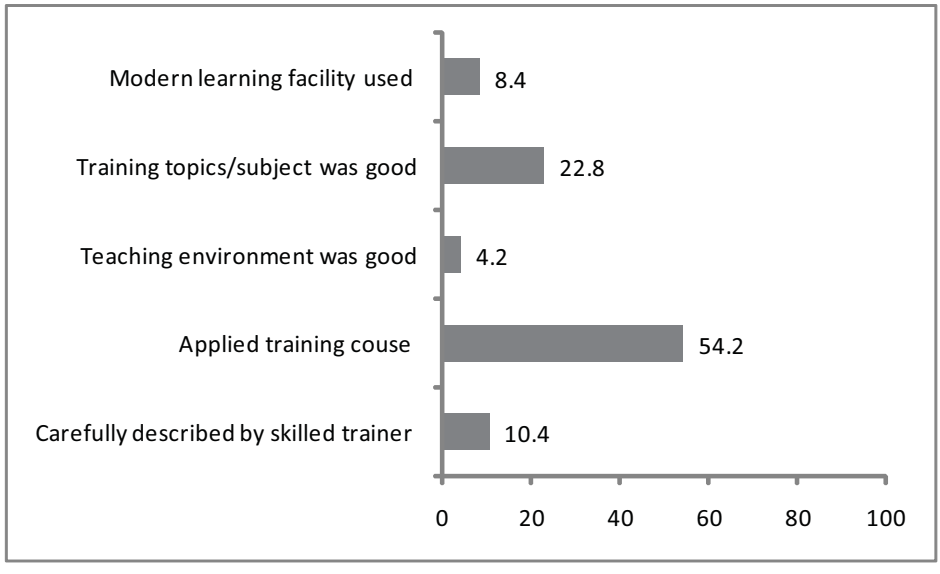


Figure 3 shows that a good proportion of respondents (54.2%) said that the training course was applied for them in terms of community need and practicalities ie, training facilities and environment. A small proportion (22.8%) of respondents mentioned that the subject of training course was good compared to other training courses which they received earlier. However a very small but valuable proportion of training participants mentioned that the quality of training course was good in terms of modern learning approaches, teaching environment and trainer's skill in facilitation.

Figure 4. Participants received same type of training course previously (%)

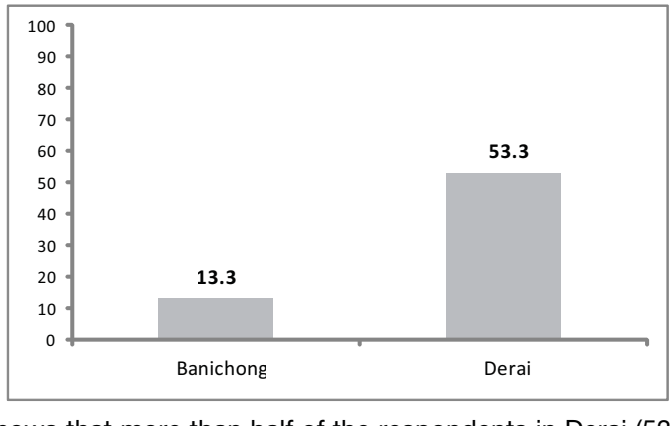


Figure 4 shows that more than half of the respondents in Derai (53.3) mentioned that they received same type of training previously from other GO/NGOs like *Juba Unnayan Adidapter* while only 13.3% in Baniachong had received such training.

Service delivery process and practice

The service delivery process and practice were measured in two ways. Firstly, training participants were directly asked what they had done and what change was observed in the village as a result of their activities. Second, training participants were asked about the specific method of delivery service and its impact like increased average monthly income. In this regard, the following subsequent section presents a discussion on this issue.

Figure 5. Service delivery process and practice by PLEW (%)

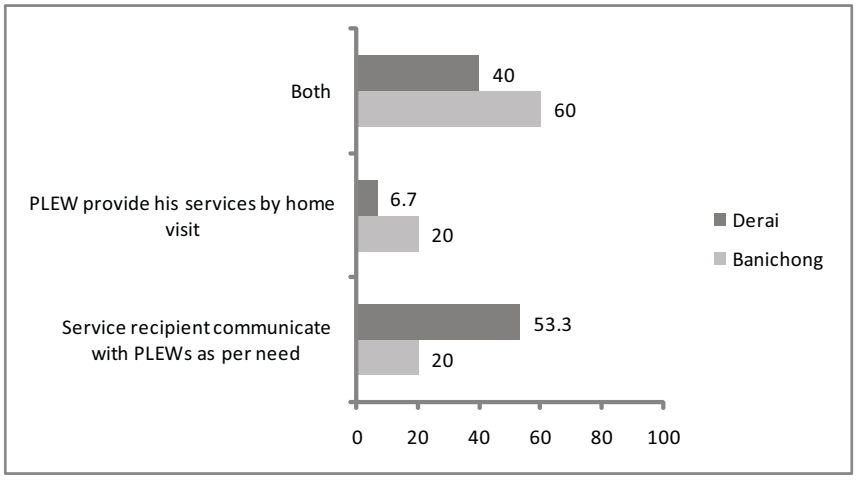


Figure 5 shows that a good proportion of PLEWs in Derai (53.3%) delivered their services per client's need at the community level compared to 20% in Baniachong. On the other hand, a smaller proportion of PLEWs in Derai (6.7%) delivered their services through home visits compared to 20% in Baniachong. However, a good proportion of PLEWs (Baniachong 60%, Derai 40%) provided their services by using both approaches in their respective working areas in *haor*.

Figure 6. Increase in PLEWs average monthly income (Tk.)

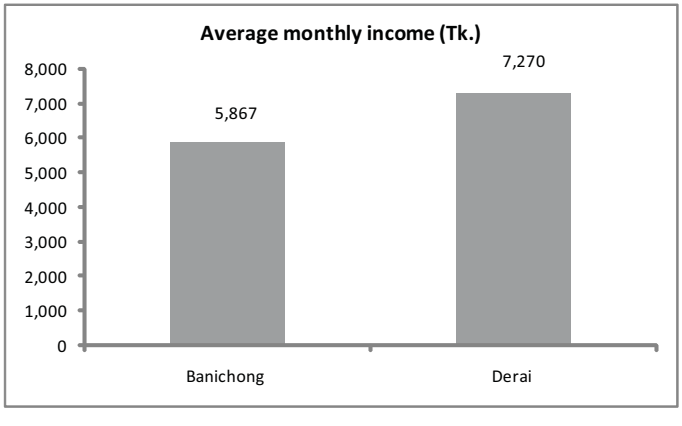


Figure 6 shows that the average monthly income has increased to Tk. 5,867 in Baniachong and Tk. 7,270 in Derai when they took PLEW as a main profession. They said that this type of income is useful to change their livelihood positively because they earn a good additional income compared to previous occupations, e.g, agrifarming, daylabour (from in-depth interviews).

A case study: Quddus Mia is a successful PLEW

Quddus Mia was unemployed for a long time after passing the SSC. After a long period of being unemployed, he became associated with agricultural work. But he did not have enough agricultural land to run a family of six members. Moreover, the land he had was not sufficient to fill the demand for the whole year. He was more interested in agriculture but was open to professions that would help run his family. He heard that BRAC is organising a training course on poultry livestock services and management. After that he communicated with the concerned BRAC staff and was finally selected for the training. He successfully completed the 15-day training and began working with the initial treatment, eg, worm tablets and vitamin injection for poor and extreme poor farmers cows at community level. He provided all kinds of services at a little cost. Similarly, BRAC's agriculture programme staffs were regularly looking after the poor and extreme poor families animal resources especially cows. According to their suggestion, villagers cultivated fodder grass to ensure balanced and nutritious meals for their cattle. Currently, in this area cows are healthier and give more milk than ever before. People are very grateful to BRAC's IDP-*Haor* project. Simultaneously, Quddus Mia's average monthly income has increased to nearly Tk. 7,000 as a poultry livestock extension worker. Now respect has increased in the society as a veterinary physician. Through this profession he would like to ensure the safety of livestock in his area and wants to receive higher training in this sector.

Quddus Mia
Poultry livestock and extension worker

Essential support and good service delivery for PLEWs

Table 3 shows that 31.9% respondents mentioned kit box or tool box as important for PLEW to provide their services at community level.

Table 3. Distribution of required essential support for PLEW (%)

Area of required essential support for PLEW	Frequency (n=30)
Supply kit box/ice box/tools box	31.9
Free supply of vaccine and medicine	22.5
Provide financial support to PLEWs	16.5
More PLEW training needed to reduce unemployment	8.8
Need specialised training on artificial insemination or artificial breeding	7.4
Supply guideline and regular update to PLEWs	5.9
Recruit PLEWs as a regular/short term staff in IDP/BRAC	5.9
Providing specialised training on PLEW	2.9

Multiple responses considered

Additionally, they also mentioned that free medicine and vaccine would have a positive impact on prevention of poultry-livestock diseases at community level in *haor* area. Because, most of the poultry livestock farmers are poor, so they cannot purchase medicine or vaccinations on timely.

Conclusion and recommendations

In conclusion, the study found that the training of PLEW has a positive impact that changes the PLEW lives as well as poultry-livestock farmer's livelihoods in the *haor* areas. So, IDP-*Haor* project can initiate the following initiatives for a sustainable PLEWs groups in the *haor* areas.

- Technical and financial support needs to be given to new PLEWs, ie, provide specialised training on artificial breeding, provide financial support to PLEWs, kit box, promote awareness, provide free vaccine and medicine especially to poor and extreme poor poultry-livestock farmers.
- Market linkage would be needed to sell their skills and knowledge at the community level.
- More PLEW training to reduce unemployment, especially for the male youth in *haor* areas.
- Ensure a supply guideline and regular updating on new and modern technology for PLEWs through refresher training.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Training needs assessment for IDP field operation

4. Training needs assessment for IDP field operation

Md Akramul Islam
Mohammad Nur Hossain Siddique
Abu Ansar Md Enayet Karim

Abstract

This study aims to determine what type of training is needed to help the IDP-*Haor* project accomplish its objectives. A quantitative research method was used to collect the data from the selected target population in Baniachong and Derai *upazila*. The study reveals that a total of 39.7% staff had no previous working experience and were newly recruited in IDP-*Haor* project. On the other hand, a total of 85.1% staff received different types of formal training on BRAC's programme activities, eg, management and skill development, gender awareness, BEP, CEP, HNPP, WASH, TUP, safe migration from the project during the last one and half year. Similarly, a total of 37.9% staff received different issue based informal training on programme activities, ie, VO formation, TUP asset distribution and follow-up, BEP school visit, SK and SS follow-up and etc during the last one and half year. However, a small proportion of staff faced difficulties to implement their respective programme activities at field level in both areas (Baniachong 7.3%, Derai 23.6%). The study suggests that special efforts like a comprehensive training on IDP's programme activities would be more relevant for the staff of IDP-*Haor* project especially in the coordination areas.

Introduction

Is training the right solution for workplace problems? To answer this, one can conduct a training needs assessment. This assessment is an "ongoing process of gathering data to determine what training needs exist so that training can be developed to help the project accomplish its objectives" (Brown, 2002, p. 569). More simply put, it is the "process of collecting information about an expressed or implied organisational need that could be met by conducting training" (Barbazette, 2006).

Essentially, a training needs assessment is a process through which a trainer collects and analyses information then creates a training plan. This process determines the need for the training; identifies training needs; and examines the type and scope of resources needed to support training (Sorenson, 2002). Rossett (1987) explains that one conducts a training needs assessment to seek information about: 1) optimal performance or knowledge; 2) actual or current performance or knowledge; 3) feelings of trainees and other stakeholders; 4) causes of identified problems; and 5) solutions

Considering, the above elements a training needs assessment study was conducted with active participation of staff in coordination areas of IDP-*Haor* project.

Objectives

To determine what training is needed to help the project accomplish its objectives

Specific objectives

- Develop a database of the existing project staff of IDP
- Know what training would be needed for staff to better management directly in the project
- Identify specific problems and training for smooth programme implementation

Methods

The study followed a non-experimental design to assess the needs to help the project of IDP-*Haor* project accomplish its objectives. A quantitative approach was applied to collect information from the target project staff of IDP-*Haor* project.

