Impacts of Mobile Phone on Agribusiness

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Abstract: Bangladesh economy largely depends upon agriculture. The mobile phone technology is very common for information technology and most of the time it used in hand to hand. The United of mobile phone technology with agriculture can accelerate the economic development by means of agricultural production. The study contains the benefits of mobile technology in agribusiness sector and covers only Rangpur division, Bangladesh. The study is to find out the use of mobile phone in the agriculture sector. Some portions of the farmers are using the mobile phone in their daily work. Primary and secondary data collection procedures were applied on the study. Farmers are using mobile phone generally but they do not apply this directly to production. The mobile phone can make their agricultural work very easy to them The technology can be applied if government and whole mobile operators are agreed to take the activities accompanied to technical support for the agricultural technology. Rural farmers should make prepare so that they can easily introduce with the technological support and be able to use the technology.

Keyword: Mobile phone, Mobile banking, Agribusiness, Farmer.

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I. Introduction

Mobile phone plays a dynamicrole for the enhancement of farmer's agribusiness towards agriculture in the development countries. Bangladeshis overpopulated country where enormous portion of communities directly or indirectly involve agro base jobs. Most of the developing countries farmers are using their mobile phone for the agriculture products. As of late the large portion of educate farmers catchagribusiness information such as market circumstance, market price, product value, seed information etc. through mobile phone. The manifestation of mobile phone encourages the pastoral communication among the farmers and intensification productivity in developing countries. In contemporary year mobile phone create very easy way to communicate and familiarize with supplier, retailer and other stakeholders who are attached in agricultural product market (Duncombe, 2012).

Mobile phone based administrations have multiplied in most recent years, giving better approaches to get price information and market data, and arrange input/output information including transport and coordinations, finance and production techniques (Gakuru, et,al 2009). The government of Bangladesh has established agricultural information service (AIS) through which training guides newsletter radio and agriculture program films etc. are organized for disseminating information. Now a day's most of the farmers in Bangladesh has been doing their transaction by mobile phone that means mobile banking. Bikash, Mcash, Rocket are now added in the banking industry. Moreover, most of the farmers carry the update information as well as training instruction in their pockets by mobile phone. Information builds up durable relationship among farmers and agricultural officers. However, farmers proliferate their production by accurate information (Tegegn and Dafisa2017). As of late, in Bangladesh young agro base entrepreneur access agriculture apps in the android mobile phone. Under this circumstance this study tried to find out how the farmers use their mobile phone for the agribusiness purpose.

The Objectives of the Study:

The key objective of the study is to identify how the Bangladeshi farmers use their mobile phone on agribusiness perspective.

The exact objectives are

- 1. To know the number of farmers who use internets.
- 2. To estimate the number who usedmobile banking effectively to utilize the potentials of the mobile phone.

II. Review of Literature

Malaysian young entrepreneur's conviction that mobile phone support to intensification their agribusiness productivity. Moreover, an enormous portion of Malaysian agro-based entrepreneurs think that they can catch agricultural interrelated information within a short time by mobile phone .As a result in Malaysia, agro-based business more forward-looking day by day(shaffril et al,2009). Providing information on existing market price, product availability & technical advice for farmers is a key to the development of socioeconomic. Also, the mobile phone has a direct impact on low-grade income people, especially in developing countries. Starting communication with clients without an intermediate is getting popularity within farmers by which, they are being paid a large amount of the selling price. (Goggin & Clark, 2009). At this instant, smartphone plays dynamic roll in agricultural sector. Moreover, small phone has some effective physical sensors. Therefore, farmers diverse their workcomfort ability as well as they save their energy and valuable time. (surasvadi et al). Moreover, most of the farmers carry the update information as well as training instruction in their pockets by mobile phone. Information build up durable relationship among farmers and agricultural officers. However, farmers proliferate their production by accurate information (Tegegn and Dafisa2017).

Using the phone messaging option to get update information was the insignificant result in Philippine among farmers. This phenomenon had revitalized their agribusiness by providing updated information on fertilizer & insecticide in their needs basis of agriculture. By the way, their production boosted in smoothly. In this similar way of messaging option has been used by Kenya's farmers, which linked to solar-powered weather stations to get updated information about weather news, the price of fertilizer and seeds. And one insurance company had been engaged with this system so that it can observe the actual situation of growing crops. Also, most dramatic change have come from Uganda, where farmers are being delivered seeds and fertilizer by using a mobile phone. (Kashem, 2010)Mobile phone technology closed remote area for connecting man to man by providing network coverage. Thus, farmers and clients are coming at the same floor to share their expected price. After that, it happens a good deal among them & risk free being from unsold products. Without mobile phone technology, the traders of Ghana weren't informed to order from clients. Then they had taken much time to load trucks of banana and beard. Lastly, it increased transpiration cost which was difficult to pay for traders. But today's mobile phone technologies are saving there, high transport cost and assisting to deliver fresh banana in the market. (Smale & Tushemereiruwe, 2007).

