# Journal of Innovation & Development Strategy (JIDS)

(J. Innov. Dev. Strategy)

Volume: 12 Issue: 1 December 2018

J. Innov. Dev. Strategy 12(1): 26-31 (December 2018)
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An International Scientific Research Publisher

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# INFORMATION SOURCES USED BY THE CHAR-LAND FARMERS OF BOGURA DISTRICT

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#### ABSTRACT

Hossain MD, Pramanik MAM, Aurangozeb MK (2018) Information sources used by the char-land farmers of Bogura district. *J. Innov. Dev. Strategy.* 12(1), 26-31.

The main purpose of the study were to determine the information sources used by the Char-land farmers, to identify the present socio-economic condition of char-land farmers, to understand the acceptability as well as satisfaction level of the char farmers to the received information, to know their further information needs and to identify the problems. The study was conducted in Nayapara char under the Sariakandi upazila of Bogura. A total list of 352 farmers was collected from database of Char Development Research Centre (CDRC) of Rural Development Academy, Bogura. From them 88 farmers (25% of population) were selected randomly for conducting the research. Data were collected during 15 May 2018 to 30 May 2018 by using an interview schedule. A mixed method research design was used for the study. The highest proportion of the farmers (24%) was dependent for information on mobile phone. The lowest source of information used by the farmers was found as leaflet. Most of the peoples (47%) receive weather related information from neighbors whereas 33% peoples did not get emergency weather related information in due time. The communication network is very weak and they solely depend on the information of hearsay and rumor. So, the actual information usually does not come to them. That's why their development growth is very slow. A number of problems of the char-land farmers had been identified in the study area which needs to be addressed for ensuring development in the char areas.

Key words: information sources, char-land farmers, problems and sariakandi upazila

### INTRODUCTION

Bangladesh is one of the leading developing countries of the World. About 71.90% of her population is living in rural area accounting about 107 million people (World Bank 2012). Most of the agricultural producers are small and marginal farmers who comprise approximately 80% of all farming households and holding about 50% of the total cultivated land (BBS 2011). Information and Communication Technologies (ICT) could be one of helping solution, which depend on network communications (Anuar *et al.* 2013). It helps to improve the links between farmers and traders, creating opportunities for small-scale producers to sell in new markets.

Bangladesh has an agrarian economy with almost 60% of the population still employed in the agriculture sector and that the country will make a course for self-sufficiency in food production by near future. The development of agriculture is synonymous to the development of Bangladesh due to its contribution in the economy and progress of the country. Transfer of appropriate technology is a big challenge for the country. This requires generation of technology, which can fit in the participation of overall farming situations depending upon the need of the potential users and their effective communication in such a way that they can be adopted in the shortest possible time (Khan 2002).

A prominent change has already taken place in the advanced nations marked by the importance of information as a vital element in the new society that has emerged. The distinct feature of the information society is in the composition of the work force. Information workers are individuals, whose main activity is producing, processing, or distributing information, and producing information technology (Rogers 1983). These changes and the observed transition to an information society formed the basis for this study. A need was felt to determine how information's are effective to farmers.

To increase agricultural productivity in Bangladesh improved agricultural technologies should be used with great care. But in practice till today only one-third of the total cultivable land is covered by the modern technology. The overall development of the country and prosperity of her people is almost absolutely dependent on agriculture. The government is consistently trying to improve the socio-economic conditions of the farmers by providing several facilities. Providing adequate and right information in right time is considered as one of the facilities among them.

Bangladesh is a riverine country. There is numerous numbers of Chars at the bank of different rivers where most of the people live under the poverty line. The policy of the country has to focus on the overall wellbeing of the people engaged in agricultural activities and live in villages. Nayapara is a village under Sariakandi upazila of Bogura district. Most of the people of this village are underprivileged. They always have to fight with natural calamities. They even cannot fulfill their daily requirements. They lag behind in education, food, proper sanitation, medicine etc. Besides, they are completely dependent on the natural resources. Although they are totally dependent on agriculture but they have not get proper price of commodities, no idea on importance of quality seed production, proper way of seed preservation.

All the problems become more aggravated as they have no available, affordable and easy access of information sources at their local level or village level. They may use some common channel which may not give accurate information. Before giving suggestions for the improvement of information sources firstly this piece of research

targeted to know the sources of information they are presently using in receiving different information. Keeping all this in mind the research has set up the following objectives.

The overall objective of this research is to know the information sources used by the char–land farmers. However the specific objectives are as follows:

- 1. To determine the information sources used by the char–land farmers.
- 2. To identify the socio-economic profile of char-land farmers namely income source of family, family income, expenditure and contribution of women, protein intake, education and agricultural production.
- 3. To understand the acceptability as well as satisfaction level of the char people to the received information.
- 4. To identify the information needs of the char-land farmers.
- 5. To identify the problems of the char-land farmers.

