

A Study on the Rice Procurement System to Ensure Food Security in Bangladesh

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LETTER OF TRANSMITTAL

March 16, 2017

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Subject: **Submission of Thesis.**

Dear Sir,

It is with great pleasure that I submit to you my thesis titled “**A Study on the Rice Procurement System to Ensure Food Security in Bangladesh**”. I believe that the knowledge and experience I have gathered during my thesis period will vastly help my career.

The entire 3-month thesis period has been a wonderful learning experience for me and I have thoroughly enjoyed it. I take this opportunity to express my sincere gratitude to you for helping me throughout the thesis period and guiding me carefully.

I can assure you that I have tried the best of my ability to prepare this thesis. I hope you will find it satisfactory.

Yours faithfully.

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CERTIFICATION

The thesis affiliation entitled “**A Study on the Rice Procurement System to Ensure Food Security in Bangladesh**” has been submitted for partial fulfillment of the requirements for the degree of Master in Procurement and Supply Management on **15th March, 2017** by Name: **T.M. Shams Arif**, Id: **15182003**. The thesis has been accepted and may be presented to the thesis Committee for evaluation.

(Any opinions, suggestions made in this thesis are entirely that of the author of the thesis. The University does not condone nor reject any of these opinions or suggestions).

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Student Statement:

I have read the University' Plagiarism Policy and I understand the consequences of a breach of this policy.

I verify that other person's work contained herein is fully referenced and properly attributed.

Students Signature..... Date.....

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It is a great pleasure for me to express my sincere thanks and gratitude to BRAC Institute of Governance & Development (BIGD), BRAC University for designing this significant and compulsory research work for students. For successful completion of this thesis, I have received assistance from many persons, without their help, this thesis would never have been possible.

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I think this thesis will be useful to the interested researchers, students and persons involved in this area.

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List of Acronyms

ADP	Annual Development Plan
AWD	Alternate Wet and Dry
BADC	Bangladesh Agricultural Development Corporation
BBS	Bangladesh Bureau of Statistics
BCS	Bangladesh Public Service Commission
BPC	Bangladesh Petroleum Corporation
CHT	Chittagong Hill Tracts
CPD	Centre for Policy Dialogue
CSD	Central Storage Depot
DAE	Department of Agricultural Extension
DAM	Department of Agricultural Marketing
DAP	Di-ammonium Phosphate
DG	Director General
EIA	Energy Information Administration
FTC	Foundation Training Course
FFW	Food for Work
FPC	Fair Price Campaign
FPMU	Food Planning and Monitoring Unit
GDP	Gross Domestic Product
GOB	Government of Bangladesh
GR	Gratuitous Relief
HYV	High-yielding Variety
ha	Hectare
IRBD	Independent Review of Bangladesh's Development
LSD	Local Storage Depot
MEP	Minimum Export Price
MSP	Minimum Support Price
MT	Metric Ton
MoA	Ministry of Agriculture
NGO	Non-government Organization
NFP	National Food Policy
OMS	Open Market Sale
PFDS	Public Food grain Distribution System
PPP	Public-Private Partnership
SMS	Short Message Service
SRI	System of Rice Intensification
SSP	Single Super Phosphate
TE	Triennium Ending
TR	Test Relief
TSP	Triple Super Phosphate
USD	United States Dollar
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding

A Study on the Rice Procurement System to Ensure Food Security in Bangladesh

EXECUTIVE SUMMARY

The study on the Rice Procurement System and to Ensure Food Security in Bangladesh was conducted with a set of objectives: to examine and understand the current procurement system considering their relative costs and benefits; to assess the effectiveness of the current procurement system that the government to procure adequate supplies for its distribution needs; examine the food distribution systems of the government to achieving food security in Bangladesh; to find out ways and means that may help for achieving food security in Bangladesh. The current study also shows that public procurement as a form of price support for the producer. In an opinion poll among urban business and intellectual communities, about 94 percent of the respondents favored price supports to farmers (Rahman 1992). Another form of incentive is the reduction of price risk. Maintenance of an optimal stock, given current distribution programs of the government, is a separate issue. That is why the estimates of procurement price are meant for the whole country-a pan territorial price for the procurement program. The cost of land rent has also been included in this cost estimate. The basis of cost is outlined in the resource allocation through their impact on the margin of change. The effectiveness of the procurement program in achieving its objectives at least cost depends very much on how the Food Department goes about it. After averaging 2.8 billion taka (\$70 million) per year during the 1980's, losses in the PFDS exploded in 1990. In that year alone, total subsidies jumped to 11 billion taka (\$280 million), an amount equal to 60 percent of the government's taka contribution to the Annual Development Plan. Although the drain has returned to its normal level of about 3.5 billion taka (\$90 million), the concern of the government and donors to this high level of cost is quite intense. (IFPRI1991). Besides this so many factors are closely involved in this procurement system such as Location of

Procurement, Mode of Purchase, Mill gate Purchase, Processing Capacity, Supply Time, Accounting Flaws, Advance Payment, Quality and Quantity Check, Packaging, Pricing, Quality Control etc are identified by this study.

Again, Food security is a state where people do not live in hunger or fear of starvation. The sufficient production, distribution and availability of essential food items in Bangladesh have always been a cause for concern for successive governments, international donor organizations and socio-economic researchers. The current study shows that around 1999, food grain production in the country started to exceed the amount required. Food security is in a severe threat due to food inflation. One of the major challenges for the present government enroute to attaining food security is to maintain access to food at affordable price. The study also shows that, according to the final estimate of the Bangladesh Bureau of Statistics, the production of the first three cereal crops, Aus, Aman and wheat were 2.13, 12.79, 0.97 million mt respectively during the 2015-16 fiscal year. The Government and the private sector imported 20 times more rice during the 2015-16 fiscal year than the previous fiscal year. On the other hand, 75 percent of wheat was imported this year by private sector importers. The current study also denotes that the Government has expanded its social safety net programmes and started food distribution through its various Public Food Distribution System (PFDS) channels such as Open Market Sales (OMS), Fair Price Cards, Food For Work (FFW), Test Relief (TR), Essential Priorities (EP), Vulnerable Group Development (VGD) and Vulnerable Group Feeding (VGF).

Chapter One

1.1 Background

Bangladesh is one of the largest deltas in the world, second to the Amazon, formed mainly by the Ganges-Brahmaputra-Meghna (GBM) river system, except for the hilly regions in the northeast and southeast and terrace land in northwest and central zones. The country is located between 20°34' to 26°38' north latitude and 88°01' to 92°42' east longitude. The total land area is 147,570 sq. km. and consists of low and flat land. A network of 230 rivers with their tributaries and distributaries crisscross the country and, therefore, the country is virtually a conglomerate of islands. Rice is the main staple food and about 50 percent of all households are involved in rice production. Food security is to a large extent associated with rice production and consumption.

Over the last decades the food security situation and its policy context in Bangladesh has undergone major changes. As the country for the first time became self-sufficient in food in 1999-2000, the focus of Government food security policies broadened to encompass, in addition to availability, also access and nutrition. Once the present government had taken over power, it stressed the need for self sufficiency in food but keeping in view the comprehensive approach articulated in the Comprehensive Food Security report of 2000 and later embedded in the National Food Policy (NFP), 2010.

Procurement of rice by the Department of Food from domestic producers and the market has been a long-standing practice since the initiation of the public food marketing system in Bangladesh. During the 1960s, procurement by the government generally involved an involuntary delivery of rice by large farmers at a fixed price (Ahmed 1979). This used to be known as the levy system. During the 1970s the levy system was replaced by voluntary sales to the government at a fixed price. This voluntary procurement practice is

currently the norm. Because of this practice, the procurement price is a significant factor in influencing how much rice the government buys. The procurement price of rice or paddy is the price at which the government purchases such grains domestically from farmers, traders, or millers.

Domestic rice procurement serves the dual purposes of building rice stocks for the Public Food grain Distribution System (PFDS) and of providing income support to farmers. To fulfill the latter objective, the Government fixes the price higher than the cost of production in order to ensure that farmers do not produce at a loss. Indeed, as described in the National Food Policy (2010-2016), small producers need adequate incentives to produce, as their economic status often compels them to sell immediately after harvest when prices are low. Higher prices, however, are in conflict with the objective of keeping prices low enough so that the low-income consumers can afford to buy food. This conflict can be avoided through higher government subsidies, but these have budgetary implications for the country and can reduce investment in public goods essential for long-term growth.

Again, food security is a state where people do not live in hunger or fear of starvation. The sufficient production, distribution and availability of essential food items in Bangladesh have always been a cause for concern for successive governments, Development partners, international donor organizations and socio-economic researchers. This Thesis examines the linkage between rice procurement and food security in Bangladesh.

1.2 Rationale of the study

Rice comprises around 94 percent for at sustenance grains handled yearly in Bangladesh Also is those staple sustenance. Sustenance security, in the connection of Bangladesh, may be accordingly unequivocally joined around those production, import Furthermore cost Dependability from claiming rice. It is evaluated that for every capita utilization about rice is around 400 grams for every day. Wheat may be the optional sustenance grain, taken after Toward maize which will be transformed Also devoured On generally

little amounts. Around 1999, nourishment grain creation in the organizations in the nation off will surpass the measure needed. Generation stayed over those prerequisite level for those next seven years, Actually clinched alongside A long time the place there were extreme floods, for example, such that 2004. However, the measure needed rose pointedly over monetary year 2006-07 Likewise contrasted with past a considerable length of time. Nourishment grain accessibility (which is the entirety of cash for net down home production, imports Also sustenance help received) might have been still essentially over what might have been required, in any case there might have been never again an observable whole the middle of net local creation Furthermore prerequisite.

Since those planet nourishment summit about 1996, those legislature from claiming Bangladesh need embraced an in-depth Also consultative methodology from claiming nourishment security strategy change. This need given those legislature for a thorough sustenance security arrangement skeleton (The National Food Policy) What's more modifying record (the national nourishment arrangement arrange about Action) and also a speculation want to nourishment security Also sustenance (The Bangladesh Country Investment Plan).

