

# AN EXPLORATION OF FERTILIZER SUPPLY CHAIN IN BADC.

Dissertation submitted in partial fulfillment of the  
Requirements for the Degree of  
Masters in Procurement and Supply Management

Submitted by  
Md. Tuhinuzzaman  
MPSM, Batch #7  
ID-14282015

**Masters in Procurement and Supply Management**

AUGUST 2015



**BRAC INSTITUTE OF GOVERNANCE AND DEVELOPMENT,  
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**Supervisor**

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Department of International Relations  
University of Dhaka



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## Certificate from supervisor

This is to certify that **Md. Tuhinuzzaman**, Cohort-3 (Session-2014), MPSM Batch # 7, ID-14282015 has prepared the thesis entitled “An exploration of fertilizer supply chain in BADC” under my supervision. I do hereby approve the style and content of this thesis. This is for the partial fulfillment of the requirement for the degree of Masters in Procurement and Supply Management (MPSM) at The BRAC Institute of Governance and Development (BIGD) in BRAC University.

AUGUST, 2015

Professor Md. Rasheduzzaman, PhD  
Department of International Relations  
University of Dhaka

## Declaration

It is hereby declared that no part of thesis, title as “An exploration of fertilizer supply chain in BADC” has been submitted or published elsewhere. The whole dissertation is prepared for academic pursuit and solely aimed for the partial fulfilment for the degree of Masters in Procurement and Supply Management (MPSM). The document is submitted to the BRAC Institute of Governance and Development (BIGD), BRAC University with due acknowledgement of the cited text and norms of standard research works.

Md. Tuhinuzzaman.

AUGUST, 2015

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## **Note on Access to Contents**

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**Md. Tuhinuzzaman**

**Author**



## Abbreviations

BADC	Bangladesh Agricultural Development Corporation
BCIC	Bangladesh Chemical Industries Corporation
BFA	Bangladesh Fertilizer Association
DAE	Department of Agricultural Extension
DAP	Di-ammonium Phosphate
DC	Deputy Commissioner
DFSMC	District Fertilizer and Seed Monitoring Committee
FDI	Fertilizer Distribution Improvement
GoB	Government of Bangladesh
HYV	High Yielding Varieties
IFDC	International Fertilizer Development Center
ILC	Inland letters of credit
KSS	Krishi Samabaya Samity
MoA	Ministry of Agriculture
MoP	Muriate of Potash
MP	Parliament Member
MRP	Maximum Retail Price
MT	Metric Ton
NFDCC	National Fertilizer Distribution Coordination Committee
NMS	New Marketing System
OMS	Old Marketing System
PDP	Primary Distribution Point
PSI	Private Sector Importer
SAAO	Sub-Assistant Agriculture Officer
SSP	Single Super Phosphate
TCCA	Thana Central Cooperative Association
TDP	Transportation Discount Point
TSC	Thana Sales Center
TSP	Triple Super Phosphate
UAO	Upazila Agriculture officer
UFFL	Urea Fertilizer Factory Limited
UFSMC	Upazila Fertilizer and Seed Monitoring Committee
UNO	Upazila Nirbahi Officer
UP	Union Parishad
USAID	United States Agency for International Development
PO	Pay order
DD	Demand draft

## **EXECUTIVE SUMMARY**

1. Chemical fertilizer was introduced in Bangladesh in the late 1950s and the fertilizer policy consisted of one basic tenet-complete public sector control over its procurement and distribution. This policy continued throughout the 1960s but since the War of Liberation the policy regime has undergone fundamental changes.
2. Bangladesh Agricultural Development Corporation (BADC) was established in 1961. Since inception BADC supplies fertilizer to farmer. The responsibility of procuring fertilizer from both domestic and external sources and distributing to the level of a small administrative unit (thana) rested solely with BADC.
3. There was a significant shift in policy on fertilizer distribution at the wholesale and retail levels during late 1970s. Finally, privatization of fertilizer trade was implemented supported by a policy of price deregulation in the early eighties which empowered the traders to sell at any price they could fetch in the market.
4. The government excluded fertilizers from the list of import restricted and allowed private sector to import fertilizer. The subsidy on fertilizers was withdrawn completely in December 1992 and importation and distribution of fertilizer made open.
5. Fertilizer distribution network is composed of appointed/licensed dealers who are expected to observe limitation, including selling only within designated areas. Government provides a supervisory role on the trade which also sets an indicative price level for traders to abide-by. Farmers collect fertilizers from three different sources: BCIC appointed fertilizer dealers and their representative (sub-dealer) shops, BADC dealers shops and local fertilizer retailer's shops.
6. The economic reasoning for providing fertilizer subsidy lies that it encourages farmers to produce more (food grain). Government of Bangladesh may opt for a selective, targeted subsidy scheme in place of the universal coverage of subsidy that is being practiced now.
7. Total fertilizer demand or requirement from household level is considerably higher than the corresponding official estimates. There is a tendency for fertilizer to be smuggled in or out depending on the comparative prices of fertilizers on both sides of the border.

# CHAPTER-1

## INTRODUCTION AND CONCEPTUAL FRAMEWORK

### **Introduction**

Bangladesh Agricultural Development Corporation (BADC) is the pioneer organization in Bangladesh providing agricultural inputs to the farmers such as seed, fertilizer and irrigation facilities. BADC was established in 1961. Since inception BADC supplies fertilizer to the farmer.

In 1992 government decided to privatize the fertilizer import and distribution system. But in 2006 government decided to import and distribute urea through BCIC and non urea fertilizer such as TSP, DAP and MOP through BADC.

Chemical fertilizers contributed significantly to the increase of crop production in Bangladesh. Soil health has deteriorated in recent years due to imbalanced use of fertilizers. Urea is used in disproportionate/over dosages, while TSP and MoP are used in much lower dosages than actual requirement.

Imbalanced use of chemical fertilizers is a consequence of lack of appropriate knowledge of the farmers regarding the crop specific dosages. Sometimes fertilizers are unavailable to farmers due to unavailability of required fertilizers in time. Higher price and defective distribution system is also cause of fertilizer crisis.

### **Problem statement**

BADC has own purchase, movement (transportation), storage and sales (distribution) division through which BADC controls its fertilizer supply network. Existing fertilizer supply network of BADC was established in 1999 but there is lack of coordination among the divisions; it requires modernization and training for development of the personnel. There is great scope for development of internal integration in the fertilizer supply chain.

### **Research question**

1. Which procurement method has been followed by BADC in sourcing of fertilizer?
2. How does BADC maintain its fertilizer transportation, storage and distribution system?
3. In what way fertilizer supply chain in BADC is internally integrated?

4. What is the functional efficiency of fertilizer supply chain in BADC?

### **Research objectives**

1. To review procurement, transportation and storage system of fertilizer and to improve the operational performance of existing fertilizer supply chain in BADC.
2. To assess fertilizer allocation and distribution system in BADC and its availability at the farmers level.
3. To increase the internal integration in the fertilizer supply chain in BADC.
4. To increase operational effectiveness within BADC (Among purchase, movement, storage and sales division).

### **Scope of the study**

The existing fertilizer related policies of Government of Bangladesh and procurement, transportation, storage and distribution system of BADC will be discussed in this study.

### **Limitation of the study**

Ministry of Agriculture formulates fertilizer related policies and they also fix the import quota (Private importers and BADC import approximately 50:50 basis of national requirement of non urea fertilizer) and at the same time they control allocation (The quantity of fertilizer distribute throughout the year based on district). BADC procure fertilizer under government to government arrangement. Transportation of fertilizer done through appointed carrier/receivers agent and there is lack of coordination between carrier/receivers agent and BADC regarding smooth transportation program. The main problem lies with the storage facilities and shortage of fertilizer is found to the godown. At present BADC have 1,55,166 MT storing capacity godown but average fertilizer stock level throughout the year around 4,00,0000 MT. BADC also faces problem in selling fertilizer in the sales level.

## CHAPTER 2

### LITERATURE REVIEW AND CONCEPTUAL DEVELOPEMENT

#### **Introduction**

Now a days Supply Chain Management (SCM) is emerging as a faculty, with the ever changing business trends. Supply chain management means anything from cross-functional process integration within a firm to total forward (customer)/backward (supplier) supply chain integration. Although its widespread recognition leads to several kinds of definitions by different industries and academics, these may be the central theme of supply chain management (SCM).<sup>1</sup>

Mentzer et al defines SCM as “the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purpose of improving the long-term performance of the individual companies and the supply chain as a whole”.<sup>2</sup>

Mentzer et al highlights the importance of integration: The new vision of supply chain management links all the players and activities involved in converting raw materials into products and delivering those products to consumers at the right time and at the right place in the most efficient manner.<sup>2</sup>

Supply chain management therefore consists of primarily building co-operative relationships across the supply chain, so that the whole chain works together to add value for the end customer in a profitable, risk-managed and competitive way.<sup>3</sup>

A supply chain is a sequence of different activities which starts from purchasing of raw materials from suppliers, and then it is transported to industry for manufacturing finished product, and then transportation of these products to customers.<sup>4</sup>

The Global Supply Chain Forum (GSCF) defines SCM as “The integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders.”<sup>5</sup>

The GSCF has identified the key processes in a supply chain as customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, product development and commercialization, and returns.<sup>5</sup>

## Stages of Supply Chain Management

As supply chain management (SCM) is a rather a new phenomenon in the field of study it is, as mentioned, still looking for its boundaries and depth. Nonetheless, the fundamental changes of the global business environment together with the changes in new technology are drivers of supply chain development.<sup>6</sup>

As companies adopt SCM and evolve with it, Nabi and Luthria discuss how SCM evolves in breadth from a narrow logistic scope, to becoming more of a multiple function phenomenon.

Stage one of development involves integrating transportation and warehousing functions, called physical distribution.

The second stage is named logistics, in which the procurement, manufacturing, and order management functions are added to SCM.

The scope in the third stage takes an outward turn, into integrated SCM, where both suppliers and customers become a part of the scope.

The fourth stage, named “super” SCM, involves even further functions such as marketing, product development (PD), and customer service.<sup>7</sup>

Poirier, nevertheless, has another view on supply chain evolution, which he presents as **a five level concept**:

Level one is called **enterprise integration**, where the company adopts a functional/process focus.

Level two, named **corporate excellence**, is where the focus turns intra-enterprise, expanding beyond the functional borders.

The third level is known as **partner collaboration** where the company expands its focus outwards to a more inter-enterprise nature.

The fourth level is called **value chain collaboration** where there is a total external focus.

Level five, the **full network connectivity** level, is complete when the company adopts a total business system focus.<sup>8</sup>

## Supply Chain Integration

The most widely recognized definitions of integration given by Kahn and Mentzer is “Integration is a process of bringing together the key activities of all departments of the organization”.<sup>9</sup>

According to Ajmera and Cook, integrating is sharing resources, which brings about lowered costs. The authors are of the opinion that integration should occur on several levels in the organization; operational, tactical and strategic.<sup>10</sup>

There are mainly two types or levels of integrations – internal integration and external integration. Internal integration means the integration within the organization i.e. between various departments, whereas external integration is concerned with collaboration between organizations (Chen et al).<sup>11</sup>

According to Bowersox et al in the context of supply chain, integration can be classified into six different integrations i.e. internal, supplier, customer, technology and planning, relationship, and measurement.<sup>12</sup>

Spens also discusses the concept of integration stressing that integration can mean both internal processes and then the integration of key processes across the supply network.<sup>11</sup>

“Integration is a key component of SCM” and refers to “linking major business functions and business processes within and across companies into a cohesive and high-performance business model.”<sup>11</sup>

As “SCM is the integration of business processes” from end users to original suppliers, “a process view of management is fundamental.” Spens found that there is an indication that SCM integration concerns business processes. Be that as it may, integration is “mutual responsiveness and collaboration between distinct activities or processes.”<sup>11</sup>

This discussion includes reference to Alter, who identified five levels (components) to integration: common culture, common standards, information sharing, coordination and collaboration.<sup>11</sup>

In short, supply chain integration describes the nature and intensity of supply chain relationships. The ultimate, true integration is where the entire supply chain works with aligned objectives, open and candid information, pooled resources and a simultaneous sharing of risks and rewards.

## **Challenges to SCM integration**

Carter et al identified fourteen key challenges in their study which must be met to gain true supply chain integration:

The first is finding a vision of financial and non-financial results to improve the supply chain integration.

The second is developing elements that support the vision: people, organization, and culture.

