

Current Paddy Procurement System and Supporting the Farmers in Selected Areas of Bangladesh: A Qualitative Analysis

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Abstract

This research aims to assess the current state of paddy procurement system in Bangladesh and know the perception of farmers regarding this system. The farmers' perception is used to identify major challenges and possible remedies to overcome the challenges. Qualitative research methodology is followed in this study. A number of key informant interview (KII) is done within 21 interviewee of four category with the specified agenda in the practical field until the interviewee found homogeneous in their response. A number of focus group discussion (FGD) within five group are conducted to generate a qualitative understanding of the of paddy procurement system from paddy surplus district in Bangladesh. A KII and FGD are then carried out on the respondents who are directly involved in the paddy procurement activities, policy making, academic researcher and ICT expert. There is a vast scope for the development of current paddy procurement system in Bangladesh is actual finding of the research. Also some opined for this holistic approach of the effective paddy procurement system Information and Communication Technology (ICT) may be a good tool because ICT may help to make the activities of the paddy procurement more transparent to all including the farmers. This, in the long run, will ensure that farmers receive the actual price without any difficulty and they encourage to cultivate paddy in the following years. The Government may also generate information about the production, stock, and demand of paddy which may help to ensure food security of the country.

Key words: Paddy, paddy procurement system, Information and Communication Technology (ICT).

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1. Introduction

Paddy is the main crop in Bangladesh. There are three types of paddy namely Aus (March to August), Aman (June to January) and Boro (November to May) are produced in this country. Rice which is main food-grain produced from paddy. Around 50% of the people of the world live on rice. It is the staple food of the population of Bangladesh. Bangladeshi people live on rice. Rice has many other use for us. Khai, Chira, Muri, different Cakes and many kinds of foods and food items are produced from rice. Many types of rice are available in Bangladesh. Some of the mentionable names are Basmati, Chinigura, Minicate, Nazirsail, etc. This rice can be used to make hundreds of food items, and the taste of the food items always is very yummy.

From the ancient time most of the people were dependent on agriculture for necessary food. In this region the history of agriculture is long and in many different causes paddy production is very closely related to the people. The maximum village population of Bangladesh are still heavily dependent on agriculture for income and employment. Location of the country, weather and nature of land especially mentionable. Beside this the main food of the people of this country is rice and the only way to get rice is none other than paddy. The plain fertile land of this delta is actually very easy and sometimes less costly for paddy cultivation. Most of the agriculture family's main income source is paddy production. Paddy is not only source of food but also food of animals like cows and some fertilizer also produce from the paddy straw. Newly rice brand oil also available. Here a statement of The Monthly Technology Today is, "Paddy (Rice) is the dominant staple food in Bangladesh, accounting for about 35 percent of household expenditure. About 80 percent of the agricultural production originates in the crop sector alone in Bangladesh of which rice contributes about 82 percent" (The Monthly Technology Today, May 2011). It is very common scenario for most of the agriculture family to maintain the all necessary expenses, beauty and entertainment expenses, the expenses of education, even luxury expenses are dependent on paddy sale. The development cost of an agriculture dependent family also depend on paddy sale for most of the families. The paddy production cost depends on paddy sale. Beside these now a days in Bangladesh the paddy production has huge dependency on the use of fertilizers, irrigation, pesticides etc. In Bangladesh most of the farmers belong to either medium or low income group; so often many of them have to borrow the cost of paddy in credit. To pay the loans taken for purchasing seeds, fertilizers, pesticides and to cover the day to day expenses farmers have to sell their paddy nearly after harvesting time. The dire need to sale the paddy in harvesting time is to pay the labor cost of harvest. The lack of necessary storage facilities of the harvested paddy farmers have to sell their paddy nearly after harvesting time this is also usual. Farmers have the weakness of the urgency of the paddy sale so they are usually exploited by different types of middlemen or intermediaries who are emerged in the market, namely faria, bepari, paiker, aratdar-cum- wholesaler and miller. Chowdhury found in most of the cases in the harvesting season farmers are to sell the paddy with comparatively lower price. It a regular phenomenon that, paddy price in harvesting time is unstable in home and abroad. The ironical facts in Bangladesh that since its independence, the seasonal fluctuation is very common in price

of paddy. (Chowdhury, N., 1987). In many other literatures we have got the paddy sale and procurement in Bangladesh which show us the paddy market, market force, market price in different time, market channels and key role players of the paddy market. As the farmers have to suffer to sale their paddy, so to reduce their suffering Government of Bangladesh has taken very operative initiative to procure the paddy from the farmers with supporting price and within the time. But it is showed by different researcher due to the lacking in paddy procurement system the middlemen getting benefits but not the actual farmers. According to the statement of Alam and others, the purposes of local paddy/rice procurement are to serving the twofold purposes. The one is building rice stocks for the public food-grain distribution system (PFDS) and another one is providing income support to farmers. This support price is higher than the cost of production to ensure the farmers do not produce at a loss and will fulfill the objective of income support. The National Food Policy Plan of Action (2008-15) is also taking care for the effectiveness of PFDS. It is also providing effective support to producer prices. (Alamet *al.*, 2014) In this regards Sabur and others findings are -“Food grain procurement program has a fairly long history in the region and now consist of Bangladesh. But it is very clear no formula or support systems are not fit to support the farmers.

