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FIRST EVALUATION
OF
THE NEW MARKETING SYSTEM
In The
CHITTAGONG DIVISION

February 28, 1979

**First Evaluation
of
The New Marketing System (NMS)
In The Chittagong Division**

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A. ACKNOWLEDGEMENT

The evaluation report was prepared by Mr. John M. Hill, IFDC Market Development Specialist and Mr. Robert D. Benton, IFDC Distribution Specialist in close consultation with Mr. B. I. Siddique, Chittagong Division Manager; Mr. A. H. M. Obaidul Bari, Chittagong District Manager; Mr. A. Chowdhury, Noakhali District Manager; Mr. Abdur Razzak, Comilla District Manager; Mr. Abdul Mannan, Sylhet District Manager; and Mr. Huq, Chittagong Hill Tracts District Manager. The evaluation was conducted in February 1979 and covers the first two months of operation of the New Marketing System (NMS) which commenced on December 1, 1978 in the Chittagong Division of Bangladesh.

B. Conclusions

The New Marketing System (NMS) with unrestricted sales of fertilizer to wholesale dealers, retail dealers, and farmers is off to a very good start except in the Chittagong Hill Tracts District. The ingenuity, hard work, and dedication to make the NMS function is a tribute to the Chittagong Division Manager, his 5 District Managers, and their staffs. They all have made on the spot decisions and developed procedures to handle new problems which appeared daily. They employed their own strategies, worked out plans, and then implemented them.

The NMS faced supply constraints in December 1978 and a 12 day strike by BADC employees in January 1979. Even with these handicaps, sales for the first two months under the NMS are up 2,859 product tons 5.5% over the same two months a year ago. More importantly, the 15 Principal Distribution Points (PDPs) are handling 67.7% of division's total sales. A year ago all sales were being channeled through 105 thana sales centers. Under the new system, PDP sales have reduced BADC costs of multiple handling, warehousing, transportation and related product losses. However, the full potential saving in costs will not be realized until under utilized BADC Thana sales centers have been closed. An evaluation of costs under the NMS compared to the old system needs to be undertaken in order to provide NMS managers with the information they need to make key decisions. Also, wholesaler and dealer costs need to be determined to ascertain if discount rates are equitable.

As the NMS matures, sales from the PDPs should continue to increase. Already PDP sales are such that a number of thana sales centers can be closed. Eventually it is expected that all but the most remote thana sales centers will be closed.

Retail prices have dropped in areas around PDPs. Prices in remote thanas are still higher than official prices as was the case before the NMS was launched.

A new group of merchants -- fertilizer wholesalers -- has begun forming in the Chittagong Division business community. These businessmen are using private sector know-how to move fertilizer by the cheapest and most effective means possible from areas of surplus to areas of need. This has improved the flow of fertilizer throughout the division.

Except in Noakhali and the Chittagong Hill Tracts Districts, fertilizer stocks on February 1, 1979 were not adequate to meet sales targets in Chittagong Division for even a two month period. The critical Districts were: Comilla, Chittagong, and Sylhet. Maintaining an adequate supply continuously on hand at the sales points is a prerequisite for the success of any marketing system, and the NMS is no exception.

Although transportation problems are serious they appear to be largely the result of BADC's current contracting methods. These can be improved upon.

Warehousing capacity is inadequate. This is especially true in the Comilla District, where priority should be given to warehouse construction under USAID Phase II and where some temporary (possibly tin shed) storage will probably have to be constructed in short order.

Dealer classification needs to be considered to solve several current problems. It would also serve as a means to allocate fertilizer should a serious fertilizer shortage occur.

DAP sales are just getting underway. Farmers are pleased with the initial results they see from their use of this new product. An active BADC dealer training program on DAP and a promotion program with the various extension services needs to be started. Coordination of this program should be initiated between top management of BADC and the Ministry of Agriculture.

Modifications need to be made in the NMS to solve other problems such as a new staffing pattern to meet the demands of the NMS. Some suggestions are offered at the end of this evaluation report.

C. Background

In October 1961 the East Pakistan Agricultural Development Corporation (EPADC) was formed under the Ministry of Agriculture to market and distribute agricultural inputs. The name of the corporation was changed to the Bangladesh Agricultural Development Corporation (BADC) when Bangladesh came into being in 1971.

BADC is headed by a Chairman who reports to the Ministry of Agriculture. Reporting to the Chairman are several Member Directors. BADC's organization has grown at the same time that its sales volume has. This parallel growth is illustrated in Table 1 below.

Table 1 BADC Fertilizer Marketing and Distribution Staff and Sales

| | <u>1967-68 Versus 1977-78</u> | |
|-----------------------------------|----------------------------------|----------------|
| | <u>(Fiscal Year July - June)</u> | |
| | <u>1967-68</u> | <u>1977-78</u> |
| Headquarter Personnel | 50 | 127 |
| Division Personnel | <u>1,828</u> | <u>6,532</u> |
| Total Personnel | <u>1,878</u> | <u>6,659</u> |
| Fertilizer Product Long Tons Sold | 211,000 | 715,000 |

In addition to marketing and distribution of fertilizer BADC also markets pesticides, seeds, irrigation pumps and various other types of agricultural machinery.

In the period 1967-68 farmers were in the early stages of learning about the value of fertilizer to increase their crop yields. BADC activities were devoted to establishing a distribution system through private dealers and cooperatives.

Farmers began to learn the value of fertilizer to increase production through the coordinated efforts of BADC and the various agricultural extension services and cooperatives. BADC is responsible for purchasing from the local factories and for the importation and marketing of almost 100% of the fertilizer sold in Bangladesh. BADC fertilizer sales have grown from 93,700 tons in 1964-65 to 305,900 tons in 1970-71, to 715,000 tons in 1977-78, and are expected to exceed 800,000 tons in 1978-79.

Two major factors limiting sales since 1971 have been a shortage of supply and timely delivery to farmers. Domestic production of urea has not been able to meet demand, supplying 277,000 tons or 79.4% of urea sales in 1976-77 and only 218,000 tons in 1977-78 or 53% of urea sales. BADC and the Government, faced with a rapidly increasing demand for urea in 1977-78, stepped up urea imports from various sources under loans and grants. Phosphate and potash are entirely imported into Bangladesh since no deposits of these minerals exist in the country. Most imports are in terms of the finished products (TSP, DAP and MP) but some rock phosphate and sulfur is imported to make some powdered TSP at the Chittagong TSP plant. Fertilizer imports represented 57% of total sales in 1977-78.

Imports have increased from 384,000 tons in 1977-78 to over 600,000 plus estimated in 1978-79. This has placed major stresses on port facilities and warehouses set aside for fertilizer imports and has intensified internal transport constraints. Shipping schedules slip due to various reasons, including implementation and coordination problems with grant and loan donors, resulting in arrivals of several vessels at the same time. This results in discharge delays of fertilizer products and compounds warehousing and transport problems.

BADC logistic supply and marketing problems have become increasingly more difficult due to the following:

1. sales volume increase of 41% in 1977-78 over sales in 1976-77 with an expected compound increase for the next several years.
2. over 60% of current sales are imported and this percentage is expected to approach 80 percent in the next couple of years.
3. more than 1100 warehouses scattered over the country require continual stocking, inventory and sales monitoring, none of which are done adequately.
4. lack of a dealer training program for the last several years. This has made the dealer ineffective as an extension of BADC's marketing effort and a source of providing farmers with the need information to obtain maximum value from the fertilizer he uses.

5. poor to no communications such as phones, telex or telegraph service between points of warehousing, thanas, districts, divisions, Dacca headquarters, in-country factories and ports.
6. transport constraints such as shortage of railway wagons; low water levels in rivers and canals during the dry season, making water transport impossible to some locations; flooding during the monsoon season which makes the road system unusable in many areas, etc.
7. difficulties in servicing close to 40,000 registered BADC dealers of which about half are inactive.
8. three rice growing seasons (Aus, Aman and Boro) each requiring timely application of phosphate and potash prior to planting, plus a portion of the urea dose. The balance of urea dose is required shortly after transplanting.
9. dissatisfaction by Thana Inspectors and Storekeepers due to poor promotion possibilities and low salary levels.
10. sales restrictions whereby dealers could only buy from a certain thana and in turn farmers could buy only from appointed dealers in their union. Thus when a given thana sales point had a shortage of a given product due to the many logistic constraints, the dealer and thus his customer could not buy products needed from another thana in the area which may have had adequate stocks.
11. a fertilizer subsidy, equal to 59% of product and distribution cost, which represents 4% of the Government's total expenditure in 1976/77 and is increasing rapidly as fertilizer sales expand.
12. BADC's total budget representing more than 90% of the Ministry of Agriculture Budget and indicates BADC has outgrown its place under the Ministry of Agriculture.