Thirdly the organization must develop customer-centric metrics, and fourthly develop multiple supply chains, chains either for segments and/or customers.

The fifth key challenge is identified as correctly positioning work globally, which is followed by the sixth challenge, namely applying supply chain orientation into product and service design decisions.

The seventh key challenge is making sourcing a first level priority and then focus and stay consistent in relationships with customers and suppliers is the eighth challenge.

A company then has to create efficient sales and operations processes and develop databases in which data and information are valid and reliable as ninth and tenth challenges.

The eleventh challenge is developing capabilities and tools to support decisions in a more complex and risky environment followed by challenge number twelve: build trust within and across organizations in the supply chain.

Number thirteen is shared risks equitably among the partners in the supply chain.

And finally, as fourteenth challenge comes sharing rewards equitably among supply chain partners.<sup>13</sup>



## **Integration benefits**

Success of integration is “predicated on close cooperation inspired by a perception of mutual benefits.”<sup>15</sup> Integration has to do with the competitive edge of those committed to the supply chain: Supply chain integration is motivated by increase in supply chain competitive advantage.<sup>2</sup> Integration is important as it is desired for its capability of bringing about better performance at lower cost.<sup>14</sup>

Lee and Whang identify four key dimensions of supply chain integration. The four dimensions increase by degree of integration and coordination: First come information integration, which focuses on data and information that can influence actions and performance of other members in the supply chain (such as demand data, inventory, capacity, schedules and plans, both in real-time and online).

The second is called planning synchronization, where the step up in coordination and integration now is expressed through product introduction, forecast, replenishment coordination through joint design and execution. Actions are coordinated through focusing on what is done with the information (such as order fulfillment).

The third dimension is called workflow coordination, which focuses on how to use the information. Workflows are streamlined and automated through the information shared. It is then important to remember that integration dimensions, internally or externally oriented, can be tangible (e.g. regard product flows) or intangible (e.g. information sharing).<sup>15</sup>

According to Hakansson and Persson, we can identify at least three different trends in growths of logistics solutions within industry during past years: First, increased integration of supply chain activities across boundaries of the firm aimed at reducing costs which discovered the need for closer cooperation and cooperation coordination with suppliers and customers.

Another trend characterizing emerging supply structure is the improved specialization of individual companies. Outsourcing of traditional activities including logistics activities is an example of such trend.

Finally, the third trend concerns change and innovation. Importance of response to market changing demands has forced companies to be more agile, responsive, and intelligent.<sup>16</sup>

## CHAPTER-3

### Fertilizer Import and Distribution system (1950-1992)

#### 3.1 Introduction

In the early 1950s the Department of Agriculture was entrusted to procure, store, distribute and retail sale of fertilizer among farmers. But, inadequate and unsatisfactory progress in the programme to manage fertilizer gradually became visible. This led to the creation of Bangladesh Agricultural Development Corporation (BADC) in 1961. BADC took over the official responsibility of distribution and marketing program in 1963.

Government tightly controlled fertilizer distribution. At that time, BADC was solely responsible for all import, procurement, transportation, storage, maintenance of sufficient stock at the godown and sale of fertilizer all over the country and started selling fertilizers at highly subsidized prices.<sup>17</sup>

Table-1: Timeline indicating main events of fertilizer distribution system in Bangladesh

Time span	Main Events
Late 1950s	Introduction of chemical fertilizers. Procurement, storage, distribution & retail sale of fertilizer were entrusted to Department of Agriculture.
1951	Introduction of urea fertilizer.
16 October, 1961	Establishment of Bangladesh Agricultural Development Corporation (BADC) for all import, procurement, transportation, storage, maintenance of sufficient stock at the godown and sale of fertilizer all over the country.
1962-78	Free trading in fertilizer was almost absent. BADC played a dominant role in fertilizer distribution through transit, intermediate warehouses, TSCs and TCCAs. Private dealers got license to sell in a restricted area. Prices were fixed by the government. Private dealers had to maintain registers.
Mid 1970s	Phasing out of fertilizer subsidies.
1 <sup>st</sup> December 1978- 1 <sup>st</sup> July 1980	The New Marketing System known as Fertilizer Distribution Improvement (FDI-1) was launched. The NMS was formally initiated first in Chittagong Division and then expanded to all over the country by July 1980.
1978-1983	BADC withdrew from retail and wholesale markets at thana levels, the primary distribution points.

1982-1983	Licensing requirement was abolished and restriction on movement removed (except for 8 kilometer border zone with India).
1982-84	Deregulation of fertilizer price took place by April 1983. Farm level prices and retail prices were decontrolled.
Mid-1980s	The creation of a competitive fertilizer market began and the process was almost completed by mid-1990s.
1985-86	Wholesaling and dealership were made free from BADC.
March 1987- August 94	FDI-2 was launched concentrating less on BADC and more on strengthening the role of the private sector.
1988-89	Private traders and distributors were allowed to make bulk purchase and import TSP and MoP.
1989	Severe urea crisis. The private sector dealers/distributors were permitted to lift urea first time from UFFL from March, 1989. They also lifted imported fertilizers directly from vessels and ports.
June 1989	Commercial credit program for private sector dealers.
July 1990	Use of Inland Letter of Credit (ILC).
1990-91	Private dealers were allowed to import all kind of fertilizers.
1992	End of public sector role in fertilizer distribution, and subsidy on TSP and MoP. Free import from world market began.
December 1992	Completion of deregulation in fertilizer marketing.
6 <sup>th</sup> December, 1992	Total removal of explicit subsidy on fertilizer. The private dealers were allowed to import urea. Import prices were liberalized.

Source: A quantitative analysis of fertilizer demand and subsidy policy in Bangladesh-Abul Barkat. Page No: 21-22.<sup>18</sup>

From 1990-91 the private companies/dealers were allowed by the government to import all kinds of fertilizers. On 16 August 1991 subsidies on some fertilizers were partially withdrawn. In the FY 1992-93, major policy decisions were taken and implemented such as the complete elimination of subsidy from fertilizer, the freedom of the private sector to import fertilizer on a full cost basis along with its marketing and distribution and permitting the private sector access to foreign exchange reserves to import fertilizer. The deregulation in fertilizer marketing was completed in December 1992. The explicit subsidy on fertilizers was totally removed on 6 December 1992. However, fertilizer subsidy was re-introduced in 1996.<sup>17</sup>

## CHAPTER-4

### Privatization of fertilizer Import and Distribution system (1993-2006)

#### **Introduction**

The main argument in favour of privatization of fertilizer trade in Bangladesh is that the private sector responds quickly to market signals and can operate more efficiently than the government bureaucracy in ensuring adequate supply of fertilizers at the right time. The government system is slow to respond to a crisis, as it has to go through a number of layers of decision making before action could be initiated.

The government excluded fertilizers from the list of import-restricted goods and allowed the private sector to import fertilizers. On 6 December 1992 the subsidy on fertilizers were withdrawn completely and importation and distribution of fertilizer was made open.

The open market system for domestically produced Urea experienced a setback in 1995. Government decided to bring the market under its direct control to mitigate the crisis reintroducing controls over marketing and distribution of Urea, which is in place today.

In 1996 Government decided to bring the market under its direct control to mitigate the crisis and price intervention.

Since fertilizer is a key agricultural input whose effectiveness depends on timely application on the crop, delayed actions could have disastrous effects on crop production. Under the government system it was necessary to maintain sufficient stocks of fertilizer ( at least three months requirement for urea, and five months for TSP and MoP) in order to minimize the risk on account of the delay in government action.

## Impact of Liberalization of Fertilizer Sector

Privatization of the fertilizer market was completed in 1992 and all fertilizer imports were handled by the private sector. All in-country from import arrival to final sales to farmers was done by private sector. At various levels in the fertilizer sub-sector, significant economies were achieved as a result of increased private participation in fertilizer import and marketing. Such as:

1.	Increased fertilizer use;
2.	An established commercial credit system;
3.	Creation of dealer association and Bangladesh Fertilizer Association (BFA);
4.	Increase in number and effectiveness of private fertilizer importers, distributors and dealers;
5.	Fertilizer market more responsive to customer needs, increased employment, agriculture production and generation of increased profits.

However, the liberalization of fertilizer trade failed to produce a favorable impact on the agriculture sector. Some of its adverse impacts are discussed below:

### **Price hike and profiteering**

The fertilizer market was liberalized with the aim of developing a competitive free market. But this leads to price hike and private profiteering.

### **Adulteration of fertilizer**

There are complaints from farmers that they are often victims of fertilizer adulteration. At the storage and distribution points adulteration might also occur. Fertilizer market is vitiated with low quality fertilizers imported mainly from India and China for higher profit by the importers.

### **Toxic chemicals found in fertilizer**

Scientists have found high concentration of toxic chemicals like cadmium, lead and chromium in fertilizers which may affect agriculture ecosystem and thereby human health through food chain.

## CHAPTER-5

### Fertilizer Production, Import and Distribution system (2006-2014)

#### **Fertilizer Intermediaries in Bangladesh**

**Factories:** The Bangladesh Chemical Industries Corporation (BCIC), a state owned organization is responsible for fertilizer production and the operation of six urea fertilizer factories, one TSP and one DAP plant in the country (Annexure-1). Distribution of BCIC's fertilizer production is made from the factory gate to the appointed dealers at prices determined by the Government. The BCIC's production is uneven, rarely producing at a rated capacity. Production and import of urea is always controlled by the government and is distributed to the farmers through BCIC's appointed 5000 dealers at heavily subsidized rates. Moreover, the production of small quantities of TSP and DAP are also at the government's command. BCIC website.

**Importers:** Bangladesh imports almost full volume of her demand of TSP, DAP and MoP. A very small amount of TSP and DAP are produced by BCIC. Import and marketing of the TSP, DAP and MoP are controlled by BADC and the Private sector importers (PSI). The government determines the requirement for different fertilizers for a budget year and then allows importers to meet up the demand.<sup>21</sup>

**Dealers:** The fertilizer dealers are usually big, affluent traders. They invest huge/big amounts of capital in their businesses. They have their own warehouses. Their activities are concentrated in the local market. In fact, they are the traders who mainly control the fertilizer market. The dealers purchase a fixed portion of the fertilizer from the factories and another portion of fertilizers from the importers. BCIC's appointed dealer can purchase Urea fertilizer produced by BCIC and non-urea fertilizer imported by BADC but BADC's appointed dealers are only authorized to purchase non-urea fertilizers imported by BADC.<sup>20</sup>

**Sub dealers:** The sub-dealers are the smaller traders. Their investment is much smaller than those of the union dealers. They purchase fertilizer mainly from wholesale dealers. They sell fertilizer to the farmers at fixed prices.

## **Present Fertilizer Procurement system in BADC**

BADC again entrusted with the responsibility of procuring non-urea fertilizer through tendering from July 2006 and it will continue up to June 2008. As the demand for fertilizer increased and government faced various problem import of fertilizer through tendering, initiative was taken to import fertilizer through Government to Government arrangement. From July 2008 BADC started procurement of non-urea fertilizer under Government to Government arrangement. Under Government to Government arrangement BADC imports TSP from Tunisia and Morocco and MOP from Belarus and Russia. In 2010 BADC also started import of DAP from Tunisia and Morocco. To meet up the increasing demand BADC also started importing of MOP from Canada in 2014. Under Government to Government arrangement BADC imports fertilizer from the above mentioned countries based on the following price formula:

### **Price Formula for MOP (Belarus)**

As per the clause no. 5 of sales contract no. 2015-00127 on 26 March 2015 between JSC Belarusian Potash Company (BPC), Belarus and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

#### A. For Shipments during 1<sup>st</sup> - 15<sup>th</sup> of every month

Reference will be made to 1<sup>st</sup> Fertilizer Market Bulletin (FMB) weekly publication report published during the previous month. Under the price heading South East Asia "Cost and Freight" (CFR), the average value indicated less 4.75% will be the price on CFR basis for the relevant shipment contract between Buyer & Seller. Actual price will be confirmed by both parties in additional agreements thereto before shipment.

#### B. For shipments during 16<sup>th</sup> - end of every month

Reference will be made to the last FMB weekly publication report published during the previous month. Under the price heading South East Asia CFR, the average value indicated less 4.75% will be the price on CFR basis for the relevant shipment contract between Buyer & Seller. Actual price will be confirmed by both parties in additional agreements thereto before shipment.