Study areas and target population

The study was conducted in coordination areas of IDP-*Haor* project in the two sub-districts, Baniachong and Derai. All existing project staff were the target population in the study.

Sampling procedure

Statistical representation was not considered when determining sample size. A simple random sampling technique was applied for selecting sample. All field staff in coordination areas of IDP-*Haor* project were the target population, eg, *shasthya kormi* (SK), programme organiser (PO), branch manager (BM), area development coordinator (ADC), sector specialist (SS), *upazila* development coordinator (UDC) in both areas, Baniachong and Derai.

Methods of data collection

Quantitative method was used for data collection, ie, semi-structure interview (SSI). A set of structured questionnaire was used to gather information on selected issues like staff profiles, skills, experiences in development area, received training, faced difficulties and need of training for smooth programme implementation. Two trained researchers directly assisted in collecting information.

Data processing, analysis and presentation

Data were collected by using a set of structured questionnaires and asking specific questions in conducted interviews. The data was analysed by using SPSS and presented in a short description with tables and figures. Narrative data was collected in Bengali and then translated into English. Issue-based tables and figures were produced by use of a coding and decoding process.

Findings and interpretation

Staff profiles

In considering the first objective of the study, the existing staff profiles focused on staff position, education, working period in IDP as well as BRAC, work experience and skills. Table 1 presents a summary statistics of existing staff position in both areas (Baniachong and Derai). It was observed that the majority of staff positions were programme organisers/field organisers in both areas (Baniachong 62%, Derai 59.8%). A small proportion of staff position was responsible to provide management and technical related services, eg, UDC, ADC and SS in both areas (Baniachong 1.9%, Derai 15.1%). On the other hand, a good proportion of staff position was *shasthya kormi* and they were involved to provide health services at community level in both areas (Baniachong 14.9%, Derai 16.6%).

Table 1. Distribution of surveyed staff by position (%)

Type of position	Baniachong (n=482)	Derai (n=296)	Total (n=778)
Upazila development coordinator	0.2	0.0	0.1
Sector specialist	0.0	3.7	1.4
Area development coordinator	1.7	1.4	1.5
Branch manager	10.2	8.1	9.4
Programme organiser	29.0	28.7	28.9
Field organiser	33.0	31.1	32.3
Project assistant	10.8	8.8	10.0
Shasthya kormi	14.9	16.6	15.6
Technical assistant (TA)	0.2	1.4	0.6
Nurse	0.0	0.3	0.1

Table 2 shows that a good number of staff in both areas Baniachong 40.9%, Derai 39.9%) was found to have higher educated like masters. (On the other hand, more than 20% staff only obtained higher secondary certificate (HSC) level of education in both areas (Baniachong 21.2%, Derai 24.3%). However, a little proportion of staff's education level was graduate/honours in both areas (Baniachong 19.1%, Derai 14.5%). Besides, the study found that a little proportion of staff's education level was only class 8 to SSC in both areas.

Table 2. Educational status of surveyed staff (%)

Details	Baniachong (n=482)	Derai (n=296)	Total (n=778)
Class 8	2.1	1.4	1.8
SSC	11.6	15.9	13.2
HSC	21.2	24.3	22.4
Diploma	4.8	2.4	3.9
Graduate/Honours	19.1	14.5	17.4
Paramedics	0.4	1.7	0.9
Masters	40.9	39.9	40.5

Table 3 shows that a good number of staff has worked in IDP for more than one and half years in both areas (Baniachong 56.8%, Derai 49.7%). On the other hand, a small proportion of staff has worked in IDP more than 19 months in both areas (Baniachong 0.4%, Derai 0.3%). However, a small proportion of staff has worked in IDP for 7-12 months in both areas (Baniachong 25.7%, Derai 31.4%). So, the study found that 54.1% of staff has been working from the beginning of IDP-*Haor* project in both areas.

Table 3. Distribution of surveyed staff working period in IDP (%)

Staff working period (month)	Baniachong (n=482)	Derai (n=296)	Total (n=778)
1-6	16.4	18.6	17.2
7-12	25.7	31.4	27.9
13-18	56.8	49.7	54.1
19-24	0.4	0.3	0.4
25 and above	0.6	0.0	0.4

Table 4 shows that a good number of staff has worked in BRAC for 12 to 24 months in both areas (Baniachong 42.5%, Derai 38.9%). On the other hand, the study also observed that more than 25% of the existing staff of IDP has been working in BRAC for above four years in both areas (Baniachong 25.7% and Derai 27.0%). A similar finding has also been observed that there is staff working from one to 11 months in both areas (Baniachong 24.7%, Derai 28.7%). The study also found that a small proportion has been working in BRAC 25 to 48 months in both areas (Baniachong 7%, Derai 5.4%). On the other hand, a good proportion of the IDP staff has been working for more than four years in BRAC in both areas (Baniachong 25.7%, Derai 27.0%).

Table 4. Distribution of surveyed staff working period in BRAC (%)

Staff working period (month)	Baniachong (n=482)	Derai (n=296)	Total (n=778)
1-11	24.7	28.7	26.2
12-24	42.5	38.9	41.1
25-36	3.9	2.7	3.5
37-48	3.1	2.7	3.0
49 and above	25.7	27.0	26.2

Table 5 shows that a good number of staff in both areas (Baniachong 40.2%, Derai 39.8%) was found to have no working experience before joining IDP. On the other hand, more than 25% of staff has one to five years working experience in

both areas (Baniachong 28.6%, Derai 33.4%). However, a proportion of surveyed staff has six to ten years working experience in BRAC from both areas (Baniachong 14.9%, Derai 13.9%).

Table 5. Working experience status of surveyed staff (%)

Working experience in year	Baniachong (n=482)	Derai (n=296)	Total (n=778)
No experience	40.2	38.9	39.7
<1	8.1	4.7	6.8
1 to 5	28.6	33.4	30.4
6 to 10	14.9	13.9	14.5
>10	8.1	9.1	8.5

Methods Training

The skill development training course is to help development workers become better and more efficient implementers of any development programme. Similarly, training on human development and social issues will increase capacity of staff that has poor skills and capability as development workers (Kamal *et al* 2007).

Table 6 shows that a good proportion of surveyed staff participated in the different type of formal training courses during the last one and half year which was mainly BRAC Learning Centre (BLC) based training in both areas (Baniachong 82.0%, Derai 90.2%). The training course duration was three to twenty days. Among the type of training courses, management, HNPP, GJ&D, WASH, Safe Migration and CEP trainings were of top priority in both areas (Baniachong and Derai).

Table 6. Staff received formal training in the last one and half year (%)

Indicators	Baniachong (n=482)	Derai (n=296)	Total (n=778)
Received formal training	82.0	90.2	85.1
Type of training course			
Management and development	20.8	4.5	14.2
IT and Skill Development	0.5	2.3	1.2
AFSP	1.3	1.5	1.4
CEP	11.9	6.4	9.7
BEP	5.6	3.8	4.8
HNPP	35.2	38.5	36.5
TUP	9.4	6.4	8.2
MF	0.3	0.0	0.2
GJ&D	65.6	73.6	68.8
HRLS	1.3	1.9	1.5
Safe Migration	2.0	1.5	1.8
WASH	13.2	10.2	12.0
Others	1.8	1.1	1.5

Multiple responses considered

Table 7 shows that a slightly good proportion of surveyed staff participated in the different type of informal training courses which are mainly conducted in the respective area offices in both areas (Baniachong 33.8%, Derai 44.6%) during the last one and half year. The training course duration was mainly one or half day. Among the types of training courses, management, TUP, HNPP, CEP, GD&J and Education training were of top priority in both areas (Baniachong and Derai).

Table 7. Received informal training in the last one and half year (%)

Indicators	Baniachong (n=482)	Derai (n=296)	Total (n=778)
Received informal training	33.8	44.6	37.9
Types of training courses			
TUP	10.4	8.3	9.5
WASH	3.1	5.3	4.1
HNPP	52.8	40.9	47.5
CEP	9.8	7.6	8.8
AFSP	6.1	0.8	3.7
Micro-finance	6.7	0.8	3.7
GJ&D	11.0	3.8	7.8
Safe Migration	3.1	0.0	1.7
HRLS	3.1	0.0	1.7
Education	11.0	3.8	7.8
Others	7.4	52.3	27.5

Multiple responses considered

According to survey staff skills and capability to smoothly implement programme operation of IDP-*Haor* project, the figure 1 shows that a higher proportion of staff in Derai (23.6%) faced some difficulties to implement the programme activities compared to Baniachong (7.3%). They reported that they mainly faced difficulties to operate microfinance and TUP programme activities at the field level like, village organisation (VO) formation, instalment collection, TUP asset distribution, village development committee (VDC) meeting facilitations due to lack of skill or less experience in related programme activities.

Figure 1. Staff faced difficulties to operate the programme activities at field level (%)

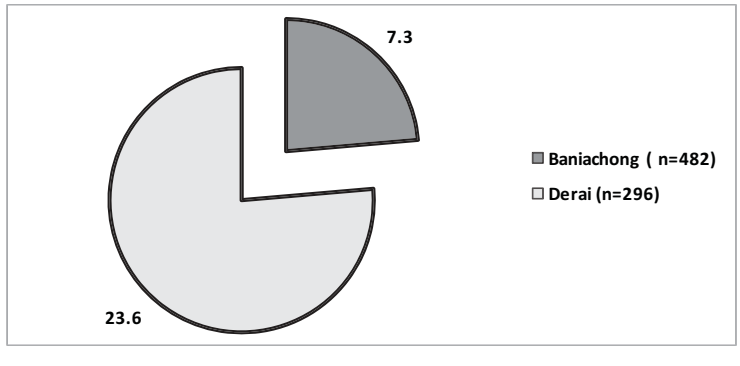
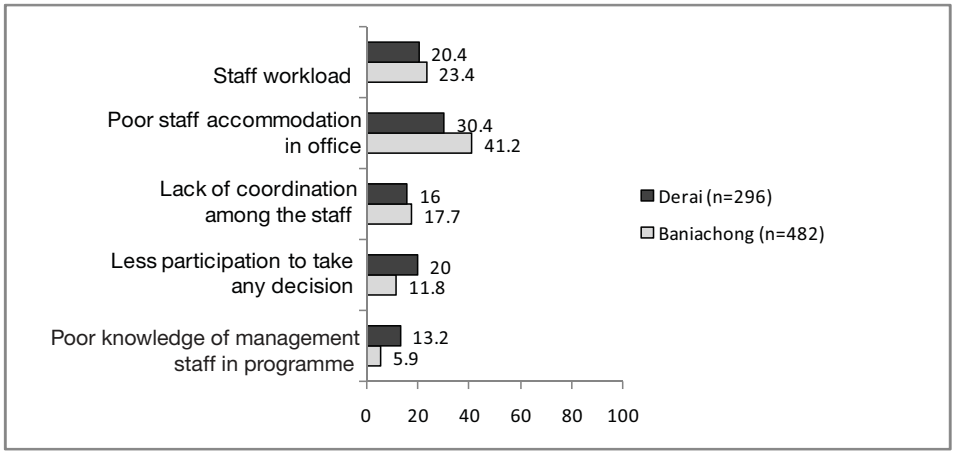


Figure 2 show that a good proportion of staff reported that the poor accommodation was a major problem in the field office in both areas (Baniachong 41.2%, Derai 30.4%). On the other hand, a good proportion of staff reported that they have huge workload \ in both areas (Baniachong 23.4%, Derai 20.4%). However, some of the surveyed staff reported that lack of coordination among the staff was another problem for them in both areas (Baniachong 17.7%, Derai 16.0%). Similarly, they also mentioned that less participation was a problem to take any decision at the field offices in both areas (Baniachong 11.8%, Derai 20.0%). On the other hand, some staff claimed to have poor knowledge and skill in programme management in both areas (Baniachong 5.9%, Derai 13.2%).

Figure 2. Type of problems faced by surveyed staff in IDP (%)



Training is a potential solution and professionals or development workers will need to closely examine if formal training is the best way to meet their need.