Bangladesh managed to avoid shortages of rice during the food crisis but price increases were substantial. On average Bangladesh is nearly self sufficient in rice. Between 1998-99 and 2007-08, the country imported an average of about 850,000 MT of rice per year, or less than 5 percent of total net availability. But geographical conditions make agricultural supply in Bangladesh especially sensitive to extreme weather events which greatly influence production levels from year to year.⁵⁸ This became particularly obvious during 2007 when two monsoon floods (respectively in July and September) and Cyclone Sidr (in November) led to significant losses in the *aman* and *aus* rice crops. Losses were estimated at 1.8 million MT from the *aman* crop alone.⁵⁹ in the last quarter of 2007, increases in the international price of rice started causing panic in the rice market. Market instability was aggravated by the export restrictions placed on rice by a number of countries, leading to steep price hikes in the world market

Over light of the issues raised above, this contemplate provide for accentuation should recognize the rice acquisition framework about Bangladesh Furthermore viability of the acquisition framework As far as effect on the farmers, with specific stress for little Also minor farmers, Also will propose elective instruments on attain those objective about manage farmers' wage and rice preparation in An expense profit investigation way and in addition its part to guarantee nourishment security of the organizations in the nation.

1.3 Objectives of the Study

The main objectives of the study included the following:

- a. To examine and understand the current procurement system considering their relative costs and benefits;
- b. To assess the effectiveness of the current procurement system that the government to procures adequate supplies for its distribution needs;
- c. To examine the food distribution systems of the government to achieve food security in Bangladesh;
- d. To find out ways and means that may help for achieving food security in Bangladesh.

1.4 Limitation of the Study

The current study has been undertaken as a partial fulfillment of the requirements for the Degree of Masters in Procurement and Supply Management. The research work has been completed by analyzing secondary data within stipulated very short duration and limited institutional and financial support.

Chapter Two

2.0 Review of the literature

In the mid-1970s, The point when Bangladesh might have been yet should fashion An enormous push ahead with rice high-yield-varieties (HYVs), those have should keep up "incentive prices" might have been generally observed commonplace, and imports were should a chance to be basic. Unfriendly shocks on rice yield were regularly gazed with similarly as dynamic components of dealing with those aftershocks. The observation might have been that for an ordinary quite a while those acquisition system likely ameliorated the regular value slippage, Also clinched alongside an above-average year, it raised both the regular and also those twelve-month Normal value. If, clinched alongside an awful year, import necessities were statically computed to change the supply shortage comparable with exactly putative for every capita requirement, in any case of a target cost or of the limit of the number will pay, afterward business sectors Might a chance to be destabilized In the imports at issue were dispersed through summed up state funded

promoting. Builds On supplies through imports Might make seen inclined to decrease advertise costs by more than Might an equivalent expand on local creation. Acquisition might need to a chance to be particularly expansive for a long time for processing shortfalls. Such a contention infers that acquisition brought up costs.

As time went by, analysts began to empirically address trade market outcome of rice procurement (Ahmed et al, 1980; Rahman and Mahmud, 1988; Ahmed, 1981; Osmani and Quasem, 1990). For example, it was found that (a) farmers accounted for about 2% of public procurement; (b) and that there was collusion between the procurement functionaries and the traders (Ahmed et al. 1980). In addition, procurement centers were too few and the financial coverage too limited to ensure the farmer uninhibited access to the program, and to ensure that the traders are obliged to treat the support price as the effective floor price.

The consensus prevailing up until the middle of 1980's was that the procurement program in Bangladesh did not fare very successfully by the criterion that an intervention to ensure incentive prices should at least hold them within a reasonable difference from the incentive price in a year of good harvest (Osmani and Quasem, 1990). It was pointed out that in two out of three good harvest years between 1975/76 and 1983/84, grower's price in the market remained substantially below the guaranteed price, even though the volume of procurement was also the highest in these years.

This "consensus" was, arguably, a little controvertible. Arguably, public procurement is highly specific, both seasonally and regionally. This is partly about the geography of the appearance of marketable surpluses. Only a handful of Bangladesh's greater districts register surpluses over and above "requirements" on a consistent basis. These locate a disproportionate share of the country's rice milling capacity. These are the districts that have strong commercial interest in feeding off a large institutional buyer (Chowdhury, 1992). A lion's share of the country's procurement is sourced from four out of twenty one greater districts, all of them in the Rajshahi division. If harvests imply relative seasonal

collapse in prices in key assembly markets, the public imperative to provide incentive price also implies a corresponding geographical mandate.

It will be arguable, therefore, that the project might have a chance to be influencing upon harvest costs in the little number for surplus-generating locale in the path envisaged by its backers without nation-wide harvest costs having the capacity to lift dependent upon those contrast (Chowdhury, 1987). For principle, acquisition system means on settle on proclamations something like showcase costs Furthermore intercession amounts clinched alongside a disaggregated host of different schema. Second, harvest season grain costs need aid affected upon Toward seasonal, desire and business variables, a portion trying will place upward, Furthermore exactly a proclamation over those impact about state funded acquisition for harvest downward, pressures, costs will be over its net, autonomous effect, same time regulating to other variables that at the same time influence rice costs. On those level from claiming advertise integration, without a moment's delay over seasons. Space and form, is expanding About whether (Ahmed Also Bernard, 1988; Goletti Also Farid, 1993), those value structuring may be also turning into an ever increasing amount delicate of the distinctive impacts of a huge rundown from claiming variables. By drawing sustenance starting with An straightforward examination between averages for three variables, viz. Production, acquisition and the Contrast the middle of harvest value Furthermore acquisition price, the adapted appraisal in the writing of the value impacts from claiming acquisition is not, analytically, great grounded.

The Food Procurement Policy 2010 of the Government of Bangladesh gives emphasis on the following aspects while procuring food grain.

- To guarantee ease of use of food and entrance to food.
- To avoid value of grain from dropping at the yield stage.
- To consume ample store at the disaster time.
- To support manufacturers by generous value inducement.
- To steady the market value of particle.
- To mark a harmless food standard.

- To ensure the supply of food grain by Administration Nutrition Circulation Organization.
- To stop rapid increase in prices of food grains in the market.

Chapter 3

3.0 Methods used for data collection and analysis

For the study both quantitative data and qualitative information were collected from sources including checklists, various official statistics, technical reports, scholarly journals, literature review articles, trade journals, reference book such as statistical report from Bangladesh Bureau of Statistics, technical report of Agricultural information service of Ministry of Agriculture, policy paper of Ministry of Food and disaster management and different non govt. organizations dealing with food grain procurement and food security. Checklist developed for data collection is given in Appendix-1.

Compiled data from various relevant sources were processed manually and with the help of MS Excel program. Statistical tools and techniques along computer software were used to analyze and interpret the conglomerated data.

Chapter Four

4.0 Research findings

4.1 Important issues in rice procurement

At national forums, price support to growers is seen to be the principal objective of the governments' procurement program. However, at the operational level of the department of food, building up food grain stocks is perceived to be the dominant purpose. A clear understanding of the primary objectives, along with the relative weights of various objectives, is necessary in order to appreciate the logic underlying the determination of procurement price.

4.1.1 Incentives in rice procurement

(a) Providing incentives to producers

Open acquisition similarly as a manifestation about value help for producers' incentives shows up on be generally acknowledged. Done a notion survey "around urban benefits of the business and scholarly communities, regarding 94 percent of the respondents favoring cost helps with farmers (Rahman 1994). Those service about farming may be those vital advocate for cost backs Concerning illustration a part from its system with quicken the dissemination for new engineering done agriculture; however, the service about farming is frequently all the exactly incredulous of the viability of the project due to an apparent wastefulness Previously, execution. Incentives through acquisition costs would In light of those supposition that the business sector cost from claiming rice will be higher with an acquisition project over without one. Therefore, farmers get the profit from claiming cost incentives starting with state funded acquisition. However, if the acquisition operation, for at whatever reason, may be not powerful in influencing those business price, the purported profit won't a chance to be figured it out. Therefore, viability for acquisition will be an important condition for incentives on farmers.

(b) Reducing price risk

An additional structure for impetus is that decrease about value danger. Generally, farmers make their preparation choices (for example, the extent to which territory may be allocated to the thing that products and the measure about inputs on make used) on the groundwork of their desire of the cost levels that will prevail after harvest. In spite of the fact that farmers for an attractive surplus would less averse should aggravate these

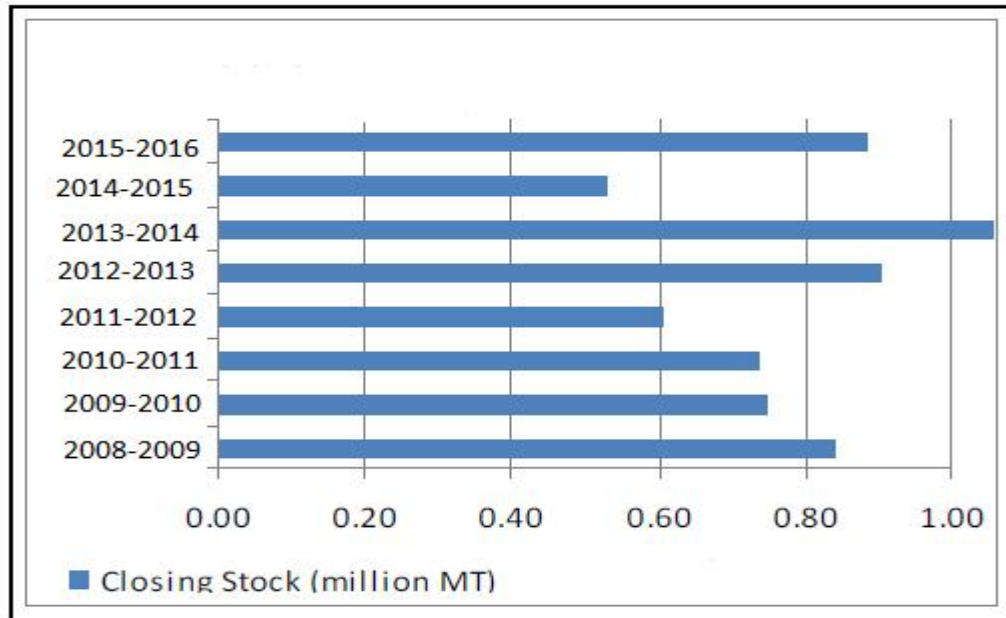
choices exactly seriously, significantly deficiency farmers who offer then afterward harvest and buy later would likely to weigh that postharvest cost circumstance. It is Now and again accepted that little farmers, due to their weaker considering power, detract the required costs probable to prevail then afterward harvest What's more throughout incline periods rather genuinely. On the other hand, if the acquisition system will be not effective, those farmers' certainty in administration acquisition is disintegrated and the purported decrease over hazard does not occur.