In the event a price is not indicated in the FMB publication, reference will be made to the latest Ferretcon publication. Under the price heading South East Asia CFR, the average value indicated less 4% will be the price on CFR basis for the relevant shipment.

### **Price Formula for MOP (Russia)**

As per the clause no. 5 of sales contract no. BADC-2015 on 26 March 2015 between Federal State Unitary Enterprise "Foreign Economic Corporation (PRODINTORG)", Russia and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

#### A. For Shipments during 1<sup>st</sup> - 15<sup>th</sup> of every month

Reference will be made to 1<sup>st</sup> Fertilizer Market Bulletin (FMB) weekly publication report published during the previous month. Under the price heading South East Asia "Cost and Freight" (CFR), the average value indicated less 4.75% will be the price on CFR basis for the relevant shipment contract between Buyer & Seller. Actual price will be confirmed by both parties in additional agreements thereto before shipment.

#### B. For shipments during 16<sup>th</sup> - end of every month

Reference will be made to the last FMB weekly publication report published during the previous month. Under the price heading South East Asia CFR, the average value indicated less 4.75% will be the price on CFR basis for the relevant shipment contract between Buyer & Seller. Actual price will be confirmed by both parties in additional agreements thereto before shipment.

In the event a price is not indicated in the FMB publication, reference will be made to the latest Ferretcon publication. Under the price heading South East Asia CFR, the average value indicated less 4% will be the price on CFR basis for the relevant shipment.

### **Price Formula for MOP (Canada)**

As per the clause no. 3 of contract no. 103298 on 12 May 2015 between Canadian Commercial Corporation (CCC), Canada and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

#### A. For shipment during 1<sup>st</sup> half of every month (Being the 1<sup>st</sup> to the 15<sup>th</sup> of every month):

Reference will be made to the first Argus Fertilizer Market Bulletin (FMB) Potash weekly publication report published during the previous month. The price on CFR basis for the relevant shipment will be the average of the high and low indicated under the price heading South East Asia Cost and Freight (CFR) less 4.5% of the average.

#### B. For shipment during 2<sup>nd</sup> half of every month (Being the 16<sup>th</sup> to the last day of the month):

Reference will be made to last FMB weekly publication report published during the previous month. The price on CFR basis for the relevant shipment will be the average of the high and low value indicated under the price heading South East Asia CFR less 4.5 % of the average.



In case, none of the FMB are available or the South East Asia CFR price is not quoted, then the price should be based on the average price quoted in the most recent available issues of FMB, immediately preceding the date of the agreed “shipment”, using either formula “a” or formula “b” as the case may be.

### **Price Formula for TSP (Tunisia)**

As per the clause no. 11 of contract no. 12.225.007.02.03.075.2014-646 on 04 November 2014 between Groupe Chimique Tunisien (GCT), Tunisia and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

A. Average of the price of the Tunisian/Moroccan TSP, published in the Fertecon and FMB 21 days prior to first day of agreed “lay can”, provided the price dispersion between the high and low prices in Fertecon/FMB is less than or equal to USD20.00.

B. In the event the price in Fertecon/FMB exceeds USD20.00, then the price will be the average of the lower bound of the price range and the lower bound plus USD20.00 minus USD 3/MT.

C. In case, none of the FMB/Fertecon are available or the Tunisian price is not quoted, then the price should be based on the average price quoted in the most recent available issues of FMB/Fertecon, immediately preceding the date of the agreed “lay can”, using either formula “a” or formula “b” as the case may be.

D. The final price will be calculated as per above formula (a or b or c), less USD 3.00 Per Metric Ton.

### **Price Formula for TSP (Morocco)**

As per the clause no. 11 of contract no. 12.225.007.02.03.018.2012-485 on 05 November 2014 between OCP S.A., Morocco and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

A. Average of the price of the Moroccan TSP, published in the Fertecon and FMB minus USD 3/MT, 21 days prior to first day of agreed “lay can”, provided the price dispersion between the high and low prices in Fertecon/FMB is less than or equal to USD20.00.

B. In the event the price in Fertecon/FMB exceeds USD20.00, then the price will be the average of the lower bound of the price range and the lower bound plus USD20.00 minus USD 3/MT.

C. In case, none of the FMB/Fertecon are available or the Moroccan price is not quoted, then the price should be based on the average price quoted in the most recent available issues of FMB/Fertecon, immediately preceding the date of the agreed “lay can”, using either formula “a” or formula “b” as the case may be.

### **Price Formula for DAP (Morocco)**

As per the clause no. 11 of contract no. 12.225.007.02.03.018.2012-486 on 05 November 2014 between OCP S.A., Morocco and Bangladesh Agricultural Development Corporation (BADC), Bangladesh price will be determined on the basis of the following formula:

A. Average of the price of the Moroccan DAP, published in the Fertecon and FMB minus USD 3/MT, 21 days prior to first day of agreed “lay can”, provided the price dispersion between the high and low prices in Fertecon/FMB is less than or equal to USD20.00.

B. In the event the price in Fertecon/FMB exceeds USD20.00, then the price will be the average of the lower bound of the price range and the lower bound plus USD20.00 minus USD 3/MT.

C. In case, none of the FMB/Fertecon are available or the Moroccan price is not quoted, then the price should be based on the average price quoted in the most recent available issues of FMB/Fertecon, immediately preceding the date of the agreed “lay can”, using either formula “a” or formula “b” as the case may be.

**Benefits of import fertilizer to Government to Government procurement:**

SL No.	Benefits
1.	Under Government to Government arrangement lead time for procurement of fertilizer is lower than tendering system.
2.	In this procurement system BADC will receive price offer 21 days prior to the LAYCAN or loading period so that BADC purchase fertilizer based on real time market price.
3.	Government to Government arrangement does not require any tender security or performance security and it reduces the operating cost of supplier and finally it will reduce the procurement price of fertilizer.
4.	After signing of contract BADC gets umbrella approval of the contract from the Cabinet Committee on Government Purchase (CCGP). Based on the CCGP approval Ministry of Agriculture gives BADC lot wise approval of the price offer.
5.	BADC fixed shipment schedule based on the demand of fertilizer all over the budget year and Government to Government arrangement ensures supply of fertilizer according to fixed shipment schedule.
6.	Under this system quality of the imported fertilizer is guaranteed.
7.	Long term partnership sourcing is developed by BADC through government to government procurement and it helps BADC to develop strategic relationship with the major non urea fertilizer around the world.
8.	It also helps BADC to develop their human resource. A pool of expertise develop in BADC for international procurement that helps them improving their fertilizer supply chain

Besides, above noted benefits from government to government procurement it has some drawbacks as well. When the price is increasing it may reflect in the FMB or Fertecon publication and price formula within a short period of time. But when the price is decreasing it may take over a period of time to reflect in the FMB and Fetecon publication. There is no provision for Liquidity Damages (LD) in case of late shipment.

## **Present Fertilizer Transportation system of BADC.**

For Cost and Freight (CFR) contract i.e. for MOP the receiver's agent is responsible to receive MOP fertilizer at outer anchorage for subsequent lightering, weighing, bagging and transportation to destined stores by trucks as per movement program issued by BADC.

For Free on Board (FOB) contract i.e. for TSP and DAP the chartered party or carrying agent is responsible to receive fertilizer at exporters port by mother vessel and subsequent lightering at outer anchorage of importer's port followed by weighing, bagging and handing over to C&F cum carrying agent as per movement program issued by BADC. The C&F cum carrying agent is responsible for transportation of fertilizer to destined stores by trucks.

Based on discharge port, the present fertilizer transportation system is divided into the following ways:

Transportation from different ghats of Chittagong port: Fertilizers are transported to the godowns of BADC situated in Chittagong, Dhaka and Sylhet division.

Transportation from different ghats of Mongla port: Fertilizers are transported to the godowns of BADC situated in Khulna, Barishal, Rajshahi and Rangpur division.

### **BADC faces a lot of problems in Transportation of fertilizer. Some of the problems are mentioned below:**

1. Due to the space crisis of godowns, as per movement program fertilizer cannot be transported to the respective godowns.
2. Lack of coordination between the shipping agent and carrying agent.
3. LMD shortage and less weight of bags creates obstacles to receive the fertilizer.
4. Transportation cannot be accomplished within the contract price.

### **Suggestive measure that should be taken in Transportation of fertilizer which are mentioned below:**

1. Coordination among the shipping agent, PSI agent and carrying agent in fertilizer transportation system.
2. The number of carrying agent should be minimized.
3. Sometimes carrying agent does not arrange sufficient trucks for transportation of fertilizer intime.
4. Political programmes like blockade hartal, strike and other activities hamper the smooth flow of transportation program.
5. Labor those are involved in unloading, bagging and loading of fertilizer some time create problem for transportation schedule which must be minimized.

## **Present Fertilizer Storage System of BADC.**

At present BADC is storing fertilizer in their own godowns much higher to its actual capacity due to shortage of sufficient spaces. At the same time the better and bigger stores of BADC are being used by BCIC. BADC fails to maintain proper storage system as they have to preserve much higher quantity of fertilizer than the actual capacity. Once BADC had 466 godown for storing fertilizer (Annexure-2). At present BADC has only 117 godown suitable for storing of 1,55,166 MT fertilizer (Annexure-3).

BADC faces a lot of problems in storing fertilizer which are mentioned below:

1. BADC has to store much higher quantity of fertilizer than its the actual capacity.
2. BADC fails to maintain storage principle like first in first out (FIFO) system.
3. It's not possible to maintain proper stocking i.e. ship wise, fertilizer wise and date wise separate stock.
4. BADC has to make much higher stock, which is neither good for stored fertilizer nor for store management.
5. There is always a risk of disruption of warehouse as BADC preserve much higher quantity of fertilizer than the actual capacity.
6. BADC suffers from acute shortage of required manpower, logistics and working capital facilities for proper store management.
7. There is mismanagement between import of fertilizer and storage facilities.
8. Lack of judicious consideration between actual quantity of fertilizer stored and allotment of fertilizer by the ministry for sale.

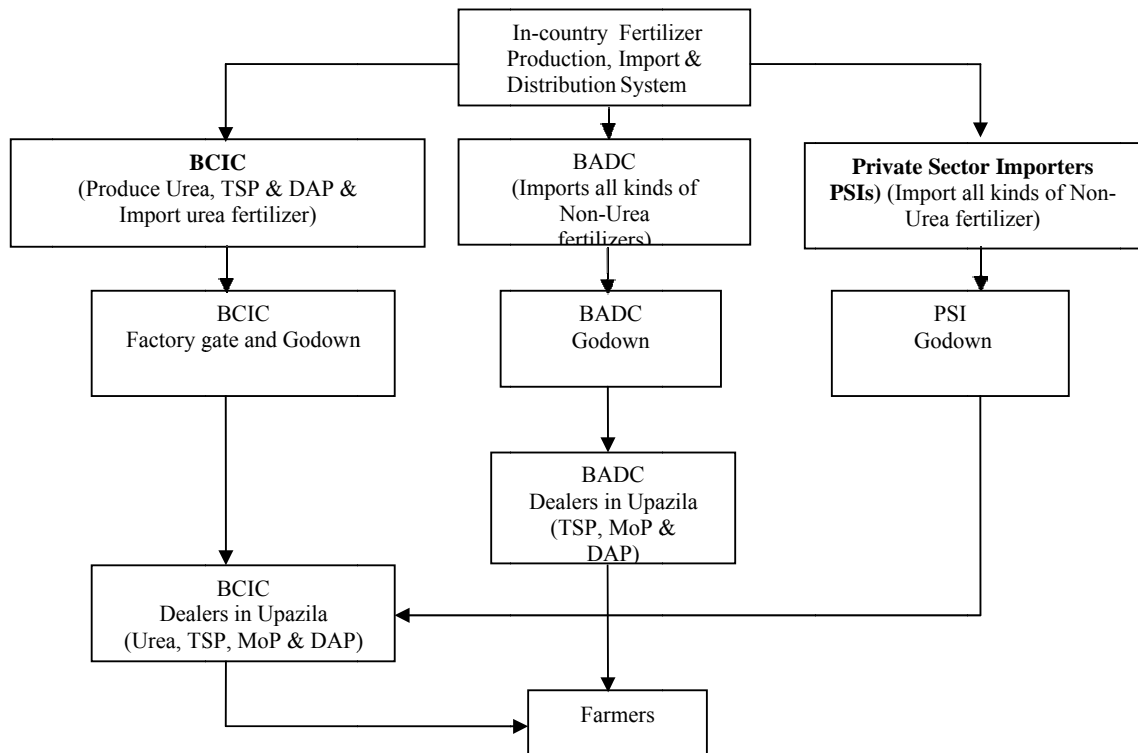
Following necessary actions are to be taken for improvement of storing fertilizer:

1. BADC should import limited quantity of fertilizer which they could store properly.
2. BADC has to increase storage capacity by capturing stores from BCIC, at least a portion at each location.
3. Ministry of Agriculture should make judicious allotment of fertilizer for considering actual quantity of fertilizer stored by BADC.
4. Required manpower, logistics and operating fund should be provided at each store.
5. Monitoring and supervision of stores should be strengthened.
6. Mechanized system of store management is needed to introduce.
7. Digitalization of store information service and software based store management is required.