Table 8. Distribution of issues and training needs for staff (%)

Training need and issues	Percentage (%) (n=1,179)
Basic training on different programmes, eg, TUP, CEP, AFSP, WASH, HRLS, BEP, GJ&D, HNPP	17.59
Management training on OCV, CSS, OMC, DECC, DMC and SHEE policy	21.60
IT/Skill development training like computer, TOT, lab training, PLEWs, master training of BEP and PRA	35.48
Development awareness, ie, social awareness, facilitation, leadership, workplace communication, RTI &STI , GST, behaviour training	15.08
Others (CSN, IDP strategy, workshop and communication, IYCF, BACD, MMRC and advance delivery training	15.66

Multiple responses considered

Table 8 shows that a proportion of surveyed staff reported that skill development training on various development issues was the highest desire/need for them to smoothly run programme operation. Second highest desirable areas for training on management related issues were mentioned by the surveyed staff. However, 18.0% of surveyed staff mentioned that programme wise basic training was the most desirable area for them to smoothly operate programme activities at the field level.

Conclusion

A training needs assessment is a valuable tool to determine what training needs exist in an organisation or any development initiatives and the type of scope and resources needed to support a training programme. In this regards, IDP-*Haor* project would be offered a set of training courses for its staff as per the study findings to improve staff skills and capacity for smooth operation of programme activities at community level.

Food for thought

- IDP-*Hoar* project can initiate a basic training course on ten programmes, eg, TUP, OTUP, microfinance, CEP, AFSP, WASH, HRLS, migration, BEP, GJD and HNPP;
- Technical and IT related training courses e.g., IT/Skill development training like computer, TOT, lab training, PLEWs, and PRA would be needed to develop skills and capacity of IDP staff;
- Arrange a staff motivation training course to increase the staff commitment at all levels.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Releasing fingerlings in open water of *haor:* learning and prospect

5. Releasing fingerlings in open water of *haor*: learning and prospect

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Abstract

The study aims to assess the effects of releasing fingerlings in open water and to know the variety of the fish in *haor* areas. A qualitative method was applied in the research to collect the data. The study finding reveals that a total of 3,89,500 fingerlings was released in the last year by IDP project including rui, katla, kalibous, silver carp, bighead, grass carp, mrigal, ghonia and many other varieties in *haor* open water. The study also reveals that a small good proportion around 30% of the total fish were caught by the poor fishermen out of total released fingerlings and nearly 50% of fish are caught by the leased owner of *haor* at the end of monsoon. Besides, a good number of the fingerlings were moved away to the river. A village based *panchayet* system was strongly in functioning in *haor* area. Usually the village elites became *panchayet* leaders who have an important role in case of social justice, *shalish*, distribution of social assets, learning more religious and cultural norms at community level. The study suggested that this type of programme intervention should be continued with additional measures to overcome its limitations and reduce food and nutritional deficiency among the poor community of *haor* dwellers especially poor fishermen in *haor*.

Introduction

Fish is the second important economic resource to the *haor* people. Various types of indigenous fish are available in *haor* area especially from May to October. It is noticed that a fishing community in *haor* are economically poor and even ultra poor. The land of *haor* is fertile but it is harvesting only *Boro* once a year. On the other hand, most of the land of the *haor* is captured by a few influential people and they sub-lease the land to the marginal farmers. Besides these reasons there is a huge risk of natural calamities. Due to early flood or hill slope most of the time the crops are damaged. Remote and expensive communication system is a big barrier for marketing of their production and assets. Rate of literacy is also lower compared to national figure. Poverty scenario is an inherent reality in *haor* area. The poor and ultra poor fishermen belong in a crucial moment and day by day they are losing their inherent profession. To some extent their life is going to be very hard. Besides, the production of fish is reducing day by day in *haor* areas of Bangladesh. Limitless using parathions, drying the water and thus there is reduction of the depth of river, unplanned dam and sublease of the water land by the powerful, moreover the water is poisoned through toxicities etc. These are the main reasons for reduction of fish production in *haor* areas. Many of the-

indigenous fish species are already extinct from the *haor* areas and others are going to be within the near future.

BRAC's IDP-*Haor* project has initiated to release fingerlings in open water in *haor* areas for ensuring food security and reducing nutritional deficiency for poor and ultra poor *haor* dwellers as well as to develop their livelihood. As a part of this programme, IDP has released fingerlings in the open water in the last year in both Baniachong and Derai areas. The main objective of the initiative was increasing fish production through increasing income of the poor fishing community and ensuring the nutritional demand of *haor* dwellers.

Objectives

To assess the effects on *haor* dwellers' livelihood of releasing fingerlings in open water

Specific objectives:

- to know the variety of fish and its changes in *haor* areas
- to assess the effects of releasing fingerlings in *haor* areas
- to identify specific problems and limitations of releasing fingerlings in *haor* areas

Methods

The study followed a non-experimental design to assess the effects of releasing fingerlings in open water in *haor*. A qualitative approach was applied to collect information from the target population eg, fishermen, community people and social leaders.

Study areas and target population

The study was conducted in the two sub-districts, Baniachong and Derai. The study target population was mainly fishermen, community people and social leaders in *haor* areas.

Sampling procedure

Statistical representation was not considered when determining sample size. A purposive sampling technique was applied for selecting sample. Fishermen, community people, social leaders were target population who were selected considering the released fingerlings' spots and villages in both areas, Baniachong and Derai.

Data collection

Qualitative method was used for data collection, ie, FGD, IDI and informal

discussion. A set of checklist was used to collect information from the target population on selected issues. Two trained researchers directly assisted in collecting information.

Data processing, analysis and presentation

Collected data were analysed by manually and then translated into English. Issue-based tables and figures were produced by use of a coding and decoding process.

Findings and interpretation

With the reference of the study objective the information was collected through group discussion, in-depth interview with local fisherman, local leaders, community people and project staffs. Different types of opinions and empirical result was found against the study objective and a narrative briefing has given following in the sub-section.

Species of fish in *haor*, strategies of fishing and marketing

Variety of available fish in *haor*

Various types of indigenous fishes are available in *haor* areas. However, the varieties of fish are decreasing day by day from the *haor* areas. Some of the small fish are- *punti, shing, magur, tengra, meni, mola, kakila, small shrimp, taki, chapila, butum, chanda, baim (eel fish), foli, khaisha, chang, chela* etc. On the other hand, a number of big fish have been seen in *haor* areas, such as; *boal, shoul, gozar, rui, katla, star eel fish, carpu, minal carp, grass carp, kalibous, artamin, pangas, tilapia* etc.

Extinct and nearly annihilated species of fish

Fish that are rarely found in *haor* areas are Pabda, Chitol, Rita, Pangas, Pabda Catfish, Mohashoul, Ghonia, Helong, Elong, Nanid, Gagra, Zait, Dhela, Ghaur, Ghaghla, Hiluin, Bachha, Guilsha, Dhola, Mira, Kangla and Nandil, etc.

Fishing tricks and marketing strategy

Strategies/Traps for fishing

From the group discussion, the study shows that a various types of net and traps are used for fishing in *haor* areas, eg, *khoni* net, current net, shove net, drawn net, cotton mesh, breadth net, *pan jal*, *bel jal*, *felon jal, dhol n*et, *chai* and fishhook etc. are all locally very well known.

Fish marketing and value chain

Generally three types of fish marketing and value chain are observed in *haor* areas, eg, wholesaling in the auction, advanced selling to the lender and retail selling in the market by the fishermen.

Whole selling in the auction:

Fishermen gather fish from *haor* and they sell it through auction in the local *haat* or the bazar. The highest bidder buys the fish. The sold fish generally go to Bhairob, Sylhet and Habiganj storehouse. Some of them are sold at the local market by the retailers. Sometimes the agent and big traders give seasonal loan to the fishermen to purchase the boat and net.

Advanced selling to the lender:

At the beginning of June, the fishermen took loan (hard cash) from the lenders as *nikari* to repair their boats, purchase the new net and to fulfil the basic needs of their family. As per condition of *nikari* they have to repay the money by fixing the value of fish. In case of rating the fish the lenders get the advantages. The *nikari* borrower has to sell their fish to the lenders. Generally each fisherman can take loan Tk. 5,000 to Tk.10, 000 from the money leaders before monsoon. This is a seasonal loan and the interest is taken by rating the fish value, which is less than market price. The lender collect the fish by "*Nikari"* and it is sent to Sylhet, Bhairob and Habiganj storehouse (*arote*).

Retail selling and the marketing by the fishermen:

Usually individuals or one to three members including a family team peddle the gathered fish within the village or in the local market. Most of the time, if the amount of gathered fish is more than enough then they sell their fish through auction.

Ownership, *haor* leasing and socioeconomic aspect

In the monsoon, the lower lands start a flooding from the very beginning of June for the hill slope. At that time different type of *haor* ownership are seen in areas and the *haor* land is divided among the *panchayet*, Goverment *khas*, and *waqfo* estate. In some areas the fishermen can hunt fish in the open water in *haor* from May to September. In *Kagapasha* union and its nearby areas of Baniachong the fishermen can catch fish from *Jaistha* (May-June) to mid of *Aswin* (October). On the other hand, the fishermen can fishi from *Joisthyo* (May-June) to first week of *Bhadra* (mid of September) in Baniachong, Subidpur and its nearby areas. In Derai the ownership of the *haor* is fixed by government bidding. The *haor* areas are normallyleased out for three years. From the beginning of *Joisthyo* to *Shravan (*May to July) fishing is allowed within the leased boundary or areas of *haor*.

Sometimes some lease holders also allow the fishermen to catch fish for exchange of money. However, in both areas fishermen are allowed to catch fish from the river throughout the year. Sometimes some parts of the rivers are grabbed by elites.

The study found three types of leasing system in Baniachong and Derai, eg, village-based *panchayet* lease, government khas lease and *waqfo* estate lease.

Village-based Panchayet Lease

The study found a village-based *panchayet* system strongly functioning in all villages in Baniachong areas. A village *panchayet* is organised by the representatives of certain villages. Usually the village elites become *panchayet* leaders and have an important role in case of social justice, *shalish*, distribution of social assets and religious occasions at community level. In the dry season *boro* is cultivated in the *haor* land from November to April. At this time the land ownership is based on occupied land. On the other hand, in *Jaistha* (mid May) month paddy is harvested, water starts flowing and the ownership of the land goes to the *panchayet*. According to the villagers, land boundary or land record of the village border is being fixed. The *panchayets* bid for leasing the water bodies during August-September. Any one of the villagers, businessmen, individuals or any organisation even the *panchayets* can also participate in the bidding. The highest bidder owns seasonal right to the respective area of the *haor*. After announcing the bidding the general people or fishermen are forbidden to fish in the respective areas of *haor*. The amount of *haor* leased out for the respective village *panchayet* are equally enjoyed by the members of *panchayet*. The money is divided only if anything special is happening in the area. The money is kept as social asset by the *`Sarkar'* nominated by the *panchayet*. Yearly plan and sector of money spent is certain. Generally the money is spent in the sectors given below-

- Construction of roads and dam
- Repair and developing mosques, *madrasa and eidgah*
- Salary and allowance of the *imam or muajjin* of the mosque or *madrasa*
- Tuition fee, food and clothing for the *madrasa* students
- Bearing the cost of w*az-mahfil* held in the certain village
- Construction of temple and the cost of arranging *puja*
- Land related litigation cost of the villagers or *panchayet*
- Marriage cost of girls and boys from poor and ultra poor families
- Construction and repairing cost of house for the poor and ultra poor
- Bearing cost of the treatment of diseases.
- Burial cost of any ultra poor's dead

- Bearing the funeral cost of migrants who moved for harvesting paddy

For above mentioned sectors, the *panchayet* committee decides on the amount of money that will be spent.

Example:

The *Baghata panchayet* of Kagapasa union under Baniachong upazila leased their occupied *haor* land for Tk. 1,065,000. A total of 737 households are under this *panchayet*. The *sarkar* (chief of *panchayet*) of this *panchayet* is Samsuddin member. Normally this amount of money could be used for the salary and allowances of *muezzin*, construction of roads and pools, marriage cost of girls in the poor family, building residence and treatment cost for the poor. In this current year they distributed around Tk.1,20,000 among the poor families. Besides, forty thousand taka was given to Abul Bashar's, wife's treatment, because he is a poor man and his wife has cancer. Rest of the money is accumulated at the *panchayet* for any future emergency.