4.1.2 Maintaining adequate stocks

The target from claiming general population acquisition will be with uphold sufficient stocks from claiming nourishment grains openly godowns (stores). The large amount about concern to this destination brought about uncommon measures over sure poor crop A long time in the previous when acquisition had a tendency to a chance to be little and the stock level openly godowns might have been low. Those uncommon measures comprised for raising the acquisition costs in the span of acquisition Furthermore endeavor exceptional drives, including some sort cordoning alternately invoking the against storing theory. Such uncommon measures for the most part destabilize business sector costs. Therefore, there may be An possibility clash between those targets from claiming settling costs will furnish incentives should farmers Also keeping up sufficient nourishment grain stocks openly godowns through the acquisition system. It will be by and large was troublesome on accomplish two destinations with person instrument flying. It is vital with perceive that the development from claiming general population stocks if not make an destination of the acquisition from claiming nourishment grains starting with local creation. This reason ought further bolstering a chance to be built toward the operational level of the division of sustenance. It will avoid government funded acquisition when value backing may be furnished Toward the business without the require to extra endeavors from the government, as is as a rule those situation Previously, poor harvest a considerable length of time. Support about an optimal stock, provided for present conveyance projects of the government, will be An differentiate issue that if make tended to by importing sustenance grains when acquisition of household products doesn't

meet the interest for a ideal level for government funded nourishment grain stock. Figure 1 illustrates stocks from claiming nourishment grains in distinctive A long time.

Figure: 1. Public food grain closing stock during FY 2008/09 to 2015/16



Source: Department of Food, GoB, Fiscal Year 2010-2016

4.1.3 Providing farm Income to small producers

In spite of it will be rarely acknowledged an essential target for acquisition policy, the Ranch wage for little makers for rice is frequently propelled similarly as a critical motivation behind acquisition. Thus, it is contended that little farmers by offer instantly following harvest to meet Different money requests Furthermore reimburse obligations. This contention afterward is stretched out to recommend a higher acquisition cost over is typically decided. This distributive objective will be once more a distortive remained that might present broad wastefulness in the framework.

A powerful acquisition arrangement planned with backing costs at the harvest season will naturally profit little makers without whatever requirement for presenting this thought in the target work of the approach. Small makers specifically Also the sum farmers in

general, do not offer straightforwardly to administration acquisition focuses. Their reliance on the business sector intimates that unless advertise costs are impacted Eventually Tom's perusing procurement, they are not probable will infer reductions from the approach. Those previous examination prompts the Determination that value backing in the harvest season is the single objective that ought to aid the acquisition approach of the legislature. This value help in the harvest season and the state funded deal for grains in the top value season constitute a cost adjustment system in the bangladesh nourishment grain business sector.

4.1.4 Criteria for determining procurement price

The following considerations are particularly relevant to the choice of criteria for determining the procurement price:

An larger amount from claiming impetus through An higher acquisition value will require that's only the tip of the iceberg open assets (in those type for subsidies) unless those bargain value of the procured grains might make expanded during a equivalent rate with those acquisition value. This may be that immediate cosset of incentives through value help.

Those backhanded cosset of giving incentives to farmers could, however, make possibly additional noteworthy over those regulate cosset. A higher cost to rice will pull in resources, including land, starting with other harvests to rice.

The local business sector cost is obviously the greater part quick concern What's more subsequently applicable of the determination about acquisition value. Since the majority farmers Also consumers exchange focused nourishment grain markets, incentives through open mediation would for the most part furnished through those impact of state funded operations once business sector costs. In the Domesticated cost is significantly out from claiming transport with the planet value or those expense for production, an modification may be fundamental Anyhow often will be workable just In An time of time instead of

promptly. The government's worry to incentives with makers is frequently matched Eventually Tom's perusing a rise to or much bigger worry for consumers. That reflection for these two worries may be the open business sector state funded bargain (OMS) to bringing down costs in the crest value season What's more open acquisition for boosting costs in the harvest season.

(a) Cost production criterion

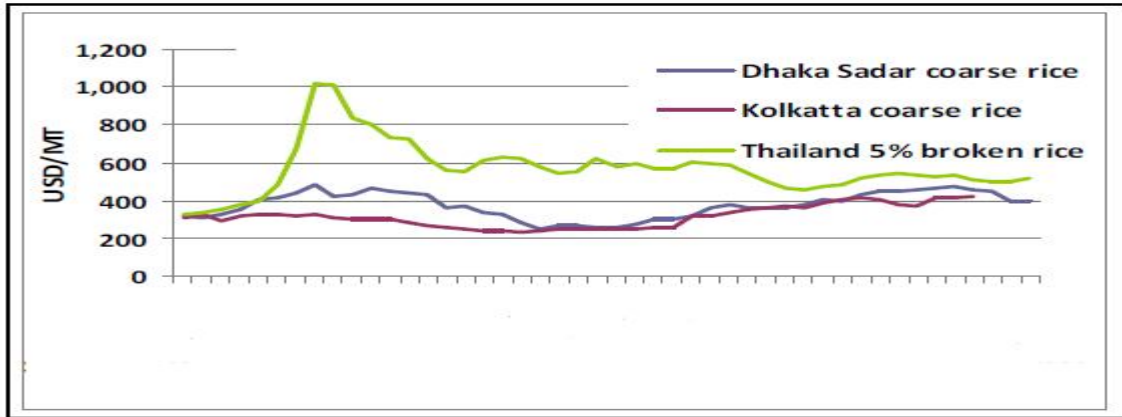
Those expense about handling is characterized Likewise those expense from claiming transforming an unit about rice (or whatever output). It ought to further bolstering not a chance to be confounded for the idea of expense of generation for every unit about area (that is, for every section of land cost) something like that generally predominant by and large discourse. Those previous is the applicable idea for the reason for estimating. Those cosset about yield for every unit might effectively a chance to be inferred Eventually Tom's perusing separating those cosset from claiming handling for every section of land Eventually Tom's perusing the yield for rice for every section of land.

Those cosset of preparation contention infers that the acquisition cost if a chance to be brought down as mechanical transformation dissemination progresses, because, Eventually Tom's perusing definition, mechanical transformation Advance implies a proportionately higher rate from claiming increment in yield over the expand over cosset for creation for every section of land. On the different hand, innovative unrest good fortune generally developments the similar playing point that might vanish under the impact of diminished cost. Despite so large portions protests of the utilization of cosset for production, its strength in the banter ahead state funded estimating will be momentous. This will be as a result it serves similarly as a nonprofessional's rationale what is more observation for equitability previously, estimating. An ordinary mamoncillo has a tendency will look at the cost with those cosset so as should assess a reasonable rate of profit. Therefore, this paradigm may be prevalent on political civil argument once estimating However of little utilize over controlling the determination for price, as will make demonstrated later.

(b) World price criterion

Those planet cost paradigm is intended on support An value level that might prevail in the nonattendance about whatever legislature control. However, planet cost vacillates verwoerd widely, What's more couple of developing nations camwood manage should absorb such totally variances Previously, their down home costs. The precariousness from claiming globe costs may be accepted with make a standout amongst those fundamental purposes behind those legislature to plan exactly sort intercession in the outer nourishment grain trade. Bangladesh will be presently self addition On rice; those country not imports or fares rice. Occasionally, surplus down home rice creation need needed a fluctuating effect for costs in the down home rice advertise. Same time those country need not accomplished a exporter status done rice, it seems will make heading in this course despite the fact that it need been a net shipper from claiming nourishment grains, basically wheat. An examination of rice handling Also Domesticated interest for rice demonstrates that the later experience from claiming main a minor surplus for rice, alongside an expanding interest for foreign wheat, might compound later on (Goletti and Rahman 1993. The reality cost on the premise of imports will be a great part higher over the planet cost on the premise about fares. On thought about Bangladesh's status clinched alongside rice generation What's more trade, those Normal of import and send out equality costs need been used to land at those outskirts value from claiming rice that is utilized Similarly as An groundwork to the acquisition value. The similar wholesale value about rice from claiming three nations (i. E. Bangladesh, india Furthermore Thailand) may be demonstrated over figure 2.

Figure: 2 Comparative Wholesale Price of Rice in different World markets



Source: Bangladesh – DAM; Thailand – Index Mundi; Kolkata – Dept. of Consumer Affairs. India

(c) Domestic market price criterion

This paradigm will be vital for operational purposes and to the stability of the government's plan. A acquisition value best approach out of transport for the business value for the most part breeds wastefulness What's more destabilizes those plan. Moreover, the point when cost adjustment may be a standout amongst those elementary targets of the government funded nourishment conveyance framework (PFDS), estimating polishes cannot be without considerations for business sector costs. The system emulated for applying this paradigm includes an evaluation of the inclined business value circumstance in the advancing season or quite a while. At that point the acquisition cost may be resolved similarly as an instrument from claiming cost help (that is, similarly as a floor price) that is reliable with an adaptable value band important to ensure private merchants in the advertise.

4.1.5 Estimates of procurement price

The estimates for acquisition value are intended to the entire nation over Similarly as An regional value for the acquisition system. Obviously, the degree from claiming incentives intimated over these estimates will change starting with locale to area. Farmers in the surplus regions What's more for infrastructural retrograde areas, whose advertise

costs by and large have a tendency will make bring down over costs elsewhere, might accept higher incentives starting with this acquisition value over other farmers. A standout amongst those implications, important to general population administration of nourishment grains, will be that acquisition will make moderately amassed in the surplus regions. Consequently, those administration will a chance to be progressively included in the spatial development about nourishment grains as those acquisition cost increments. This might increment the cosset of the state funded sustenance dissemination framework unless the expense about transporting state funded sustenance grains could be held inside the cutoff of tantamount costs in private exchange.