## Present Fertilizer Distribution system in Bangladesh

The distribution network of the fertilizer market is composed of appointed/licensed dealers who are expected to observe certain limitations, including selling only within designated areas. The government carries out a supervisory role on the trade which also sets an fixed price level for traders to abide by. The National Fertilizer Distribution Committee (NFDC) allocates fertilizer quotas to the dealers and dealers collect fertilizer according to the given quotas. A district level committee, headed by the Deputy Commissioner is supposed to ensure strict discipline in the distribution network. Imports of phosphate and potassium fertilizer are still the playing field for private traders. Dealers are organized into a politically powerful association. Fertilizer distribution channels in Bangladesh is shown by a flowchart (Figure-1)

Figure-1: Fertilizer Distribution Channels (This figure is drawn by the researcher)



## Channels of Fertilizer Distribution

Generally, farmers collect fertilizers from three different sources:

1.	BCIC appointed fertilizer dealers shops.
2.	BADC appointed fertilizer dealers shops.
3.	Local fertilizer retailer's shops.

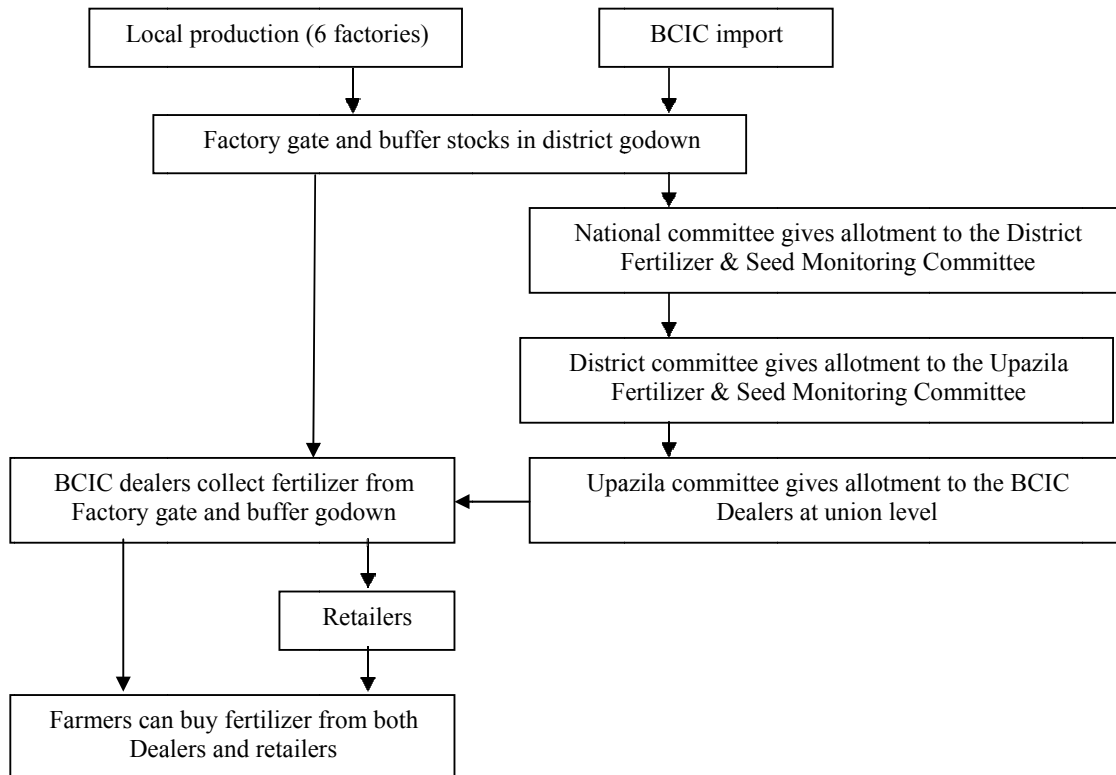
On the other hand, dealers lift fertilizer from BCIC, BADC and Private Sector Importers (PSI) on the basis of allotment made by the National Fertilizer Distribution Committee (NFDC). Dealers collect their allotted fertilizer from different sources e.g., import points, BCIC fertilizer factories and buffer godown and BADC sales center (Annexure-4).

The distribution channels for both urea and non-urea fertilizers have close resemblance. The BCIC dealers who lift urea fertilizer from factory gate and buffer godown also procure TSP from factory gate and importers' warehouses. To the contrary, the BADC dealers collect non-urea fertilizers from BADC godown only. The farmers can buy fertilizer both from dealers (union level) and retailer (ward/village level) shops.

## Urea Fertilizer Distribution

The production, import and distribution of urea are still in the control of public sector. The BCIC appointed dealers at union level, with the allotment issued by the Upazila Fertilizer and Seed Monitoring Committee, procure urea from factory gate and buffer godown. In October 2009, provisions have been made to be appointing dealer in each union to make fertilizers readily available to the farmers. So, the farmers can purchase urea from both dealers and retailers. Urea fertilizer distribution system is shown by a flowchart (Figure 2.2)

Figure-2: Distribution flowchart for urea fertilizer



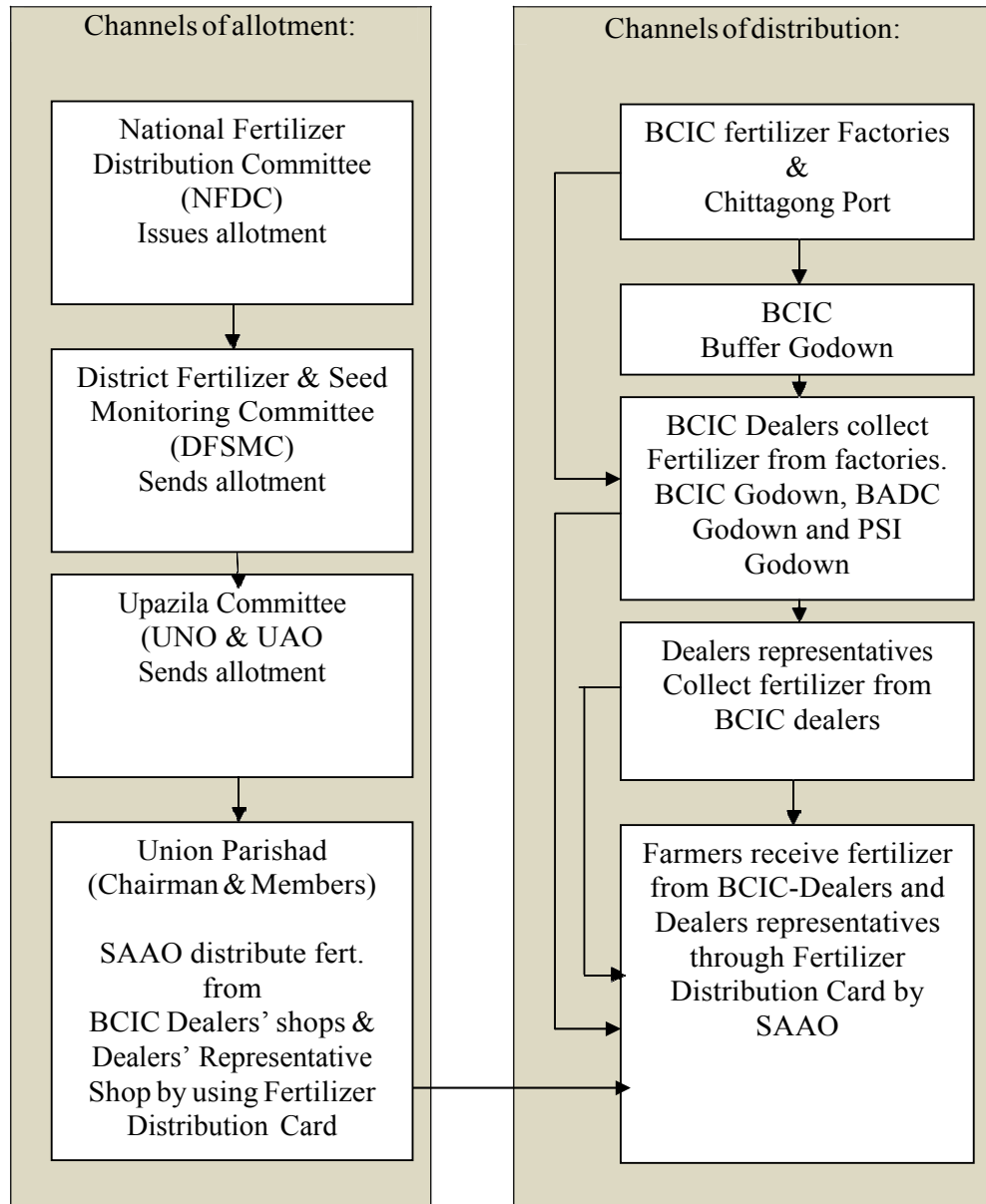
Source: A quantitative analysis of fertilizer demand and subsidy policy in Bangladesh-Abul Barkat. Page No: 55.<sup>18</sup>



### BCIC fertilizer distribution channels:

BCIC dealers lift urea fertilizer produced and imported by BCIC. At the same time they also lift non-urea fertilizer produced by BCIC, imported by PSI and BADC.

Figure-3: Distribution Channels of fertilizers produced and imported by BCIC



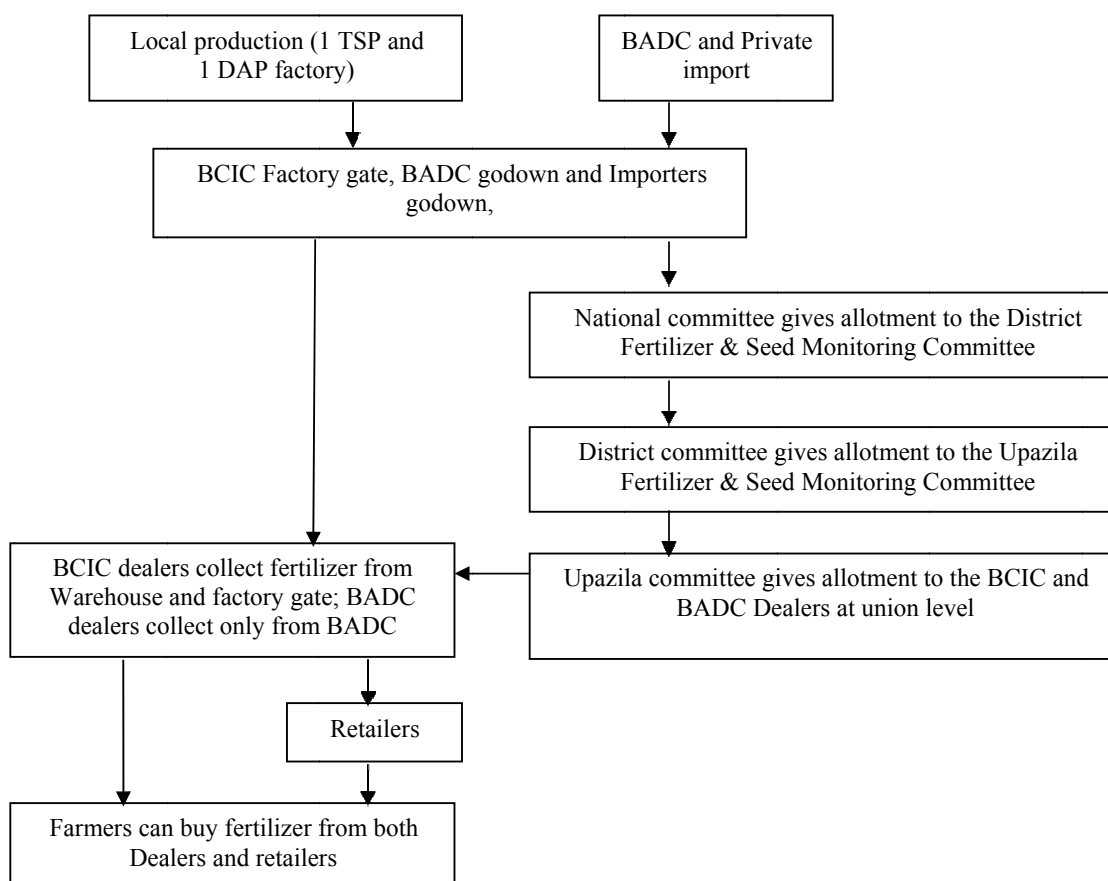
Source: A quantitative analysis of fertilizer demand and subsidy policy in Bangladesh-Abul Barkat. Page No: 51<sup>18</sup>

## Non-urea Fertilizer Distribution System

These fertilizers (TSP, DAP and MoP) are imported by private sector importers (PSI) and BADC. Urea fertilizer which is dealt by BCIC through the Ministry of Industries and BADC through Ministry of Agriculture deals with non-urea fertilizers. Distribution channels in many respects are quite alike to that of urea. The same BCIC dealers also lift out non-urea fertilizers from factory gate (Chittagong TSP Complex Ltd. and Chittagong DAP Fertilizer Co. Ltd), BADC godown and private sector importers warehouses. The warehouses are located at across the country. There is a limited number of BADC appointed dealers across the country who collect non-urea fertilizers exclusively from BADC godown. Farmers are allowed to buy non-urea fertilizers from BCIC and BADC dealers and retailers.