It was because of these and other problems that BADC developed the New Marketing System (NMS) to modify its 14 years old marketing system. The NMS is designed to attempt to meet the challenge of sales which have expanded 3.5 times in the last 10 years and which are expected to double again in the next several years.

The NMS has two basic objectives: (1) to solve constraints on timely availability of the right fertilizer products to the right places, and (2) to reduce BADC marketing distribution costs.

The strategy to reach these objectives is to reduce the 1100 plus warehouses to a much smaller number of Primary Distribution Points (PDPs) and remote thanas. This is to be accomplished by selling from strategically located PDPs to wholesale dealers. The wholesalers in turn move the fertilizer to areas of need, selling to dealers and farmers. From an official retail price, wholesalers are to be given a discount to cover transportation, handling, warehousing, other costs and a profit. A quantity minimum per purchase (currently 3 tons) applies to sales at PDPs. At remote thanas, BADC maintains warehouses selling to dealers at a lesser discount than given at PDPs. In remote thanas BADC also sells to farmers at the official retail price. The NMS is to be a free marketing system. Anyone who wishes to be a dealer may register at PDPs and BADC thanas. No restrictions are to be placed on where a wholesaler or dealer may sell, or where a farmer may purchase. Prices are free except that they may not exceed specified retail ceiling prices with discounts from the ceiling prices calculated to allow a reasonable profit to the dealers. Competition among wholesalers, dealers, BADC remote thana points of sale and availability of supply would set retail market prices below the ceiling prices.

BADC marketing costs are expected to be reduced by eliminating multiple warehousing multiple transportation, multiple handling and related product losses. Field marketing and distribution personnel are to be re-aligned to service the high volume of sales through PDPs and in staffing BADC remote thana sales points.

BADC decided to try the NMS first in the Chittagong Division and to perfect it there before extending it to the rest of the country.

The NMS was launched in the Chittagong Division December 1, 1978. This evaluation of the NMS covers the first two months experience.

During the month of January 1979 a BADC employees' strike closed all operations for about 12 days. The strike caused a nationwide drop in sales for January 1979 compared to the same month in 1978.

D. Findings of The Evaluation

1. General

The BADC Chittagong Division is one of the four marketing division of BADC. The other three are Dacca Division, Rajshahi Division and Khulna Division.

Sales for the four divisions in 1977-78 were as follows:

Table 2 1977-78 BADC Division Sales (July 1977 through June 1978)

(000 Long Tons of Product)

| | <u>Urea</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> |
|-------------------|--------------|-------------|-------------|--------------|--------------|
| Dacca Division | 137.9 | 43.3 | 8.8 | 2.2 | 192.2 |
| Rajshahi Division | 116.2 | 56.6 | 14.0 | 2.2 | 189.0 |
| Khulna Division | 66.1 | 33.5 | 6.9 | 0.3 | 106.8 |
| Chittagong | <u>157.7</u> | <u>57.7</u> | <u>11.7</u> | <u>0.2</u> | <u>227.3</u> |
| Total | 477.9 | 191.1 | 41.4 | 4.9 | 715.3 |

The Chittagong Division sales in 1977-78 represented 31.8% of BADC total sales. The division comprises 5 districts in which sales in 1977-78 were as follows:

Table 3 Chittagong Division Sales 1977-78

(Long Tons of Product)

| | <u>Urea</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> |
|---------------------------|--------------|-----------------------------------|-----------------------|-----------------------|-----------------------|
| 1. Chittagong District | 53,389 | 12,991 | 3,208 | 17 | 69,605 |
| 2. Noakhali District | 23,945 | 8,159 | 630 | 35 | 32,769 |
| 3. Comilla District | 62,458 | 29,761 | 6,521 | 39 | 98,779 |
| 4. Sylhet District | 16,220 | 6,020 | 1,141 | 131 | 23,512 |
| 5. Chittagong H. T. Dist. | <u>1,689</u> | <u>742</u> | <u>210</u> | <u>-</u> | <u>2,641</u> |
| Total | 157,701 | 57,673 | 11,710 | 222 | 227,306 = Grand Total |
| | <u>N</u> | <u>P₂O₅</u> | <u>K₂O</u> | <u>Total Nutrient</u> | |
| | 72,542 | 26,530 | 7,026 | 106,098 L. T. | |
| Nutrient Ratio | 2.73 | 1.00 | .26 | | |

The above nutrient sales ratio in the Chittagong Division shows the current nutrient ratio being used by farmers in the Division. Better recommendations from research by area, by crop and by season are needed to determine what changes if any are needed in farmer fertilizer usage rates. The districts of the Chittagong Division vary from one of the most intensive agricultural and fertilizer use areas in Bangladesh, the Comilla District, to one of the least intensive agricultural and fertilizer use areas, the Chittagong Hill Tracts District,

As stated earlier, BADC employees were on strike during about a 12 day period in January 1979 which prevented sales to dealers and any restocking of warehouses. Sales in the Division for January 1979 were 2,279 tons lower than in January 1978, a direct result of the sales losses during the strike period. Sales in December 1978 were 4,962 tons higher than in December 1977. Even with the strike, sales for the first two months under the new system were 2,859 tons higher than for the same two months in 1977-78.

a. Primary Distribution Points (PDPs) and Thana Sales

The true index of success under the NMS is the degree to which sales have switched to the PDPs from the thanas. The following summary table shows the relative success of PDPs during the first two months of the NMS in the Chittagong Division.

Table 4 PDP and Thana Sales Chittagong Division For December 1978 And January 1979

| (Long Tons of Product) | | | | | | |
|----------------------------|-------------|---------------|-------------------------|-----------------|-------------|--------------------|
| | No. of PDPs | PDP Tons Sold | BADC Thana Sales Points | Thana Tons Sold | Total Sales | % of Total By PDPs |
| <u>Chittagong District</u> | | | | | | |
| December 1977 | - | - | 22 | 3,586 | 3,586 | - |
| December 1978 | 3 | 3,389 | 18 | 1,008 | 4,397 | 77.1% |
| January 1978 | - | - | 22 | 6,475 | 6,475 | - |
| January 1979 | 3 | 6,108 | 18 | 2,140 | 8,248 | 74.1% |
| <u>Noakhali District</u> | | | | | | |
| December 1977 | - | - | 14 | 2,425 | 2,425 | - |
| December 1978 | 2 | 2,841 | 4 | 315 | 3,156 | 89.9% |
| January 1978 | - | - | 14 | 3,029 | 3,029 | - |
| January 1979 | 2 | 1,513 | 4 | 324 | 1,837 | 82.4% |

| | <u>No. of PDPs</u> | <u>PDP Tons Sold</u> | <u>BADC Thana Sales Points</u> | <u>Thana Tons Sold</u> | <u>Total Sales</u> | <u>% of Total by PDPs</u> |
|----------------------------------|--------------------|----------------------|--------------------------------|------------------------|--------------------|---------------------------|
| <u>Comilla District</u> | | | | | | |
| December 1977 | - | - | 22 | 16,690 | 16,690 | - |
| December 1978 | 5 | 13,317 | 14 | 7,048 | 20,365 | 65.4% |
| January 1978 | - | - | 22 | 13,062 | 13,062 | - |
| January 1979 | 5 | 8,122 | 14 | 3,225 | 11,347 | 71.6% |
| <u>Sylhet District</u> | | | | | | |
| December 1977 | - | - | 35 | 2,831 | 2,831 | - |
| December 1978 | 4 | 873 | 35 | 1,413 | 2,286 | 38.2% |
| January 1978 | - | - | 35 | 3,182 | 3,182 | - |
| January 1979 | 4 | 566 | 35 | 1,712 | 2,278 | 24.8% |
| <u>Chittagong H. T. District</u> | | | | | | |
| December 1977 | - | - | 10 | 116 | 116 | - |
| December 1978 | 1 | 79 | 12 | 211 | 290 | 27.3% |
| January 1978 | - | - | 12 | 231 | 231 | - |
| January 1979 | 1 | 60 | 12 | 222 | 282 | 21.3% |
| <u>Total Chittagong Division</u> | | | | | | |
| December 1977 | | | | | 25,648 | |
| December 1978 | | | | | 30,494 | |
| January 1978 | | | | | 25,979 | |
| January 1979 | | | | | 23,992 | |
| Old Marketing System | | | | | | |
| Dec. 77 + Jan. 78 | - | - | 105 ^{1/} | 51,627 | 51,627 | - |
| New Marketing System | | | | | | |
| Dec. 78 + Jan. 79 | 15 | 36,868 | 83 ^{2/} | 17,618 | 54,486 | 67.7% |

Source: BADC District Managers.