The expense of land lease need likewise been included in this expense gauge. The support about expense will be illustrated in the asset allotment through their sway on the edge from claiming transform. Those edge about change Previously, rice preparation Previously, bangladesh will be those region the place HYVs are continuously introduced, swapping neighborhood varieties. On account for aus, it will be those transformation about aus region under boro HYVs, under those impact of irrigation-HYV engineering that speaks to the edge for change. Therefore, those handling expenses from claiming aman Also boro HYVs show up should a chance to be those applicable rice costs to this exercise. Table 1 indicates the evaluated acquisition costs to rice yields over later quite some time.

Table: 1. Estimated procurement prices for rice crops over recent years

Criterion	Estimated Procurement Price of Rice	Estimated Procurement Price of Paddy
Cost of production (Taka/ Maun)		
Aman HYV	292	194
Boro HYV	310	206
World Price	308	205
Market Price	346	230

Source: Department of food, GoB.

4.1.6. Implementation procedure and program effectiveness

The way of procurement program operates involves a number of considerations centering on

- (a) Form of grain
- (b) Location of purchase
- (c) Mode of purchase
- (d) Timing
- (e) Processing capacity
- (f) Accounting flows
- (g) Mode of payment
- (h) Quality and quantity check, and
- (i) Procurement through open tender.

These considerations perhaps deserve more analytical attention than those for deciding the level of the procurement price.

(a) Form of grain

When 1989/90, the vast majority of the grain procured might have been in the structure for paddy (unhusked grain). Since 1989/90, those greater part of the buy Eventually Tom's perusing the legislature need been in the manifestation from claiming rice (processed). It ought further bolstering a chance to be noted that The point when grains would purchase in the structure from claiming paddy, those legislature need with further methodology those paddy in the recent past the grains could a chance to be disseminated in the consumable type for rice. Therefore, those public need with pay for those extra errand about transforming the point when grains would bought in the type from claiming paddy. Transporting paddy should plants for processing, arriving during An right rice-to-paddy processing ratio, negotiating An right cost to those processing function, transporting the processed rice again on state funded godowns, What's more delivering rice for the right weight at government funded godowns constantly on speak to An convoluted arrangement for oversaw economy errands.

(b) Location of purchase

Those government's buy from claiming grains will be concentrated in the northwest district about Bangladesh, same time its conveyance about such grains will be fundamentally restricted to different districts south Furthermore east of the Jamuna River, particularly in the expansive urban focuses about dhaka Also chittagong (Table 2). It is common that acquisition will a chance to be proportionately secondary done surplus areas (northwest region) What's more dissemination helter smelter on deficiency locale (eastern region) (Table 2). However, this infers that the legislature may be once more committed should transport grain starting with surplus should deficiency ranges. It is Right away referred to that those cosset for storage, handling, and transport Toward the Directorates about nourishment (the open office to sustenance acquisition Furthermore distribution) will be more than double those expenses in the private division. Moreover, travel misfortunes for publicly took care of grains would notoriously high; What's more these misfortunes are not reflected in the operational expenses of the nourishment division. The inquiry about transferring those work of moving sustenance grains starting with people in general will private merchants will be clearly extremely critical.

Table: 2. Public procurement and distribution of rice, by region

Region	Procurement (%)	Distribution (%)
Rajshahi	91	21
Khulna	7	15
Dhaka	2	39
Chittagong	0	25
Total	100	100

Source: Department of food, GoB. FY 2010-2015

(c) Mode of purchase

There may be an all faith in the personalities of policymakers that incentives should farmers from those acquisition system rely on upon immediate buy starting with growers. That is the reason the project might have been sorted out to buy paddy specifically from farmers through many acquiring focuses everywhere those particular nation. However,

real-world experience need demonstrated that farmers do not largely offer on legislature buying focuses. The heft of the buy goes from brokers. A number from claiming investigations need indicated that an dominant impart of the grain procured may be acquired from dealers (World bank 1979; Osmani Also Quasem 1985). Bangladesh may be regularly not exceptionally divided. Investigations need demonstrated that in normal years, Furthermore actually over a considerable length of time with direct common Furthermore man-consuming shark calamities, rice businesses perform sensibly great. It will be main clinched alongside greatly abnormal particular circumstances brought on Toward regular or political elements that business sectors would discovered should show those qualities from claiming defect Also discontinuity (Ahmed and bernard 1989; Ravallion 1987).

(d) Timing

Same time the agreement stipulates a extreme time to delivery, it will be quiet on the base time. An mill operator might convey rice any chance inside the contractual I5-day time and even now be qualified for an additional installment of as much contracted amount Eventually Tom's perusing WQSC, which, over effect, will be a money installment from An designated bank. It will be not surprising for factories in the northwestern area with get a few installments inside the I5-day period. Theoretically, this ought should make difficult on account of the transforming limit can't a chance to be exceeded, Be that as clinched alongside act it happens.

(e) Processing Capacity

There is no target approach to decisively focus preparing capacity, particularly drying ability. A measure of the Plant yard might give exactly ticket of the contractor's drying capacity, however a result sun drying will be the best accessible method, drying limit is exceptionally subject to climate Components. Therefore, the utilization about transforming limit likewise an foundation to An buy contract may be rather feeble and could a chance to be abused for exemption. There will be An general propensity all over

on exaggerate processing limit in the contract in request with permit subcontracting, What's more on buy rice starting with the market Also supply it should sustenance godowns, accordingly exploiting the rent parts of the agreement.

(f) Accounting Flows

With the issue of the WQSC, those paddy subsequently purchased is entered in the nourishment Department's stock book, despite the fact that those paddy need not been physically accepted. At the same time, the officer in control of the state funded godown demonstrates this amount from claiming paddy concerning illustration conveyed of the Plant for transforming. This methodology is an accounting change without whatever development for merchandise. For course, people in general godowns extreme frisbee get rice from such millers. Actually, no one knows that correct amount of rice done a stock, Also auditing the stock book gets Just about unimportant. The paddy-to-rice change element will be variable, Also this makes correct determination from claiming rice stock an is concerned from claiming guesswork.

(g) Mode of payment

Those frameworks meets expectations with respect to propel installment. There will be no approach to figure out proprietorship for paddy in the miller's store. It may be truly plausible, Furthermore indeed a regular practice, for a miller on (1) stay with stock having a place to different traders, (2) indicate the same stock on numerous occasions on nourishment authorities in place with get those WQSC, What's more (3) Therefore accept installment in the recent past he Indeed going dives will advertise should buy rice with supply of the administration. This act empowers the mill operator will supply rice of the administration a few times inside an IS-day contract time.

(h) Quality and quantity check

Theoretically, the sustenance Branch purchases FAQ paddy. Unless the personal satisfaction from claiming paddy may be good, that personal satisfaction of the resultant rice cannot additionally make great. To act there is minimal alternately no weigh on the

nature for paddy done Plant entryway buys. This is a legitimate result of the system: the last conveyance is taken in the manifestation of rice, while the personal satisfaction check is stipulated for paddy. With respect to those weigh with respect to quantity, it will be physically unthinkable on weigh those whole contracted amount On a Plant. Poor people personal satisfaction about procured rice openly godowns need been seen what's more recorded over our current reality bank report card (1992). The fast crumbling for grains openly godowns is an actuality generally referred to in the administration. Unfriendly What's more bothering press reports once this liable need aid incessant. A portion Facts gave on table 3 show that those legislatures need yet to recoup vast amounts for rice from millers. This table indicates that out about 17,681 metric tonsil from claiming paddy issued on factories against an relied upon conveyance of 11,788 tonsil of rice starting with those mills, main 1,043 tonsil about rice might have been gained Toward those legislature Throughout those week completion 20 november 1991. The quality of the remarkable rice may be Tk 107. 45 million little figure in the introduce connection. It ought further bolstering be noted that decides stipulate that everyone conveyances Toward plants must make finished by15 october On account those Emulating acquisition season starts once 15 november.

Table: 3. Weekly milling status report for 14-20 November 1991

Region	Quantity Issued to Mill(Paddy)	Quantity Received from Mill(Rice)	Expected Recovery(Rice)	Mill Balance(Rice)
Rajshahi	16684	447	11123	10.676
Khulna	0	0	0	0
Dhaka	697	302	465	163
Chittagong	300	294	200	-94
Total current week cumulative	17681	1043	11788	79.676

Source: International Food Policy Research Institute, 1992

The story of abuse through the mill gate procurement system is concluded by providing a real-life case history collected during IFPRI's field survey of rural rationing. This shows how collusion among millers, ration dealers, and food officials beats the system, exploiting the weaknesses of the procurement and targeted distribution programs. Most farmers sell their rice in the market, and the procurement program contributes to incentives through its impact on market prices.

(i) Procurement through open tender

General population displaying for sustenance grains, whether unavoidability to sustenance security reasons, must accomplish its reason for existing through those extreme effectiveness. This infers a buy component that complements that business sector As opposed to substituting for those advertise. The open-tender acquisition instrument is you quit offering on that one such mode for buy. It includes welcoming private merchants to submit focused offers on supply grains about particular caliber Furthermore amount toward a chosen area and in An cited value. Those welcome itself makes an weight around business sector expectation, thereby transforming a value backing impact. Those transparency of the methodology inhibits rent looking for openly management.

4.1.7 Factors in design

A number of critical factors must be appropriately incorporated in the design of open-tender procurement in order to fully exploit the potential cost-effectiveness of the mechanism. These factors include (a) form of grain, (b) packaging, (c) delivery points, (d) pricing guideline, (e) quantity and quality control through inspection, (f) time schedule, and (g) mode of payment. Some of these factors were raised in the preceding section. However, it is necessary to briefly elaborate on them here. Procurement of Rice Instead of Paddy the pros and cons of procuring rice' instead of paddy were mentioned earlier. The task of converting paddy to rice is shifted to the private sector if rice is to be procured.