Leasing of government *khas jalmahal* (water body):

The *Jalmahals* of *haor* areas are leased seasonally by the district commissioner's office in Habiganj and Sunamganj area. Usually politically strong individuals or groups leased the *Jalmahal* or *haor* areas. After leasing of the *jalmahal*s by the government authority, it has been leased again to another person and this type of work will continue. Generally from the Bengali month of *Bhadro* to *Aswin* the *Jalmahals* are leased out completely. After that any fisherman cannot catch fish from the *haor* and respective *Jalmahals.*

***Waqfo* estate:**

Though the *Zamindary* practice or system has ended but a large area of *haor* water bodies or *Jalmahals* are captured by the local influential families like a *Zamindar* system. These lands are known locally as *waqfo* estate to carry the cost of building school, college, temple, mosque and *madrasa*. The local fishermen said that a stay order of high court helped them to keep this land.

The impact of releasing fingerling in open water in *haor*

Last August 2013 under the project 3,89,500 fingerlings were released and the varieties included *rui, catla, mrigal,* grass carp, silver carp, *ghonia* and orange-fin labeo (*kalibaus*). These were released in different spots in open water of Baniachong and Derai areas. The spots were- *Milon* bazar, *Sonaru* in Baniachong and *Chandipur*, *Bhorargaon* and *Kaliakuta haor* in Derai areas.

The study reveals that a large amount of different types of fish was caught by the fishermen which were released by the project in the last year. The local fishermen reported that around 30% of fish released were caught. On the other hand, the remaining 50% were caught by people leased the *haor*. Besides, a good number of fingerlings were moved away to the river. However, it may be possible for the poor and hardcore poor fishermen to catch the fish and sell it. The fishermen and community people reported that different types of fish, ie, *sar-punti*, grass carp, silver carp and *kali bious, gonia, rui* and *katla* were caught by the fisherman which is more compared to previous year in the same area. They said that releasing fingerlings was a good initiative for them. However, they also think that the bidding price of the *haor* may be higher this year if fingerlings are released again. This type of initiative will bring good progress to their society. However, it has some limitations there were observed in the last year which are noted briefly below.

Identified problems and limitations of fingerlings releasing in open water in the last year:

- The fingerling release was initiated late the last year; as a result the poor *haor* dwellers were able to catch fish for a very short period of time. Because, during the mid of *Bhadro*-A*swin haor* area was already leased out and after that the general *haor* dwellers or fishermen were not allowed to catch fish from the *haor* areas.
- Last year, most of the fingerlings were released in one or two spots in the open water in *haor.* So, released fingerlings couldn't spread out all over the *haor's* open water. However, a good proportion of released fingerlings were trapped in the nearest fishing nets a few days after being released.
- Quality of fingerlings was not so good in last year. In this regard, some of the fingerlings died after being releasing and there was also a transportation problem while carrying them.
- Before releasing fingerlings, committee was not formed in the village and spots were selected through the participation of elites and fishermen at community level. As a result soon after releasing the fingerlings they were trapped by different type of local traps for fishing. So the released fingerlings could not grow much.

Conclusion

Fish is the essential element of animal protein for *haor* people and it is also an economic asset. It is the only way of making livelihood for the fisherman. So that cultivation of fish plays an important role for their livelihoods in *haor* areas. Recently it has been noticed that reproduction of fish has been reducing day by

day in *haor* area. The main reason is high use of parathions and fertilisers; capturing fish with various harmful nets is thoroughly decreasing natural habitats of fish. So, a sustainable plan needs to be developed for *haor* dwellers' livelihood through increasing the reproduction of fish especially of indigenous varieties. In that sense, a sustainable plan for releasing fingerlings in open water in *haor* by IDP will play an important role to fulfil the demand of animal protein for *haor* dwellers especially the poor. This will also improve their livelihoods of *haor* dwellers.

Recommendations

To increase the fish production in *haor* areas through releasing fingerlings the following steps or initiatives at community level are needed:

- At the very beginning of rainy season the fingerlings should be released in open water in the *haor*. Besides, an initiative should be taken at local level to ensure availability of good quality fingerlings during monsoon.
- Not to release the fingerlings in a single spot or fixed areas of *haor*. The fishermen community has recommended at least 10,000 fingerlings to be release per spot.
- Releasing rapid growing variety of fingerlings which are more *haor* friendly, such as- Olive barb, Mozambique *tilapia*, grass carp, orange-fin labeo, kuria labeo and also local indigenous varieties like *shar puti, telapia* etc. These type of fingerlings are comparatively less expensive than rui, catla, mrigal and silver carp.
- A committee will be formed before releasing the fingerlings in each spot to protect the fingerlings for a certain period. Then the production and reproduction rate of the fish will be sound in *haor* areas.
- Project and community people will take lease of *haor* areas for one year and protect it for the period. After that it could be open early monsoon. This will help to increase local or indigenous varieties of fish in *haor* area.
- Provide financial support like loan for the poor fishermen to repair their boats and nets.
- Discourage fishermen to fish using the *khonajal*, current net, barriers nets and through poisoning.
- Create an alternative income source for the fishermen during *Jaistha* and *Asharh* months for increasing indigenous fish in *haor* area. Because, during this period normally the fishermen catch impregnate fish, *renu pona* and small fishes which is the main reason for reduction of the fish production in *haor*.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Exploring the profitable duck farming and creating value chain in haor

6. Exploring the profitable duck farming and creating value chain in *haor*

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Abstract

This study aims to explore the effective way of profitable duck rearing opportunities for better livelihood of the poor *haor* dwellers. A mix method was used to collect the data and a purposive sampling technique was applied to select the sample locations and duck farmers. The study reveals that household incomes and expenditure were small, family sizes were large and a good portion of household members have no education compared to national statistics. The study also reveals that a good number of *haor* dwellers (Baniachong- 416, Derai-266) were involved with duck farming commercially. However, they faced difficulties farming duck, eg, shortage of capital, limited market access, unavailability of duck medicine and vaccines, lack of skill and knowledge on duck farming and fewer opportunities for collective bargaining at community level. So, ensure financial support with other facilities, eg, establish linkage among the duck farmers and traders at all level, increase bargaining capacity, vaccine availability, training and forming duck farmers' forum could be helpful to create a profitable duck farming and create value chain in *haor* areas.

Introduction

Bangladesh is one of the most densely populated countries of the world with a total population of around 16 million. Despite tremendous growth in agriculture sector over past few decades Bangladesh is still vulnerable to food security, especially in terms of protein consumption rate. According to the report of BBS (2010), per capita protein consumption rate is only 66.3 gm/day which is significantly lower than in the developed countries. Apart from fish and different pulses, major sources of protein in the country are milk, meat and eggs produced from animal sources. However, production of animal protein is not enough to meet the national demand. The average annual per capita availability of meat in Bangladesh is only 9.12kg against the required amount of 43.25kg; out of it consumption rate of poultry meat is only 1.9kg whereas annual per capita availability of egg is around 36 in number against the required amount of 104 (Saleque, *et al* 2010). It is well evidenced that there is a huge deficit of animal protein in Bangladesh. Particularly demand of poultry meat and eggs in rural areas of Bangladesh (Huque KS, *et al,* 2011). Geographical advantages like-natural feeding sources, abundant water for swimming, tolerable temperature etc. have made the North-Eastern part of Bangladesh especially *haor* areas suitable for duck farming (Islam, Mazharul, *et al* 2012).

BRAC's IDP-*Haor* project would like to take an initiative in this regard in *haor* areas and to uphold this activity to develop profitable duck farming and value chain for better livelihood opportunities of the poor and extreme poor *haor* dwellers. Before taking any initiatives on duck farming in *haor* areas, an action research could be conducted to find out an effective way of profitable duck rearing and value chain in *haor* areas.

Objectives

To explore the effective way of profitable duck rearing opportunities for better livelihood opportunities of the poor *haor* dwellers.

Specific objectives:

- to explore the nature of existing duck farming in *haor* area;
- to identify duck famers who are involved with duck farming commercially in *haor* area;
- to find out the existing constraints or limitations for duck rearing in *haor* area;
- to provide a set of suggestions or recommendations for duck rearing and value chain creation in *haor* areas.

Methods

The study followed a non-experimental design to explore the effective way of profitable duck farming in *haor* areas. Both qualitative and quantitative approaches were used for collecting data from the target population.

Study areas and targeted population

Nearly 1,000 households are involved with duck farming in *haor* areas in the two sub-districts – Baniachong and Derai. The study target population was mainly duck farmers who were involved with small and medium scale duck farming commercially in *haor* areas.

Sampling procedure

Statistical representation was not considered in determining sample size. A census was conducted to identify the small and medium scale duck farmers in both areas, Baniachong and Derai. Simple random sampling technique was adopted for selecting target population from the census of duck farmers in *haor* areas.

Methods of data collection

Both qualitative and qualitative methods were used for data collection. A semi-structure interview questionnaire was used to gather information from the

selected duck farmers. The study also conducted in-depth interview and focus group discussion with duck farmers. Two trained researchers assisted in data collection.

Survey

A total of 25 duck farmers (Baniachong 15, Derai 10) were surveyed in both Baniachong and Derai. Survey questionnaire comprised of closed and open-ended questions. The survey was carried out to collect socio-demographic information of duck farmers and their present situation on duck framing in *haor* areas. The study also collected information about the cycle of duck farming, production and selling place and location, constraints of duck farming for creating an effective value chain in *haor* area. Information was collected from duck farmers who have at least 100 ducks.

In-depth interview/focus group discussion

Eight in-depth interviews and FGDs were carried out for duck farming, profit and constraints of duck farming in *haor* areas.

Data management and analysis

The quantitative data were analysed by using SPSS. Simple statistical techniques include simple frequency distribution expressed in table and figure. The qualitative data were analysed manually by following coding and recoding process. In addition, qualitative techniques were employed to describe and interpret any particular situation to understand and complement the associations observed in quantitative findings.

Findings and interpretation

Socio-demographic profile

In considering the study objectives the socio-demographic characteristics focused on household size, income and expenditure, land size, age, educational and marital status and main occupation of household members. Table 1 presents a summary statistics of socio-demographic characteristics of surveyed households who are involved in duck farming at presently. It was observed that the duck farmers as well as *haor* dwellers are significantly more disadvantaged compared to national statistic in the socio-demographic characteristics. The average household size (6.8) of survey population was higher than the national figure (5.56). The average monthly income (Tk.9, 585) and expenditure (Tk. 8,627) of the survey households were lower than the national figure (income Tk. 9,648; expenditure Tk. 9,612). Teenage marriages and widows were also very high among the survey households compared to the national rural figure (BBS, 2010).

Table 1 also compares the age distribution among the surveyed household members. A good number of households members aged 5-17 years, 18-40 years age-group were more in number compared to their other age groups, eg, <5 years, 40-60 years and above 61 years.

More than half of the population was unmarried (61.1%) in surveyed household members. On the other hand, 36 % of married population was in surveyed households. The majority of target population was involved in non-skilled physical labour intensive occupations, eg, day labourer (agri. and non-agri.), small business, duck farming and agriculture farming in surveyed household. Some of these activities were not directly income generating in nature (non-IGA) such as housework and a good number of household members were students in surveyed areas.

Table 1. Socio-demographic characteristics of surveyed household

Indicators	Percentage (n=25)
Household	
Household size	6.8
Average monthly income	9585
Average monthly expenditure	8627
Average own land (in decimal)	146
Age (%)	
<5	4.6
5-17	45.1
18-40	34.9
41-60	12.6
>61	2.9
Educational status (%)	
No education	19.4
1-5 class	55.2
6-10 class	24.8
11-14 class	0.6
Marital status (%)	
Unmarried	61.1
Married	36.0
Widow	2.9
Main occupation (%)	
Agriculture farming	6.3
Small business	3.4
Day labour (agriculture and non-agriculture)	1.7
Service (GO & NGO)	1.1
Duck farming	13.1
Housework	21.7
Student	38.9
Others (fishing, woodcutter, driver)	5.7
Children/dependent/disable	8.1

Table 1 also shows that a good number of surveyed household members were found to be uneducated (19.4%). On the other hand, a good number of household

members in survey areas completed classes 1 to 5. In the higher levels of education (HSC and above) among the surveyed household members the numbers were very few. However, the study found that completion of junior levels like 6 to 10 classes was a good percentage in surveyed household members.