### **METHODOLOGY**

**Locale of the study:** Nayapara village under Sariakandi Upazila of Bogura district was selected purposively for conducting the study. There are two reasons behind purposive selection of the study area. Firstly, researchers have a general understanding about the agricultural conditions of the char land farmers. Secondly, most of the people of this village have to fight with natural calamities. They even cannot fulfill their daily requirements due to lack of proper information.

**Population and sample:** All the farmers of Nayapara village under Sariakandi Upazila of Bogura District were the population of the present study. A total list of 352 farmers was collected from database of Char Development Research Centre (CDRC) of Rural Development Academy, Bogura. From them 88 farmers (25% of population) were selected randomly for conducting the research.

Sources and methods of data collection: Data were collected mainly from primary sources. Face to face interview with the farmers was the methods of data collection. Observation of the existing network of information, PRA, Pair-wise discussion and FGDs with the respondents was also used for primary data collection. Besides primary data the secondary sources documents, scientific publications, books and data bank of RDA (Rural Development Academy, Bangladesh) was used. In order to collect relevant data for the study, a structured interview schedule was prepared keeping the objectives in mind. The questions and statements contained in the schedule were simple, direct and easily understandable by the respondents. The schedule contained both open and closed form of questions. The data were collected by the researchers in assistance with the data collection team consists of the civil servants trainees. From dawn to dusk the researchers observed and engaged themselves in the tasks in which a farmer goes through. The researchers collected fruitful information for understanding the life and socioeconomic aspects of char farmers who are mostly engaged with agricultural activities.

**Research design:** This research employed both qualitative and quantitative approaches. The qualitative such as observations and quantitative survey approach were used to investigate survey results. Thus, a mix method research design was applied to determine the sources of information used by the farmers.

Tools and methods of data collection: An interview schedule was prepared carefully with due patience keeping the objective of the researcher in view. The questions and statements contained in the schedule were simple, direct, and easily understandable to the rural community. The schedule contained both open and closed form questions. In order to improve, finalize, and make the interview schedule reliable, it was pre-tested under real life situation. Necessary corrections, alterations and adjustments were made accordingly in the light of the actual and practical experiences and result of the pre-test.

**Collection of data:** Data were collected personally by face to face interview. Rapports were established with the respondents prior to interview and the objectives were clearly expressed to avoid any biasness in data collection. Excellent co-operation and coordination was obtained from the respondents. The entire process of data collection was done during 15 May to 30 May 2018.

**Processing and analysis of data:** Data collected from the respondents were coded, compiled, tabulated, and analyzed in accordance with the objective of the study. Qualitative data were converted into quantitative form by means of suitable scoring whenever needed.

**Measurement of variables:** The present socio-economic profile of char—land farmers namely income source of family, family income, expenditure and contribution of women, protein intake, education and agricultural production were measured using standard statistical scales and scores. Source of information used by the farmers in char areas were measured by considering their responses and expressed in percentage. Other variables were measured mostly in qualitative form.

### FINDINGS AND DISCUSSION

According to the objectives the findings are presented in the following sub sectors.

# Information sources used by the char-land farmers

Although the information network in Jamuna riverine chars is very fragile but there is some existence of information network in Char areas of Sariakandi upazila of Bogura at Northern Bangladesh. The reason behind the situation is mainly due to remoteness from the main land. The information sources used by the farmers in char-land have been presented in Figure 1.

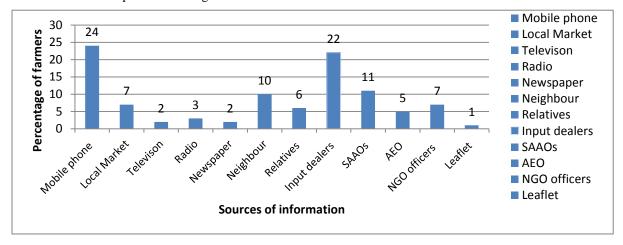


Fig. 1. Source of information used by the farmers in char areas

Data obtained from figure 1 revealed that the highest proportion of peoples (24%) were dependent on information over mobile phone. The findings may be due to that the mobile network coverage is increased in the remote areas which have made the flow of information smoothly and quickly. The second highest source of information was found on input dealers followed by SAAOs, neighbor and so on. The lowest source of information sources used by the peoples was found as leaflet. The result may be due to that in char areas leaflets are very rarely distributed except in emergency condition.