According to regulation, PSI must sell their imported fertilizers to the BCIC dealers and they also receive the PSIs part of allotments that they will get from the respective PSI's. Non-urea fertilizer distribution system in Bangladesh is shown by a flowchart (Figure-4)

Figure-4: Distribution flowchart of non-urea fertilizers (TSP, MoP and DAP)

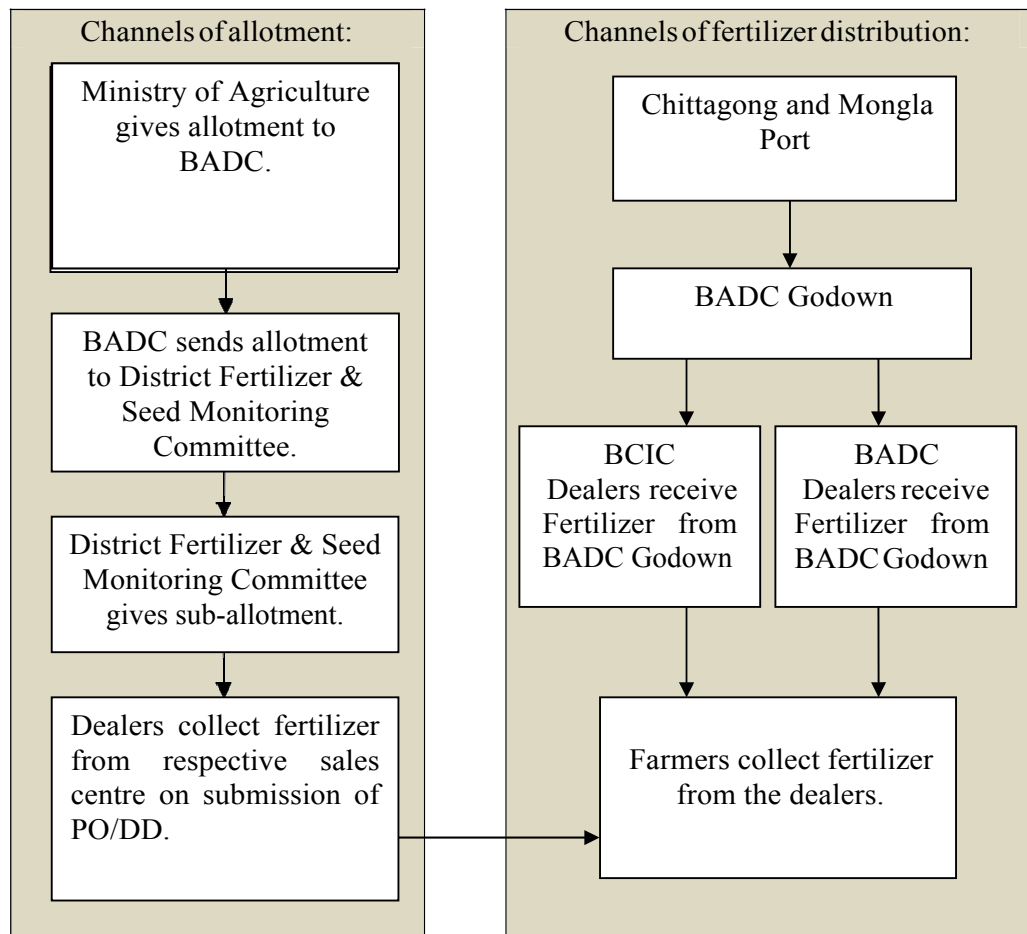


Source: A quantitative analysis of fertilizer demand and subsidy policy in Bangladesh-Abul Barkat. Page No: 56<sup>18</sup>

## BADC Fertilizer Distribution Channels

Ministry of Agriculture issues district wise allotment of non-urea fertilizer from BADC's stock. Fertilizer management division of BADC reallocate sale centre wise supply break-up against monthly allotment issued by MOA. On receipt of MOA monthly allotment and BADC's sale centre wise supply break-up, District Fertilizer & Seed Monitoring Committee (DFSMC) makes dealer wise sub-allotment. Concerned sale centre issue fertilizer sale order (Cash memo) for respective dealer on submission of PO/DD of required amount from scheduled bank against sub-allotment. Officer in-charge (DAD) issue delivery order (DO) against individual dealer after confirmation of PO/DD. Concern store officer make delivery of fertilizer to respective dealer from specific fertilizer godown after having DO issued by BADC. Non-urea fertilizer distribution system of BADC is shown by a flowchart (Figure-5)

Figure-5: Distribution Channels of BADC imported fertilizer (This figure is drawn by the researcher)



BADC dealers procure non-urea fertilizers only from the BADC godown imported by BADC. They have also demanded allotment of urea in addition to TSP and MoP. Otherwise, urea buyers coming for urea goes away and never come back for only TSP and MoP.

**Problems faced by BADC in fertilizer distribution:**

1. Acute shortage of required manpower and logistic support.
2. Shortage of required operating fund for handling of fertilizer.
3. Unavailability of required space for systematic management of store.
4. Dealers don't lift all types of fertilizer at a time. Sometimes they prefer to lift fertilizer 2/3 month after allotment.
5. Dealers are interested to lift the fertilizer in the crop season only.
6. Scheduled banks are away from the sale centers and banking system are not on line all over the country so transfer of deposited money is delayed.

**Following steps may be taken to improve the present distribution system:**

1. Provide required manpower and logistics support.
2. Improve storage facility.
3. Provide required fund for handling of fertilizer.
4. Trained-up storage personnel.
5. Reduce handling volume of fertilizer i.e. BADC should maintain buffer stock to overcome fertilizer crisis.
6. Scheduled bank facility for issuing Demand Draft (DD)/Pay Order (PO) to be facilitated at the premises of the sale center or nearest location.
7. Online banking facility should be ensuring in the remote area.

**Import and distribution of fertilizer by BADC from July 2006-June 2015  
are as follows:**

Table-2: Non-urea fertilizer import and sales by BADC from July 2006 to June 2015  
Quantity shown in MT

Serial No	Financial Year	Activities	Name of fertilizer			
			TSP	MOP	DAP	Total (FY)
1	2	3	4	5	6	7
1	2006-07	Import	1.31	0.97	-	2.28
		Sales	0.11	0.28	-	0.39
2	2007-08	Import	0.48	0.00	-	0.48
		Sales	1.60	0.68	-	2.28
3	2008-09	Import	1.49	0.80	-	2.28
		Sales	0.38	0.12	-	0.50
4	2009-10	Import	1.52	1.58	-	3.06
		Sales	1.69	0.93	-	2.62
5	2010-11	Import	2.06	1.85	0.99	4.90
		Sales	2.23	2.62	0.24	5.09
6	2011-12	Import	2.34	2.64	1.31	6.29
		Sales	2.10	2.31	0.72	5.13
7	2012-13	Import	3.13	4.17	0.52	7.82
		Sales	2.89	1.84	0.65	5.38
8	2013-14	Import	2.87	3.82	0.51	7.20
		Sales	3.41	5.38	1.09	9.88
9	2014-15	Import	4.16	3.78	1.57	9.51
		Sales	3.75	4.10	1.14	8.99

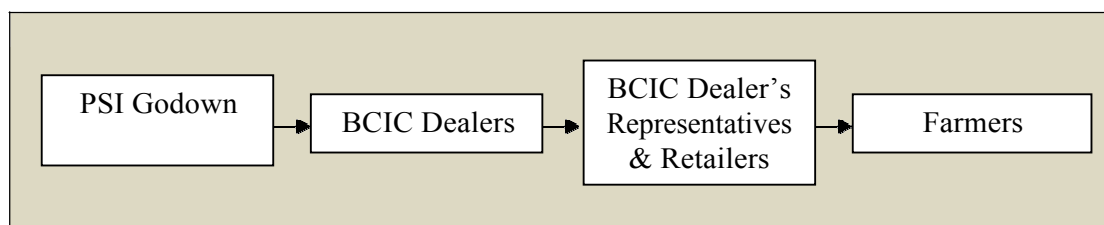
Table-3: Total fertilizer import and sales by BADC from July 2006 to June 2015 are as follows:

Financial Year	Name of fertilizer					
	TSP		MOP		DAP	
	Import	Sales	Import	Sales	Import	Sales
2006-07	1.31	0.11	0.97	0.28	-	-
2007-08	0.48	1.60	0.00	0.68	-	-
2008-09	1.49	0.38	0.80	0.12	-	-
2009-10	1.52	1.69	1.58	0.93	-	-
2010-11	2.06	2.23	1.85	2.62	0.99	0.24
2011-12	2.34	2.10	2.64	2.31	1.31	0.72
2012-13	3.13	2.89	4.17	1.84	0.52	0.65
2013-14	2.87	3.41	3.82	5.38	0.51	1.09
2014-15	4.16	3.75	3.78	4.10	1.57	1.14
Total=	18.34	17.73	18.27	16.25	4.9	3.84
Total fertilizer import= 41.51						
Total fertilizer sale= 37.82						

## Private Sector Importers (PSI) Fertilizer Distribution Channels

National Fertilizer Distribution Coordination Committee (NFDCC) (Annexure-5) usually issues allotment for non-urea imported fertilizers which the private sector importers are supposed to sell/distribute through the BCIC dealers. But, virtually they sell these to different agents. Moreover, it is alleged that Private Sector Importers (PSI) also gets supply from different hidden sources. To maintain control over fertilizer market sometime dealers sell fertilizers even at prices lower than those fixed by the government. In this case, some dishonest importers refill the empty sacks of original fertilizers with low grade fertilizers. Thus, the importers in the private sector retain their control in the fertilizer market and as a result it remains effervescent round the year. PSI imported non-urea fertilizer distribution system in Bangladesh is shown by a flowchart (Figure-6)

Figure-6: Distribution Channels of PSI imported fertilizers



Source: A quantitative analysis of fertilizer demand and subsidy policy in Bangladesh-Abul Barkat. Page No: 52<sup>18</sup>

## CHAPTER-6

### Fertilizer related policy and distribution/allotment of subsidy

#### **National Agriculture policy 2013:**

Agriculture is the main sector in Bangladesh where most of the workforce is employed. For guiding and betterment of agriculture sector government has formulated National Agriculture policy 2013.<sup>19</sup> Chapter 7 page 17 of National Agriculture Policy states about the fertilizer. As per the said policy Fertilizer is the indispensable agriculture input for improving crop production. Demand of fertilizer is increasing uninterruptedly due to extension of modern agriculture management and intensity of cultivation. For meeting increasing demand it is inevitable to ensure fertilizer supply timely. Imbalanced use of chemical fertilizer can cause soil erosion and it reduces crop productivity. In these situation, for maintain soil fertility effective measures should be taken and farmer should encourage using balanced fertilizer. Government should follow the following policy for strengthen fertilizer management:

SL No	Description
7.1	<b>Procurement and Distribution:</b>
	Fertilizer procurement, sourcing and distribution should be continue both in government and private sector.
	Necessary measures should be taken for maintaining buffer stock in regional, district and upazilla level.
7.2	<b>Quality control:</b>
	Government should ensure supply of quality fertilizer in farmer level.
	Production, import, marketing, distribution and use of any kind of fertilizer those are harmful for soil, plants and animal should be prohibited.
	Government should increase analytical facilities for ensuring fertilizer quality.
7.3	<b>Promotion/encouraging of compost and balanced fertilizer:</b>
	Government should ensure use of bio fertilizer and compost fertilizer to the farmer level.
	Awareness will be build up for maintaining ecological balance of soil nutrient.
	For using balanced, economical and bio fertilizer farmer will be encouraged and given necessary support.
	Production and uses of granular urea fertilizer will be encouraged.
7.4	<b>Fertilizer Monitoring:</b>
	Government will monitor fertilizer supply, storage, price and quality in various levels.