NGO affiliation

Among the surveyed duck farmers only 7% of duck farmers are affiliated with different types of national[1], international[2], and local NGOs[3] in survey area.

Figure 1. Affiliation of household members with NGO (%)

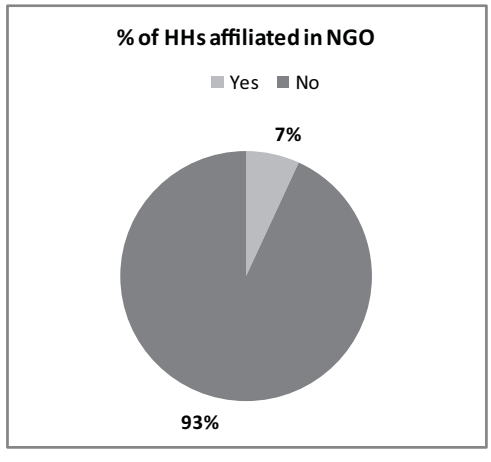


Figure 1 shows that a majority duck rearing household members has not affiliated with any type of development organisation. In qualitative findings it was found that most of the duck rearing households took loan from money lenders and duck wholesalers to continue the duck farming in *haor* areas.

Scenario of duck rearing in *haor*

Area and farmers selection

A census was carried out in two *upazilas*; Baniachong and Derai in IDP-*Haor* project areas. The census was conducted in the 162 villages */hati's* under eight unions of Baniachong upazila; and 88 villages/*hatis* in five unions of Derai.

(Footnotes)

[1] National NGOs include national organisations such as ASA, BRAC etc. Some have state and city branches and assist local NGOs. (As per Wikipedia definition)

[2] International NGOs range from secular agencies such as CARE, Save the Children. They can be responsible for funding local NGOs, institutions and projects and implementing projects. (As per Wikipedia definition)

[3] Local NGOs or community-based organisations (CBOs) arise out of people's own initiatives. They can be responsible for raising the consciousness of the urban and rural poor, helping them to understand their rights in accessing needed services, and providing such services. (As per Wikipedia definition)

Table 2. Number of duck farmers and duck rearing in Baniachong *upazila*

SL No.	Name of area	Number of village/hati	Number of duck farmers*	Number duck rearing
1	*Baniachong Sadar*	15	39	23,128
2	*Kagapasha*	15	52	36,676
3	*Aligonj*	16	50	27,420
4	*Sujatpur*	9	39	28,322
5	*Muradpur*	22	36	30,876
6	*Chawdhury Bazar*	20	73	43,320
7	*Ekram*	37	66	61,019
8	*Subidpur*	28	61	33,370
	Total	162	416	284,131

Source: Census of duck farmers

Table 2 shows that a total number of 416 duck farmers rear at least 100 ducks in *haor* areas commercially. They were mainly involved with producing eggs and supplied meat locally and nationally. In qualitative findings it was observed that around 125 households at *Vatipara* village in Baniachong were involved with duck rice husk hatcheries for the past 12 years. They were producing around 1.5 million ducklings annually which met the local demand as well as for other parts of the country.

Table 3. Number of farmers rearing ducks in Derai upazila

SL No.	Name of area	Number of village or *hati*	Number of duck farmers*	Number of duck rearing
1	*Vatipara*	15	64	24,369
2	*Jagdal*	12	18	3,860
3	*Shyamerchar*	7	19	7,000
4	*Dhal Bazar*	17	38	21,614
5	*Derai Sadar*	37	127	22,791
	Total	88	266	79,634

Source: Census of duck farmers

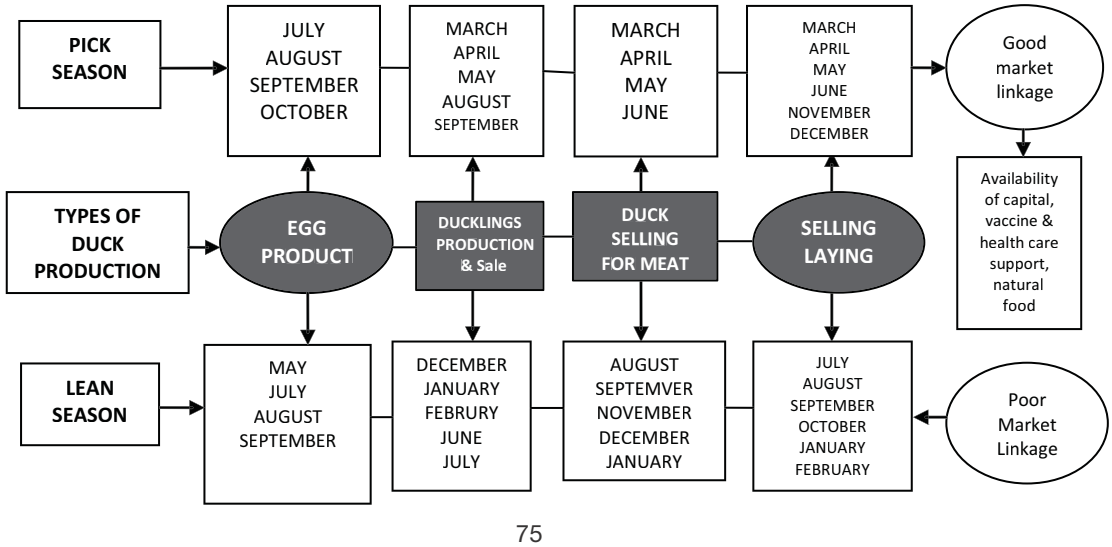
Table 3 shows that a total number of 266 duck farmers rear at least 100 ducks commercially in Derai. They were mainly involved with producing eggs and supplied meat locally and nationally. In qualitative findings, we found that around 85 households at Kachua and Dattagram village in Derai were involved with duck rice husk hatcheries for the past 10 years. They were producing around 0.5 million ducklings annually which met the local and national demand.

Nature of duck farming in *haor* area

In the *haor* area it is usual that almost every household has a few ducks (5 to 50), especially at rainy and autumn season when water surrounds the localities and natural feeds like- different kinds of snails, fishes, pests and water hyacinth become available. These ducks are being reared on scavenging system and additional feed like- rice polish, boiled potatoes, rice grains etc. are being supplied for a short period of a year. The commercial duck farms are also being operated on scavenging system. Usually one farmer looks after 100 to 500 ducks and moves from one place to another place on routine basis. Movement and distance from the farmers' house depends on the availability of natural feeds for ducks. In *haor* area, duck farming depends on availability of capital, vaccine & health care support, natural food and water.

Farmers move with their flocks deep in the *haor* and stay there from July to October when natural food is available in *haor*. Sometimes from May to June, November to December and January to February, natural feed becomes scarce and additional feed is required, this often hampers egg productions. During the period of June to September, when *haor* becomes flooded then farmers again move towards *haor* peripheries, as natural feed becomes available there. In search of natural feed farmers sometimes go even 20 to 30 kilometres from their house and set their farms beside the local water bodies. From around mid September to mid December natural feed for ducks become extremely scarce and additional feed supplementation is required. In this period, egg production almost stops and the farmers who are not able to feed their ducks due to financial limitations are compelled to sell their flocks and buy pullets or laying ducks for the next season (fig.2).

Figure 2. Duck rearing and production cycle in a year



The duckling production depends on availability of egg locally with good weather and strong sunshine. In *haor* areas, there are mainly two types of duck farmers: one is backyard farmer and the other is commercial farmer. In the census we found that the backyard farmers keep 2-19 ducks, they can even be divided into two more groups as marginal (2-7 ducks) and small (8-19 ducks). The commercial ones keep at least 50 ducks, they are divided into two segments as medium (50-199 ducks) and large (>200 ducks). There are even farmers having more than 1500 ducks in both areas (Baniachong and Derai). Farmers rear ducks mainly for egg production and meat supply. In the study area, total number of duck farmers has been increasing over the last 5 years.

Price of duck egg varies from season to season. Ducks lay eggs between its two moulting (feather changing) periods, February to March and September to October. Therefore, during the two peak seasons of laying eggs, production of duck goes high. However, farmers get lower price for eggs during the hot season from May to September (fig. 2). Around seventy per cent of the total production of eggs is exported to Dhaka and other urban regions. The rest are consumed locally.

Figure 3. Average rearing cost and sale value of 100 ducks

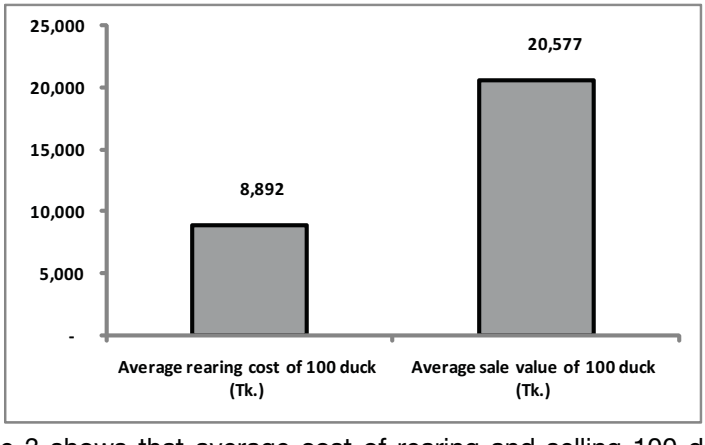
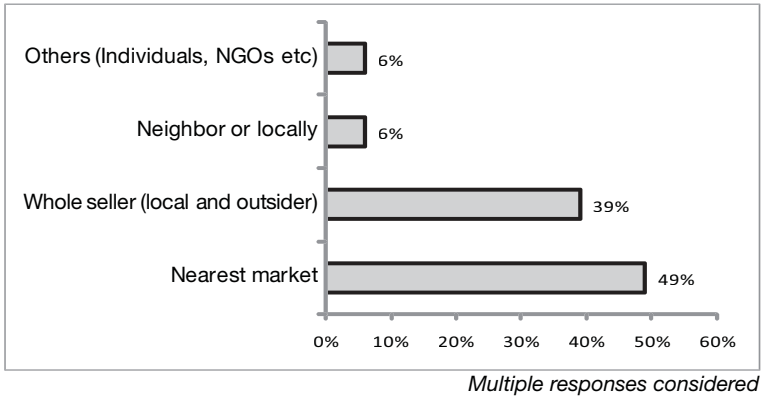


Figure 3 shows that average cost of rearing and selling 100 ducks. The study found that the average value of 100 ducks (Tk. 20,577) was double compared to the average cost or expenses of 100 ducks rearing (Tk. 8,892). So, duck farming and rearing was a profitable income source for *haor* dwellers in both areas, Baniachong and Derai. However, some obstacles or constraints were faced in *haor* areas, eg, availability of vaccine and medicine, shortage capital in the pick season, monopoly market for duck wholesaler.

Figure 4 shows that a 4-step marketing is needed for eggs, ducklings and ducks in the study areas, eg, nearest market (49%), wholesalers (39%), locally (6%) and NGOs (6%).

Figure 4. Location of duck selling in *haor* area (%)



Multiple responses considered

Duck rearing and selling

Majority of the inhabitants rearing ducks in selected areas were poor. There are affluent people who also keep ducks in their backyard farms, the number of ducks in these backyard farms ranges from eight to 100. They require very low cost, minimal care and attention. But the income from selling eggs and ducks to the *farias* (local buyers) and local markets maximizes their family income and helps them to meet their livelihood expenses.