**Information received in different sectors:** In addition to information sources used by the char-land farmers, the information received in different sectors also determined. It is a matter of concern that there is no electricity in the char areas so the other modes of communication like-radio, television, cable TV, computer and internet access are very poor and limited. As a result the char-land farmers are not getting required information regarding education, health, agriculture, sanitation, land related issues etc. These are discussed as follows-

Agriculture related information: According to the findings the char-land farmers get agricultural information from the input dealers and SAAOs. They get information regarding cultivation from their neighbors, different NGOs and local people. They get agricultural market related information from Upazila Agriculture Officer, local market, fertilizer dealer and pesticide dealers etc. according to their availability and affordability of information.

**Livestock related information:** Most of the char dwellers get livestock related information like- diseases of their cattle and treatment from CLP (Char Livelihood Program), quack and local market. They get animal husbandry related information also from CLP and quack also. The percentage of reliance to the available information is poor.

**Health related information:** Most of the char dwellers get health related information like- treatment, nutrition and family planning from quack, community clinic, pharmacy and experienced neighbors. They get sanitation related information from quack, community clinic etc.

**Education related information:** Education is one of the most pivotal fundamental rights. Most of the dwellers of char get education related information from local teachers. They also get limited educational support from Government like- scholarship, stipend and educational equipment etc.

**Weather related information:** The char people have to fight very hard against natural calamities. Their sufferings can be minimized to some extent if they would have got some weather forecast. Most of the char-land farmers get weather forecast from local people. They get information regarding disaster management and relief from neighbors. Figure 2 represents the distribution of sources according to weather related information.

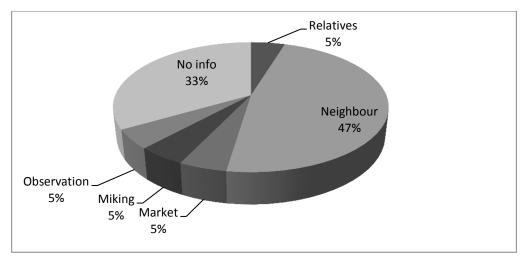


Fig. 2. Distribution of peoples according to weather related information

Figure 2 indicates that most of the peoples (47%) receive weather related information from neighbor whereas 33% peoples did not get emergency weather related information in due time.

**Land management related information:** The char farmers basically take land lease or take rent from the land owners. They get land management related information from the owner of land. Information regarding solving different land related disputes they receive from local people and land owners. The percentage of reliance to the available information is not satisfactory as per observation.

### Socio-economic conditions of the farmers

This chapter deals with the findings from second objectives of the research. The characteristics of people's family like age, income source of family, family income, expenditure and contribution of women, protein intake and education.

**Age**: Peoples are categorized into three categories according to age presented in Figure 3. The research revealed that most of the peoples were more than 50 years old.

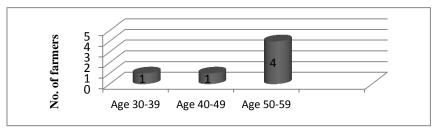


Fig. 3. Distribution of the peoples according to age

**Income source of family:** The most of the families (67%) found to be dependent on agriculture as their source of income. Income source of the families of char areas have been collected from agriculture, livestock, and some other sources which have been presented in Figure 4.

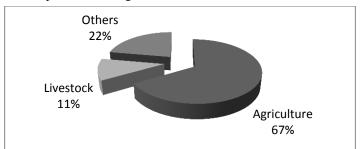


Fig. 4. Distribution of the income sources of families of the char-land farmers

**Family income, expenditure and contribution of women:** The findings indicated that, income and expenditure almost same in the char area which are representing in Figure 5. It was also found that women's income is less than Tk. 4000. Women's participation in income was mainly contributed by helping the male in agricultural related activities, rearing dairy, rearing poultry, sewing etc. Besides this most of the women participate in social functions and take part in decision making in any kind of family matters.

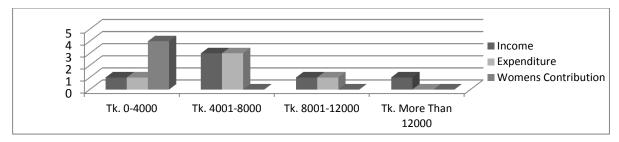


Fig. 5. Distribution of family income, expenditure and women contribution

**Protein intake:** It was observed that the respondents were habituated to take fish as meal in average 20-25 days/month and meat in average 2-3 days/month. Most of the fish are collected from local river and canal, meat from local markets and domestic sources and egg from domestic sources. Near about 50% of the surveyed family faced food shortage in different time of year.