2. Literature Review

Main cause to buy the paddy from the farmers is to providing income support to farmers. Many different researchers and literature we found supporting this. According to the statement of Alam and others, the purposes of local rice procurement are to serving the twofold purposes one is building rice stocks for the public food grain distribution system (PFDS) and another one is providing income support to farmers which is higher than the cost of production to ensure the farmers do not produce at a loss and will fulfill the objective of income support. As the farmers have to suffer to sale their paddy, so to reduce their suffering Government has taken very effective initiative to procure the paddy from the farmers with supporting price and within the time. But it is showed by different researcher due to the lacking in paddy procurement system the middlemen getting benefits but not the actual farmers. Sabur with others (Sabur S. A. *et al.*, 2003) opined the government of Bangladesh is consistently pursuing policies to attain food self-sufficiency and also to improve the farmers' economic condition. The present food gain production in Bangladesh is sufficient to meet its domestic requirement. The National Food Policy Plan of Action (2008-15) is also taking care for the effectiveness of PFDS. It is also providing effective support to producer prices. (Alamet *al.*, 2014) In this regards Sabur and others findings are -“Food grain procurement program has a fairly long history in the region and now consist of Bangladesh. The primary objective of the procurement program has been to secure enough food grains to feed the Public Food Distribution System (PFDS) and it continuing for a long time. Although feeding PFDS remained an important concern, since 1975, however, price support became an important objective. The price support program has itself involved in two phases. Firstly, the idea was to guarantee a floor price announcing just before the harvesting

season and more recently, the whole system has been geared up towards guaranteeing an incentive price. The procurement price is announced before the sowing season and is now intentionally related to production cost. It is said that the present procurement program is not effective to provide incentive to the farmers. Through paddy procurement centers located in different areas of Bangladesh, Government procures paddy from the farmers and rice from the millers. In the post-harvest season, due to some practical reason the farmers sell their paddy mainly to the middlemen. There are different categories of middlemen who are involved in the trading of paddy. They are commonly called as Kutial, Barkiwala, Faria, Bepari and miller. Only Faria, Bepari and Miller were involved in the procurement channel and Kutial, Barkiwala were not involved in the procurement channel. Either farmers or the millers are the suppliers to the procurement center.” (Sabur S. A. *et al.*, 2003). Bangladeshi paddy production and its sales process, involvement of the middlemen the policy of government and how the farmers may get the actual benefits of paddy productions etc describe Plash in details. The paddy sales pass through too many middlemen such as commission agents, wholesalers, millers cum wholesalers, retailers during distribution. So the price goes up abnormally due to large number of middlemen, who take lion share of profit. To ensure the rice requirements in public distribution system and to avoid profiteering by the middlemen Government should take care of a sound food policy which keeps the price constantly under control and to maintain satisfactory stock of foods. (Prakash C., 2012) In current paddy procurement system organize force of middlemen forced the farmers to sales the paddy within the process. To achieve the target Government should eliminate the inherent defects prevalent in agricultural marketing presence of superfluous middlemen, multiplicity of market charges, multiplicity of weights and measures and malpractices of markets. Government is also should be careful to the effect a sound marketing system to ensure the producers to get fair price. To identify the marketing system of rice sector in Bangladesh, Dewan conducted a study in a number of 90 samples were purposively chosen from Dinajpur, Sherpur and Dhaka district for collecting primary data and also secondary data were collected from DAM as well as other secondary sources and he shows that, rice millers were the dominant traders and is able to influence the price of paddy greatly as well as buy huge amount of paddy during the season of harvest at lower price and store it to run their business effectively in lean period. (Dewan, M. F.A., 2011) Robel found in his research that the millers are the actual regulator of the paddy market in Bangladesh, he shows how the channels are maintain-the faria, bepari, paiker and aratdar-cum- wholesaler are the middlemen or intermediaries in the marketing networks to purchase paddy from the farm gates and market places to sell paddy to the other middlemen in the same market or other markets. Farias purchase paddy from the farmers either at farm gates or in the markets and sale the same to the beparis, paikers in the market. The beparis purchase paddy from farmers and farias and sale the same to the paiker and millers. The paikers buy paddy from farmers, farias and beparis and then sale to the millers. (Robel. M., 2013) Conducting a research covering 12 districts of Bangladesh of which six are from rice surplus area and six are from rice deficit area Raha found that millers are getting paddy as much they need but the farmers are not