Figure 5. Distribution of objective of duck rearing and selling (%)

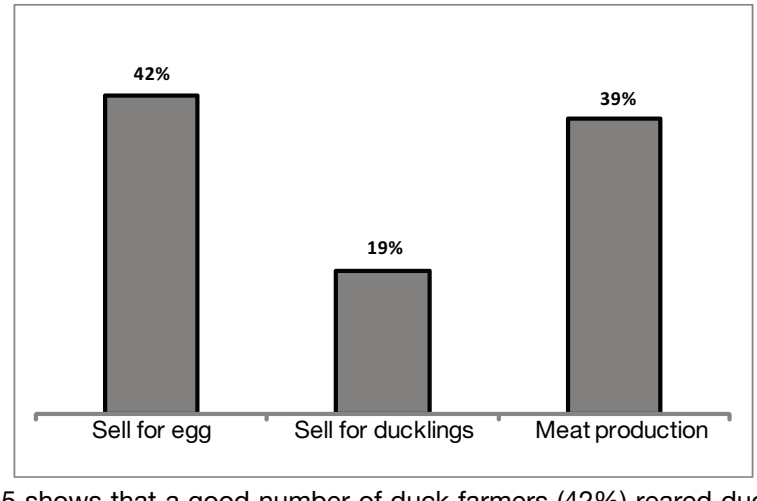


Figure 5 shows that a good number of duck farmers (42%) reared duck for only the egg production. However, 39% of duck farmers said that they reared duck only for meat production. On the other hand, a small proportion of duck farmers (19%) said that they were rearing duck mainly for ducklings. However, majority of duck farmers were either unaware or reluctant about the modern technology of duck rearing.

Sources of capital for duck farming

Duck farming requires some capital investment. Despite the abundant natural feeds and scavenging farming system, financial capital has required to purchase ducklings, pullet or laying ducks, drugs, vaccines and for many other purposes.

Figure 6. Distribution of duck rearing and fund sources (%)

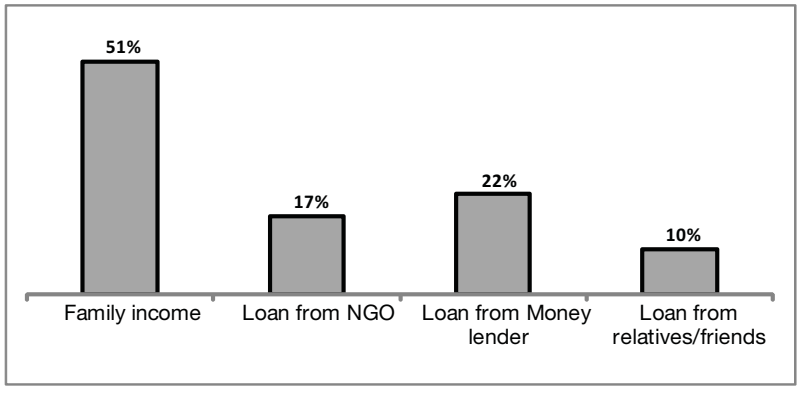


Figure 6 show that a good proportion of duck farmers (51%) started duck farming with their own income and savings. On the other hand, more than 20% of duck farmers took loan with a high rate of interest from money lenders for duck farming. However, a little good proportion of duck farmers took financial support like credit from NGO (17%) and followed relatives or friends (12%) for duck farming.

In qualitative discussion, we found that the rice husk hatchery owners were also in shortage of capital to hatch duck eggs, as a result they often produced fewer ducklings than their target. In these areas few scheduled banks and microfinance institutions are in operation. But this support from formal financing institution is less than the demand of duck farmers and most of farmers are not able to get loan supports from these institutions as they are not able to fulfil necessary collateral requirements. Besides these informal financing sources, an alternate source of finance in *haor* region is *dadon* (local money lenders, who lend money for a short period of time at a high interest rate). The common practice in this region is lending money early in the duck production season with the condition that farmers have to sell their products (eggs and ducks) to the lenders for the whole season and at the end of the season the farmers' have to pay back 1.5 times of the loan amount (locally called *'dera shud'* or '*duna shud'*). The upshot of lending is shocking in *haor* areas. Famers were bound to sell their product at an unfair price compared to the regular price to selected retailers or wholesaler in the market.

Access of services

Figure 7. Received services from upazila livestock extension office in last one year (%)

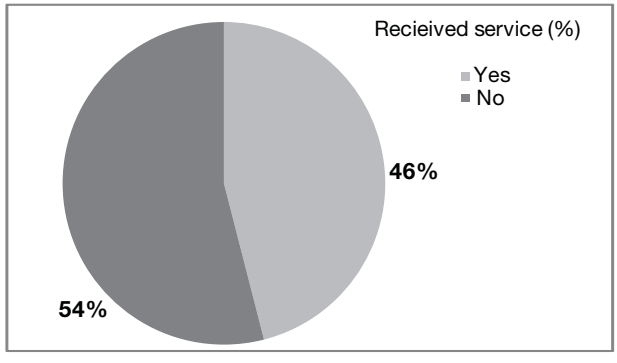


Figure 7 shows that more than 50% surveyed duck farmers did not receive any type of service from the livestock extension office at *upazila* level in the last one year. However, 46% surveyed duck farmers said that they received at least one service from the *upazila* livestock office in the last one year, eg, vaccine, diseases prevalence advice and emergency treatment for ducks etc. On the other hand, in qualitative findings it was found that most of the duck farmers did not find any specialised person in the *upazila* livestock office when they searched for services from the *upazila* livestock office at emergency.

Skill and knowledge on duck rearing

Figure 8. Farmers received training on duck rearing in the past (%)

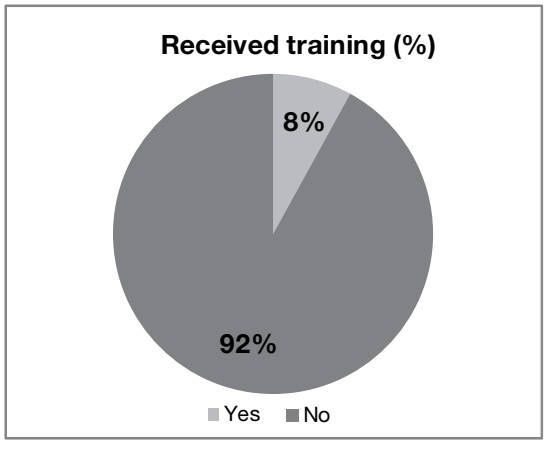


Figure 8 show that a small proportion (8%) of duck farmers received training on duck rearing and farming in surveyed areas. So, a majority proportion of duck farmers (92%) did not receive any type of scientific training on duck rearing and management. In that regard, they are mainly habituated and practice with indigenous knowledge and skills to duck rearing.

Constraints of duck rearing in *haor* area

Figure 9. Major constraints of duck rearing in *haor* areas (%)

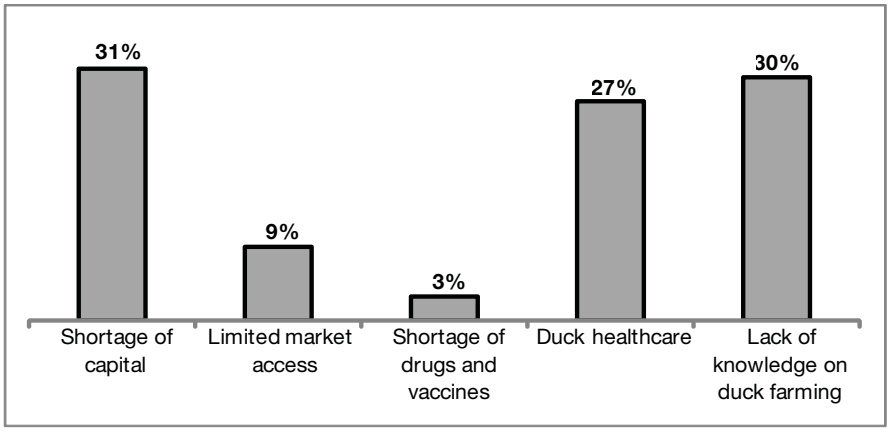


Figure 9 shows that shortages of capital (31%), lack of knowledge (30%) on duck health care services (27%) were the major constraint for the duck farming and rearing in *haor* areas observed.

In qualitative findings we found that duck farmers take it for granted that their ducks will be fed from feed found in nature. They think that the eggs they get are sufficient. They do not know about balanced diet, amount of protein, mineral, salt, fiber, etc., for ducks, which would increase the productivity of ducks. Duck farmers' have lack of knowledge on diseases of ducks which lead to high mortality that results in low income. Mortality rate of ducks both for small and large scale farms due to disease outbreak (primarily due to duck plague and duck cholera outbreak) is around 30 % at the *haor* areas. They do not have sufficient knowledge on disease management, prevention and control; and are always at risk of disease outbreak. There is also lack of duck healthcare services from certified, skilled and experienced veterinarians' at the *haor* areas. Moreover, much disrupted communication between the flocks located in the deep *Haor* and doctor's office is also a constraint in providing service by the government and NGO's. Limited market access and unavailability of vaccine on time was a constraint for duck rearing in *haor* area. There are no large investors, private companies for providing support to the duck farmers. The study found shortage of vaccine supply from government sources and there were also gaps in vaccine supply chain and its proper usage by the farmers. Middlemen were dominating the vaccine supply chain and due to lack of knowledge many of the farmers were administering an overdose of vaccines to their ducks at a frequent rate. In this way they were actually wasting vaccines, where many farmers' were not even getting vaccines.

Value chain for duck rearing in *haor* area

Figure 10. Indicator of profitable duck rearing and value chain creation in *haor* areas (%)

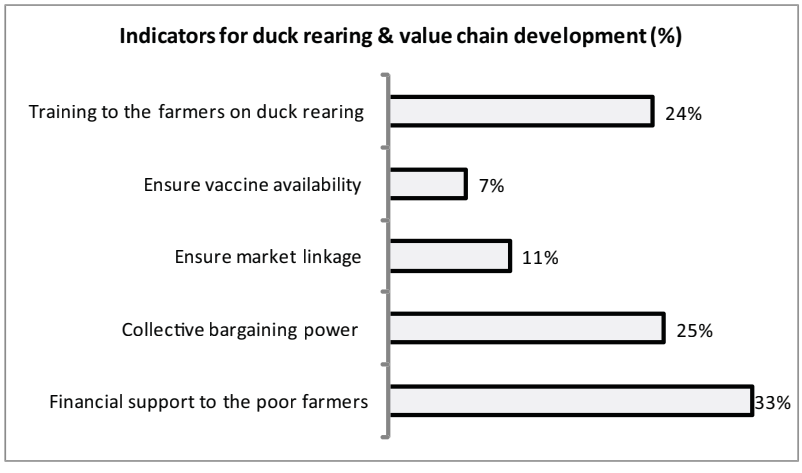


Figure 10 shows a set of indicators which will help to create a value chain for profitable duck farming and rearing in *haor* areas. Among the surveyed duck farmers 33% of farmers mentioned that financial support was an important role for duck farming in *haor* areas. From the qualitative findings, the duck farmers said that BRAC can provide low interest loan to break the shackle of local money lenders and it will create a revolution for duck farming business in the *haor* areas.

Figure 10 also shows that a good proportion of (25%) duck farmers mentioned that collective bargaining power was another important factor for creating duck value chain in *haor* areas. However they have been involved with duck farming since a long time in *haor* areas, but they are very poor for collective bargaining with the local egg traders, middlemen and whole sellers. The value chain exerting power is very weak for the farmers as they are shackled by the local lenders. They also mention that extensive training on modern duck farming, vaccination methods and treatment for different diseases of ducks with hatchery management practices would provide a good value chain for the farmers and local duck hatchery (rice husk hatcheries) owners.

A small proportion of surveyed duck farmers (11%) mentioned that market linkage is one of the most important indicators for creating duck value chain in *haor* areas. They said that to ensure fair prices for duck, egg and ducklings, BRAC will help create a link with the duck farmers and the big traders in the big markets of other regions. Listed big traders from different markets of different regions can create linkages with the duck farmers. Farmers will get an update of the market price from different markets by using their mobile phones. It helps them to compare the price of duck products like eggs, ducks and ducklings and then sell their produce for a competitive price.

Figure 10 also shows that a small proportion of surveyed duck farmers (7%) mentioned that vaccine availability is a factor for profitable duck farming in *haor* areas. Because, they did not know the symptoms of duck diseases; they did not know what to do. Then they go to the *upazila* livestock hospital to seek their service and advice. The government allots vaccine to *upazila* based on the requisitions of the *upazila* livestock officers (ULOs). However, the supply from central depot is always scarce to meet the demand in *haor* areas, particularly duck plague vaccine become scarcer from March to July. They mentioned that the department of livestock services (DLS) and district livestock offices to prioritise the *haor* areas and ensure vaccine delivery on time through the *upazila* livestock offices.