^{1/}Includes a number of TCCA operated sales points.

^{2/}Does not include TCCA sales points, only BADC Thana sales points.

The use of PDPs has started well in the Chittagong District. Sales from Chittagong District's 3 PDPs in December accounted for 77% of total district sales and 74% in January. The District Manager is considering the opening of another PDP in the District to facilitate product movement by water into the southern portion of the district. The stocking of PDPs appears to be going well with the exception of the PDP at Cox's Bazar. A limited stock of DAP had been shipped into PDPs and most of this had been sold out. All PDPs and thana warehouses should be supplied with an on going inventory of DAP. TCCAs have not lifted stock from PDPs and most of their thana warehouses have been closed since the start of the NMS. This has left a gap in the district and the District Manager needs to evaluate whether the former exclusive TCCA thana areas are being served by the PDPs or whether BADC should open BADC thana warehouse sales points in some of these thanas.

The Noakhali District shows the best PDP sales as a percent of total district sales of any district in the Chittagong Division. In December, the 2 PDPs accounted for 90% and the 4 BADC Thana sales point for only 10% of the total district sales. PDP sales dropped to 82% in January due to the strike and resupply problems. The District Manager is currently considering the need to open 2 to 3 additional PDPs to cover dealers in remote thana areas. Closure of TCCA thana warehouse sales points has caused severe problems as many of the TCCA locations were in remote areas. The District Manager may need to open BADC Thana warehouse sales points in these areas if these remote TCCA warehouses do not reopen quickly.

DAP stock was low in all PDPs. Shipments need to be made to all warehouses to increase DAP sales. This would also alleviate the storage capacity problem in the Chittagong Port.

The Comilla District sales represent about 13% of the total fertilizer sold in Bangladesh, the highest of any district in Bangladesh. The NMS is reported to be going well as reflected in PDP sales. The 5 PDPs combined represented 65.4% of total district sales in December and 71.6% in January.

DAP has been selling well in Comilla and first reports from farmers who have seen initial results indicate they are very pleased. It is even reported that some farmers in certain areas are demanding DAP instead of TSP. Adequate stocks of DAP are needed in every PDP and thana sales point. All dealers should be encouraged to buy several bags of DAP in order for farmers to get experience with this new product prior to the coming Aman season.

Sylhet District is currently operating 4 PDPs. The sales from these PDPs represented only 38.2% of district sales in December and 24.8% in January. The low level of PDP sales suggests that some PDPs may need to be relocated or new ones added in areas better suited to servicing wholesale dealers.

Only small amounts of DAP have been brought into Sylhet District to date. This needs to be remedied quickly. A promotion program with dealers and extension workers needs to be launched to popularize this new product.

The NMS is not working in the Chittagong Hill Tracts (CHT) District. This district has the lowest sales of fertilizer of any district in Bangladesh. The one PDP operating at Rangamati cannot serve the PDP function for the district due to lack of road and waterways effectively interconnecting the thanas. It is doubtful if any 2 or 3 PDP locations will serve this district. In the southern part of the district, dealers are using Dohazari PDP in the Chittagong District.

The NMS for the CHT district must be modified to meet this district's special low sales volume and transportation problems to remote thana locations. A vigorous sales promotion program to educate dealers and farmers is needed in this district. This program needs to be closely coordinated with the extension service.

Various sales restrictions have been imposed at the PDPs throughout the division as summarized below:

- a. Purchases at PDPs are limited to 3 ton minimum.
- b. Customers wanting to purchase less than three tons at the Tk. 5/maund commission must go to thana sales centers.
- c. At PDPs where some products are in short supply customers have been required to purchase two tons of other product(s) in order to get one ton of that product in short supply.
- d. A 20 ton maximum purchase restriction per sale at PDPs was imposed in December due to a supply shortage.

- e. At some sales locations having powdered TSP, customers wanting to purchase granular TSP must take at least half of it in the powdered formulation.

Some procedures that might be regarded as restrictions are that sales locations are open only from 10:00 AM to 5:00 PM; customers must first come to the PDP inspectors office locations for calculation of intended purchase, then to the bank for the bank draft, then back to the inspector's location to obtain a release from the warehouse, and then to the warehouse to pick up the fertilizer, and some PDPs have not been adequately staffed to process the increasing sales rapidly. Consideration needs to be given to locate all offices of PDP inspectors at the PDF.

b. Warehousing Under the NMS

Warehouse capacity at PDPs is inadequate to serve the current and anticipated sales volume under the NMS. Transportation constraints prevent the attainment of inventory turnover rates to satisfy demand from existing facilities. Additional pressure has been placed on storage facilities designated as PDPs under the new marketing system because demand has sharply increased at most PDP locations.

Every effort has been made by BADC to lease additional storage capacity and more capacity has been secured as shown in Table 5. Most of the leased facilities are of poor quality construction and should only be regarded as for temporary use in this emergency. Much of the leased storage is also not ideally located. Some PDP storage complexes with many individual warehouses are straining control procedures that were designed for more ideal distribution facilities.

Table 5 shows that in the Chittagong Division the current storage status is:

- (1) Chittagong District needs more capacity constructed at the PDPs. The leased facilities are poorly located and poorly constructed resulting in improper storage and difficulty for customers to get prompt delivery. The thana capacity is probably sufficient and some warehouses leased to TCCA may be returned to BADC and BADC will be closing some noneffective thana sales centers under the NMS.

- (2) Noakhali District also needs more capacity constructed at the PDPs to replace leased storage for the same reasons as those in Chittagong. The thana warehouses are also adequate for the same reasons as those of the Chittagong District.
- (3) Comilla District has a critical shortage of storage capacity at the PDPs and leased space is not available. If only a 60 day supply is felt necessary, the district requires 50,000 tons of storage capacity to handle the projected demand for November-December 1979. Again the thana warehouses are probably sufficient for the same reasons as in the Chittagong and Noakhali Districts.
- (4) Sylhet District needs some warehouses constructed at the PDPs to replace poorly constructed and located leased facilities. Some thana warehouse construction may be needed in remote areas.
- (5) Chittagong Hill Tracts District may require construction of some thana warehouses but the present situation is good. The major distribution centers in the district are supplied from the Chittagong District and some customers purchase fertilizer at Chittagong District PDPs.

Therefore it can be concluded that future construction programs should be primarily at the designated FDP locations.

Table 5 Chittagong Division Warehouse Capacities*

| | <u>Chittagong</u> | <u>Noakhali</u> | <u>Comilla</u> | <u>Sylhet</u> | <u>Chittagong Hill Tracts</u> |
|---|-------------------|-----------------|----------------|---------------|-------------------------------|
| PDP owned & leased warehouse capacity | 20,000 | 12,000 | 7,625 | 6,700 | 500 |
| Thana owned & leased warehouse capacity | 6,740 | 3,519 | 1,720 | 8,800 | 2,000 |
| Total owned & leased warehouse capacity | 26,840 | 15,519 | 9,345 | 15,500 | 2,500 |
| District 1977-78 Sales | 69,605 | 32,769 | 98,779 | 23,512 | 2,641 |
| Capacity to sales ratio | .39 to 1 | .47 to 1 | .09 - 1 | .66 - 1 | 1.06 - 1 |
| <hr/> | | | | | |
| PDP owned capacity | 7,700 | 1,000 | 5,700 | 3,800 | 500 |
| Thana owned capacity | 1,400 | 1,200 | 400 | 3,900 | 1,200 |
| Total owned capacity | 9,100 | 2,200 | 6,100 | 7,700 | 1,700 |
| District 1977-78 sales | 69,605 | 32,769 | 98,779 | 23,512 | 2,651 |
| Capacity to sales ratio | .13 to 1 | .07 - 1 | .06 - 1 | .33 - 1 | .64 - 1 |
| <hr/> | | | | | |
| PDP owned & leased capacity | 20,000 | 12,000 | 7,625 | 6,700 | 500 |
| District 1977-78 Sales | 69,605 | 32,769 | 98,779 | 23,512 | 2,641 |
| Capacity to sales ratio | .29 to 1 | .37 to 1 | .08 to 1 | .28 to 1 | .19 to 1 |
| <hr/> | | | | | |

* Does not include warehouses owned by BADC and leased to TCCA.

Source: District Managers

c. Inventory and Stocking

The supply in the Chittagong Division over the next 60 day sales period of February — March will be tight. However overall demand can be satisfied if BADC succeeds in selling DAP to replace TSP and if resupply is timely.

The stock situation against projected demand for February and March is shown in Table 6.