getting reasonable price of their paddy. So millers are happy with the current paddy procurement system but in farmers' perspective, the paddy market is not serving the purpose of them." (Raha *et al.*, 2013). "Monojit Kumar, deputy director of Naogaon DAE, told the Dhaka Tribune that the farmers have gradually been turning away from paddy cultivation as they are failing to make much profit from it. "The hybrid paddy gives them higher yield, but the market price shrinks when the production is high. That is why many farmers are looking for alternatives. Some of them are going for mango plantations instead of paddy cultivation, while some are taking up vegetable gardening. Many among the farmers have either given up agricultural activities, or have ended up selling off their lands." Jakir Hossain of Baliagari village in Naogaon Sadarupazila used to be a full time farmer just a few years ago. Subsequent losses with the paddy harvest forced him to look for an alternative livelihood. Now he runs a fertilizer shop in the locality. "I faced losses with the paddy cultivation. Now I spend more time and money in fertilizer business, though still continuing paddy cultivation to a small extent." (Dhaka Tribune, February 3rd, 2018). Sometime government bound to procure paddy or rice from the intermediary force of the market. Not only the farmers but also the government become hostage to the malevolent force. Even the blacklisted millers are so influencing in this area that government sometime has to depend them. (*The Daily Star*, Star weekend, May 04, 2018).

2.1 Government Paddy Procurement Procedure

Government procures paddy from the farmers and rice from the millers through its procurement centers located in different areas of Bangladesh. There is an Officer in Charge (OC) and other employees in each procurement centre. Upazila Controllers of Food (UCF) supervises the procurement system of each upazila and District Controller of Food (DCF) supervises the procurement system of each district. Government fixes procurement target for each procurement center on the basis of procurement centers' capacity and national procurement target. Then the UCF calls on a committee meeting and listed the farmers and Millers. Rice procurement target is distributed among the agreed upon millers on the basis of their milling capacity. The agreed upon millers are those millers who are already listed for selling rice to the procurement center. Union Parishad chairman provides the lists of farmers to the UCF for selling paddy to the procurement center. A farmer can sell minimum of 70 kg and maximum of 5 tones paddy to procurement center.

2.2 Problems in paddy procurement system in Bangladesh

Most of the farmers and many of the involved people with the current paddy procurement system opined in different way but their conclusion is that the current system is not working properly. The scope of improvement of current paddy procurement system is still indeed. It is said that the present procurement program is not effective to provide incentive to the actual farmers. There are lot of regions behinds this. Through paddy procurement centers located in different areas of Bangladesh, Government procures paddy from the farmers and rice from the millers. In the post-harvest season, due to some practical reason the farmers sell their paddy mainly to the middlemen. There are different categories of middlemen who are involved in the trading of

paddy. They are commonly called as Kutial, Barkiwala, Faria, Bepari and miller. Only Faria, Bepari and Miller were involved in the procurement channel and Kutial, Barkiwala were not involved in the procurement channel. Either farmers or the millers are the suppliers to the procurement center.” (Sabur S. A. *et al.*, 2003). “Boro farmers at the mercy of middlemen: Buyers offer prices lower than govt-fixed rates for paddy, rice; procurement by govt yet to start- When the government had declared at the very beginning of the harvesting season that it would buy a higher volume of paddy directly from farmers, Boro growers across the country pinned high hopes on the domestic food procurement scheme. But two weeks have gone by since the paddy and rice procurement drive was officially launched on May 5 and thousands of the Boro growers still remain at the mercy of private buyers and middlemen. The farmers are being offered much less by the buyers and the middlemen than what the government had promised under the public procurement scheme. The reason farmers are losing out is because in reality the government rice-buying drive has not started yet. Thanks to procedural delays, the food directorate is yet to open its silos for farmers to sell paddy and rice. Contacted, Ilahi Dad Khan, director (procurement) at the Directorate General of Food, acknowledged the situation and attributed it to the district food officials not getting Boro farmers' lists from the agriculture officers concerned at the grassroots.” (*The Daily Star*, May 21, 2016) Bangladeshi paddy production and its sales process, involvement of the middlemen the policy of government and how the farmers may get the actual benefits of paddy productions etc describe Plash in details. The paddy sales pass through too many middlemen such as commission agents, wholesalers, millers cum wholesalers, retailers during distribution. So the price goes up abnormally due to large number of middlemen, who take lion share of profit.