Conclusion

The optimum utilisation of the unexplored opportunities, financial and technical support could ensure the duck farming commercially at *haor* areas, especially in Baniachong and Derai area. It can turn this area into a prime source of supplying eggs, duck meat and ducklings all over the country. This can also result in improvement of livelihoods, employment generation, empowering the women and ensuring food security in *haor* areas.

Food for thought

- IDP-*Haor* project can initiate to provide low interest microfinance support for the poor and extreme poor duck farmers to break the shackle of local money lenders in *haor* areas.
- Expressive training on modern duck farming, prevention of different duck diseases, rice husk hatcheries management could be effective for duck farming in *haor* areas.
- IDP-*Haor* project can initiate to build a network or linkage between the duck farmers and traders (local and outsider). That can ensure the fair retail value of eggs, ducklings and ducks in *haor* area.
- A strong connection with ULO/DLO and local PLEWs may strengthen the availability of vaccine for seasonal ducks based in *haor* area.
- IDP-*Haor* project may take initiative to form village/union/*upazila*-based duck farmers' forums or association to make an active value chain for profitable duck rearing in *haor* area.
- Facilitating group purchases approach can develop a user-friendly duck value chain model in haor area. The farmers, who are involved with scavenging duck rearing earlier, did not buy ducklings from hatcheries as they had duck eggs from their own flock. Using the groups they are able to buy medicine and vaccines jointly that is cost effective and in turn fruitful for them.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Exploring the practice and prospects of floating boat delivery centre in *haor*

7. **Exploring the practice and prospects of floating boat delivery centre in *haor***

Md Akramul Islam
Mohammad Nur Hossain Siddique
Abu Ansar Md Enayet Karim

Abstract

The study aims to explore the present situation of the floating boat delivery centre and its activities in *haor* areas. A qualitative method was applied in the research to collect the data. The study finding reveals that the centre was providing mainly services, eg, ANC, PNC, routine check up of pregnant women, treatment with advice and safe delivery at community level. A set of technical staff were providing regular services at the centre eg, paramedics, programme organiser, *shasthya kormi* and *shebika*, paramedics and two boatman. Mainstream programme people were also regularly monitoring the delivery centre activities and ensuring the overall hygiene practice for safe delivery. Six types of register books were being used to maintain and follow up the delivery centre activities routinely. However, there were some limitations, eg, inadequate service of paramedic for 24 hours, weekly linkages with other mainstream programmes, poor campaign and lack of referral systems. The study suggested that if IDP can take necessary actions to overcome these mentioned limitations then the floating boat delivery centre would provide remarkable services in the community level in *haor* areas.

Introduction

Ensuring safe maternal services to the pregnant women and preventing maternal mortality is one of the especial challenges in *haor* areas. It has been seen in *haor* eco-system that villages in *haor* remain water logged/surrounded by water in monsoon. There are no suitable roads to communicate with the main areas during monsoon as well as in the dry season. Even during the rainy season roads are remain submerged in water. Many areas of *haor* are isolated and remain 20 to 25km far from district or sub-district level health care centres or clinics. So, pregnant women and mothers are deprived of maternal care and also have health risks. Considering this situation, IDP-*Haor* project is operating two floating boat delivery centres (FDC) in Baniachong and Derai to ensure emergency health services, especially safe maternity services, eg, pre delivery, delivery and post delivery in *haor* areas. In this stage, the project wants to review the floating boat delivery centre activity, management, effectiveness and its strategy through conducting an action research.

Objectives

To assess the present situation and status of the floating boat delivery centre activity in *haor* areas.

Specific objectives:

- to observe the floating boat delivery centre activities and management process
- to Identify specific problems and limitations of the delivery centre to provide extensive services in remote *haor* areas.

Methods

The study followed a non-experimental design to assess the floating boat delivery centre activities in *haor* areas. A qualitative approach was applied to collect information from the target population eg, staff of delivery centre, community people and service recipient from the centre at community level.

Study areas and target population

The study was conducted in the IDP-*Haor* project in the two sub-districts, Baniachong and Derai. The study target population was mainly staff of delivery centres, community people and service recipients in both areas.

Sampling procedure

Statistical representation was not considered when determining sample size. A purposive sampling technique was applied for selecting sample. Delivery centre staff, community people, and project participants/service recipients were the first set of target population who were selected purposively in both areas, Baniachong and Derai.

Methods of data collection

Qualitative method was used for data collection, ie, FGD, IDI and informal discussion. A set of checklists was used to gather information on selected issues. Two trained researchers directly assisted in collecting information.

Data processing, analysis and presentation

The data was manually collected in Bengali and then translated into English. Issue-based tables and figures were produced by use of a coding and decoding process.

Findings and interpretation

This chapter presents findings drawn on a qualitative study to answer the questions; what is the management procedure of a floating boat delivery centre, what services are delivered by the centre, what are the impacts of the services at community level in *haor* areas and what are the limitations of the centre to provide quality service.

Management of the floating delivery centre:

The study found that a centre was regularly monitored and supervised by the concerned sector specialist and area development coordinator who were providing necessary suggestions and technical assistance. Similarly, concerned technical manger also followed up and visited the centre routinely. Concerned sector specialist and area development coordinator jointly presented a performance report on the delivery centre activities at the monthly meeting regularly. Based on the performance report, *upazila* coordinator took decision to act as early as possible. However, six register books were used to manage and follow up on the delivery centrecentre activities routinely. Such as:

- Delivery and referral register;
- Antenatal care (ANC) and postnatal care (PNC) register;
- Stock register;
- Paramedics movement register;
- Presence register of boat man;
- Visitor register;

Delivery and refer register:

This register used to record the services provided to pregnant mothers, eg, pregnant mother's name, date of last menstruation, expected delivery date, arrival and departure date and time for the delivery, result, birth weight, gender, referred information etc.

ANC and PNC register:

The centre mainly provided safe delivery services with ANC and PNC by a set of health workers at the centre and also conducted home visits regularly. Similarly, *Shasthya kormi* was also providing all kinds of information about the delivery centre and its services and facilities at the community level. This register recoded the ANC services provided to the pregnant mother such as: name, guardian

name, age, number of pregnancies, pregnancy term, name of local health workers, *Shasthya Shebika* and *Shasthya kormi* for follow-up support, identified maternal problems, expected delivery date, and mobile number, etc.

Stock register:
Materials needed and reserved for the delivery centre are recorded in this register such as: medicine, delivery kit and stock of materials required for the delivery service.

Paramedic's movements register:
The presence of paramedics and her movement with boat delivery centre is recorded in this register.

Presence registers of boat man:
This register keeps the presence record of boat man who is mainly responsible to the boatman.

Visitors register:
This register has been keeping record of delivery center visitors to put their comments and suggestions if any required.

Services of the floating boat delivery centre:
Area development coordinator and branch manager (base office) were responsible to maintain activity management and monitor the boat delivery centres. Concerned programme organiser of base office provided referral services for complications of delivery patient. His/her responsibility began after the patient reached the centre. All types of technical assistance were provided by sector specialist (HNPP & WASH) to ensure safe delivery. A basic duty of the concerned paramedic was to provide delivery service efficiently at the centre. Besides, she/he ensured necessary logistics required for delivery. She/he is also responsible to monitor and ensure the overall hygiene practice of the delivery centre. Moreover, she/he takes account of the cost of fuel for the boat delivery centre. Two boatmen were mainly responsible for the security of each boat delivery centre for all time.

A patient card (ANC & PNC) was given to each pregnant mother which included phone numbers of the respective BM, paramedic and POs to ensure safe delivery service and in case of emergency. The centre also provides ANC and PNC services to the poor patients by taking minimum fees and cheap medicine. Sometimes, the floating delivery centre is used as an ambulance for emergency movement during complicated pregnancies.

Moreover, due to lack of knowledge and awareness the villagers or community people in *haor* area received poor services from the delivery centre. Such as:

- family members of the pregnant mother asked for the boat by suspecting labour pain but it was not actual labour pain;
- Local people are more interested to carry out the delivery at home unless there is severe complexity;
- Local superstition and fear of delivery cost discourage usage of delivery service from boat delivery centre or from hospital/clinic;

Services of delivery centres to be enhanced by taking following initiatives:

- ANC and PNC services being offered to the pregnant women to encourage boat delivery through organise the village campaign;
- When pregnant women arrive with maternal complications to take services at the delivery centre, they should be provided with awareness and motivation for safe delivery at the centre;
- Boat delivery is also encouraged to the villagers through the VDO meeting, health forum meeting and household visits of SS and SK.

Conclusion

Finally, to ensure safe delivery in *Haor* area floating delivery centrecentre is the only option. If this pilot initiative can ensure quality service in *Haor* area then its identity, needs, number of service recipient will increase.

Recommendations

- Ensure services of paramedics for 24 hours at the delivery centre;
- Increase the popularity of the boat delivery centre to check blood group of the villagers at community level;
- Organise a community-based satellite clinic, monthly or weekly to provide various services, eg, health, family planning for poor and extreme poor *haor* dwellers in collaboration with union health and family welfare centre that could increase patients in floating boat delivery centre;
- Increase awareness of safe delivery at the centre to the male counterparts and mother-in- laws of pregnant women;

- Ensured transportation or ambulance service for emergency referred patient
- Organise pre delivery home visit by concerned PO and SK to ensure safe delivery for pregnant woman;
- A billboard or signboard can be put up at community level in favour of floating boat delivery centre**;**
- VDO, VDC meetings, popular theatre (PT) show and other forums of the programme can take large scale campaign about the boat delivery centre activities at community level.

Participatory action research

Reflection and learning

RESEARCH PAPERS

Exploring the effectiveness of BRAC's health centre in haor area

8. Exploring the effectiveness of BRAC's health centre in *haor* area

Md Akramul Islam
Ripon Kumer Acharjya
Abu Ansar Md Enayet Karim

Abstract

The study aims to explore overall scenario of BRAC's health centre to ensure health services at community level in *haor* areas. A qualitative method was applied in the research to collect the data. The study finding reveals that a total of 1,996 patients received treatment on different diseases, eg, pregnancy related healthcare, fever, cold and cough, diarrhoea from the two health centres in the last one and half years. The study also reveals that the health centre mainly provided indoor and outdoor services for the poor and extreme poor family members especially women, children and teenage girls. The study also showed that the centre provided essential medicine for the poor patients. However, some limitations of the centre, eg, unavailability of doctor for 24 hours especially women doctor, inadequate treatment facility, lack of exposure about the health centre services at community level, insufficient linkage with other programmes of IDP, poor awareness at the grass root level and social and religious superstitions observed at community level. The study suggested that the quality of the service is essential for the health centre and necessary measures and initiatives must be taken in this regard.

Introduction

In the *haor* areas, maternal and neonatal death is one of the major challenges. Most of the villages remain surrounded by water in monsoon. On the other hand, the earthen roads became hollow and risky in the dry season and remain under water in the rainy season. Many of the remote villages are 20-25km away from the *upazila* or district health centres. As a result the people of these areas are deprived of health facilities especially the pregnant women, children and adolescents couldn't reach the health centres even they are in a very vulnerable position. With the reference of above circumstances, IDP has been operating two health centres to reduce maternal and neonatal death by providing emergency and essential health services in *haor* areas at Baniachong and Derai *upazilas*. To explore the overall scenario of the health centres ie, services, outcomes and its feasibility, an action research was conducted.

Objectives

To explore overall scenario of health centre to ensure health services at community level in *haor* areas.

Specific objectives:

- to know what kind of services delivered by the health centre at community level
- to identify specific problems and limitations of the health centre for ensuring health services

Methods

The study followed a non-experimental design to explore the health centre activities at community level in *haor* areas. A qualitative approach was applied to collect information from the target population eg, staff of health centre, service recipients and community people.

Study areas and target population

The study was conducted in the two health centres and its surrounding areas under the two sub-districts, Baniachong and Derai. The study target population was mainly staff of health centre, service recipients and community people.

Sampling procedure

Statistical representation was not considered when determining sample size and study areas. A purposive sampling technique was applied for selecting sample. Staff, service recipients and community people were the target population in both areas, Baniachong and Derai.

Methods of data collection

Qualitative method was used for data collection, ie, FGD, IDI and informal discussion. A set of checklists were used to gather information on selected issues. Two trained researchers directly assisted in collecting information.