Noakhali, Comilla, Sylhet, and Chittagong Hill Tracts will need urea and supply should be coming into Sylhet from the Fenchuganj factory and into the other districts from Chittagong Port.

There will be a clamor for TSP as little is arriving in port warehouses and farmers are very reluctant to purchase the powdered TSP being made at the TSP factory at Chittagong. DAP is getting into the supply line. With some promotion by BADC, it will be accepted by farmers as a preferred replacement for TSP. There will be spot shortages of TSP/DAP in the Sylhet District due to transportation problems in the remote areas.

In addition to current stock on hand in each district planned shipments during February and March to each district will augment stocks and will generally offset sales.

Table 6 Stock Position

February 1, 1979 Inventory on Hand Vs. February - March 1979 Sales Projections

In Long Tons (+ excess stock) (-stock short)

| <u>Product</u> | <u>Chittagong</u> | <u>Noakhali</u> | <u>Comilla</u> | <u>Sylhet</u> | <u>Chittagong Hill Tracts</u> | <u>Chittagong Division</u> |
|------------------|-------------------|-----------------|----------------|---------------|-------------------------------|----------------------------|
| Urea stock | 11,984 | 5,394 | 2,878 | 3,777 | 467 | 24,500 |
| Urea Sales Proj. | 13,200 | 4,900 | 13,400 | 5,500 | 400 | 37,400 |
| Position | <u>-1,216</u> | <u>+ 494</u> | <u>-10,522</u> | <u>-1,723</u> | <u>+ 67</u> | <u>-12,900</u> |
| TSP stock | 3,460 | 884 | 668 | 1,530 | 741 | 7,283 |
| TSP sales Proj. | 5,500 | 2,000 | 4,900 | 1,000 | 300 | 13,000 |
| Position | <u>-2,040</u> | <u>-1,116</u> | <u>-4,232</u> | <u>+ 530</u> | <u>+441</u> | <u>-6,417</u> |
| DAP stock | 550 | 1,142 | 1,609 | 43 | 0 | 3,344 |
| DAP sales Proj. | 0 | 0 | 0 | 0 | 20 | 20 |
| Position | <u>+ 550</u> | <u>+1,142</u> | <u>+1,609</u> | <u>+ 43</u> | <u>-20</u> | <u>+ 3,324</u> |
| MP Stock | 930 | 439 | 853 | 752 | 201 | 3,175 |
| MP Sales Proj. | 1,300 | 150 | 2,600 | 170 | 120 | 4,340 |
| Position | <u>- 370</u> | <u>+ 289</u> | <u>-1,747</u> | <u>+ 582</u> | <u>+ 81</u> | <u>- 1,165</u> |

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Source: District Managers

d. Transportation

Securing sufficient transportation is the most critical problem in the distribution system at this time. With adequate transportation the shortage of storage capacity would not be as critical.

Railway wagons remain unavailable in sufficient quantity but can be supplemented with water transport shipments to such places as Hatiya and Chandpur and highway transport shipments to some other areas. In Sylhet some locations are accessible only by rail. Urea is shipped from the Fenchuganj factory only by rail into the Sylhet area.

Inadequate truck transport is caused by deficiencies in BADC contracting methods rather than an equipment shortage. These methods include:

- a. Permitting unqualified contractors to quote and secure contracts.
- b. Restricting contractors to specific routes.
- c. Not permitting ready substitution for contractors not performing.
- d. Not allowing adequate payment for services or provisions for adjusting rates to cover unforeseen circumstances.

Additionally, it seems that the Division Manager should have some control over shipments into his division from all supply points to enable him to dispatch to priority locations to satisfy unexpected demands and take advantage of changing conditions under the NMS.

e. Dealer Registrations

BADC Headquarters has directed that dealer registration under the new system is to be open to everyone at every FDP and thana sales center. A registrant is to be required only to bring a photograph of himself and a valid form of identification. The District Managers have followed these instructions in all respects, except that the wording of Directive No. 2 appears to have been unclear and the District Managers have interpreted it to mean that a letter from the Union Council is the only acceptable form of identification. BADC Headquarters intends to correct this error. Still the Consultants believe the registration is open to all. The free registration has permitted customers to register at any number of sales locations, so the total registration also reflects multiple registration.

A registration number is assigned by BADC and an identification card with photograph is prepared for the dealer. BADC is supposed to maintain a dealer registration ledger at each sales location along with a dealer's offtake record indicating the particulars of every purchase. This is currently not being done at all PDPs or thanas.

A number of registrants have purchased no fertilizer to date. It is suggested that registered dealers who have not purchased fertilizer within six months of their date of registration should have their registration cancelled.

The comparative low numbers of registrations in the Sylhet and Chittagong Hill Tracts Districts probably results from the communication and transportation difficulties in those districts and the unattractiveness of engaging in the fertilizer marketing-distribution business.

Table 7 Dealer Registration

| <u>District</u> | Number of dealers registered old system | <u>New Marketing System</u> | | | |
|---------------------------|--|----------------------------------|-------------------------|-------------------------------|---------------------------|
| | | Number regis- tered PDP | Number lifted PDP | Number registcred Thana | Number lifted Thana |
| Chittagong | 2080 | 2502 | 2281 | 1493 | 951 |
| Noakhali | 1850 | 949 | 474 | 991 | 376 |
| Comilla | 4637 | 2598 | 2598 | 1175 | 1175 |
| Sylhet | 4342 | 150 | 130 | 566 | 525 |
| Chittagong Hill Tracts | 402 | 27 | 9 | - | - |

f. TCCA Sales

The Thana Central Cooperative Association (TCCA) in the old system has been a wholesale distributor for BADC in much of the Chittagong, Noakhali, and Comilla Districts. TCCAs are not operating in the Sylhet and Chittagong Hill Tracts Districts. They have distributed fertilizer to dealers and had a monopoly in thana

areas where they had operated. TCCAs either owned their own warehouses or leased them from BADC and, sold fertilizer through a network of dealers. Under the old marketing system, TCCAs purchased from BADC at the official retail price less Tk. 171/ton commission for fertilizer delivered to the TCCA thana warehouse with the freight paid by BADC. TCCA dealers then picked up at the TCCA thana warehouses and were allowed an average commission of Tk. 141 per ton. Thus the TCCA made a gross margin of Tk. 30 per ton with expenses for only warehousing and administration.

In the NMS, the TCCAs purchase at the same price and terms as any other wholesale customers at the PDPs except that many of the TCCAs receive one year credit terms from BADC backed by a bank guarantee ranging from 300 to 600 tons.

Some TCCAs have not yet registered as dealers at the PDPs and TCCA liftings have been very light. The TCCA current sales are primarily from inventories carried over from the old system. They are not actively competing with the private wholesalers and their December - January purchases from BADC are down about 60%. Some TCCAs report that their major problem in the new system is securing transportation from the PDPs and competition from wholesale dealers. TCCA officials complain the 230 Tk/ton wholesale dealer discount from official retail prices is not adequate and would like BADC to subsidize them by increasing their discount.

New dealers and sub-dealers interviewed who were formerly TCCA dealers, like the new system because fertilizer is readily available directly from BADC. They report that it took them 5-7 days to get fertilizer from the TCCAs and in some cases several dealers stated they had to deposit money with the TCCA several days before the TCCA would make delivery.

BADC has opened some temporary sales centers at remote locations where TCCAs have stopped functioning and which are too far to be served by PDPs. BADC in effect is trying to insure supply in those remote areas.

g. NMS Costs and Prices

(1) NMS Costs

One of the basic objectives under the NMS is to reduce BADC marketing and distribution costs. The primary reduction in BADC costs is to be achieved by turning intermediate warehouses into Primary Distribution Points known as PDPs and as the main points where fertilizer will be sold. Wholesalers who purchase from PDPs would perform warehousing transportation, promotion, and the sales functions of selling to retail dealers.

To encourage wholesalers to come forward, BADC has established a 230 Taka per long ton discount from the official retail price of each fertilizer product. A 3 ton minimum quantity purchase has been established to discourage small dealers from buying at PDPs and to encourage them to buy from wholesalers.

Sales have dropped 50% or more in 29 of the 83 BADC Thana Sales Centers in the Chittagong Division. Thus it appears that PDPs in the Chittagong Division are serving the sales function objective of the NMS in these thana locations. However as of February 22, BADC had closed no BADC Thana Sales Centers in the Chittagong Division except those located at PDP sites. Unless under-utilized Thana Sales Centers are closed, little if any savings can accrue to BADC under the NMS.