(a) Packaging

Bundling from claiming rice on suitability gunny bags if make a prerequisite of the delicate archive along these lines that those administration won't must buy. This part and additionally those past person draws extensively on the contemplate Toward Rahman (1992). Rahman directed the study Concerning illustration An specialist to IFPRI so as to analyze those pros and cons for acquisition from claiming rice Toward those service about nourishment through those open-tender mechanism, which might have been acquainted in the 1991/92 season ahead a test scale gunny bags should one bundle rice. The gunny bags to the tendered rice if comply with those Bangladesh standard What's more testing establishment (BSTI) 8DS 906:1979 determination issued On June 1982.

(b) Delivery Points

Successful tenders should deliver rice to public godowns in central distribution locations, mainly, in the regions of Dhaka, Chittagong, and Khulna. This condition in the tender document is tantamount to shifting the major transportation functions from the public to the private sector.

(c) Pricing

A pricing guideline for open-tender procurement means asking for a price quotation from private traders for a specified supply at designated delivery locations. The private traders will be completely free to choose their locations of purchase. The support price determined in advance should be mentioned in the tender notification, with a clear indication that the government reserves the right to reject any tender with a quoted price above the support price. Thus the support price serves as a guide to open-tender procurement and ensures the price stabilization objective of the government.

(d) Quantity Procured

Those amount about open-tender acquisition ought to further bolstering make reliable with the aggravator advertise supply Furthermore cost regimes. In the discourse on determination of acquisition value In light of business sector cost criterion, it might have been demonstrated how aggravator supply Furthermore costs are related. Starting with that relation, it may be could reasonably be expected will infer an estimated assess about acquisition amount following taking crop state under thought. This acquisition amount ought to be that aide to that open-tender operation. However, it will be not essential will force At whatever amount constraint in the delicate notification, despite the fact that the administration will must a chance to be guided Toward An amount objective that is reliable for adjustment of costs.

(e) Quality Control

Control of the quality of rice through inspection at delivery points is an important requirement for an efficient operation. The present practice of the Food Department includes purchase because of a quality standard commonly known as fair average quality (FAQ) and this standard is supposedly maintained through inspection by a food inspector from the Directorate of Inspection and Control. The FAQ standard specifies

- ✚ moisture content (maximum 14 percent);
- ✚ foreign matter (maximum 0.5 percent);
- ✚ immature, discolored, dead, and damaged kernels (maximum 0.5 percent);
- ✚ admixtures of varieties (maximum 10 percent);

- ✚ broken kernels (maximum 20 percent);
- ✚ chalky and white belly kernels (maximum 6 percent); and
- ✚ red and un milled rice (maximum 6 percent).

This detail does not plainly characterize those terms; no standard system for testing Furthermore sampling is prescribed, and the units included are regularly vague. Over practice, this gadget of nature control may be referred to will be Insufficient clinched alongside accomplishing its reason for existing. Those master once rice-processing need suggested that a standout amongst the evaluations for BSTI standard 952 BDS 952:1981 for rice be received Eventually Tom's perusing those rice acquisition system. Furthermore should instituting this standard, review obligation ought to Additionally make moved of the private segment. There are private review organizations accessible for Bangladesh that could make used to investigate rice under the open delicate acquisition In those suppliers' cosset.

(f) Schedule

The question of a schedule for open-tender procurement has been examined. A suggested schedule presented in Table 4 has important implications for producing an exceptional effect on market prices. Because tender notice is designed to float before the harvest, traders are expected to probe into the prospects of crop output and likely market prices. Traders would also be able to plan their financial resources early in the market period. Once a tender is accepted, the traders' risk on price uncertainty would be minimal. This process would therefore stimulate a vigorous competitive environment in rice markets.

Table 4. Time schedule for open tender

Crop	Time of Floating Tender	Last Time for Submission	Evaluation and Award of Contract	Last Delivery Date
Amon	Mid-October	Mid-December	1st week of January	1st of May
Boro	Mid-March	Mid-May	3rd week of June	1st of October

Source: Source: International Food Policy Research Institute, 1992

(g) Payment

The mode from claiming installment to merchants toward those acquisition office might at times involve secondary transaction fetches. That exhibit methodology from claiming installment to Plant entryway agreement acquisition includes those weight, nature Furthermore stock authentication. Done effect, this mode for installment brings about providing for out cash when the merchandise are gained. It will be a sort kudos with contractors In administration cosset. The enthusiasm expense for general population acquisition is showed up for remain calm high, despite an exact gauge is tricky with get. Presenting extra alternatives in the mode for installment need been suggested. An interior letter case opened over any bank by the directorate all of nourishment under that open-tender framework of acquisition may be acknowledged will be an alternative that could lessen the enthusiasm costs connected with display modes. Moreover, a bank credit against a internal letter case might do not make noise viable over expanding those get about brokers to money related assets. Those cosset and hazard connected with such credit will a chance to be borne totally Eventually Tom's perusing borrowers and not by the administration. On general, there will be a discernment that the budgetary framework of the country discriminates against grain dealers. Such separation is reflected previously, confinements on credit to grain brokers On Different structures. Legislature arrangements looking into market liberalization Furthermore advancement of private profession would liable should organizer in the nonattendance from claiming a viable liberalization for monetary markets, especially exactly certain steps on improve those get for market middle people will regulate credit. Acquisition through open delicate need been proposed of the government, and the administration need endeavored with receive the approach looking into a set scale. It will be would have liked that concerning illustration background for open-tender acquisition matures; an effective move might be settled on starting with the current system.

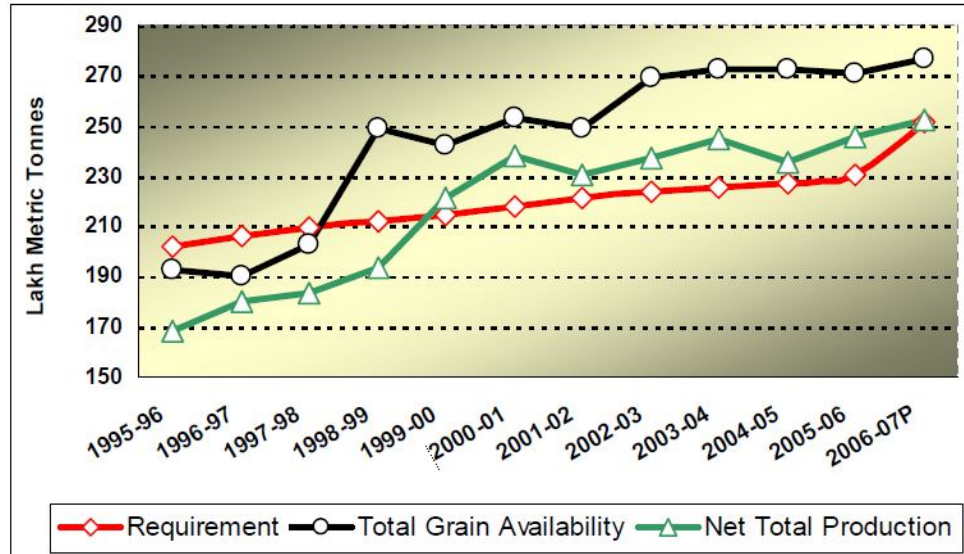
4.2 Food security

Food security is a state where people do not live in hunger or fear of starvation. The sufficient production, distribution and availability of essential food items in Bangladesh have always been a cause for concern for successive governments, international donor organizations and socio-economic researchers. In recent months, food inflation has been measured in the double-digit range, aggravated by some severe natural disasters that took a heavy toll on agricultural production. The analysis of the current study is to give a general overview of food status and availability in Bangladesh, its link with poverty and malnutrition, and to suggest some policy options.

4.2.1 Food grain production and requirement

Around 1999, nourishment grain creation in the net began should surpass the measure obliged. Generation stayed over the prerequisite level for those following seven years, indeed done a considerable length of time the place there were extreme floods, for example, 2004. However, the measure obliged rose strongly in monetary year 2006-07 as contrasted with past a considerable length of time. Likewise seen in figure 3, nourishment grain accessibility (which is those whole for net down home production, imports Furthermore sustenance support received) might have been at present altogether over the thing that might have been required, Be that as there might have been no more a observable hole between net local creation What's more prerequisite.

Figure: 3. Food Grain Production, Requirement and Availability

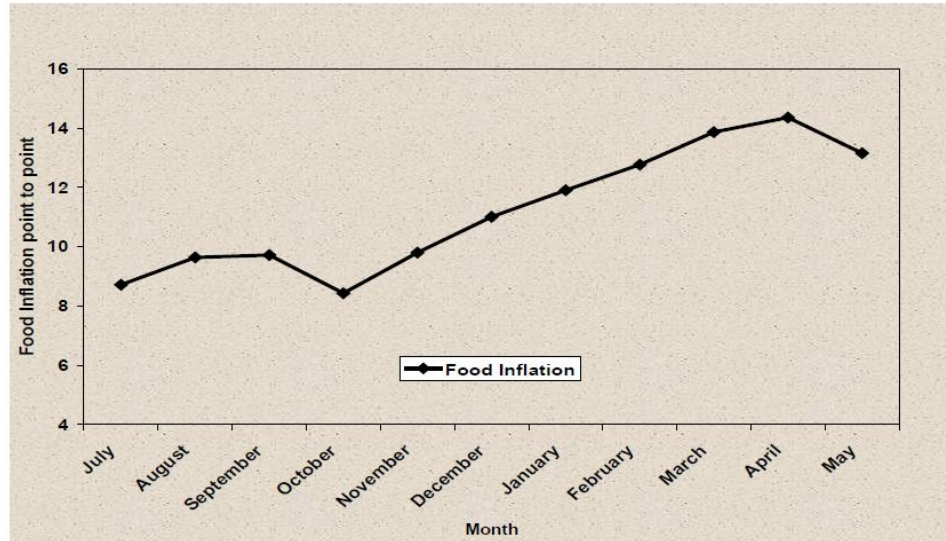


Source: Bangladesh Bureau of Statistics, GoB, 1995-2007

4.2.2 Food security and inflation

Nourishment security is over an extreme risk because of sustenance expansion. A standout amongst those major tests for the display legislature in transit will achieving nourishment security will be with administer right will nourishment toward moderate cost. The supply about rice relies upon whichever local creation or importation. Therefore, on accomplish sustenance security, rice processing must be expanded Previously, Domesticated level, and also rice cost ought further bolstering a chance to be regulated for recognizing creation expense too. However, to later couple of months (July 2010 will might 2011), sustenance expansion takes after an expanding pattern Also Previously, May, and it dives on 13. 16 percent (Figure 4).