## Dealership Policy

Following the fertilizer crisis in early 1995, a judicial commission was formed by the government to probe into the matter. Meanwhile, the government, in consultation with the Bangladesh Fertilizer Association (BFA), appointed district level dealers through public advertisements and district-based selection committees headed by the Deputy Commissioners. BFA and the local chambers of commerce and industries had their representations in the selection committees.

With approval of the National Coordination and Advisory Committee for Fertilizer, the government has formulated the integrated policy 2009 to guide appointment of fertilizer dealers and fertilizer distribution.<sup>20</sup> The new policy came into force from 1st October, 2009. Its main objective was to ensure adequate and timely supply of fertilizers to the farmers. The salient features of the policy are as follows:

1.	Introduction of retail sale of fertilizers.
2.	Arrangement of ID Cards for the retailers.
3.	Abolition of sales representatives of dealers.
4.	Appointment of union-wise dealers.
5.	Restrict dealership within the district.
6.	Fix-up priorities in appointment of dealers.

### **Integrated policy for appointment of fertilizer dealers and fertilizer distribution – 2009.**

The main thrust of this policy is to remove all intricacies of the past developing a farmer friendly distribution system by invigorating union-wise dealer appointment. Union will be the 'focal point' for fertilizer distribution, and each union parishad will have one authorized dealer. In the appointment of new dealers for union/municipality, the residents of the union will be given first priority. Dealers will be appointed through public advertisements.

In general no dealer will be appointed in police/metropolitan station except for union/municipality. If significant amount of cultivable land is available in police/metropolitan station and appointment of dealer is required then dealer will be appointed by the District Fertilizer and Seed Monitoring Committee (DFSMC) (Annexure-6).



For appointment of new dealer Upazila Fertilizer and Seed Monitoring Committee (UFSMC) (Annexure-7) will publish advertisement for appointment of dealer in local/district/national daily. These advertisement for appointment of dealer will also publish in the notice board of Deputy Commissioner office, Office of the Deputy-Director, Department of Agriculture Extension, office of the Upazilla Nirbahi officer, office of the Upazilla agriculture officer, office of the Assistant Commissioner (Land), Upazilla BRDB office, Upazilla Cooperative office, Officer in charge in the police station and notice board of the respective Union parishad/Municipality. Advertisement expenses will be borne from the application fee.

The applicant should be resident in concerned Union/Upazilla/ District and supported by copy of national identity card and citizenship certificate from respective union/municipality should be submit. The applicant should have to be sales center with 50 metric tons capacity godown either his own or rented at union parishad/municipality. The applicant should be financially solvent and have to be Tk. 5.00 Lac financial solvency certificate from the bank. Trade license from union parishad/municipality/city corporation. The applicant should be minimum 18 years old. Dealership was cancelled before due to punishment they can not eligible to apply.

Applicant should submit application their own letter head pad. Photo copy of birth registration certificate, secondary school certificate, trade license, ownership of storage or rent agreement, bank solvency certificate and recent passport size photo (4 copies) all are attested by concerned upazilla's class one gazetted officer.

In the new policy, If there is only single applicant in a union, then he will be treated as a dealer subject to the fulfillment of other preconditions. BCIC, on recommendation of the District Fertilizer and Seed Monitoring Committee, will appoint dealers. Except in case of inheritance of an enterprise having a fertilizer dealership, the dealership is non transferable. It has been decided to reorganize the District Fertilizer and Seed Monitoring Committee (DFSMC) to monitor the overall fertilizer situation. All parliament members (MPs) of a district will act as advisers to the District Fertilizer Seller Selection Committee headed by the Deputy Commissioner.

Besides, the MPs in a Upazila will be advisers to respective Upazila Fertilizer and Seed Monitoring Committees. In the new policy, the MPs are also empowered to select retailers. The DFSMC is assigned with the responsibility to determine the maximum retail price of fertilizers for each district. However, the DFSM Committee is not empowered to allot/suballot urea or non-urea fertilizers to any institution under any circumstances.

According to the MoA, the new Policy if properly implemented will enable the farmers to purchase fertilizers from the local market as per their demand pattern. As regards to the mechanism in selecting retail sellers, an ID Card of fertilizer retail dealership from the

Upazila Agriculture Office (UZAo) is to be collected for retail sale of fertilizer. Headed by the UP Chairman, the retail fertilizer sales selection committee will be formed in each union for sorting out the retail seller. Out of the 6 committee members, 4 are to be nominated by the local MP. This committee is designated to appoint retail sellers of fertilizer.

It is clear that local retailers with their ID cards are allowed to purchase fertilizer from the authorized dealer and sell it to the farmers. However, in case of insufficient stock of fertilizer with the dealer, the retailer can purchase fertilizer from any dealer of the upazila using his own valid ID Card.

It is stressed that if the contract is not renewed due to under/non-performance as reflected in the annual evaluation, dealership will be cancelled. Any party, dealer or authority, can withdraw/cancel his/her dealership by issuing a 3- month prior notice in this regard.

In light of this policy, those dealers who were previously appointed and have, at the same time, all eligibility to be appointed as dealers will be retained, and their contracts will be renewed and adjusted.

Regarding the scope of the Policy, it may be said that urea, DAP, TSP, SSP produced and imported by the BCIC and the non-urea fertilizers imported by BADC and private importers have been included in this Policy.

## Non-urea fertilizer import, sales and subsidy Payment/Allotment Method 2015:

Inter-Ministerial committee fixes common sales prices of different fertilizers. On December 1992, explicit subsidies on fertilizers were totally removed. Later, due to a sharp increase in world prices, subsidies on non-urea fertilizers were reintroduced in 2006. Currently, the amounts of subsidies are higher in all types of fertilizers imported from outside the country or produced domestically at home.

The salient features of the system and method of payment and allotment of subsidy for TSP, DAP, MAP and MoP fertilizers as declared by the Fertilizer Management and Monitoring Branch of Ministry of Agriculture in 29 January,<sup>21</sup> 2015 are as outlined below:

1.	Continuation of the payment of subsidy to the non-urea fertilizers imported by BADC, produced by BCIC and through importers registered by the Department of Agricultural Extension (DAE) ;
2.	The non-urea fertilizers included in the subsidy policy have the following specifications:
	a. Triple Super Phosphate (TSP)
(i)	Total Phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 46.0
(ii)	Water soluble phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 40.0
(iii)	Free Phosphoric acid (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Max. 3.0
(iv)	Moisture percent by weight, maximum. 1.5
	b. Di-Ammonium Phosphate (DAP)
(i)	Total Phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 46.0
(ii)	Water soluble phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 41.0
(iii)	Total nitrogen all in ammoniacal form, percent by weight, minimum. 18.0
(iv)	Moisture percent by weight, max. 1.0
(v)	The material shall be in the form of free-flowing granules.
(vi)	Particle size-Minimum 90 percent of the material shall pass through 4mm BDS sieve and be retained on 1mm BDS sieve. Not more than 5 percent should be below 1mm sieve.
	c. Mono-Ammonium Phosphate (MAP)
(i)	Total Phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 46.0
(ii)	Water soluble phosphates (as P <sub>2</sub> O <sub>5</sub> ), percent by weight, Min. 41.0
(iii)	Total nitrogen all in ammoniacal form, percent by weight, minimum. 11.0

	(iv) Moisture percent by weight, max. 1.0 (v) Colour-White/Off white (vi) Physical condition-Powder
	d. Muriate of Potash (MOP)
	(i) Total Potash contain (as K <sub>2</sub> O) percent by weight, minimum-60.00 (ii) Sodium as NaCl percent by weight (on dry basis), Maximum-3.50 (iii) Moisture percent by weight, Maximum 0.5 (iv) Physical condition: Standard Grade, Free Flowing and Free from harmful substances. (v) Particle size: Minimum 95 percent of the material shall pass through 1.7 mm. IS sieve and be retained on 0.25 mm IS sieve.
	Note: The manufacturer's guaranteed analysis shall indicate that "the product does not contain toxic wastes and the level of heavy metals present is not hazardous for human, crop and environment".
3.	Government/highest policy making body related with fertilizer will prepare the annual requirement and annual procurement plan. Private sector importers (PSI) take predetermined steps to import non-urea fertilizers based on annual requirement and annual procurement plan.  BADC will import non-urea fertilizer as per the direction of the government//highest policy making body related with fertilizer.  BCIC will produce non-urea fertilizer fixed by the government//highest policy making body related with fertilizer.
4.	Government will fixed up the maximum retail price and dealer price of non-urea fertilizer to the farmer/user level.
5.	Subsidy is to be paid based on actual quantity of non-urea fertilizer imported by BADC and Private sector importers and actual quantity of non-urea fertilizer produced by BCIC.
6.	Subsidy to be given in case of BADC and PSI imported non-urea fertilizer based on import price plus local cost of importing fertilizer minus dealer price fixed by government.  In case of BCIC produced TSP and DAP fertilizer BCIC calculate the production cost. Then government fixed the dealer price and BCIC will get subsidy based on total production cost minus dealer price.
7.	Subsidy to be given only when the amounts of imported non-urea fertilizers are

	equivalent to their annual procurement plan approved by the government. No subsidy will be given for extra import of non-urea fertilizer.
8.	Private sector importers allowed to import non-urea fertilizer under subsidy scheme based on specification fixed by the government following the procedure mentioned below:
	a. Ministry of Agriculture will inform the private sectors importers association/Bangladesh fertilizer association about the quantity of fertilizer imported by the private sector. At the same time this will publish in the website of Ministry.
	b. Fertilizer importers apply to the ministry with in the stipulated time with the following documents:
i.	Up to date registration certificate from Department of Agriculture.
ii.	Specification certificate from the manufacturer.
iii.	Price of per Metric ton fertilizer in USD – Price will include the following breakup: <ul style="list-style-type: none"> <li>● CFR value;</li> <li>● Other expenses ( Example- Bank charges except interest, cost of bagging, VAT, etc)</li> </ul> * CFR value of fertilizer mentioned in separately.
iv.	Amount of fertilizer will be supplied.
v.	Bank solvency certificate from the bank regarding amount of fertilizer will be supplied.
	c. Private sector importers imported fertilizer will include in the subsidy scheme based on their lowest value considering the total value. For verifying the price, price will be compared recent price of fertilizer imported by BADC and published international fertilizer bulletin such as Argus FMB and Fertecon. In these regard authority’s decision will be final.
	d. If the demand/quota in private sector is 2.00 Lakh metric ton or less than in that case single organization in private sector importers allowed to apply for supply 15% and if the demand/quota in private sector is more than 2.00 Lakh metric ton in that case single organization in private sector importers allowed to apply for supply 10%.