In order to determine cost savings per ton to BADC under the NMS, a detailed economic analysis needs to be made. This should take into account BADC cost per ton for transportation from transit warehouses to PDPs, PDPs handling and warehousing costs, PDPs staffing costs, and product losses. These costs plus the 230 Taka per ton discount at PDPs will establish PDPs' cost per ton under the NMS. Also, cost calculations are needed for the NMS on a cost per ton basis for BADC Thana sales center covering transportation, handling, warehousing and staffing costs, as well as the thana sales costs under the old marketing system.

Only by comparing situation A (that is NMS cost per ton multiplied by volume moved through PDPs, and cost per ton multiplied by volume moved through BADC Thana Sales Centers) against situation B (old marketing system Thana sales centers' costs per ton multiplied by an equal volume as in situation A) can an evaluation be made of the possible potential saving under the NMS. This has not been done to date.

The question of whether the wholesale dealer commission is adequate to cover their costs and still leave a profit incentive also needs to be determined. Thus, wholesale dealer costs and profits need to be analyzed. This economic evaluation is needed to assist in determining answers for several basic issues currently facing managers of the NMS as follows:

- (a) What are the average costs by item (labor, warehousing, etc.) a wholesaler would encounter and what would be his net profit incentive per long ton after all costs for the following: (1) If he sold to retail dealers; (2) had a 20 ton capacity warehouse; (3) sold 100 tons of fertilizer every four months; (4) and had to transport his fertilizer purchases from a PDP (a) 10 miles by paved road, or (b) 20 miles by paved road, or (c) 1 mile by paved road, 30 miles by country boat and 4 miles by dirt road?
- (b) How long can a wholesaler hold fertilizer in his warehouse and sell it at official retail prices and still break even?
- (c) Should the minimum quantity per purchase at PDPs be raised from the current 3 ton minimum to 5 tons, 10 tons or 20 tons?
- (d) Should the discount at PDPs (currently Tk. 230 per long ton) be raised or lowered?
 - (i) What would be the effect on the creation of a fertilizer wholesale dealer class of trade?
 - (ii) Can retail dealers function on the discount allowed them by wholesale dealers, currently reported at 54 to 81 Taka per long ton.

Answers to these and other economic questions pertaining to the NMS need to be determined. It is suggested that a short term IFDC consultant be approved to handle these and other related cost and discount questions as provided for in the IFDC/BADC contract. He needs to be assisted by a local IFDC hired cost analyst and appropriate BADC personnel.

(2) The IFDC Marketing and Distribution Consultants spent 10 days each in the Chittagong Division in early February. BADC employees, wholesale and retail dealers, and farmers were interviewed at random. Based on these limited numbers of interviews, the following observations were made relating to retail fertilizer prices.

- (a) BADC has instructed their personnel that under the NMS selling prices to farmers are not to exceed the official retail price,
- (b) No evidence was seen, in the 25 to 30 retail dealer shops visited, of a sign stating the official retail prices.
- (c) BADC personnel, to the best of our knowledge, have not emphasized to wholesalers or retail dealers that selling prices to farmers are to be at official retail prices.
- (d) Retail selling prices within 5 to 6 miles of PDPs are generally below the official retail price due primarily to low transport costs and the high number of dealers in this area competing for farmer sales.
- (e) Retail selling prices in a range of 6 to about 15 miles from PDPs, or from a BADC Thana, are generally at official retail prices.
- (f) Retail prices in excess of about 15 miles of a PDP, or from a BADC Thana Sales Point, range from 2 to 5 taka over official retail prices. This is due primarily to the higher transport costs wholesaler and dealers must pay.
- (g) Black TSP granular fertilizer, high in demand by farmers, sells at 10 to 15 taka over official retail prices when it is available.
- (h) When a product is in short supply dealers and farmers report that prices are above the official price. This was the case for TSP during December 1978.

In general, in remote locations with high transport costs, retail selling prices are above official retail price as was the case last November when MCC and HEED conducted a survey in parts of the Chittagong Division. If the intent is to maintain retail selling prices no higher than official prices, then two requirements need to be met: (1) a commission schedule is needed that is adequate to cover transport costs to remote areas not served adequately by BADC sales points, and (2) adequate stocks to dampen prices and provide competition must be maintained.

E. District Evaluations

1. Evaluation of the Chittagong District NMS

The Chittagong District is the second highest district in Bangladesh in fertilizer consumption. The principal cities are Cox's Bazar and Chittagong. Chittagong is the second largest city in Bangladesh and has the country's primary sea port.

There are three subdivisions in the district and 22 thanas. The Chittagong Sub-Division has nine thanas, the Patiya Sub-Division has six thanas and Cox's Bazar Sub-Division has seven thanas.

The cropped acreage in the Chittagong District as reported for fiscal year 1975-76 totaled 1,061,500 acres of the following crops.

Table 8 Chittagong District Cropped Acres 1975-76

| <u>Crop</u> | | <u>Acres</u> |
|-------------|-------|--------------|
| T. Aman | HYV | 215,000 |
| | Local | 335,000 |
| Aus | HYV | 111,000 |
| | Local | 135,000 |
| Boro | HYV | 225,000 |
| | Local | 3,200 |
| Sugarcane | | 6,000 |
| Potato | | 9,000 |
| Jute | | 600 |
| Tobacco | | 5,200 |
| Oil Seeds | | 1,000 |
| Vegetables | | 15,500 |
| | Total | 1,061,500 |

The total fertilizer used in the fiscal year 1977-78 was 69,605 long tons of product or 68.6 pounds of nutrient for every cropped acre.

Much of Chittagong District is blessed with relatively good transport infrastructure. The country's TSP factory and major transit warehouses are located in the Chittagong Port area. From these facilities rail, water, and highway transport is available. The meter gauge railway system runs south to Dohazari and north through the district to the urea fertilizer factories in the northern portion of

Bangladesh. Water transportation is available to the offshore islands in the district and to many thanas along the coastline and on inland waterways. Pucca (paved) roads reach most of the thanas.

The district's fertilizer supply comes from imports through the Chittagong Port and obtains some powdered TSP from the TSP plant at Chittagong.

The district office of BADC is located in Chittagong and the sub-divisional offices at Chittagong, Patiya, and Cox's Bazar.

The two PDPs at Chittagong comprise 21 owned and leased warehouses with a total capacity of 17,500 tons. The PDP at Dohazari has one 600 ton warehouse owned by BADC and one 600 ton warehouse leased. The Cox's Bazar PDP has one 400 ton warehouse owned by BADC and one 1,000 ton warehouse leased. BADC has 10 thana warehouses with a 2,400 ton total capacity leased to TCCAs and operates 35 owned and leased warehouses with a total capacity of 6,740 tons. Thus, the total capacity of the warehouses operated by BADC is:

| | |
|--------|----------------|
| 3 PDPs | 20,100 tons |
| Thana | <u>6,740 "</u> |
| Total | 26,840 tons |

This capacity compares to the annual 1977-78 sales of 69,605 tons and results in a warehouse capacity to sales ratio of .39 to 1.

The Chittagong District is headed by a district manager, an additional district manager (position now vacant), 3 sub-divisional managers, 22 thana inspectors, and 195 other personnel.

BADC owned and operated transportation consists of a jeep for the district manager, one for one of the subdivisional managers and 4 trucks to supplement product movement by contractors.

The new marketing system was inaugurated on December 1, 1978 and the comparative sales by thana for the first two months of the new system versus the same two months a year ago are shown in Table 9.

A sampling of the retail prices indicates that farmers are paying a little below the fixed prices within 5 miles of the PDP, at fixed prices from 5 to 25 miles from a PDP on pucca roads, and a little above that in remote areas more than 25 miles by road away from PDPs. Where water transportation is available fixed rates prevail as far as 50 miles from the PDP.

Dealer registrations at the new PDPs in the Chittagong District were extremely heavy but less than half of those registered have lifted. The registration picture was also distorted because many businessmen registered on speculation, some dealers registered at two or more PDPs and some dealers from other districts registered in Chittagong thinking the supply would be more plentiful near the port. Some dealers are actively lifting from the PDPs, some are retailing only, other wholesaling only and accepting 1 or 2 taka per maund profit, and most are doing a combination of both. The consensus among dealers interviewed is that the new system is good because it is free of restrictions and inspecting harassment so that a fair profit can be made.

Sales from the TCCAs has dropped from 40 - 70% among the various locations. The TCCAs can buy from the PDPs but are still unwilling to vigorously compete with private wholesalers.