Data processing, analysis and presentation

The data was manually collected in Bengali and then translated into English. Issue-based tables and figures were produced by use of a coding and decoding process.

Findings and interpretation

This section presents findings drawn on a qualitative study to answer the questions; what is the management procedure of a health centre, what services are provided by the centre, what the impacts of the health centre services at community level are and what the limitations of the centre to provide quality service.

Health centre management and services

From the discussion with the health centre staff, we found that following services are providing by the health centre especially for poor and extremely poor people. Such as:

- Indoor and outdoor health services for women, children and adolescent girls;
- Pregnant women received antenatal and postnatal care;
- Provide all type of treatments for regular diseases, eg, fever, cold, cough, pneumonia, diarrhoea and surgery;
- Provide essential medicine for the poor patients at comparatively 3% less than market price;

A set of medical practitioners, eg, doctor, nurses, paramedics and technical assistant has been working in each health centre to offer health services. The poor people who couldn't afford better treatment for their illness, they come towards the health centre. A higher number of women and children come to the centre to receive the service compared to men. Basically, pregnant women received various services, eg, ANC, PNC, delivery and for complexity during pregnancy period. Table 1 and 2 show statistics about the two health centres services in the last one year.

Table 1. Statistics of Baniachong health centre services in the last one year

Type of Patient	Number	Type of Disease	Given Services
Women	813	Pregnancy, normal symptoms	NVD, MR, prescription and medicine
Men	107	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Teenage	39	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Children	79	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Total	**1,039**		

Source: register book of health centre

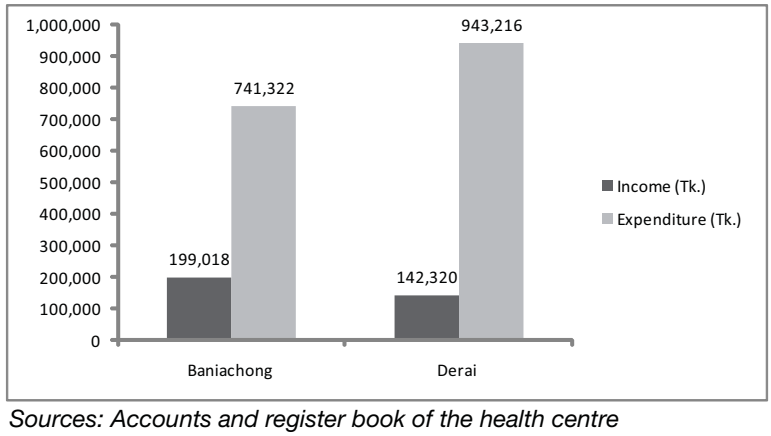
Table 2. Statistics of Derai health centre services in the last one year

Type of Patient	Number	Type of Disease	Given Services
Women	649	Pregnancy, normal symptoms	NVD, MR, prescription and medicine
Men	185	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Teenage	37	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Children	86	Normal symptoms (fever, cold, cough etc.)	Prescription and medicine
Total	**957**		

Sources: register book of health centre

Income and expenditure of health centre in the last six months (May-October 2014):
Income of the health centre included fees of patients, medicine cost, fees of pathological test, and etc. On the other hand, expenditure included house rent, staff salary, utilities costs, and etc. It could be noted that- the only profit comes from medicine which is counted as income and net cost of medicine and it goes to revolving fund for the purchase of medicine in future.

Figure1. Income and expenditure status of the health centre in the last six months



Sources: Accounts and register book of the health centre

Any service related to development initiatives for the poor communities can be very difficult to calculate in terms of its profit, income and expenditure. However, the finding reveals that the centre's operation expenditure was much higher than the income even when compared with the scenario of unsatisfactory services the patients received from the centre in both health centres, Baniachong and Derai. In this regard, the study observed that the quality of services and advocacy can increase income as well as reach the number of expected patients in the health centre.

From the in-depth interview and informal discussion with service providers and service receivers of the centres, we found that patients came to the centre for receiving both indoor and outdoor services. Apart from emergency and delivery patients others were not kept in the centre for receiving indoor services. To ensure proper health service the health workers (*shasthya sebika* and *shasthya kormi*) were moving door to door at community level. They informed the people, especially women and elders about the health care of pregnant women, eg, food, health, nutrition, complications and care during the pregnancy period, etc. Especially poor pregnant women had to come to the health centre to receive the ANC and PNC services. Each health centre provided services and took Tk. 80 fee per patient. When doctors were not available in the centre, a paramedic provided services and took only Tk. 30 fee per patient. The centre provided medicine support for the poor patients and that cost 3% less than market price. To some extent, STUP and OTUP members also got some services from the health centre. So safe delivery, neonatal care and mother and child health care were the main services provided by the health centre. However, in emergency situations, the centre also referred patient to the nearest *upazila* and district level hospital.

The patients coming to the health centre are not large in number. It's quite far from the project goal. Following observations were found in the qualitative findings.

- In *haor* areas, most people living under the poverty line were not able to pay Tk. 80 as doctor's fee for treatment purposes and it seems like a large amount for them. So, they want to go to the pharmacy or the village doctor to seek their treatment instead of going to the health centre.
- Medication for different types of normal diseases were available in the health centre such as, for fever, cold, cough, diarrhoea, normal surgical treatments etc. But a large number of the pregnant women come to the centre for caesarean facilities for safe delivery. An example - in Baniachong, a pregnant woman came to the centre and she wanted to know about the centre facilities like caesarean. She said that if this type of facility is available then she would get admitted in the centre.
- A very well known tradition of rural Bangladesh is conducting delivery with the help of a midwife. In that sense to preserve the inherent practice many of the people take the midwives at home. As a result it is not possible to get the pregnant women to the hospital. Sometimes the midwife also manipulates the family because she gets money and other

valuable stuff after carrying out the delivery. It has happened regularly in this area, i.e., once a midwife moved a pregnant woman just before delivery. Another occurrence also happened at Baniachong- at the moment of delivery a patient was taken to the labour room, after a while a midwife known by the woman came and wanted to enter the room. Though she was pledged by the health centre staff the midwife did not listen to them.

- Sometime, responsible doctors were not available in the health centre when needed. Such as, when Baniachong health centre had no doctor for five months a good number of patients were turned away from the centre without treatment. For this reason, they were not eager to visit the centre again.
- The local people are impatient and unaware about the pregnancy and the complicated situations that may arise. Such as: once a woman came to the centre with labour pain. Doctor asked her to stay under observation till 5am but that woman ignored the doctor's advice and she went home. Later the woman gave birth at dawn in her house.
- Poverty is very common in the life of haor people and religion is a big factor in this area. In case of pregnant women this type of fanaticism is more common. As a result, if any pregnant woman suffers from any complication during her pregnancy period, her family doesn't want to take her to the health centre or any hospital. A nurse in Baniachong health centre said, "A wife of the local mosque imam came to the centre with pregnancy complication. When she went to the centre, she almost gave birth. She came to the doctor without informing her husband. After checking her, the concerned doctor suggested her to stay under observation because the delivery might need to be done within morning. But the woman said that she came here without informing her husband, it will be a great problem if her husband came to know '.

Probable strategy for health centre:

The main focus of this health centre is to ensure standard health facilities to the squalid people of *haor* area. But the health centres were far from meeting the project goal. Besides the surroundings, socioeconomic status of the natives and practiced social norms and values the health centres also couldn't cross the limitations. Inadequate technical instruments, not reaching the grassroots level people, uncertainty of doctors are the primary barriers to obtain its goal. On the

other hand, if the doctor is a woman instead of a man, then women would visit the health centre more frequently. Because *haor* area is conservative most of the people object to send their wife, daughter, sister to a male doctor. Even young adults would come for their adolescent problems if there was a female doctor.

Advocacy is needed to create awarness in the people. Most of the people don't know about the health centre and its services. The people are in far areas and don't know much about this. They need to be informed. It is essential to run mobilisation programme to keep this project successful. In 1997 when BRAC started health centres then five staff was assigned for mobilisation. But now no assigned staffs have fixed programme operation activities. The health workers (*shasthya kormi*) have been working in the field and they only focus on the pregnant women. If the *shasthya kormi* refer a normal patient she would receive an incentive of Tk. 20 only, instead of that if she refers a pregnant woman she would receive about Tk. 150 as incentive. Another fact is when they follow up they only suggest the pregnant woman to go to the health centre. Most of the time, they follow up on the EDD (expected date of delivery) mothers. There is lack of counselling among the field level workers. Most of the villagers got this notion that it is a delivery centre rather than health centre. As a result pregnant women come here a lot. All people must be informed that it's a health centre, not just a delivery centre. To some extent the people who are taking this service also don't have any clear conception about the health centre and its services. *During conversation with a woman who came here to get service, she said that- it would be better if all the children, elders and men could get service here as well. Not only the women but many of the men also couldn't get proper treatment for the cost.*

When the programme refreshers were held, the midwives and village doctors should be told about the health centre, because they are playing an important role at community level in *haor*. So, if the village doctors give suggestion to the people then they will go to health centre for better health facility.

Coordination should be increased within the field level staff. And the staff of the health centre must behave in a professional way. They have to ensure the doctor's availability. A patient once said that one day she came could not reach the doctor and it was only 3pm. The doctor responsible for the centre leaves early even though he is supposed to stay there from 9am to 5pm. A doctor is needed in the centre for 24 hours for emergency service. If the doctor's fee is reduced then more patients will visit the centre. Similar procedures would be applicable for the cost of pathological test especially for the poor and extreme poor people.

There is lack of advocacy and coordination among the programmes. It could be developed by following up the POs and other field level staff. The centre needs to clarify to the locals about the services in detail. It could be discussed in the VDO, VDC, parents meeting etc. It will ensure service availability besides advocacy. The number of patients will increase if this is done properly.

Conclusion

To conclude, providing better health services besides safe delivery to the poor and ultra poor of remote *haor* areas there is no alternatives other than a well functioning health centre. To ensure the quality of the service provided by IDP it is essential to take initiatives. So that, day by day the demand and popularity of the health centres will increase as along with the clients.

Recommendations

- A woman doctor is needed in health centre to provide 24 hours service;
- Enhanced publicity about available services to the natives;
- Ensured combination with the midwives, village doctors and other programmes;
- Initiatives to build awareness to the grassroots level;
- Minimise doctor fees and pathological test;
- Ensured availability of doctor and ultrasonogram in health centre;
- Flexibility in case of buying emergency medical kits. Sometimes some essential kits are needed for emergency patients especially during delivery. But it takes some time due to official formality. and
- Proper monitoring and supervision and steps for regular follow-up on health centre activities are needed.

Over all conclusion

Any development programme initiative can be fine-tuned by conducting the action research (AR) and this will also help to take actions which are relevant to the programme as well as for betterment of programme participants as per their community requirement, prospects and sustainability. In this regard, IDP-*Haor* project has conducted a lot of action research to find haor friendly innovations. It can be helpful to change livelihoods of *haor* dwellers in a positive and sustainable manner.

References:

BBS: Report of HIES, 2010. Table-5,6, page 54.

Barbazette, J. (2006). *Training needs assessment: Methods, tolls and techniques.* San Francisco: Pfeiffer.

Brown, J. (2002, Winter). Training needs assessment: A must for developing an effective training program. *Public Personnel Management, 31*(4), 569-578.

Huque KS, Saleque MA and Khatun R, 2011. Commercial poultry production in Bangladesh published in WPSA_BB souvenir.

Islam Md Mazharul, Bhuiyan Md Nurul Karim, Harun Md Youf, 2012. Good Practices for Family Poultry Production: An Effective Way of Profitable Duck Farming in *Haor* Areas of Bangladesh.

Kamal, M., Islam, Z. Chakma, S. Indigenous Commities, Cultural Survey of Bangladesh Series 5, Asiatic Society of Bangladesh, Dhaka, December 2007.

Rossett, A. (1987). *Training needs assessment.* Englewood Cliffs, NJ: Educational Technology Publications.

Sorenson, S. (2002, June). Training for the long run. *Engineered Systems, 19*(6), 32.

Saleque Md. A, 2010. Livestock and Livelihoods- The role of BRAC in Livestock development in Bangladesh, presented in Review of Livestock Research Programs and preparation of future Research, organised by BRAC.

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