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ABSTRACT

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In recent years farmers attitude to access to agricultural information have been changed because of very fast networking of Information and Communication Technology (ICT). Specially rural marketing exploring in a new ways as farmers access to market information. Various projects have been developed that integrate ICT into the dissemination of agricultural information to farmers. This paper discusses a number of innovative projects that utilize ICT in delivering information to farmers.

Key words: agriculture, farmers, ICT, information and innovation

INTRODUCTION

With the change of time and the development of information technology, the potential of ICT to support the access to and exchange of information for farmers is cleared.

A new concept about agriculture informatics that has arisen following the rapid development in ICT and of the internet referred to as e-agriculture. Information is delivery through the advances in ICT and the internet. Improved ICT are known to enhance or expand human networks (Qaisar *et al.* 2011).

Bangladesh Agricultural Research Institute (BARI) is the largest multi- crop research institute conducting research on a wide variety of crops, such as cereals, tubers, pulses, oilseeds, vegetables, fruits, spices, flowers, etc. Besides, variety development, this institute carries out research on such areas as soil and crop management, disease and insect management, water management and irrigation, development of farm machinery, improvement of cropping and farming system management, post-harvest handling and processing, and socioeconomic studies related to production, processing, marketing and consumption.

Many of the organizations like government (A2I, BARI), private and cooperatives have attempted to facilitate technology transfer in the agriculture sector (Best and Kumar, 2008; Gollakota 2008; ITU 1981; MIOA/IICA, 2007; Munyua and Hilda, 2008; UNDP 2009). Also Radio and TV Programmers feature agriculture information.

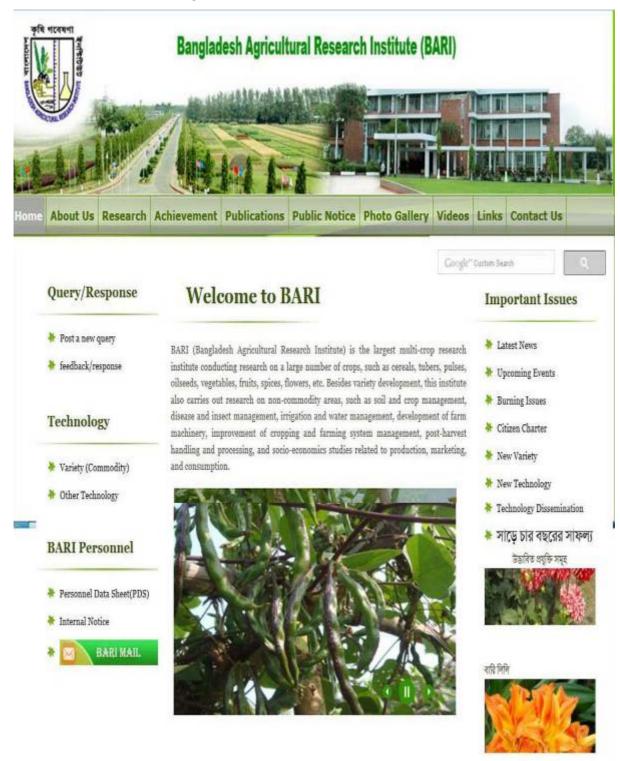
BARI on line e-agriculture services to the beneficiaries. Any stakeholder can ask question related to agriculture with the help of on-line e-agriculture facility of BARI web site. BARI has been giving on-line feedback services through website (www.bari.gv.bd) to end user.

METHODOLOGY

To facilitate farmers BARI has established a web based methodology for any queries. Any root level farmer can directly access to BARI through BARI website (www.bari.gv.bd) even from union level. Moreover for the better of our e-agri management and communication development we have established the following system for data collection.

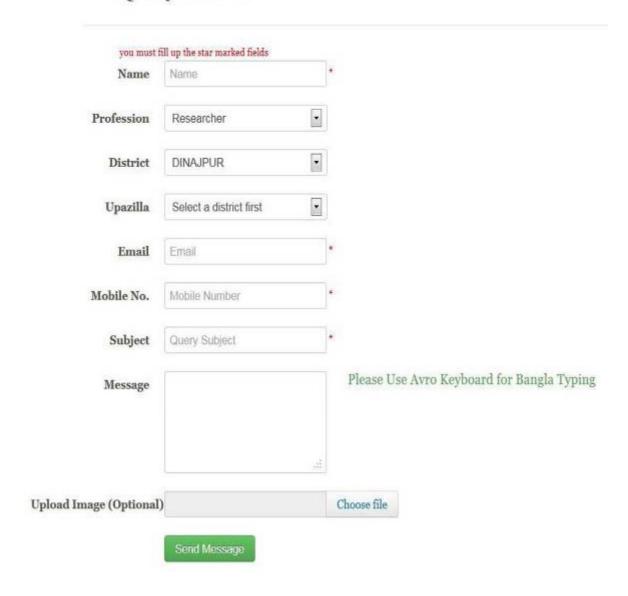
The queries and data collection are given below which has been developed by renowned software using My SQL, PHP etc. Specialized applications are being developed to further extend this impact. Some of the results were analyzed by computer package software such as MS EXCEL, SPSS etc.