Table 9A Chittagong District Sales
(Product Long Tons)

| | Thana | December 1977 | | | | | December 1978 | | | | | | |
|-------------|---------------|---------------|-----|------|-----|-------|---------------|------|-----|------|----|-------|------------|
| | | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | Other | Total |
| PDP | (H alishahar | 51 | | 39 | 2 | | 92 | 215 | 2 | 548 | 5 | 328 | 1098 |
| | (Dewanhat | 98 | | 10 | 80 | | 188 | 526 | 1 | 547 | 15 | | 1089 |
| | (Dohazari | | | | | | | 458 | | 134 | 9 | 70 | 671 |
| | (Cox's Bazar | 78 | | 98 | 33 | | 209 | 227 | | 261 | 20 | 20 | 528 |
| | Hathazari | 29 | | 89 | 23 | | 141 | | | | | | |
| | Sandwip | 32 | | 15 | 15 | | 62 | 52 | | 15 | | | 67 |
| | Mirsharai | 49 | | 120 | 10 | | 179 | 33 | | 1 | | | 34 |
| | Sitakunda | 49 | | | 11 | | 60 | | | | | | |
| | Fatikchari | 26 | | 40 | 57 | | 123 | | | | | | |
| | Raozan | 52 | | 70 | 1 | | 123 | | | | | | |
| | Rangunia | 197 | | 7 | | | 204 | 72 | | | | | 72 |
| | Anwara | 77 | | 105 | 1 | | 183 | 98 | | 26 | 6 | | 130 |
| | Banshkhali | 92 | | 152 | | | 244 | 97 | | 27 | 2 | | 126 |
| | Boalkhali | 102 | | 28 | | | 130 | | | | | | |
| | Patiya | 12 | | 40 | 3 | | 55 | 49 | | 12 | 4 | | 65 |
| | Satkania | 251 | | 229 | | | 480 | 166 | | 24 | 14 | | 204 |
| | Chakarria | 255 | | 205 | | | 460 | 108 | | 32 | 9 | | 149 |
| | Kutubdia | 26 | | 2 | | | 28 | 10 | | | | | 10 |
| | Ramu | 9 | | 118 | | | 127 | | | | | | |
| Moheshkhali | 54 | | 36 | | | 90 | 60 | | 8 | 2 | | 70 | |
| Teknaf | 45 | | 48 | | | 93 | 61 | | 11 | 10 | | 82 | |
| Ukhiya | 7 | | 84 | | | 91 | | | | | | | |
| Thana Total | | 1591 | | 1535 | 236 | | 3362 | 806 | | 156 | 47 | | 1010 22.9% |
| PDP Total | | | | | | | | 1426 | 3 | 1490 | 49 | 418 | 3386 77.1% |
| Grand Total | | 1591 | | 1535 | 236 | | 3362 | 2232 | 3 | 1646 | 96 | 418 | 4396 |

February 22, 1979

Source: District Manager

Table 9B Chittagong District Sales
(Product Long Tons)

| | Thana | January 1978 | | | | | January 1979 | | | | | Total | | | |
|-------------|-------------|--------------|------|-----|----|-------|--------------|------|------|-----|-------|-------|------|-------|--|
| | | Urea | DAP | TSP | MP | Other | Urea | DAP | TSP | MP | Other | | | | |
| PDP | Halishahar | 50 | | 28 | | | 78 | 1190 | 16 | 616 | 64 | | | 1886 | |
| | Dewanhat | 82 | | 72 | 15 | | 169 | 1137 | | 793 | 22 | | | 1952 | |
| | Dohazari | | | | | | | 725 | | 393 | 11 | | | 1129 | |
| | Cox's Bazar | 285 | | 93 | 19 | | 397 | 798 | 51 | 215 | 22 | 23 | | 1109 | |
| | Hathazari | 81 | | 96 | 18 | | 195 | | | | | | | | |
| | Sandwip | 30 | | 21 | 12 | | 63 | | | | 52 | | | 52 | |
| | Mirsharai | 209 | | 20 | | | 229 | 66 | | | | | | 66 | |
| | Sitakunda | 32 | | 47 | 36 | | 115 | 15 | | | 20 | | | 35 | |
| | Fatikchari | 39 | | | 2 | | 41 | | | | | | | | |
| | Raozan | 286 | | 81 | 8 | | 375 | 16 | | | 8 | | | 24 | |
| | Rangunia | 353 | | 37 | 79 | | 469 | 202 | | 12 | 65 | | | 279 | |
| | Anwara | 406 | | 112 | 23 | | 541 | 122 | | 59 | 2 | | | 183 | |
| | Banshkhali | 196 | | 187 | 60 | | 443 | 49 | | 39 | 50 | | | 138 | |
| | Boalkhali | 45 | | 1 | | | 46 | 11 | | | | | | 11 | |
| | Patiya | 319 | | 270 | 12 | | 601 | 41 | | 51 | 3 | | | 95 | |
| | Satkania | 212 | | 261 | 37 | | 510 | 96 | | 122 | 6 | | | 218 | |
| | Chakaria | 614 | | 285 | 10 | | 909 | 378 | | 150 | 5 | | | 533 | |
| | Kutubdia | 70 | | 29 | 2 | 19 | 120 | 60 | | 23 | | | | 83 | |
| | Ramu | 101 | | 132 | | | 233 | 60 | | 75 | | | | 135 | |
| | Moheshkhali | 186 | | 81 | | | 267 | 45 | | 128 | | | | 173 | |
| Teknaf | 121 | | 83 | | | 204 | 101 | | 14 | | | | 115 | | |
| Ukhiya | 107 | | 47 | | | 154 | | | | | | | | | |
| Thana Total | 3824 | | 1983 | 333 | 19 | 6159 | 1256 | | 673 | 211 | | | 2140 | 25.9% | |
| PDP Total | | | | | | | 3850 | 67 | 2017 | 119 | 23 | | 6076 | 74.1% | |
| Grand Total | 3824 | | 1983 | 333 | 19 | 6159 | 5106 | 67 | 2690 | 330 | 23 | | 8216 | | |

February 22, 1979

Source: District Manager

2. Evaluation of the Noakhali District NMS

The District Headquarters for Government administrative purposes is Noakhali (Maijdi). Other principal cities are Feni, Raipur and Begumganj. The district is divided into two sub-divisions, Feni and Noakhali. There are 6 thanas in the Feni Sub-Division, and Noakhali Sub-Division has 7 thanas.

The reported cultivated area in 1977-78 totaled 1,154,943 cropped acres (includes multiple cropping) reported as follows:

Table 10 Chittagong District Cropped Acres 1977-78

| <u>Crop</u> | <u>Season</u> | <u>Cropped Area 1977-78</u> <u>(Acres)</u> |
|------------------|---------------|---|
| Rice Paddy | Aus | 312,290 |
| | Aman | 630,800 |
| | Boro | 157,700 |
| Wheat | | 865 |
| Potato | | 1,283 |
| Sweet Potato | | 14,850 |
| Sugarcane | | 6,375 |
| Chillies | | 17,765 |
| Ground Nuts | | 11,490 |
| Lentil | | 1,180 |
| Gram | | 325 |
| Other | | 54,153 |
| Other Boro Crops | | 211,853 |
| Total | | <u>1,154,943</u> |

Total fertilizer use in the Noakhali District for 1977-78 totaled 32,769 long tons of fertilizer product. This represents 29.38 pounds of nutrient per acre of cropped land.

Transportation in Noakhali consists of meter gauge railway, paved and dirt roads and coastal as well as inland waterways. The District of Noakhali receives its fertilizer from imported sources via Chittagong, and to some extent powdered TSP from the Chittagong TSP factory. Fertilizer is transported to the district by private contractor trucks from Chittagong. Trucks currently carry 5 tons. Previously they used to carry more than 5 tons, but recently a weigh station just outside of Chittagong prevents even the smallest excess over the 5 ton limit. The 12 BADC operated thana warehouses receive fertilizer dispatched to them from the 2 PDP's at Feni and Begumganj.

The Feni PDP consists of 18 warehouses with a capacity of 7,543 tons. The Begumganj PDP consists of 14 warehouses with a capacity of 4,434 tons. The 12 BADC thana sales centers in the district consist of a 26 warehouses with a capacity of 3,519 tons. BADC has in addition to this capacity rented 6 thana warehouses to TCCAs with a capacity of 1,600 tons.

The district BADC owned/operated and hired warehouses, not counting the ones rented to TCCAs, have a total capacity of 15,496 tons and, compared to 1977-78 sales of 32,769 tons, had capacity to sales ratio of .47 to 1

Noakhali District fertilizer sales are managed by a District Manager who administers 2 Sub-Division Managers and 128 Thana Inspectors, storekeepers, drivers, peons and tally clerks. The BADC District Headquarters is located in the City of Noakhali.

Currently the district has 3 trucks and 2 jeeps owned by BADC which are used to meet a part of the requirement for dispatching of fertilizer from PDPs to BADC operated thana warehouses.