(Prakash C., 2012) In current paddy procurement system organize force of middlemen forced the farmers to sales the paddy within the process. The farmers of Jagannathpur and Nargoon unions who blocked the highway at Khochabari Haat in Thakurgaon demanded fair price of their produce. Abdul Wadud Dara, chairman of the parliamentary standing committee on the food ministry, said, "In previous years, the middlemen used to get the price enefits out of the government food procurement scheme.” (*The Daily Star*, May 21, 2016)To achieve the target Government should eliminate the inherent defects prevalent in agricultural marketing presence of superfluous middlemen, multiplicity of market charges, multiplicity of weights and measures and malpractices of markets. Such procurement is crucial for the South Asian nation to feed its poor and keep domestic prices stable. The world's fourth-biggest producer of rice, Bangladesh consumes almost all of its production to feed its population. (DHAKA, 17 April 17, Reuters)

Government is also should be careful to the effect a sound marketing system to ensure the producers to get fair price. To identify the marketing system of rice sector in Bangladesh, Dewan conducted a study in a number of 90 samples were purposively chosen from Dinajpur, Sherpur and Dhaka district, he shows that, rice millers were the dominant traders and is able to influence the price of paddy greatly as well as buy huge amount of paddy during the season of harvest at lower price and store it to run their business effectively in lean period. (Dewan,M. F.A., 2011)

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The paddy sales pass through too many middlemen such as commission agents, wholesalers, millers cum wholesalers, retailers during distribution. So the price goes up abnormally due to large number of middlemen, who take lion share of profit. To ensure the rice requirements in public distribution system and to avoid profiteering by the middlemen Government should take care of a sound food policy which keeps the price constantly under control and to maintain satisfactory stock of foods. Due to lack of storage facilities and the government's failure to control the market, every year Bangladesh's farmers incur huge losses with their products. It is clear that every year, this initiative loses its purpose as, instead of procuring the rice from the farmers, the government actually procures it from the millers. The millers purchase paddy from the farmers at a far lower price than the government fixed rate. In procurement, ICT can play a critical role due to its ability to handle and analyze massive amount of data within a short period." (Yang *et al.*, 2012) Ananth with some others find out the use of computer to produce the receipt and cheque for farmers in Chhattisgarh who sell their product/paddy minimum support price (MSP) under the decentralized procurement. They also show the system is ensuring the payment of the farmers instantly." (Ananth *et al.*, 2011) How the farmers get payment in paddy procurement system Shukla shows in details- Once paddy is procured from online registered farmers, they are given computer-generated receipts and cheques also made for payment to farmers. Research findings of Bhatnagar and others still, there are few investigative studies or influenced assessments that endorse those benefits of ICT in paddy procurement have been delivered in large-scale projects. (Bhatnagar *et al.*, 2010).

By reviewing the above mentioned literature, it appears that a number of studies on Agriculture, Food security, Minimum support price for farmers and paddy procurement system have been conducted in Bangladesh and also in other countries. A lot of study on ICT and its application is founded in agriculture and trade areas. But it is clearly apprehensive that a vast scope is there to work on a comprehensive level of paddy procurement system which is suitable for the country and supportive to farmers.

3. Problem Statement and Rationale of the Study

The government of Bangladesh procure Aman, Boro and Aus paddy from the farmers. Due to ensuring the food for the people of the country the procurement is increasing day by day but the suffering of farmers is also increasing. There are nuance causes in the current paddy procurement system. Due to lack of proper paddy procurement system in Bangladesh, the farmers are suffering as well as the middlemen and the corrupt personals involved are getting the benefits provided by the Governments. This gap in paddy procurement system may cause of discouraging to the farmers which may create food scarcity in the country. At present, the agriculture sector in Bangladesh faces fierce problems like lack of adequate storing facilities to store the paddy and the farmers necessitate money at the earliest as they need to pay the loans which they have taken for purchasing seeds, fertilizers, pesticide etc. So they have to sell the paddy in immediate of harvest time and with the lacking of proper procurement system they have to suffer and are deprived of the real price, though the government is paying it. This research will be focused to find out the problems in this sector and propose for the development of the paddy procurement system to support the farmers. The study will broaden the knowledge of the relevant fields and will indicate to the possible initiatives that could be taken for improving the system.

4. Objectives of this Research

The main objective is know the perceptions of the farmers with current paddy procurement system and propose some suggestions for the developed paddy procurement system which is appropriate in Bangladesh based on the find perception. The Specific objectives of this research are:

- i) To assess the current paddy procurement system in Bangladesh and to know the perception of farmers regarding this system.
- ii) To identify major challenges and suggest possible remedies to overcome the challenges identified.