Overview of BARI website are given below:



Post a new Query form are given below:

Query Submit



Query subject, message of feedback message are given below:



Query Subject	Request for suggestion
Message	Sir, Could you please inform whether wheat could be cultivated in the soil which becomes more salty during winter in coastal Chor area. if possible what is the variety @ from where Seed could be collected?
Feedback Informa	tion
Feedback Message	BARI Gom 25 released in 2010 is saline tolerant wheat variety. It can tolerate salinity level of 8-10ds/m. Å Seed can be collected from Regional Wheat Research Centre, BARI, Gazipur or from nearly BADC sale centre. Å Regional Wheat Research Centre, BARI, Gazipur
Query Subject	pH lebel of all districts of Bangladesh
Message	Dear sir, we need to know the pH level of all districts of Bangladesh.Please inform us Thank You.
Feedback Informa	tion
Feedback Message	BARI Gom 25 released in 2010 is saline tolerant wheat variety. It can tolerate salinity level of 8-10ds/m. Seed can be collected from Regional Wheat Research Centre, BARI, Gazipur or from nearly BADC sale centre, Â Regional Wheat Research Centre, BARI, Gazipur
Query Subject	pH lebel of all districts of Bangladesh
Message	Dear sir, we need to know the pH level of all districts of Bangladesh Please inform us Thank You.
Feedback Informa	
Feedback Message	The pH level of all districts of Bangladesh is given below:
Feedback File Link	Download
Query Subject	Timetable of BARI
Message	I'm interested to know when BARI will open to visit for us.

RESULTS AND DISCUSSION

The detail study was from secondary data. Number of queries/answers in different section/division/centre during 2011-12 and 2012-13 Annual report was collected from Annual report (ASICT Division, 2011-12 and 2012-13):-

Queries/Feedback information

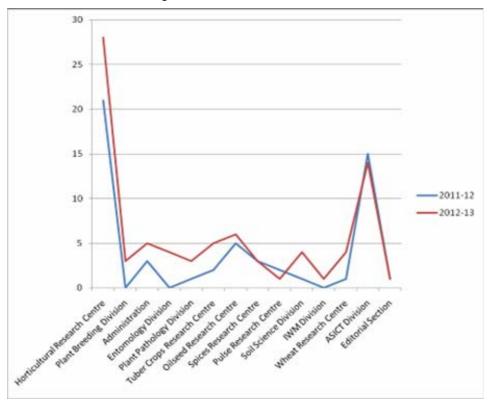


Fig. 1 Line-chart of queries/feedback (2011-12 and 2012-13)

From Figure 1 it was observed that the number of queries/feedback is increasing year by year. So that the formers are being benefited by using BARI e-agriculture services.

Queries/Feedback information (2011-12)

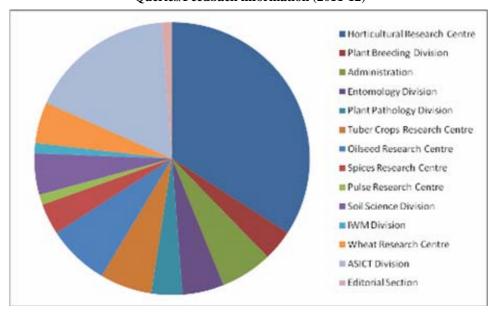


Fig. 2. Pie-chart of queries/feedback (2011-12)

Horticultural Research Centre Plant Breeding Division Administration Entomology Division Plant Pathology Division Tuber Crops Research Centre Oilseed Research Centre

Queries/Feedback information (2012-13)

Fig. 3. Pie-chart of queries/feedback (2012-13)

From figure 2 and 3 it was observed that most of the farmers want to know about Horticulture crops (such as fruits flowers and vegetables etc.).

CONCLUSION

Agriculture is the major driving force of Bangladesh economy. 80% people depends on agriculture. About 20% of the national GDP depends on it. Throughout the agricultural seasons farmers typically seek information on disease prevention, pest control and advice to make their farms more productive. Demand for these kinds of information is rapidly increasing (Fig. 1). ICT and web service of BARI providing these information which made their access easy. Thus, these services assisting famers in making the best decisions in farming. Day by day post a new query and feedback/response rate is increasing.

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