Reports by BADC personnel and by dealers indicate that current February selling prices to farmers within a distance of about 15 miles of the 2 PDPs are at or below official prices. Prices within 6 miles of remote thana warehouses operated by BADC are currently reported to be at official prices.

TCCA warehouses have been closed due to a strike by TCCA employees and by TCCA management decision. The TCCAs have found now they no longer have a monopoly on sales to dealers in their thana areas. TCCA officials claim their transportation, loading, unloading, warehousing, and personnel costs makes them non-competitive with wholesale dealers' costs. Thus, where TCCA warehouses are beyond a break even road transport distance of about 15 miles or more from a BADC, PDP, TCCA warehouses have been closed.

As in other districts, farmers in Noakhali District prefer black granular TSP. Farmers in Noakhali have bid the price up for this product with reported prices ranging from 10 to 15 Taka over that of grey colored granular TSP.

In comparing February 1979 reported farmer buying prices under the New Marketing System, with a survey conducted by MCC and HEED for USAID in remote thanas of the Noakhali District in November 1978 (when the old marketing system was in effect), it appears that farmers today are paying prices equal to or slightly lower than in November 1978.

Dealer registration in the district, as of January 31, 1979, totaled 1,940, of which 850 dealers have purchased fertilizers from BADC points of sale since December 1st 1978. The dealer registration under the old system totaled 1,168.

Table 11A **Noakhali District Sales**
(Product Long Tons)

| <u>Thana</u> | <u>December 1977</u> | | | | | | <u>December 1978</u> | | | | | | |
|--------------------|----------------------|------------|-------------|------------|--------------|--------------|----------------------|------------|-------------|------------|--------------|--------------|--------------|
| | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | |
| Hatiya | 20 | | 66 | 1 | 3 | 90 | 22 | | 52 | 2 | | 76 | |
| Ramgati | | | | | | | | | | | | | |
| Lakshmipur | 20 | | 87 | 2 | | 109 | | | | | | | |
| Ramgonj | | | | | | | | | | | | | |
| Chatkhil | 180 | | 207 | 27 | | 414 | | | | | | | |
| PDP Chcumuhani | 403 | | 587 | 27 | | 1017 | 522 | 115 | 567 | 69 | 167 | 1440 | |
| Sudharam | 55 | | 195 | 8 | | 258 | | | | | | | |
| PDP Feni | 120 | | 75 | 29 | 3 | 227 | 601 | 20 | 457 | 43 | 280 | 1401 | |
| Chhagalnaiya | 91 | | 62 | 20 | 1 | 174 | 53 | 11 | 38 | 11 | 25 | 138 | |
| Parshuram | 22 | | 8 | 3 | | 33 | 15 | | 14 | 3 | | 32 | |
| Senbag | 18 | | 19 | 6 | | 43 | 20 | | 14 | 1 | 34 | 69 | |
| Senagazi | | | | | | | | | | | | | |
| Companyganj | | | 16 | | | 16 | | | | | | | |
| Thana Total | 929 | | 1322 | 123 | 7 | 2381 | 110 | 11 | 118 | 17 | 59 | 315 | 10.1% |
| PDP Total | | | | | | | 1123 | 135 | 1024 | 112 | 447 | 2841 | 89.9% |
| Grand Total | 929 | | 1322 | 123 | 7 | 2381 | 1233 | 146 | 1142 | 129 | 506 | 3156 | |

Source: District Manager

Table 11 B **Noakhali District Sales**
(Product Long Tons)

| Thana | January 1978 | | | | | | January 1979 | | | | | |
|--------------------|--------------|-----|------------|------------|----------|-------------|--------------|------------|------------|-----------|-----------|-------------------|
| | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | Other | Total |
| Hatiya | 23 | | 23 | | | 46 | 16 | | 65 | 1 | | 82 |
| Ramgati | 18 | | | | | 18 | | | | | | |
| Lakshampur | 52 | | 179 | 3 | | 234 | | | | | | |
| Ramgonj | 145 | | 89 | | | 234 | | | | | | |
| Chatkhil | 120 | | 29 | | | 149 | | | | | | |
| PDP Choumuhani | 824 | | 261 | 42 | | 1127 | 541 | 97 | 185 | 18 | 9 | 850 |
| Sudharam | 180 | | | 7 | | 187 | | | | | | |
| FDP Feni | 140 | | 126 | 14 | 2 | 282 | 387 | 79 | 175 | 17 | 4 | 663 |
| Chhagalnaiya | 235 | | 78 | 15 | | 328 | 101 | | 20 | 7 | 32 | 160 |
| Parshuram | 70 | | 20 | 8 | 1 | 99 | 31 | | 15 | 3 | | 49 |
| Senbag | 48 | | 13 | 5 | | 66 | 11 | | 21 | 1 | | 33 |
| Sonagazi | 55 | | 74 | 7 | | 136 | | | | | | |
| Companygonj | 23 | | 73 | | | 96 | | | | | | |
| Raipur | | | 27 | | | 27 | | | | | | |
| Thana Total | 1933 | | 992 | 101 | 3 | 3029 | 159 | 0 | 121 | 12 | 32 | 324 17.6% |
| PDP Total | - | | - | - | - | - | 928 | 176 | 361 | 35 | 13 | 1513 82.4% |
| Grand Total | 1933 | | 992 | 101 | 3 | 3029 | 1087 | 176 | 482 | 47 | 45 | 1837 |

Source: District Manager

February 22, 1979

3. Evaluation of the Comilla District NMS

The Comilla District enjoys the highest fertilizer sales of any district in Bangladesh, about one seventh of the country's total. The principal cities in the district are Chandpur a major river port, Comilla and Brahmanbaria.

There are three sub-divisions in the district at Comilla, Brahmanbaria, and Chandpur and 21 thanas. The Comilla Sub-Division has 10 thanas, Brahmanbaria Sub-Division has six thanas, and the Chandpur Sub-Division has five thanas.

The cropped acreage as reported for fiscal year 1975-76 totaled 1,398,500 acres and comprised the following crops.

Table 12 Comilla District Cropped Acres 1975-76

| <u>Crop</u> | <u>Season</u> | <u>Acres</u> |
|-------------|---------------|------------------|
| T. Aman | HYV | 188,000 |
| | Local | 155,000 |
| Aus | HYV | 106,000 |
| | Local | 392,000 |
| Boro | HYV | 215,000 |
| | Local | 35,000 |
| Wheat | HYV | 40,000 |
| | Local | 7,000 |
| Sugarcane | | 1,000 |
| Potato | | 32,000 |
| Jute | | 183,800 |
| Tobacco | | 3,900 |
| Oil Seeds | | 22,000 |
| Vegetables | | 17,800 |
| Total | | <u>1,398,500</u> |

The total fertilizer used in the fiscal year 1977-78 was 98,779 tons for an average 29.38 ^{74.2} pounds of nutrient for every cropped acre, the highest for any district in Bangladesh.

Rail, water, and highway transportation facilities are available in the district. The meter gauge railway system provides sources of fertilizer from the urea factories, TSP factory, Chittagong Port, Narayanganj and Chandpur River Port. Water transportation is available on the Meghna River and some small waterways during the monsoon. Pucca roads serve most of the thanas.

The district's supply of fertilizer comes mostly from the Chittagong Port and TSP Factory.

The district office of BADC is located at Comilla and the sub-divisional offices are in Comilla, Chandpur, and Brahmanbaria. The warehouse locations designated as PDP's are at Comilla, Laksham, Chandpur, Hajiganj, and Brahmanbaria. The warehouse facilities at the PDP's are:

Appendix Table 13 : Comilla PDPs

| <u>PDP Location</u> | <u>Warehouse Number of Owned & Leased</u> | <u>Total Capacity</u> |
|---------------------|---|-----------------------|
| Comilla | 3 | 1,425 tons |
| Laksham | 2 | 1,000 tons |
| Chandpur | 8 | 2,900 tons |
| Hajiganj | 2 | 800 tons |
| Brahmanbaria | 2 | 1,500 tons |
| Total : | <u>17</u> | <u>7,625 tons</u> |

There are 14 owned and leased thana warehouses with a total capacity of 1,720 tons bringing the total BADC storage capacity in the district to 9,345 tons.

The total warehouse capacity, compared to the annual sales of 1977-78 of 98,779 tons, results in a warehouse capacity to sales ratio of .09 to 1 which is critically low. This district is in desperate need of additional storage capacity. The sales forecast for the month of December 1979 is 30,000 tons. To achieve this sales target inventory must be turned over more than three times in the month of December.