5. Research Methodology

A methodology is a necessary and integrated part of any research. Before conducting a research study the researcher should be needed the careful considerations about the research methodology. It is the only researcher who has great accountability to define clearly what types of research design, method and procedure he or she will follow in selecting the study area, sampling technique to analyze and interpret those to arrive at correct conclusions. Working with the objective of identifying best solutions researcher will conduct extensive research to identify initiatives that contribute towards the betterment of paddy procurement system.

5.1 Research Design

Choosing the appropriate research design could be helpful, especially to appropriately achieve the research objectives. According the objectives of this study the qualitative research design

approach is followed in this study. The following subsections will provide the justification for choosing qualitative research design for this study.

5.2 Data Collection for Qualitative Research

Before final study, few interviews were conducted using the semi-structured interview method. Understandability and grammatical accuracy of the interview questions were checked in this stage which has helped to improve the interview questions for the final interview. The preliminary interviews helped in planning for final data collection. Information generated from these interviews was used in questions structure for the final interview. It helped to re-design the semi-structured interview questions; with this, some new questions were added, sequence of questions was re-arranged, pre-interview discussion was re-structured to keep the interview focused on the research issue. There are several types of stakeholder who can be part of the research population for this study. For example, academicians (Professor in Statistics, Professor in Computer Science & Engineering), Civil society member, Consultant in International Agriculture Based Organization, Retired Govt. officer in Agriculture field, Govt. officer in Agriculture field, Govt. officer in trade ministry, Govt. officer in food ministry, NGO officer in Agriculture field , Farmer, Miller/ Chatal owner, IT Consultant a2i and political leader.

The reason behind this initial population is that all these stakeholders have an interest in the research issue. For example, policy makers, including members of Government officials of different ministry like agriculture, finance, Food and trade are responsible for making, amending, and modifying existing policies for the paddy procurement system activity. In a similar way, the policies made by the policy makers can affect the activity of paddy procurement system activity. The first consideration of this study was to interview the minister, concern members of parliament and officers from the office of minster of agriculture, finance, food and trade and effort was made accordingly. All the formal process of getting interview appointments with these populations was made but in the end they declined to participate in the interview of this study.

This study has limited its choice to the following types of stakeholders; academician in statistics and ICT discipline from different institutions, former and current officers of Ministry of agriculture, finance, food and trade, top executive officers of International Agriculture Based Organization, Civil society member, NGO officer in Agriculture field , Farmer, Miller/ Chatal owner, IT Consultant a2i and political leader.

The academician's understanding of these issues is essential because their understanding may clarify the idea behind paddy procurement system and well activity of paddy procurement system. The academicians can share their perception and experience regarding this issue from the academic point of view as well as from practical aspect, because some of these professors are members of different policy making body of government. On the other hands the officials of different ministry have strong influence in the decision making about paddy procurement system so they are included in the population? Their work can be considered as having a significant role in the development efforts of the paddy procurement system as well in the country. Top executive officers of International Agriculture Based Organization sometimes play a vital role in the policy

making system of government. Civil society member and NGO officer in Agriculture field also the contributory part of this area. Miller/ Chatal owners' also very significant role player in paddy procurement system. Farmers are direct beneficiary or concern group of paddy procurement system. The interview conducted with political leader especially local government representative because they are direct or indirect influential person of paddy procurement process. The interview also conducted with IT Consultant of a2i project of government of Bangladesh because they can play vital role in the development of the proposed model of paddy procurement system.

This study has selected officials from different ministry like agriculture, finance, food and trade who have direct experience on the research issue. This selection is very crucial for the research because these officers have practical experience in paddy procurement system activities which will assist in having a better understanding of the research issue.

The researcher did not consider any specific number of respondents rather, selection of the number of respondents depended on when saturation was considered achieved. This marked the stage at which no new data appeared to be provided by the subsequent respondents; in other words, when new respondent appeared to be saying almost the same thing as earlier respondents. While doing so, the researcher has become theoretically sensitive by immersing themselves in the data and trying to understand what the participants see as being significant and important (Calman, 2006).

Therefore, this study has collected its data from 21 individuals deemed important for this research issues. They are, namely, academicians (Professor in Statistics, Professor in Computer Science & Engineering), Civil society member, Consultant in International Agriculture Based Organization, Retired Govt. officer in Agriculture field, Govt. officer in Agriculture field, Govt. officer in Food ministry, Govt. officer in Finance and Trade ministry, NGO officer in Agriculture field, Farmer, Miller/ Chatal owner, IT Consultant a2i and political leader. This study considers saturation point as an overall pattern for all types of stakeholders rather than saturation for each stakeholders group separately. Even though the respondents are from different professions, all of them have a common understanding about paddy procurement system. The official's government views there are some problems but the problems arise due to the ignorance of farmers but the farmers and other respondents view is also similar that there are some problems whoever the responsibility. Therefore, all of them are considered respondent from the research issue viewpoint.