	<p>e. TSP fertilizer should be imported from the following countries: Malaysia, Indonesia, Algeria, Jordan, Vietnam, Turkey, Tunisia, Lebanon, Morocco, Bulgaria, Egypt; DAP fertilizer should be imported from the following countries: Malaysia, Jordan, Philippine, Turkey, Australia, Saudi Arab, Morocco, Tunisia, USA, China, Russia, Mexico; MOP fertilizer should be imported from the following countries: Russia, Belarus, Canada China, Jordan, Thailand, Uzbekistan and Germany. Besides these, if any country will produce fertilizer according to approved specification that should be imported with prior approval of Ministry of Agriculture. In case of import of powder MAP prior approval of Ministry of Agriculture is required.</p>		
	<p>f. Selected importers will inform the ministry about their storage facility with details. But the importers are bound to store the fertilizer as directed by the ministry. Respective Chairman and Secretary of the District Fertilizer and Seed Monitoring Committee will be informed about the godown where fertilizer is stored.</p>		
	<p>g. Applicant should submit 2% pay order of total value in favor of Secretary of Ministry of Agriculture and after work order the concerned applicant should submit additional 2% pay order of total value</p>		
<p>9.</p>	<p>To ensure the quality of fertilizer government gives direction regarding laboratory test from assigned lab. “Inspection committee for imported fertilizer” will submit the report with certification to the Ministry of Agriculture after examination of import documents including the quantity of fertilizer imported, source, price and quality of fertilizer imported by private sector. Same certification copy also provided to the concerned importers. Besides these, subsidy cell under the Additional Director, Department of Agriculture Extension, Chittagong will send the import documents to the Ministry of Agriculture after examination.</p>		
<p>10.</p>	<p>Private Sector importers are paid for local cost for following rate:</p>		
<p>SL No.</p>	<p>Details of expense</p>	<p>Taka/Per Metric Ton</p>	
<p>1</p>	<p>River dues/Landing charge</p>	<p>40.00</p>	
<p>2</p>	<p>Stevedoring</p>	<p>160.00</p>	
<p>3</p>	<p>Literage from sea port/Variou godown by small ship</p>	<p>500.00</p>	
<p>4</p>	<p>Liter/Fertilizer discharge from small ship (Local bagging and unloading)</p>	<p>170.00</p>	

	5	Servier/Escort	20.00
	6	Rent for godown (Per bag Tk. 3 @ 2 months)	120.00
	7	Insurance premium for godown rent	45.00
	8	04 (Four) months bank interest	Interest rate will be fixed as per directive of Bangladesh Bank
	9	Profit	3% (3% of total cost)
11.	Private sector importers will not be allowed to claim additional/extra time bank interest or other expenses. In these regard they will give undertaking in Tk. 300 stamp. Amount of total import price and subsidy per metric ton calculated to BADC and Private sector importers imported fertilizer adding local cost with actual import price. Increase or decrease of local cost will be the discretion of “Committee for ascertain total import price and subsidy per metric ton including local cost on Phosphetic and Potash fertilizer.”		
12.	Importers will be informed about total amount of subsidy including per ton subsidy ascertained by the “Committee for ascertain total import price and subsidy per metric ton including local cost on Phosphetic and Potash fertilizer”, based on these importers will submit bill to the Ministry of Agriculture.  Ministry of Agriculture take necessary steps for payment of subsidy money with in rational time subject to the availability of budget certified by the “Inspection committee for imported fertilizer” based on importers submitted bill, import documents and pre-audit reports.		
13.	Ministry of Agriculture allocates the fertilizer imported by the private sectors importers. In case of allocation priority will be given early arrival date of ship.		
14.	Ministry of Agriculture issues allotment for next month with in first half of every month with a copy to their website from stock of fertilizer imported by BADC and private sector importers and produced by BCIC.		
15.	Dealers must lift the fertilizer allocated from the importers within two month after sub-allocation. If the dealer does not lift the fertilizer within two month then importers have the authority to sell the fertilizer to valid fertilizer traders.		
16.	District Fertilizer & Seed Monitoring Committee (DFSMC) supervise fertilizer will be sold to the farmer/user level within the maximum retail price fixed by the government. If any importers or dealers sale the fertilizer above the government rate and it will prove then they become black listed with canceling		

	their registration and legal action should be taken against them.
17.	Considering the reasonable ground Ministry of Agriculture allocate additional requirement of fertilizer based on demand and stock position.
18.	Non-urea fertilizer produced by BCIC and imported by BADC and private sector importers are distributed/supplied through dealers including the price situation Ministry of Agriculture regularly supervise so that subsidy benefits goes to farmer/user.
19.	BADC, in coordination with District Fertilizer & Seed Monitoring Committee (DFSMC) will supervise the sale of subsidized fertilizer to the BCIC and BADC appointed dealers.



## CHAPTER-7

### Conclusion

Since inception BADC involved in fertilizer procurement and distribution system up to 1992. Government decided to privatize the fertilizer procurement and distribution system and it was continued from January 1993 to June 2006. Again BADC involved in non-urea fertilizer procurement and distribution system from July 2006. At present BADC import 50%-60% non-urea fertilizer of total requirement.

BADC as a state owned organization have to maintain lots of formalities for procurement and distribution of fertilizer. In doing so BADC faces barriers that distort market forces such as allocation of foreign exchange to import fertilizer, lengthy import procedures, inadequate port, warehouse and transportation facilities.

The responsibility of procurement fertilizer from both domestic and external sources and reaching it to the levels of a small administrative unit (Thana) rested solely with BADC up to 1992. Now BADC deals with only a portion of non-urea fertilizer. BADC should involve more in the present fertilizer procurement and distribution system. The main problem in BADC's fertilizer supply chain is its inadequate storage facilities. BADC have 462 godown among them BADC uses only 117 godown for storing fertilizer.

Fertilizer supply chain of BADC consists of finance, procurement, transportation, storage and distribution division. At present internal integration among the division are better and a pool of expert manpower working here. Smooth operation of fertilizer management by BADC help the farmer to get the right quantity at the right time at the right place and it increases the overall agricultural productivity.

## **Limitations relating to fertilizer import & distribution:**

The fertilizer sectors in Bangladesh faces a lot of problems. These include:

1.	Import restriction on fertilizer. Import of fertilizers fully depends on MOA's allotment & permission.
2.	Monopoly of Urea fertilizer produced and imported by BCIC. BADC and private importers import the required quantity of TSP, MoP and DAP from different countries and sources.
3.	Wastage due to poor and inadequate storage facilities.
4.	Subsidy diverted to unintended beneficiaries.
5.	Fertilizers sold above government approved prices.
6.	Interference with the distribution mechanism by well-connected people, political heavyweights, and personnel entrusted with fertilizer sales.
7.	Same fertilizer type for all farmers irrespective of crop grown and soil type.
8.	The GoB fertilizer demand assessment is centrally determined and is not need based. Inaccurate assessment of the demand for fertilizer.
9.	Knowledge gap of the farmers.
10.	Smuggling and black marketing.
11.	Delays in distribution due to poor transport facilities.
12.	Artificial crisis created by the private importers and dealers to reap supernormal profit.
13.	Quantity demanded does not match quantity supplied, putting severe pressure on price to increase.
14.	Inadequate and weak provisions to prosecute guilty officials and traders found to have illegally sold fertilizers by diverting it to middlemen or highest bidders.
15.	Distortion of fertilizer marketing & pricing need to be corrected through progressive liberalization of the system.

### **Suggestion to minimize fertilizer import and other expenses:**

1. Fertilizer should be imported short time before targeted cropping season, avoiding longer storage which will reduce capital blockage and increase bank interest.
2. Reversing transportation of fertilizer should be preferred as and where available.
3. Community fertilizer storage system may be introduced which will minimize human resource and logistic cost.
4. Use of organic manure should be encouraged to improve soil health, product quality and cost of chemical fertilizer.
5. Introduction of organic manure will reduce the cost of transportation and storage as well as improve natural eco system.
6. As a production oriented organization BCIC should only produce fertilizer and as a importer BADC should only import all fertilizer.
7. Annual procurement plan of fertilizer should be based on monthly and quarterly requirement. Actual demand of fertilizer should be determined accurately.
8. Transportation system of fertilizer should be modernized so that lead time may be reduced.
9. Management information system should be modernized.
10. Self fund for procurement and distribution of fertilizer is needed.
11. Stock of huge amount of unsold fertilizer raises expenses. Just in time (JIT) should be followed in case of smooth supply of fertilizer.
12. Subsidy on imported fertilizer should be provided carefully so that fake importer cannot take these facilities.

### **Wider role of BADC in fertilizer procurement and distribution:**

1. In present system of fertilizer procurement and distribution, BADC should involve more to reduce government expenditure.
2. BADC should maintain buffer stock to balance private sector's ill intervention (if any) in fertilizer management.
3. Government should allow BADC to sale fertilizer directly to the farmer at government price for ensuring it's quality.
4. Fertilizer allocation and distribution system should be delegated to BADC.
5. Shipment schedule of imported fertilizer should be fixed according to BADC's option.

## Recommendations

For efficient marketing and distribution of fertilizers at right quantity, at right time and at right place some recommendations can be made:

1.	Monitor fertilizer price, supply and demand situations in the market;
2.	Keep information about market behavior at import levels and on distribution network;
3.	Select dealers in a candid and non-discriminatory way;
4.	Number of dealers in each upazila should be increased;
5.	Develop and implement a training program for dealer and sub-dealers;
6.	Strengthen market information and monitoring;
7.	Coordinate fertilizer production, procurement, distribution and marketing by regular monitoring;
8.	Supply and availability issues of fertilizer to be clearly identified and properly addressed;
9.	Smuggling, black marketing and syndication of fertilizer need to be stopped through strong monitoring;
10.	Government should establish an agency to be responsible for: - Quality control; - Collection and dissemination of market information on fertilizer price, availability, location, types and trends, etc; - Payment of subsidy;
11.	Government should at the beginning of each year establish quotas on the quantity of fertilizer it is willing to subsidize;
12.	Government should use tax and other incentives to encourage the establishment of private sector fertilizer plants across the nation to become self-sufficient in fertilizer production;
13.	An effort should be made for a phased reduction of fertilizer imports as domestic fertilizer production takes-off;
14.	Government should streamline and shorten port- clearing processes to facilitate the clearing of fertilizer at the shortest possible time;
15.	Annual fertilizer demand should be assessed very carefully. A bottom-up method of demand assessment should be followed depending on total cropped area, cropping pattern, cropping season and fertilizer requirement per unit of land.

**Annexure-1**

**Fertilizer factories under Bangladesh Chemical Industries Corporation (BCIC)**

SL No.	Enterprise Name	Established	Location	Commercial production date	Installed capacity (MT)	Major raw materials	Products
1.	Chittagong Urea Fertilizer Ltd. (CUFL)	October, 1987	Rangadia Anwara, Chittagong	July, 1988	5,61,000	Natural Gas	Ammonia Urea
2.	Jamuna Fertilizer Company Ltd. (JFCL)	1991	Tarakandi, Jamalpur	July, 1992	5,61,000	Natural Gas	Ammonia Granular Urea
3.	Ashuganj Fertilizer & Chemical Co. td. (AFCCCL)	1981	Ashuganj, Brahmanbaria	July, 1983	5,28,000	Natural Gas	Ammonia Urea
4.	Urea Fertilizer Factory Ltd. (UFFL)	1970	Ghorasal, Narsingdhi	September, 1972	4,70,000	Natural Gas	Ammonia Urea
5.	Natural Gas Fertilizer Factory Ltd. (NGFF)	1960	Fenchuganj, Sylhet	July, 1962	1,06,000 & 12,000	Natural Gas, Sulphur	Urea Ammonium Sulphate
6.	Polash Urea Fertilizer Factory Ltd. (PUFFL)	December, 1985	Polash, Narshingdhi	July, 1986	95,000	Natural Gas	Ammonia Urea
Phosphatic Fertilizer Plant:							
7.	Triple Super Phosphate Complex Ltd. (TSPCL)	1970	North Potenga, Chittagong	1973	120 TSP	Rock phosphate, phosphoric Acid, Rock Sulphur	TSP, sulphuric acid, phosphoric acid
8.	Di-Ammonium Phosphate Fertilizer Company Ltd. (DAPFC)- 1-2	2006 2008 Not operational Fully	Rangadia, Anwara, Chittagong Rangadia	2007	800 (Daily) 240 DAP 249.6 DAP	Imported Ammonia & phosphoric Acid	DAP

**BADC's own fertilizer godown.**

SL No.	Subject	Storage capacity (MT)	No. of godown
1.	Fertilizer godown used by Fertilizer Management Division of BADC.	155166	117
2.	Fertilizer godown used by Seed and Horticulture wing of BADC.	71934	82
3.	Fertilizer godown used by Minor Irrigation wing of BADC.	3600	7
4.	Fertilizer godown used by Chittagong Hill Tract Integrated Agriculture Productivity project.	2200	7
5.	Fertilizer godown used by BCIC	136500	37
6.	Fertilizer godown used by Directorate of Food	29000	21
7.	Fertilizer godown used by Department of Agriculture	2300	8
8.	Fertilizer godown used by Barendra Development Authority.	7800	9
9.	Fertilizer godown used by Upazilla Parishad.	7400	29
10.	Fertilizer godown used by Chittagong Port Authority.	13000	2
11.	Fertilizer godown used by Bangladesh Border Guard.	200	1
12.	Fertilizer godown sale by BADC.	13200	15
13.	Fertilizer godown damaged by flood.	1600	3
14.	Fertilizer godown under BADC but not for useable.	15400	50
15.	Fertilizer godown used by private sector under lease agreement.	34100	51
16.	Fertilizer godown which are not in control of BADC.	11700	17
Total=		505100	462