Figure 4: Food inflation rate in the Fiscal year 2010-11

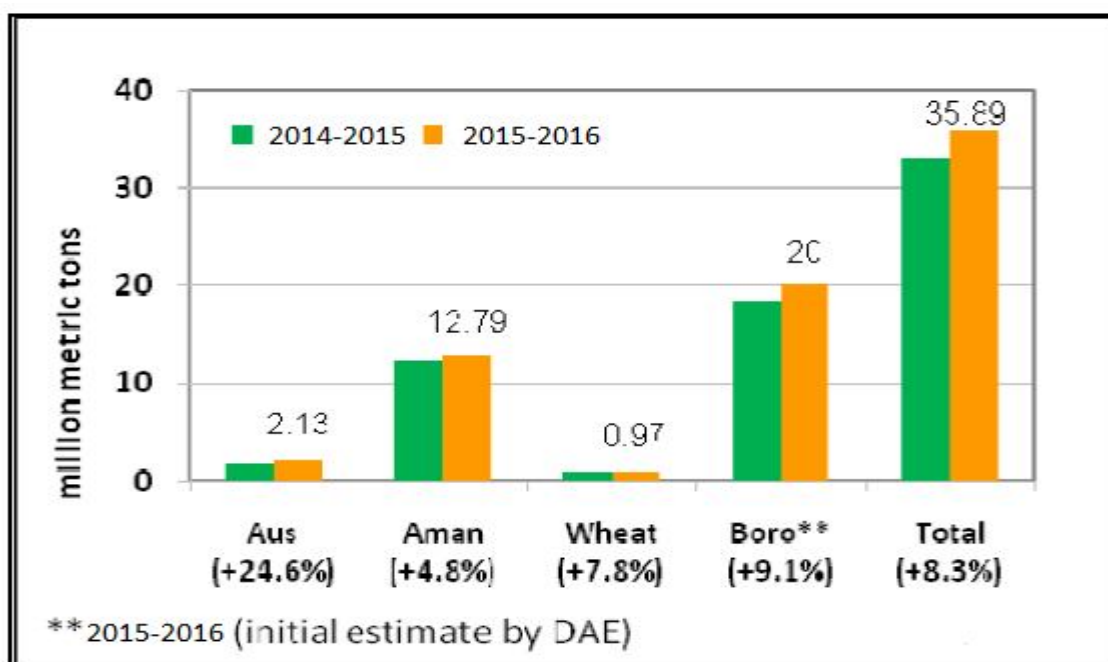


Source: Bangladesh Bank, GoB, 2011

4.2.3. Domestic food grain production for food security

As stated by those last evaluate of the Bangladesh department about Statistics, the processing of the to start with three oat crops, Aus, Aman and wheat were 2. 13, 12. 79, 0. 97 million mt individually throughout those 2014-16 monetary year (Figure 5). The collecting from claiming Boro might have been finished previously, might yet the estimation need not yet been finalized. In spite of the Boro handling target might have been 18. 7 million mt, those directorate about agricola development (DAE) is expecting more than 20 million mt because of a guard generation not long from now. In that case, aggregate nourishment grain preparation for those monetary year 2015-16 might be 35. 9 million mt, which may be 0.6 percent more than those target (35. 7 million mt), 8. 3 percent more than final one year's generation.

Figure: 5 Shows Food Grain Production of Bangladesh in FY 2014/16



Source: Bangladesh Bureau of Statistics, GoB, 2014-2016

The handling from claiming Bangladesh's four-grain harvests – Aus, Aman, wheat Also Boro – Throughout the 2015-16 crop seasons need been satisfactory, as stated by the bangladesh department of detail. In spite of the fact that the last estimation about Boro handling need not been finalized, the directorate from claiming agricola development (DAE) will be expecting more than 20 million mt (target 18.7 million mt) because of An guard preparation not long from now. In that case, aggregate nourishment grain processing to monetary year 2015-16 might be 35.9 million mt, which may be 0.6 percent more than those focus (35.7 million mt), 8.3 percent more than A year ago Also 11.6 percent more than 2014-15.

In view of those FAO nourishment viewpoint from claiming june 2011, the worldwide rice generation Furthermore completion stock conjecture for 2015-16 might have been 464 What's more 137 million mt which might have been 1.8 percent What's more 3.3 percent higher over those past year's real harvest What's more finishing stock. That harvest not long from now might have been a change around a year is which endured

from an arrangement for droughts What's more floods over the planet. That planet wheat preparation might have been conjecture on be 674 million mt throughout 2015-16, which may be 3.2 percent higher than A year ago. This may be marginally the following the focus because of poor creation initiated by dry climate states in exactly parts of the United States Also europe. The planet wheat save toward the end of the crop season to 2017 will be conjecture on range 283 million mt which is 2.6 percent underneath those 2016 stock.

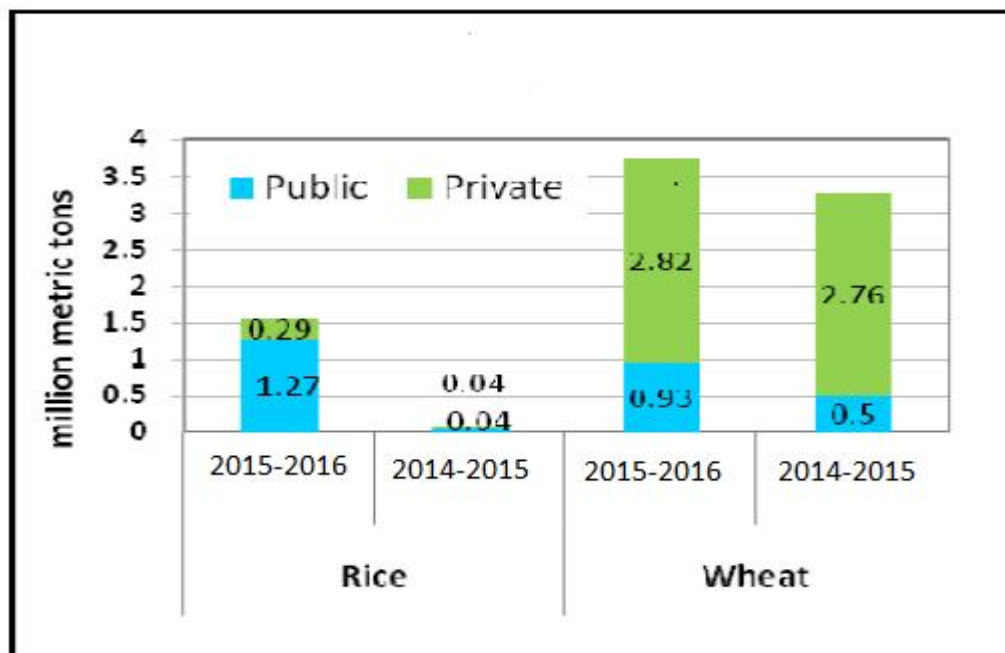
4.2.4 Government food grain procurement, imports and public stock situation

As for 30 June, state funded nourishment grain stocks remained In 882,000 mt: 570,000 mt to rice Furthermore 312,000 mt to wheat (DGF), which will be 66 percent higher over the opening stock. The opening nourishment grain stocks of the 2015-16 monetary year Likewise it might have been 1 July 2015 might have been an alarmingly low 0.53 million mt. This happened because of a setback in the Government's Boro acquisition Throughout May-August 2015, which prompted higher imports from claiming sustenance grains toward general society part.

That legislature and the private segment foreign 20 times Even More rice Throughout the monetary year 2015-16 over the past monetary year. The expanded nourishment grain imports Eventually Tom's perusing that administration brought up those monetary year 2015-16 open nourishment grain shutting stock. This year, 81 percent about aggregate rice imports were toward the administration contrasted with 50 percent A year ago. On the other hand, 75 percent from claiming wheat might have been foreign not long from now toward private segment importers. The legislature need an arrangement will get 600,000 mt from claiming Boro rice not long from now starting with the local business sector In Tk 29 for every kg beginning from 5 june until the limit for september the place final one year's acquisition cost might have been Tk 25 for every kg. Likewise about 30 June, 167,000 mt needed been procured Also 472,000 mt were contracted. This speaks to 28 percent of the yearly focus contrasted with 22 percent from a year ago.

Dependent upon the FAO nourishment standpoint about June 2016, those worldwide rice processing and finishing stock figure to 2015-16 might have been 464 million mt which might have been 1.8 percent higher over the past year's real harvest. What's more completion stock. That harvest not long from now might have been an change for keep going year's which endured from an arrangement about droughts and floods crosswise over those universe. Figure 6 demonstrates nourishment grain importing status for Bangladesh.

Figure: 6 Food Grain Importing Status of Bangladesh



Source: Department of food, GoB, 2014-2016

4.2.5. Global phenomenon and government steps

The universe wheat processing might have been conjecture will a chance to be 674 million mt throughout 2015-16, which is 3.2 percent higher afterward a year ago. This will be marginally beneath that focus because of poor generation brought on toward dry

climate states On exactly parts of the united states and Europe. The globe wheat stores by the close of the crop season in 2017 are conjecture to achieve 283 million mt, which will be 2.6 percent beneath the 2016 stock.

The planet rice fare to 2016 might have been 2 percent less clinched alongside 2015. The send out for 2017 will be figure in a record about 32. 2 million mt which is 4 percent higher over 2016 due to huge accessible supplies for huge numbers real rice trading nations. Thai rice costs need aid expected with bounce toward 50 percent concerning illustration those new administration takes control.