This study conducted the face-to-face interviews after agreeing with interviewees on pre-arranged sessions. It used the semi-structured interview approach followed by few specific questions and these questions was guided by hardcopy to describe the different aspects of paddy procurement system. Remaining questions were unstructured and these questions were asked based on the answer of the immediate last asked question.

This study employed the key informant interview approach in designing the semi-structured interview questions because this approach allows the researcher to choose the participants by considering their position, role and willingness to be interviewed (Blee and

Taylor, 2002). Therefore, all the 21 respondents were selected based on their respective position along with experience in the research issue.

5.3 Data Collection Process

The actual data collection process was done through all formal communication systems to get the interview schedule. Entire interview session was recorded in written format. A formal data collection letter was provided for each respondent for their permission to be interviewed. This letter was the formal assurance to maintain the respondents' confidentiality regarding their name and work position. Each interview session was approximately 30(thirty) minutes on average. At the beginning of each interview session, a brief introduction was given on the research objectives and also to assure the respondents of their confidentiality. Interview session began by asking initial questions on the respondents' background, namely, their name, age, job experience and job position in the organization. Asking these questions makes the respondents at ease and relax before the discussion moves on to the research issues.

5.4 Validity of Data

This qualitative research was designed to generate valid and reliable data. Validity means to verify the accuracy and trustworthiness of the findings by using specific procedures (Creswell, 2009). As such, the researcher plays a significant role to make sure that investigation is conducted in an ethical manner (Merriam, 2009). Internal validity, external validity and reliability are the key areas under the validity of data. Internal validity emphasizes on the matching process between research findings and reality (Merriam, 2009; Yin, 2009). Triangulation of data sources is used to check this internal validity. It can help to view and explore the phenomena from various perspectives (Baxter and Jack, 2008). This study considered various sources of data for triangulation. For the multiple sources of data, it was done by comparing and cross-checking data gathered from interview with people from different profession (Merriam, 2009) and data gathered from earlier literature findings. External validity refers to the generalizability of the study. Two types of strategies are employed to achieve external validity and they are thick description and maximum variation (Merriam, 2009). This study considered both strategies for external validation.

5.5 Data Analysis

In case of interview data, qualitative data analysis works as a statement of relationship and underlying themes (Strauss and Corbin, 1997). Qualitative data analysis is complex and not readily convertible into the standard measurable units of objects (Schatzman and Strauss, 1973). This study considers each individual respondent as a unit of analysis because individual human beings can be considered as the most typical units of analysis for social research (Babbie, 1998). At this point, it is important to mark data that addresses the research question. This is the beginning of the coding process (Guest, 2012). The second step in thematic analysis is generating an initial list of items from the data set that have an occurring pattern. This systematic way of organizing and gaining meaningful parts of data relating to the research question is called coding. Data coding is the transitional route between data collection and analysis of data (Saldana, 2013).

Moreover, data coding not only refers to data analysis and data interpretation, but also allows the researcher to connect between the data to the idea and from the idea to all the data pertaining to that research (Richards and Morse, 2007). This study involved going back and forth between phases of data analysis as needed until the researcher is satisfied with the final themes (Braun & Clarke, 2006). Moreover, the researcher attempts to go beyond the surface meanings of the data to make sense of the data and tell an accurate story of what the data means (Braun & Clarke, 2006).

Q1: Why do farmers need paddy production (major food item, the land is suitable for its production, no other way left etc.)

In most of the respondents answer this question that as rice is the main food and rice produce from paddy so the farmers produce paddy. To ensure the food for the families they need to cultivate paddy. On the other hand a group of respondents said most of the lands are suitable for the paddy so they produce paddy. It is also found some respondent they have no other alternative to work that means only income source is paddy production as well only working area is paddy production.

Q2: Assessment of paddy production cost (land, seed, irrigation, fertilizer, insecticide, labor etc.).

To do the proper assessment of land, seed, irrigation, fertilizer, insecticide, labor etc it is clear to me the different respondent answer in many different ways. For example someone cultivating own land on the other hand others cultivating other land hiring for short time or long time even someone share the paddy in every session. About seed related question the answer were mainly three types: some farmers use the seeds produce by them self in their field, someone buy it from other farmers or from open market and other buy it from different government or non-government agencies though it is costly most of the time but reliable. Irrigation, fertilizer, insecticide, labor most of the cases the findings of these points are very diverse, some farmers.

Q3: Why and when the farmer needs to sell the product (only earning source, surplus, storage problem, immediate before harvesting, to pay the cost etc.)?