**Education:** The observation also indicated that rate of primary school enrollment is 80%, rate of secondary school enrollment is 60% but 30% of children cannot complete secondary level of education because of provision of child marriage, engaged in agricultural activities and parents unconsciousness. Higher secondary enrollment is 30% but the successfully completion of their study rate is 15%. It can be concluded that the educational status was not satisfactory as per expected.

**Agricultural production:** The average agricultural production has been presented in the following Table 1.

Table 1. Present scena	rio of area	and product	ion agricul	tural crops	
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Crops	Land (Acre)	Production/Acre	Expenditure/Acre	Profit/ Loss (Acre)
Paddy	0.43	0.84 ton	Tk. 20,000	Tk. 7,100
Jute	0.31	0.24 ton	Tk. 27,000	Tk. 1,780
Chili	0.33	0.24 ton	Tk. 60,000	Tk. 11,666

The results of Table 1 indicates that although the acreage of paddy is high, but the profit is high for chili production.

# Acceptability of the received information

The research tries to investigate the acceptability of the received information. Two FGD sessions were conducted with the presence of 10 female and 10 male participants in each. The acceptability of the information was found moderately satisfactory during group discussions. From that discussion it was found that the communication network is very weak in the study area and the respondents solely dependent on the information of hearsay and rumor. So, the actual information usually does not come to them. That might hinder them to achieve the desired development. During focus group discussion the farmers leader Mr. Sakhawat opined that they are poor farmers of char, they do not receive proper information timely. They did not get any medical support timely. They have an expectation to improve their livelihood conditions.

## Information needs of the farmers

Farmers' information needs in practicing agriculture was another focus of this study. During FGD farmers opined that the highest information needs was observed on pesticides name for pest and disease control. The other information needs were observed on price of inputs, price of products, doses and time of application of pesticides and identification and control measures of diseases.

# Problems of the char-land farmers

Participatory Rural Appraisal (PRA) is a powerful tool to identify the problems of any community. It is usually done by open discussion with the farmers in a group. In this PRA, the findings indicated that lack of information regarding land management and its measurement is the main problem. The other problems identified are presented below.

# **Crop production related problems**

- i. Lack of proper information in right time
- ii. Poor road communication and irrigation system
- iii. Lack of capital
- iv. Problem in getting loan from government bank
- v. Scarcity of labor and high wage of labor
- vi. Fertilizer problems- high price, scarcity during seasons
- vii. Insecticides/ pesticides problems- high price, scarcity during seasons, lack of knowledge of using pesticides & insecticides
- viii. Absence of electricity

# Marketing related problems

- i. Poor transportation system
- ii. Lack of information about price of commodities

# Livestock related problems

- i. Lack of grass and proper treatment.
- ii. Infectious diseases.
- iii. Unavailability of loan

## Health and sanitation related problems

- i. Common diseases like fever, cold, diarrhea etc.
- ii. Lack of doctors, nurse
- iii. Scarcity of medicine
- iv. Unhygienic environment
- v. Conveyance of patients

## **Environment and disaster related problems**

- i. Drought- damages crop production.
- ii. Seasonal flood
- iii. They are vulnerable to river erosion.
- iv. Farmers are not conscious about negative impacts of excess use of insecticides & fertilizers and they do not use mask while spraying insecticides.

# **CONCLUSION**

Farmers are trying to use different information sources in char-land but they have not still supported by the right information at right time. The highest information source was found as mobile phone whereas the lowest was found as leaflet. Rural people are the driving force and backbone for the rural and national development of any country. So the rural peoples have to add in the mainstream of the national and economic development of the country. Besides this the civil servants who are going to be the future policy-makers may be boosted-up their mind to uplift the life standard of the char people, especially char-land farmers, through the application of their practical experiences gathered from char attachment programs.

## RECOMMENDATIONS

The research suggests the following recommendations:

- i. There is an emergency need to take steps by GO and NGO in dissemination of timely information among char-land farmers.
- ii. Homestead for the char people should be ensured. The *khas* land which are belongs to land lords may be distributed among the char farmers.
- iii. Agricultural marketing channel should be strengthened to get the exact price of their products.
- iv. Communication system of the char areas should be improved.
- v. Research should be undertaken particularly to identify the further factors causing hindrance to expected level of practicing agriculture and to explore the potentialities of the farmers to overcome the hindrances.
- vi. More training sessions need to be organized by different government and non-government organizations to increase the knowledge and awareness of the farmers in practicing agriculture.
- vii. Electricity supply for the char people should be ensured.
- viii. Cold storages facilities for preservation of produced crops need to be established in char areas.
- ix. Social awareness regarding women education and early marriage should be created.
- x. Ensuring better health services by establishing community based mobile medical services.
- xi. Mobile plant clinic is needed to be establishing in the char areas.
- xii. The organizations working for char areas should be strengthened by more government and international support.

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