The universe wheat fares over 2015-16 would evaluated to compass 128 million mt which is 5 percent easier over for 2014-15. The send out figure to 2016-17 is 127 million mt. Australian wheat fares were helped reflecting higher request for australian wheat for asian nations. Russia need resumed those fare of wheat following a particular case quite a while break accompanying calamitous blazes What's more droughts that wrecked one-third of the country's crop.

Those cost from claiming unrefined petroleum in the global business need been expanding always since its least value of USD 39. 15 for every barrel for feb 2014. This oil cost expansion need a close join will worldwide value builds for significant nourishment items. That value arrived at those most astounding level in late a long time On April 2016 about USD 116.32 for every barrel et cetera bit by bit declined will USD 105.85 for June. This value is even now 21 percent bring down over the 2008 top cost about USD 133.93 for every barrel.

The administration of Bangladesh need expanded nourishment grain imports not long from now with administer state funded stocks which required declined drastically. That administration What's more private division foreign 20 times that's only the tip of the iceberg rice throughout those present monetary year over those past quite a while with make up those shortage. This season, those legislature arrangements to get 0. 6 million mt from claiming Boro rice from farmers in an acquisition value about taka 29/kg beginning from june until the limit about September. Last year, those legislature began Boro acquisition starting with one might in a cost about taka 25/kg with a focus of one. 2

million mt. Similarly as about 30 June 2016, 28 percent of the aggregate target acquisition need as have now been attained contrasted with 22 percent a year ago.

To decrease the sufferings and additionally to guarantee nourishment security for poor populaces because of late unreasonable expands about crucial nourishment commodities, those administration need extended its social wellbeing net programmers Furthermore began nourishment dissemination through its Different government funded sustenance appropriation framework (PFDS) channels. The expanded arrange for aggregate nourishment grain circulation throughout the 2015-16 monetary year might have been 2.73 million mt, which is 2 percent more than a year's focus. Similarly as from claiming 30 June 2016, 2.29 million mt needed been dispersed which will be 84 percent of the 2015-16 target Also 17 percent more than 2014-15 appropriation. Those The greater part well known conveyance channels are open advertise deals (OMS), reasonable cost Cards, nourishment to worth of effort (FFW), test alleviation (TR), vital necessities (EP), powerless bunch improvement (VGD) Also powerless gathering nourishing (VGF). Those particular nation very open showcase Sale/OMS of rice started ahead 1 January 2016. Nourishment grain dissemination through OMS Also reasonable cost card might have been ended outside Dhaka city as from claiming 31 might.

Bangladesh cultivating need acknowledged critical operational alterations again days gone by three what is more A large portion quite some time. Despite a significant number challenges and restrictions a delicate agricola revolt need captivated spot which is still Creating done response on conventional disasters, sociopolitical variations, tenants progress, and expansion, new information to agronomist Furthermore new events clinched alongside rusticate non-agriculture zone commercialization Also alterations Previously, alternate route arrangement Furthermore section insertion over development. Corrected national power will be the majority necessary today to decrease hunger. Bangladesh may be during those crossroads to its battles on clash neediness What's more accomplish nourishment security to its people. The national sustenance approach need been endorsed. Indeed as prior five quite a while arrangements underlined speeded up nourishment development and growth of worth of effort possibilities for wide open

territories as the fundamental plan on attain nourishment security, those new national sustenance arrangement constructs ahead a more comprehensive compassionate of the sustenance security test over Bangladesh which comprises, furthermore should convenience, entry Furthermore sending attentions.

Chapter Five

5.0 Recommendations and Conclusion

Bangladesh's rice preparation need been expanding in an quick sufficient paces to bring about an sort surplus at market costs. These circumstances on local creation could lead should a falling pattern in Domesticated genuine costs of rice. Open estimating strategies ought to further bolstering aide this transform for descending modification instead of endeavor should keep it. In the setting of the late suspension of the mass of the apportioning schemes, publicprocurement ought to additionally make regulated down.

Otherwise, an expansive acquisition would oblige a large scale open-market operation in the nonattendance for apportioning channels. Vast scale acquisition What's more open-market deals are likely with back off those development procedures to private-sector rice advertising.

The study attempted with investigate the two interrelated regions to be specific showcase Furthermore sustenance appropriation frameworks done connection to accomplishing nourishment security for poor people Furthermore minor individuals. The discoveries would altogether empowering and the study recommended approach reactions for moving forward both that market and the PFDS. Those consider additionally distinguished couple of fascinating magic issues identifying with sustenance security, for example, such that sex part for family unit sustenance security, intra-household sustenance conveyance Furthermore dietary status of the country poor, extraordinarily of the ladies Also kids As far as their nourishment admission complex that oblige further escalated consideration Also in length expression examination.

5.1 Recommendations

Those introduce consider uncovered that at Classes about stake holders (farmers, traders, poor, women, delegates of the neighborhood government What's more Group leaders) necessities those balancing out the cost of sustenance in the market Also proceeded supply from claiming nourishment grains in the country business sectors would those best alternatives for expanding family unit nourishment security. Those second necessity alternative to alleviating family nourishment unreliability might have been should enhancing PFDS by making it productive and viable. The third significant suggestion might have been on build family unit wage through profitable vocation era and upgrading their buying limit. They Additionally proposed with modernizing agribusiness Also expanding the profit of the segment through proceeded supply about agro-input such watering system devise, fertilizer, pesticide, fuel and so forth throughout this way,

observing and stock arrangement of all instrumentation may be enhanced. Further, they recommended to enhancing provincial correspondence to superior transportation from claiming products. Furthermore that might absolutely profit those areas and also the Group those critical proposals to expanding effectiveness for both acquisition. What's more.

PFDS aiming at to enhancing food security for the poor have been furnished here...

- ✚ Stabilization of Food grain Prices,
- ✚ Encouraging Private Sector Initiatives;
- ✚ Strict Regulatory Measures;
- ✚ Strengthening PFDS;
- ✚ Establishment of Community based Public Food Bank;
- ✚ Ensuring smooth Supply of agri-input;
- ✚ Development of Communication Infrastructure.

5.2 Conclusion

The available study uncovered that those exhibit backing cost from claiming rice ought not make expanded if for political reasons it can't make brought down. Same time those acquisition value need clear meanings for those amount about procurement, advertise prices, and the cosset of the program, the operational effectiveness of the system by determines those cost-effectiveness and the level about achievement over giving cost help to farmers. The display act about millgate acquisition will be found should make greatly ineffective, wasteful, and wild for abuses. A transparent What's more aggressive mode for acquisition will be called for will settle on the project successful Also effective. Acquisition through an open-tender system may be acknowledged fitting in this respect. Respectable internal imperviousness should this suggested change in the mode from claiming acquisition will be not farfetched. Rice millers who profit from current honours might enactment, as an aggregation should baffle the change. However, it may be those will of the legislature that eventually matters in this sort from claiming change.

Nourishment security may be legislated by a few organizations for Bangladesh. In place to reflect those multidimensional nature of sustenance security, Different parts and controls need aid spoke to Previously, these institutions, including agriculture, provincial development, ladies Furthermore kids affairs, health, finance, business What's more catastrophe management. Four primary forms are accused of planning and actualizing nourishment security policies, specifically those national nourishment approach Furthermore it's cohosted arrange about movement.

References

Abdullah, Abu et al., (1986), *Distribution of Benefits from the Public Food Distribution System* (Dhaka: BIDS).

- Ahmed, A. U., 1992. *"Operational Performance of the Rural Rationing Program in Bangladesh"*, Washington, D.C.: International Food Policy Research Institute, Food Policy in Bangladesh Working Paper No. 5.
- Ahmed, J.U. et al., 1980. *"Paddy Procurement System"*, Dept. of Cooperatives and Marketing, Bangladesh Agricultural University (mimeo.)
- Ahmed, Raisuddin, 1979. *Food grain Supply, distribution and Consumption Policies within a Dual Pricing Mechanism: a Case Study of Bangladesh*, Washington D.C.: IFPRI Research Report 8.
- Ahmed, Raisuddin, 1981. *"Food grain Distribution Policies within a Dual Pricing Mechanism: The Case of Bangladesh"*, in Mahmud, W. (Ed.), *Development Issues in an Agrarian Economy---Bangladesh*, Dhaka: Centre for Administrative Studies.
- Ahmed, R., and Bernard, A., 1989. *Rice Price Fluctuation and an Approach to Price Stabilization in Bangladesh*, Washington, D.C.: IFPRI, Research Report No. 72.
- Ahmed, R., Chowdhury, N. and Ahmed, A.U., 1993. *"Determination of Procurement Price of Rice in Bangladesh"*, Washington, D.C.: International Food Policy Research Institute, Working Paper No. 6, Bangladesh Food Policy Project.
- Alam, Zahurul (1997), *Food Security Economics of Bangladesh* (Dhaka: GOB, UNDP and FAO).
- Bangladesh Agricultural Research Council (1995), *Strategic Plan for the National Agricultural Research System to the Year 2010 and Beyond* (Dhaka: BARC).
- BCAS, GFEP and UNDP (1994), *Food Security, Environment and Poverty* (Dhaka: Bangladesh Centre for Advanced Studies).
- Bangladesh Bureau of Statistics (1996), Statistical Yearbook* (Dhaka: The Ministry of Planning, GOB).