Most of the full time farmers manage the family expenses' selling paddy and of course paddy is surplus, even sometimes due to storage problems they have to sale paddy immediately. But the main finding is that most of the farmers have to sale the paddy very immediate harvesting even sometimes it's near before the harvesting time they need money to pay the cost related paddy production like the costs of **irrigation, fertilizer, insecticide, labor; the most urgent is about labor cost**. So the farmers need to sale as possible as harvesting time even from yard and now it is from the fields.

Q4: Where and why to go for sale (private arrangement, paddy procurement system, price, payment, amount, transportation, time, hazard)?

In the responses of most of the respondents it was found that farmers need the money in the harvesting time and sometimes it is before or around the harvesting time to fulfill the farmers dire need of money they need to sale their product immediate of harvesting. As procurement system

takes time and necessity is very urgent so they have to think about private sale, and due to some practical regions are founded. Like immediate needs of money, mode of payment, amount, transportation, time, price and hazard. Immediate need to pay the loans which they have taken for irrigation, fertilizer and pesticides. But which is most urgent is to pay the labor cost because in harvest time the crisis of labor. Whatever the price due to the quality of the paddy in harvesting time they sale it in private market because time constrains and weather are not always favorable to make the quality product. Mode of payment is another important cause to pay in local market or in private sale because cash is urgent at that time. Amount of the product is another cause to go to private sale. In procurement system one farmer has to maintain a minimum and maximum limit in amount but in private sale any amount is allowed to sale. Transportation and time constrain another important issues in private sale. Transport is not available as well it is another cost involved issue, on the other hand in harvesting time the farmers are huge busy. Very interesting findings here are the dala, foria of arotdar or small miller/chatal are very proactive and they seems very cordial to serve the purposes of farmers, so they usually come to the yard of the farmers and even in fields with cash taka and sometimes the very eager to pay in advanced.

6. Discussion and the Observations from qualitative research

It is clearly apprehensive from KII that the research need to be more clarification about the current paddy procurement system. It is a clear direction of FGD with some specific agenda.

After KII researcher has gone for Focus Group Discussion (FDG) with FDG guideline: FDG guideline was-

6.1 Findings from FGDs Background

A total of 25 respondents participated in 5 FGDs groups with 5 types of questions which the cover the study area. Within the 5 groups one group only the farmers, one group only government officials who are directly interact with farmers, the another group Chatal owners' / Small Millers', the next group Bapari/ Arotdar/ Supplier to govt. Paddy Procurement System and finally one mixed. In the FGDs, participants openly discussed issues related to paddy procurement like need paddy production, why and when need to sale the paddy, where and why go to sale the paddy and for need of improvement of current paddy procurement system is needed and how the improvement. The brief outcomes of the FGD are given below:

6.2 General Perception of the FGD participants

Most of the participants opined that the farmers' produce paddy because they have nothing to do without paddy production. The land suitable only paddy cultivation, they are doing this by heritage, and only income source of maintaining of family is paddy production. Half of the participants admitted that the current paddy procurement system is not serving their purposes properly though the initiative is good. Around one third of the participants said the current paddy procurement system working as per expectation. A little less than half of the FGD participants believed that the current paddy procurement system had been proved useless and would not be useful to support them .According to the FGD participants, a very little less than one fourth of the

FGD participants believed that the current paddy procurement system had been proved very useful and would be useful to support them in paddy production.

6.3 Type of Land and Ownership of the land

Most of the participants were in the opinion that the maximum of land around the study area are suitable for paddy cultivation. Two third of the farmers are owners of lands by inheritance, some of them, however owned by purchase. A one third number of farmers cultivate others' land and a few numbers of farmers are of both kinds. Out of the participants who owned lands by inheritance most of them cultivate paddy by inheritance. These observations were also been echoed in KIIs conducted with the government and non- government officials who are involved in agriculture fields especially in paddy production related works.

6.4 Cost involved in cultivation: Seed, Irrigation, fertilizer, insecticide, labor and other

All participants were in the same opinion in this question that the cost of Seed, Irrigation, fertilizer, insecticide and labor increasing day by day. It is also found from maximum respondents that labor cost increasing is insufferable way especially in harvesting time. Some respondents opined that the modern machineries are used in many different level of cultivating including harvesting but it is not reducing the cost. Scarcity of labor is creating huge suffering for the farmers especially in increasing the cost of production.