Bangladesh is the most compactly populated country in the subcontinent where the mobile phone is the momentous electronic media for the individuals. Moreover, farmers abate their communication charge as well as information rate.in addition, pastoral farmers have able to access agricultural technologies information by mobile phone. (Hasan, 2015). Using mobile phone farmers have saved their valuable energy as well as time. .therefor, they can augmentation their income level. Farmers can without difficulty communicate with market brokers as a consequence they mindful of their product unbiased value .in addition, farmers sell their product to the customer at an authentic price.(chhachhar and Hasan 2013)

III. Methodology of the Study

The study requires an efficient procedure from selection of the topic to preparation of the final study. To perform the study, the data sources were to be identified and collected, to be classified, analyzed, interpreted and presented in a systematic manner and key points were to be found out. Exploratory study has been conducted for gathering better information that will give a better understanding on different financial data. Both primary and secondary sources of data collection procedure have been used in the study. Primary data has been collected mainly through the writer's observation of the approval process and monitoring techniques, informal interviews of farmers, and the people who are involved with agriculture. We first design a questionnaire and then goes to the door to door of farmers and collect information. These information is collected from the farmers of Rangpur Davison's various district through face to face conversation and different journals and study which is related to technology use in agriculture.

Limitations of the Study: There is some drawback of the study. First of all, this study only emphases on the Rangpur division. However, Secondly, the farmers are anxious about giving appropriate information about their work. Last, of all, the farmers do not cognizant about the technology.

IV. Analysis and Result Discussion

Table 01: Age of respondent

Age	Respondent	Percentage
20-30	13	13
31-40	27	27
41-50	30	30
51-60	20	20
61-70	10	10
Total	100	100

The table illustrates oninformation of respondent's age. It is visible that majority number 30(30%) of respondents age level is between 41-50 years followed by (31-40) years, (51-60) years, (20-30) years and the last number is (61-70) years.

Table 02: Knowledge of mobile banking of the respondents

Mobile Banking Name	Respondents	Percentage
Bkash	64	64
DBBL	17	17
M Cash	0	0
Others	0	0

The table depicts information on users of mobile banking. People can smoothly transfer their money one place to another place very swiftly by mobile phone. Therefore, in this prevailing circumstances, an enormous portion of people in our country would like to mobile banking for their many kinds of banking transaction. Tabledivulge the preferred mobile banking operators for their transaction. Majority number 64 (64%) of respondent use Bkash and DBBI 17(17%), M-cash (0).

Table 03: Preferred mobile phone operators for agricultural information

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Mobile phone operators	Respondent	Percentage	
Grameen phone	88	88	
Banglalink	8	8	
Airtel	1	1	
Citycell	0	0	
Robi	2	2	
Teletalk	0	0	
Total	100	100	

There are a plethora of mobile phone operators in Bangladesh .for example, Grameen phone, Banglalink, Airtel, Ciyecell; Robi, Teletalk. Farmers can access straightforwardly all sort of mobile operators and they can catch their expectation agricultural information. The table exposes the preferred mobile phone for intending agribusiness information. Majority number 88(88%) of interviewer use Grammen phone to get agribusiness information followed by 8(8%) Banglalink, Robi 4(4%), Airtel 1(1%) and citycell 0(0%), Telitalk 0(0%).

Table 04: Advance knowledge about technology

Particulars	Internet	E-commerce	Agricultural apps
Use	30	20	20
Do not use	70	80	80
Total	100	100	100

The table illustrates on information about the technological knowledge, Farmers are doing their different kinds of work by this technological tools. Moreover, farmers are able to communicate with all over the world by this way. Where 30 % of those farmers are known about the internet. 20 % the farmer knows about E-commerce. Same as the number of 20 % of farmers know about agricultural apps.

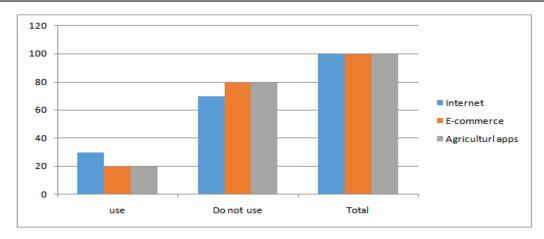


Table 05: communication with middleman

Media	Respondent	Percentage	
Physically	67	67	
Mobile phone	67	67	
By others	14	14	

The table illustrates on information communication way with the middleman. Most of the farmers must need numerous information. For example; market price, weather circumstance, etc. This information collects in different ways .such as physically, mobile phone, others media. The table indicates 67 respondent physically contact with the middleman in percentage the number is 67%. On the other hand, 67 respondent use the mobile phone to contact with the middleman, there also the percentage is 67% and 14 respondents communicate with middleman by other people, where the percentage is 14%.