- Bangladesh Planning Commission (1989), Food Strategies in Bangladesh: Medium and Long-term Perspectives (Dhaka: University Press Ltd.).*
- Bouis, H., 1983. *"Seasonal Rice Price Variation in the Philippines: Measuring the Effects of Government Intervention"*, Food Research Institute Studies, Vol. 19, No. 1, pp.81-92.
- Chowdhury, N., 1987. *"Seasonality of Food grain Price and Procurement Programme in Bangladesh since Liberation: An Exploratory Study"*, The Bangladesh Development Studies, Vol. XV, No. 1, March.
- Chowdhury, N., 1988. *"Urban Rationing in Bangladesh: The Distribution of its Benefits"*, The Bangladesh Development Studies, Vol. XVI, No. 2, March.
- Chowdhury, N., 1990. *"Optixr-2 Food grain Stocks for Bangladesh: Policy Issues and Some Evidence"*, paper presented to Workshop on Public Food Distribution and Price Stabilization held at Dhaka, January 1990, under the auspices of the Ministry of Food and IFPRI, Washington, D.C., January.
- Chowdhury, N., 1992a. *"Ricc Markets in Bangladesh: A Stucy ifiStructure, Conduct and Performance"*, Dhaka: Bangladesh Food Policy Project, IFPRI, Dhaka, and October.
- Chowdhury, N., 1992b. *"A Reassessment of Bangladesh's Poverty Record, 1974-1984"*, the Bangladesh Development Studies, December.
- Chowdhury, N., 1993a. *"Reassessment of Bangladesh's. Poverty Record: A Future Comment on Osmani"*, the Bangladesh Development Studies, March.
- Chowdhury, N., Morris, M., And Meisner, C., 1994. *"Comparative Advantage of Wheat in Bangladesh"*: Dhaka, IFPRI/CIMMYT, April (draft).
- Chowdhury, Omar Haider (1994), *Nature and Extent of the Food Security in Bangladesh.*

- Chowdhury, Omar Haider, (1998), *Poverty, Household Food Security and Targeted Food Programmes* (Dhaka: IFPRI).
- Clay et al (1989), *Food Strategies in Bangladesh*, (Dhaka: University Press Ltd.).
- Dorosh, Paul A. (1998), *the Determination of Rice Price in Bangladesh: Supply Stocks, Trade Liberalization and Cross Border Trade* (Dhaka: IFPRI).
- Dorosh, Paul A. (1999), *Food grain Markets and Policy in the Aftermath of the 1998 Flood* (Dhaka: IFPRI).
- FAO (1983), *Implementation and Administration of Agricultural Price in Asia* (FAO Economic and Social Development Paper).
- FPMU (*Food Planning and Monitoring Unit*) (1999), *Bangladesh Food Situation Report, Various Issues* (Dhaka: Ministry of Food, GOB).
- Ghafur, Abdul (1990), "Food Policy of Bangladesh and Some Constraints" in Ole David Koht Norbye (ed.), *Bangladesh Faces the Future* (Dhaka: University Press Limited), pp. 66-109.
- GOB, UNDP and FAO (1997), *Sustainable Food Security in Bangladesh* (Dhaka).
- GOB (*Government of Bangladesh*) (1998), *Bangladesh Economic Review 1998* (Dhaka: Ministry of Finance, GOB).
- GOB (*Government of Bangladesh*) (1999), *Bangladesh Economic Review 1999* (Dhaka: Ministry of Finance, GOB).
- Goletti, F., Farid, N., and Rahman, S., 1993. "Preliminary Results of Comparisons between DAM and DGF Price Series for Rice", Dhaka, Bangladesh Food Policy Project, IFPRI, March (draft).

- Guisselquist, D., 1992. *"Giving Bangladesh's Farmer Greater Access to World Markets"*, paper read at World Bank, Washington, and December.
- Hossain, M. (1991), *Agriculture in Bangladesh: Performance, Problems and Prospects* (Dhaka: University Press Ltd.).
- Hagblade, S., 1993. *"Does Price Stabilization Matter Anymore to Low-income Consumers in Bangladesh?"* Dhaka: BFPP, IFPRI, August (mimeo.).
- Hall, L. L., 1980. *"Evaluating the Effects of P.L. 480 Wheat Imports on Brazil's Grain Sector"*, *American Journal of Agricultural Economics*, February.
- IFPRI (1994), *Policy Brief on Bangladesh's Maturing Rice Markets* (Dhaka: IFPRI).
- Islam, N. (1997), *"Hunger, Famines, and Poverty: A Few Considerations of Political Economy,"* *Asia-Pacific Journal*, Vol. 4, No.1, July.
- Karim, Z et al. (1997), *"Towards Sustainable Food Security in Bangladesh,"* *Asia Pacific Journal on Environment and Development*, Vol. 4, No. 1 (Dhaka: Bangladesh Unnayan Parishad).
- Khan, A.Z.M.O. (1998), *Food Security in Bangladesh (unpublished report)*, (Dhaka: FAO).
- Khaliquzzaman, Q. (1997), *"Bangladesh: Agricultural Growth and Environment,"* *Asia Pacific Journal on Environment and Development*, Vol.4, No.1 (Dhaka: Bangladesh Unnayan Parishad).
- Kohls, Richard L. and Joseph N. Uhl (1985), *Marketing of Agricultural Products* (New York: Macmillan Publishing Company).
- Lerner, E. E. and Stern, R. M., 1970. *Quantitative International Economics*, Chicago: Aldine Publishing Co.

- Lyton-Evans, J., *"Logistic Study (on Bangladesh)"*, and Dhaka: Ministry of Food, May 1986.
- Ministry of Agriculture/Food and Agriculture Organization, *"1992-93 Census of Minor Irrigation in Bangladesh"*, Dhaka, February 1994.
- Montgomery, R., 1983. *"Open Market Grain Sales as a Public Policy Instrument for Moderating Food Price Fluctuations in Bangladesh"*, Dhaka, July (mimeo.).
- Nino, C. (1998), *Efficiency of Targeted Food programs*, (Dhaka: IFPRI).
- Nino, C. (1999), *Impact of the 1998 Flood on Labor Markets and Food Security and Effectiveness of Relief Operation* (Dhaka, IFPRI).
- Osmani, S.R. et al. (1990), *Pricing and Subsidy Policies for Bangladesh Agriculture* (Dhaka:BIDS).
- Osmani, S.R., 1993. *"Reassessment of Poverty Record: A Rejoinder"*, the Bangladesh Development Studies, March, pp. 69-78.
- Osmani, S.R., and Quasem, M. A., 1990. *Pricing and Subsidy Policy for Bangladesh Agriculture*, Dhaka: BIDS, Research Monograph # 11, February.
- Rahman, A., and Mahmud, W., 1988. *"Rice Market Intervention in Bangladesh"*, in *Evaluating Rice Market Intervention Policies: Some Asian Examples*, Manila, April.
- Rahman, M., 1994. *"Liberalization of Credit for Growth"*, Dhaka: IFPRI, January.
- Raj Krishna and Chhibber, A., 1983. *"Policy Modeling of a Dual Grain Market: The Case of Wheat in India"*, Washington, D.C.: International Food Policy Research Institute, May.
- Ravallion, M., *Markets and Famine*, Oxford: Clarendon Press, 1987.

- Samad, A., Haque, A., and Sidhu, S.S., 1989. *"Low Cost Intervention Study for the Fertilizer Market of Bangladesh"*, Dhaka, IFDC, November.
- Shahabuddin, Q., 1992. *"A Disaggregated Model for Stabilization of Rice Prices in Bangladesh"*, the Bangladesh Development Studies, March.
- Shahabuddin Q, and others, 1999, *"Domestic Rice Procurement Programme in Bangladesh-An valuation"*, IFPRI, Dhaka
- Shahabuddin Q., 1992, *"A Disaggregated Model for Stabilization of Rice Price in Bangladesh"* the Bangladesh Development Studies. BIDS.
- Shahabuddin, Quazi and Dorosh, Paul A. (1998), *Rice Market in the 1997-98 Aman Season: A Rapid Appraisal Analysis* (Dhaka: IFPRI).
- Shahabuddin, Q (1998), *Nature and Extent of Fluctuations in Rice Prices in Bangladesh* (Dhaka: IFPRI).
- Sahabuddin, Q. and Zahir, S. (1994), *Analysis of Market on Conduits of Macro-Micro Transmission in Bangladesh* (Dhaka: CIRDAP).
- Sohban, R. (1980), *"Policies of Food and Famines in Bangladesh," Bangladesh Politics ed. E. Ahmed* (Dhaka: Centre for Social Studies).
- Sriglitz, Joseph E. (1999), *State versus Market: Have Asian Currency Crises Affected the Reform Debate?* (Dhaka: University Press Limited).
- Theil. H., 1961. *Economic Forecasts and Policy*, Amsterdam: North-Holland, 1961.
- Timmer, C.P., Falcon, W., and Pearson, S., 1983. *Food Policy Analysis* Baltimore: John Hopkins.
- Timmer, C.P., 1989. *"Food Price Policy the Rational for Governemtn Intervention"*, Food Policy, pp. 17-27.

World Bank, Bangladesh: Food Policy Issues, Washington, D.C.: 1979.

World Bank, Bangladesh Food Policy Review: Adjusting to the Green Revolution, Washington, February.

M. Rahman, "*Available Procedure and Open Tender Mechanism of Procurement*," Bangladesh Food Policy Project (International Food Policy Research Institute. Dhaka. 1992). Mimeo

Appendix.1

The following checklist has been prepared for performing study entitled "A Study on the rice procurement system and to ensure food security in Bangladesh" a thesis paper submitted to the BRAC University as a partial fulfillment of the requirements for the Degree of Masters in Procurement and Supply Management.

Title of the Study: "A Study on the rice procurement system and to ensure food security in Bangladesh"

- 1) Rice Procurement in Bangladesh
- 2) Incentives to Rice Producers
- 3) Maintaining Adequate Stocks of Food Grain
- 4) Providing Farm Income to Small Producers
- 5) Criteria for Determining Procurement Price of Rice
- 6) Cost Production Criterion of Rice
- 7) World Food Grain Price Criterion
- 8) Domestic Market Price Criterion
- 9) Estimates of Procurement Price

- 10) Form of Grain
- 11) Location of Procurement Food Grain
- 12) Mode of Purchase
- 13) Processing Capacity
- 14) Supply Time
- 15) Accounting Flaws
- 16) Advance Payment
- 17) Quality and Quantity Check
- 18) Procurement through Open Tender
- 19) Factors in Design
- 20) Packaging
- 21) Delivery Points
- 22) Pricing
- 23) Quantity Procured
- 24) Quality Control
- 25) Schedule
- 26) Payment
- 27) Food Security
- 28) Food grain production and requirement
- 29) Domestic Food grain Production for Food Security
- 30) Government food grain procurement, imports and public stock situation
- 31) Global Phenomenon and Government steps