6.5 Awareness about support of government

It was revealed in the FGD to know that the farmers who cultivate paddy in their land are aware about the supports of government especially in seed, irrigation, fertilizer and insecticide. But many of the farmers are not aware about this. Some one third of them know about them but don't know how it provided. Yes; some of them have got it in much different time any ways. The farmers' participants of the FGD, when asked whether they had all the documents, responded positively, although, many of them, as already mentioned, did not know about the proper documents. Majority of the participants claimed they knew the documents necessary to get supports against paddy production, which was obviously reflected in the views of the KII participants who described the attempt to aware the farmers regarding the necessary documents. But only the half of the respondent has the Farmers Identification Number (FID). Only way to income, surplus, storage problem, immediate of harvesting, pay the cost etc.

6.6 Possession of Necessary Documents

When the participants were asked why and when they need to sale their paddy, most of them mentions that paddy production is there only income source. Some of them replied the storage is vital issue, all produced paddy is not consumable that is paddy surplus so, they need to sale it answer some of the respondents. But most of the farmers and other respondents of FGD very clearly mentioned that farmers need to sale the paddy immediate of harvesting to pay the cost of labors and pay the loan they have taken for cultivating paddy like seeds, irrigation, fertilizer or pesticides. A large number of respondents did not feel to sale the paddy not other than harvesting time because there need is so ominous and whole the session they were waited for this day of harvesting. These issues were further supplemented by the opinions of the KII participants, where

it was observed by many of them that the farmers didn't have enough scope of to arrange the money to mitigate the necessary cost. The KII and FGD participants also mentioned that, in case of procurement sale the farmers need to waiting is long which maximum times insufferable to them are.

6.7 Views regarding ICT

Mixed responses were observed regarding the issue of use and satisfaction of the ICT by participants of FGD. Group based responses revealed that the farmers and the small miller, arotadar were not aware about the ICT applications in paddy procurements but he other groups opined that ICT may be a good tool to support the farmers. They also opined that the role of the middlemen may be reduced. However, most of them think they would be satisfied if they get the right price in right time whatever the advancement of the system.

As a whole the picture reflected by the FGD participants, most of them are not happy with current paddy procurement system and some of them are not interested to cultivate paddy at all. So, farmers have been suffering after cultivating paddy in their lands which is important income earning sources as well source of main food. If the situation is not improved the paddy cultivation will reduced it is must which found from maximum of the participants responses. It is dire urgent to improve the paddy procurement system which opined most of the FGD participants it's also reflected in KII responses. Although, in the opinion of some of the KII respondents, it is apparent that the complex procedure of collection, insufficient amount, delay in payment may have made people reluctant to collect compensation, it was evident in the FGDs that almost all.

6.8 Observations found from KII

Interviews of this study were conducted according the standard ethical guideline. In compliance with the standard code of practice on research ethics, I agreed that any information that was obtained in connection with this study through interviews and that could be identified with interviewees would remain confidential and would be disclosed only with the permission of interviewees, except as required by law. With the permission of interviewees, I only discussed and published the results of the interviews as part of this study of the paddy procurement system in Bangladesh. Moreover, to prevent any interviewee from any potential for harm, it was my aim that in this thesis or any other publication, information would be provided in such a way that s/he cannot be identified. Therefore, in order to ensure confidentiality of interviewees, in this instance, no details have been given. The farmers need to sale the paddy why and when is it also significant. The farmer needs to sell the product: only earning source, surplus, storage problem, immediate before harvesting, to pay the cost etc. The sale of the paddy is also significant. Where and why to go for sale: private arrangement, paddy procurement system, price, payment, amount, transportation, time, hazard. From the KII it is very much clear the scope of the improvement of farmers' paddy sales whether it is private sale or procurement system sale.

6.9 Observations founded out from FGD

Respondents from FGD informed that initiatives of government of the support price may be easy and even some of them opined it may be direct to the farmers. One group which are formed of

government officials informed in some areas government's giving credit to the farmers though it is small in volume. As a whole the picture reflected by the FGD participants, most of them are not happy with current paddy procurement system and some of them are not interested to cultivate paddy at all. So, farmers have been suffering after cultivating paddy in their lands which is important income earning sources as well source of main food. If the situation is not improved the paddy cultivation will reduced it is must which found from maximum of the participants responses. It is dire urgent to improve the paddy procurement system which opined most of the FGD participants it's also reflected in KII responses. Although, in the opinion of some of the KII respondents, it is apparent that the complex procedure of collection, insufficient amount, delay in payment may have made people reluctant to collect compensation, it was evident in the FGDs that almost all The involvement of Dalal or middlemen problem sometimes aggravates this frustration.

7. Conclusion

As paddy sale is the dire need to the farmers of Bangladesh and the government also need to buy the paddy from the farmers to confirm the food security for the population, so the faulty procurement system should be replaced by the new one. The new developed paddy procurement system should be very easy and transparent to the farmers and the supports of farmers should be sanguine. ICT may be the good tool to do this which may ensure the all activities clear, easier and user friendly.

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