## Fertilizer godown where BADC store imported fertilizer.

SL No.	District	Name of Godown	Storage capacity in MT	No. of godowns
1.	Munshiganj	Mirkadim	1000	1
2.		Komolaghat	400	1
3.	Narayanganj	Araihajar	500	1
4.	Manikganj	Manikganj	1000	1
5.	Dhaka	Sech Complex	1000	1
6.	Mymensingh	Sombhugong	4000	1
7.	Netrakona	Netrakona	1333	1
8.	Kishoreganj	Jashodal	2500	1
9.		Ekrapur	500	1
10.		Chandiber-1	2000	1
11.		Chandiber-2	1333	1
12.		Batheir Kandi	2000	1
13.		Sorarchor	1000	1
14.		Tangail	Tangail	500
15.	Kalihati		200	1
16.	Madhupur Kakraid		5000	1
17.	Madhupur Sadar		200	1
18.	Jamalpur	Melandoho	5000	1
19.	Sherpur	Nalitabari	200	1
20.	Faridpur	Tepakhola	1000	1
21.	Rajbari	Rajbari Sadar	500	1
22.	Chittagong	Transit-1	5000	1
23.		Transit-2	7500	1
24.		Dewanhat-1	1000	1
25.		Dewanhat-2	1000	1
26.		Dewanhat-3	1000	1
27.		Dewanhat-4	1000	1
28.		Dewanhat-5	500	1
29.	Cox's bazar	Cox's bazaar	2000	1
30.	Bandarban	Bandarban	200	1
31.	Rangamati	Kathaltoli	400	1
32.	Comilla	Jaipur	4000	1
33.		Chandina	200	1
34.		Debidwar	200	1
35.		Doulotgang-1	500	1
36.		Doulotgang-2	500	1
37.		Brahmanbaria	Medda	6000
38.	Shimraylkandi		1000	1
39.	Kasba		200	1
40.	Feni	Mahipal-1	3000	1
41.		Mahipal-2	500	1
42.		Parshuram	200	1
43.	Noakhali	Kompanigong	200	1



44.	Khulna	Shiromoni	7000	1
45.		Ruzvelt	3000	1
46.		Boyra-1	500	1
47.		Boyra-2	500	1
48.		Boyra-3	500	1
49.		Boyra-4	500	1
50.		Boyra-5	500	1
51.		Boyra-6	500	1
52.	Satkhira	Kukrail	500	1
53.	Bagherhat	Bagherhat	400	1
54.	Jessore	Raipara-1	1000	1
55.		Raipara-2	1000	1
56.		Sheikh Hati	1500	1
57.		Chachara-1	500	1
58.		Chachara-2	500	1
59.		Krishnonagar	400	1
60.	Jhenaidah	Kotchandpur	200	1
61.	Magura	Magura -1	1000	1
62.		Magura -2	1000	1
63.	Narail	Narail-1	500	1
64.		Narail-2	500	1
65.		Narail-3	500	1
66.		Narail-4	500	1
67.	Kushtia	Kushtia Sadar	1000	1
68.	Pabna	Ishwardi-1	500	1
69.		Ishwardi-2	500	1
70.	Rajshahi	Rajshahi-1	800	1
71.		Rajshahi-2	800	1
72.	Chapai Nawabganj	Rohonpur	4000	1
73.	Bogra	Banani-1	500	1
74.		Banani-2	500	1
75.		Banani-3	500	1
76.		Banani-4	500	1
77.		Santahar	6000	1
78.		Gabtali	200	1
79.	Naogaon	Naogaon Sadar	2000	1
80.		Atrai	3000	1
81.		Mohadebpur	400	1
82.		Niyamotpur	400	1
83.		Badalgachi	200	1
84.	Dinajpur	Raniganj	500	1
85.	Sirajgonj	Mirpur-1	4000	1
86.		Mirpur-2	1000	1
87.		Dhangara	1000	1
88.		Gamtail	200	1
89.		Ullahpara	6000	1
90.		Ullahpara	2000	1
91.	Pabna	Debttor	400	1

92.		Chatmahor	200	1
93.	Rangpur	Kalibari	500	1
94.		Kellabond	600	1
95.	Sayedpur	Niamotpur	2000	1
96.	Gaibandha	Gaibandha-1	1000	1
97.		Gaibandha-2	1000	1
98.		Gaibandha-3	800	1
99.		Gaibandha-4	800	1
100.	Lalmonirhat	Mahendranagar	3000	1
101.	Dinajpur	Phulhat-1	1000	1
102.		Phulhat-2	800	1
103.		Bochagang	200	1
104.		Hakimpur	400	1
105.		Biharipara-1	1000	1
106.		Biharipara-2	800	1
107.		Birgang	1000	1
108.	Thakurgaon	Shibgong-1	1000	1
109.		Shibgong-2	800	1
110.	Barisal	Barisal	2000	1
111.		Bakergonj	200	1
112.	Jhalokati	Nalchity	200	1
113.	Barguna	Barguna	3000	1
114.	Sylhet	Lauai	1000	1
115.		Sylhet Sadar	200	1
116.	Habiganj	Habiganj Sadar	3000	1
117.	Sunamganj	Sunamganj Sadar	1500	1
Total=			155166	117

## Fertilizer Sales Center under BADC

Regional office	Sales center
1) Dhaka	1) Mirkadim, Munshiganj
	2) Manikgonj
	3) Sech complex, Dhaka
	4) Madhupur
2) Tangail	5) Tangail Sadar
3) Jamalpur	6) Melandoho, Jamalpur
	7) Nalitabari, Sherpur
4) Mymensingh	8) Sombhugonj, Mymensingh
	9) Netrakona
5) Kishoreganj	10) Kishoreganj
	11) Bhairab
	12) Sararchar
6) Sylhet	13) Sylhet, Sadar
	14) Sayestaganj
	15) Sunamganj
7) Chittagong	16) Chittagong TG
	17) Cox's bazar
8) Rangamati	18) Rangamati
9) Bandarban	19) Bandarban
10) Comilla	20) Daudkandi
	21) Brahmanbaria
11) Noakhali	22) Feni
12) Faridpur	23) Tepakhola, Faridpur
	24) Rajbari
13) Rajshahi	25) Rajshahi, Sadar
	26) Rohonpur
14) Pabna	27) Sirajgonj
	28) Ullahpara
15) Bogra	29) Santahar
	30) Naogaon
	31) Bogra sadar
16) Rangpur	32) Kalibari, Rangpur
	33) Sayedpur
	34) Mahendranagar, Rangpur
	35) Gaibandha
17) Dinajpur	36) Poolhat
	37) Birganj
	38) Birampur
	39) Shibgonj, Thakurgaon
18) Khulna	40) Shiromoni, Khulna
	41) Satkhira
	42) Bagerhat
19) Jessore	43) Jessore, Sadar
	44) Magura
	45) Narail
20) Kushtia	46) Kushtia, Sadar
	47) Ishwardi
21) Barisal	48) Barisal, Sadar
	49) Barguna

**Composition of National Fertilizer Distribution Coordination Committee (NFDCC)**

SL.No	Committee members
1.	Chairman (by rotation) - Secretary, Ministry of Agriculture, Bangladesh Secretariat, Dhaka. - Secretary, Ministry of Commerce, Bangladesh Secretariat, Dhaka.
2.	Member – Chairman, Bangladesh Chemical Industries Corporation (BCIC)
3.	Member – Chairman, Bangladesh Agricultural Development Corporation (BADC)
4.	Member – Director General, Department of Agriculture Extension (DAE)
5.	Member – Chairman, Bangladesh Fertilizer Association (BFA)
6.	Member – Chairman, FBCCI
7.	Member Secretary – Additional Secretary (Input & Admin), Ministry of Agriculture

Source: Integrated policy for appointment of fertilizer dealers and fertilizer distribution-2009.<sup>20</sup>

**District Fertilizer and Seed Monitoring Committee (DFSMC)**

SL No.	Members	Position
1.	All Member Parliament of the District	Advisor
2.	Deputy Commissioner (DC)	Chairman
3.	Superintendent of Police (SP)	Member
4.	All Upazila Chairman under the District	Member
5.	All UNO under the District	Member
6.	District Livestock Officer	Member
7.	District Fisheries Officer	Member
8.	Joint Director (Fertilizer) BADC	Member
9.	Deputy Director (Seed), BADC	Member
10.	Representative, District Agriculture Marketing Department	Member
11.	Representative, Seed Certification Agency	Member
12.	Deputy Director, BRDB	Member
13.	District Cooperative Officer	Member
14.	President, District Press Club	Member
15.	Representative, District Chamber of Commerce or Trade Organization	Member
16.	BDR Representative (for Border area)	Member
17.	BFA Representative (02)	Member
18.	Farmer's Representative (02) nominated by the Committee	Member
19.	Deputy Director, Agriculture Extension	Member-Secretary

Source: Integrated policy for appointment of fertilizer dealers and fertilizer distribution-2009. <sup>20</sup>

**Upazila Fertilizer and Seed Monitoring Committee (UFSMC)**

SL No.	Members	Position
1.	Local MP	Advisor
2.	Upazila Chairman	Advisor
3.	Upazila Vice-Chairman (2)	Advisor
4.	Upazila Nirbahi Officer (UNO)	Chairman
5.	Upazila Fisheries Officer (UFO)	Member
6.	Upazila Livestock Officer (ULO)	Member
7.	Upazila Rural Development Officer (URDO)	Member
8.	Upazila Cooperative Officer (UCO)	Member
9.	Officer-in-Charge (OC) of Thana	Member
10.	All UP Chairman under Upazila	Member
11.	BADC Fertilizer/Seed Representative	Member
12.	BFA representative	Member
13.	BDR representative (Border area)	Member
14.	Farmer representative (nominated by Upazila Council)	Member
15.	President, Upazila Press Club	Member
16.	Upazila Agriculture Officer	Member-Secretary

Source: Integrated policy for appointment of fertilizer dealers and fertilizer distribution-2009. <sup>20</sup>

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## Information of Respondent

Name .....Age .....Sex .....  
Designation.....Division.....  
Organization.....Phone.....E-mail.....

### Issues: Import of fertilizer

1. Would you please tell us about the present fertilizer procurement method of BADC?
2. What problems do you face in present fertilizer procurement method?
3. What are your suggestions to improve the present fertilizer procurement method of BADC?

### Issues: Transportation and storage system of fertilizer

1. Would you please tell us about the present fertilizer transportation and storage system of BADC?
2. What problems do you face in present fertilizer transportation and storage system?
3. What are your suggestions to improve the fertilizer transportation and storage system?

### Issues: Distribution system of fertilizer

1. Would you please tell us about the present fertilizer distribution system of BADC?
2. What problems do you face in present fertilizer distribution system?
3. Suggest necessary steps that should be taken to make the present distribution system more dynamic and efficient?

### Issues: General

1. BADC, BCIC and Private sector importers (PSI) are involved in the present fertilizer procurement, transportation, storage and distribution system (in terms of deployment of human resource, logistics, finance, time spent etc). What are your suggestions to minimize these expenses?
2. Do you think that BADC can contribute more in present fertilizer procurement and distribution system? If yes, then how?

**List of the Professional Interviewed:**

SL. No.	Interviewee	Position
01.	Md. Ferdous Rahamn	General Manager (Inquiry), BADC, Dhaka.
02.	Muhammad Mahfuj-ul-Hoque	Project Director, BADC, Dhaka.
03.	Md. Nurul Alam	Manager (Movement), BADC, Dhaka.
04.	Tapasi Rani Basak	Manager (Storage), BADC, Dhaka.
05.	Ripon Kumar Mondal	Manager (Sales), BADC, Dhaka.
06.	Md. Ali Asgar	Manager (Sales), BADC, Dhaka.
07.	A.K.M. Jahingir Alam	General Manager, Multilink Resources, Dhaka.
08.	Mohammad Khosru Noman	Deputy Manager (Administration), BADC, Dhaka.
09.	Mohammad Yoonus	Manager (Purchase), BADC, Dhaka.