Table 06: About fair value

Media	Respondent	Percentage	
Television and radio	13	13	
By people	83	83	
Newspaper	4	4	
Mobile phone	27	27	

This table shows the information about how a farmer collects the information about the fair value of their product. There are four media available to collect the fair value. They are television and radio, by other people, newspaper, and mobile phone. From our survey we get 13 respondents are use television and radio in percentage is 13 %. 83 respondent collect the information by other people the percentage is 83%.4 person of the respondent use newspaper to collect the fair value of his product in percentage which is only 4%. The most disappointed matter is the mobile phone which is the most common media of communication, only 27 respondent uses the media to collect the fair value of their product. In percentage which is only 27%.

Key findings:

Firstly, It brings to light that majority numbersare known about internet in which most of the respondents age level between (41-50) and another visible factor having found that majority number of respondents use BKASH Mobile banking henceforth the largest portion of interviewer use Gramophoneto get agribusiness data. It also reveals that large number of respondents get the actual information about the fair price of agricultural products by personal communication. Besides, a large number of interviewer contact with the middleman through the mobile phone. Asmost of the young person is not like to enter agricultural sector in our country for it is being observed as not a prestigious sector. They also realize this could not make their life speedy. The large number of farmers in our country is not capable of using mobile phone in an effective way moreover they use mobile phone for eithermaking call or receiving call. Most of the farmers are not rich enough to adopt this trend. They lead their lives from hand to mouth for that reason and are not engaged easily with the latest technology as like mobile phone. Above all, the farmers of Bangladesh are unconcerned how to get benefit from mobile phone in agricultural sector.

V. Recommendation and Conclusion

Bangladesh govt. should avail the training sessions for the farmers to develop the capability of the farmers and also assist from the technological facilities like agribusiness apps, online service centers etc. Where the touch of technology is absent among the backward farmers should be availed also. Furthermore, Mobile

operator should take activities or give facility to the farmer so that they can easily get the legal price information Using of smart phone has to be available among the route level farmers. Bank or other financial institution should provide easy loan procedure to the farmers so that they can easily recover their financial scarcity. As a result, they can adjust with agricultural update technology such as mobile agricultural apps. Some educational program should also take as if the farmers can get educational support for using agricultural technology. Mobile operator should give look on the customer service for the route level farmers. Agriculture institution should make available online way to buy or to sell agricultural products for every crucial time to be developed the capability of respective farmers. There are large numbers of farmers in developing countries like Bangladesh where most of the farmers have not get adequate agribusiness facilities from mobile. Though mobile phone is available among the farmers, it is not properly use in agribusiness sector. Recently government takes some initiatives for the development of farmer's ability to adaption about agriculture technology. Beside this some mobile operators provides to the farmers some agribusiness facilities. If this both initiatives are continue the farmers will be able to use mobile phone in agribusiness perspective.

Reference

- [1]. Duncombe, R.(2012) Mobile phones for agricultural and rural development, URL: http://hummedia.manchester.ac.uk/institutes/gdi/publications/workingpapers/di/di_wp50.pdf Accessed date: 25-05-2017.
- [2]. Gakuru, M. Winters, K. & Stepman, F. (2009) Inventory of innovative farmer advisory services using ICTs, Forum for Agricultural Study in Africa.[On-line]
- [3]. Tegegn M and Dafisa A (2017) Review on potential of mobile phone usage in agricultural information dissemination in Ethiopia.international journal of scientific and research publication, volume 7, issue 12, page 63
- [4]. Shaffril, M., Azril, H., Hassan, M. S., Hassan, M. A., & D'Silva, J. L. (2009). Agro-based industry, mobile phone and youth: A recipe for success. European Journal of Scientific Study, 36 (1), page 41.
- [5]. Surasvadi N,Chaovalit P, Pongnumkul S (2015) Application of smart phone based sensors in agriculture a systematic review of research, journal of sensor article id 195308.page 16.available from http
- [6]. Goggin, G., & Clark, J. (2009). Mobile phones and community development: a contact zone between media and citizenship. Development in Practice, 19 (4-5), 585-597.
- [7]. Kashem, M. (2010).Farmers' use of mobile Phones in receiving agricultural information towards agricultural development. In Proceedings of the 2nd International Conference on M4D Mobile Communication Technology for Development 10-11 November. Kampala, Uganda
- [8]. Smale, M., & Tushemereiruwe, W. K. (Eds.) (2007). An economic assessment of banana genetic improvement and innovation in the Lake Victoria region of Uganda and Tanzania. Study 155. Washington, DC: International Food Policy Study Institute.
- [9]. Chhachhar ,R,A.and Hasan S,M.(2013)The use of Mobile phone Among Farmers For Agriculture Development. International Journal Of Scientific Research.Voiume:2,Issue:6 page
- [10]. Hasan, M. M (2015). Mobile Phone as an Instrument of Disseminating Requisite Agricultural Information for the Agricultural Development of Bangladesh. International Journal of Study in Engineering and Technology.volume:04 Issue:04 April 2015, page 523.

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