TCCAs have leased 13 warehouses from BADC with a capacity of 3,400 tons, but they are not actively utilizing most of them. Every effort should be made to have these warehouses returned to BADC operation.

The Comilla District is headed by a District Manager and three Sub-Divisional Managers with 21 Thana Inspectors and 90 other personnel.

BADC owned and operated transportation consists of a jeep for the District Manager, one for one of the sub-divisional managers, and 4 trucks to supplement product movement by contractors.

Retail prices have varied throughout the district depending on distance from the FDP and supply of product. Demand was very high during December and January and TSP supply was insufficient. Thus, most TSP has sold above the fixed retail price. Some TSP that was brought from Chittagong by dealers was sold for as much as Tk. 100/maund (55 Tk/maund being the official retail price). As of February 19th, 4000 tons of DAP had been sold in the district, primarily the result of the TSP shortage.

The new marketing system has been well received in the Comilla District and the only complaint from dealers is the supply shortage. To date 2598 dealers have signed up at the PDP's and 1175 at the thana sales centers. It is estimated that about 25% of this number are active.

The high dealer signup at the sales centers was due to the TCCAs' reluctance to participate actively under the new marketing system. Under the old system the TCCA wholesale distribution system was a major factor in the district but they have chosen not to compete with private wholesalers and dealers in the new system.

Table 14A Comilla District Sales

| | Thana | December 1977 | | | | | December 1978 | | | | | | |
|-----|--------------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|-------------|-------------|-------------|------------|---------------------------|
| | | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | Other | Total |
| PDP | Comilla | 576 | | 495 | 209 | | 1280 | 2575 | 833 | 736 | 347 | 72 | 4563 |
| | Chauddagram | 136 | | 15 | | | 151 | | | | | | |
| | Barura | 22 | | 155 | 60 | | 237 | 87 | | 5 | 1 | | 93 |
| PDP | Laksham | 254 | | 189 | 34 | | 477 | 849 | 130 | 263 | 152 | | 1394 |
| | Burichong | 100 | | 247 | | | 347 | 98 | | 50 | 17 | | 165 |
| | Chandina | 484 | | 199 | 84 | | 767 | 230 | 74 | 122 | 92 | 39 | 557 |
| | Homna | 265 | | 103 | | | 368 | 97 | 49 | 66 | 5 | | 217 |
| | Debidwar | 583 | | 347 | 70 | | 1000 | 145 | 191 | 140 | 96 | | 572 |
| | Muradnagar | 562 | | 569 | 4 | | 1135 | 741 | 128 | 232 | 21 | 39 | 1161 |
| | Daudkandi | 795 | | 570 | 124 | | 1489 | 682 | 256 | 163 | 72 | 67 | 1240 |
| PDP | Chandpur | 25 | | 70 | 3 | | 98 | 2273 | 175 | 673 | 255 | 157 | 3533 |
| | Matlab | 1149 | | 388 | 70 | | 1607 | 185 | 95 | 167 | 100 | 125 | 672 |
| PDP | Hajiganj | 37 | | 279 | 50 | | 366 | 687 | 166 | 209 | 112 | 142 | 1316 |
| | Faridganj | 96 | | 131 | 22 | 8 | 257 | 86 | 1 | 75 | 23 | | 185 |
| | Kachua | 372 | | 365 | 73 | | 810 | 234 | 153 | 51 | | | 438 |
| PDP | Brahmanbaria | 1527 | | 499 | 93 | | 2119 | 1043 | 405 | 808 | 192 | 57 | 2511 |
| | Sarail | 632 | | 378 | 15 | | 1025 | 109 | 108 | 252 | 120 | | 589 |
| | Kasba | 475 | | 67 | 52 | | 594 | | | | | | |
| | Nabinagar | 935 | | 516 | 86 | | 1537 | 256 | 5 | 217 | 53 | 32 | 563 |
| | Bancharampur | 234 | | 120 | 36 | | 390 | 62 | 17 | 50 | 25 | | 154 |
| | Nasirnagar | 250 | | 346 | 40 | | 636 | 208 | 31 | 130 | 10 | 63 | 442 |
| | Thana Total | 9509 | | 6048 | 1125 | 8 | 16690 | 3220 | 1108 | 1720 | 635 | 365 | 7048 34.6% |
| | PDP Total | ----- | ----- | ----- | ----- | ----- | ----- | 7427 | 1709 | 2689 | 1064 | 428 | 13317 65.4% |
| | Grand Total | 9509 | | 6048 | 1125 | 8 | 16690 | 10647 | 2817 | 4409 | 1699 | 793 | 20365 |

February 22, 1979

Source : District Manager

Table 14B Comilla District Sales
(Product Long Tons)

| | Thana | January 1978 | | | | | January 1979 | | | | | | | |
|--------------------|--------------|--------------|-----|-------------|-------------|-----------|--------------|-------------|-------------|------------|------------|-----------|--------------|--------------|
| | | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | | Other | Total |
| PDP | Comilla | 404 | | 192 | 186 | | 782 | 2228 | 506 | 149 | 204 | | 3087 | |
| | Chauddagram | 204 | | 84 | 25 | | 313 | | | | | | | |
| | Barura | 269 | | 97 | 49 | | 415 | 114 | 8 | | 17 | | 139 | |
| PDP | Laksham | 371 | | 116 | 50 | | 537 | 510 | 163 | 27 | 42 | | 742 | |
| | Burichong | 555 | | 50 | | | 605 | 52 | | | | | 52 | |
| | Chandina | 486 | | 209 | 64 | | 759 | 141 | | | 10 | | 151 | |
| | Homna | 208 | | 43 | 44 | | 295 | | | | | | | |
| | Debidwar | 489 | | 141 | 69 | | 699 | 30 | | | 4 | | 34 | |
| | Muradnagar | 953 | | 201 | 94 | | 1248 | 255 | 25 | 21 | 6 | | 307 | |
| | Daudkandi | 912 | | 346 | 108 | | 1366 | 301 | 44 | 28 | 29 | | 402 | |
| PDP | Chandpur | 160 | | 54 | 75 | | 289 | 548 | 409 | 112 | 72 | 5 | 1146 | |
| | Matlab | 806 | | 69 | 70 | | 945 | 262 | 77 | | | | 339 | |
| PDP | Hajiganj | 146 | | 70 | 45 | | 261 | 685 | 122 | 26 | 66 | 20 | 919 | |
| | Faridganj | 132 | | 33 | 22 | 20 | 227 | 111 | 55 | 25 | 23 | | 214 | |
| | Kachua | 376 | | 90 | 66 | | 532 | 110 | | | | | 110 | |
| PDP | Brahmanbaria | 666 | | 168 | 123 | | 957 | 1485 | 425 | 116 | 176 | 26 | 2228 | |
| | Sarail | 566 | | 78 | | | 644 | 140 | | 50 | | | 190 | |
| | Kasba | 560 | | 401 | 38 | | 999 | 68 | 20 | 128 | 74 | 10 | 300 | |
| | Nabinagar | 742 | | 71 | 39 | | 852 | 329 | 95 | 126 | 13 | | 563 | |
| | Bancharampur | 212 | | 26 | 14 | | 252 | 93 | 93 | 21 | 3 | | 210 | |
| | Nasirnagar | 326 | | 190 | 13 | | 529 | 151 | 45 | 16 | 2 | | 214 | |
| Thana Total | | 9543 | | 2749 | 1194 | 20 | 13506 | 2157 | 462 | 415 | 181 | 10 | 3225 | 28.4% |
| PDP Total | | | | | | | | 5456 | 1625 | 430 | 560 | 51 | 8122 | 71.6% |
| Grand Total | | 9543 | | 2749 | 1194 | 20 | 13506 | 7613 | 2087 | 845 | 741 | 61 | 11347 | |

February 22, 1979

Source: District Manager

4. Evaluation of the Sylhet District NMS

The Sylhet District in size is one of the largest in Bangladesh. The principal city is Sylhet.

There are four sub-divisions in the district (Sylhet, Sunamganj, Moulvi Bazar and Habiganj) and 33 thanas. The Sylhet Sub-Division has 11 thanas. Sunamganj Sub-Division has 8 thanas, Moulvi Bazar Sub-Division has 6 thanas, and Habiganj Sub-Division has 8 thanas.

The cropped acreage as reported for fiscal year 1975-76 totaled 1,783,300 acres and comprised the following crops:

Appendix Table 15 Sylhet District Cropped Acres 1975-76

| <u>Crop</u> | | <u>Acres</u> |
|-------------|-------|------------------|
| T. Aman | HYV | 192,000 |
| | Local | 422,000 |
| Aus | HYV | 200,000 |
| | Local | 292,000 |
| Boro | HYV | 255,000 |
| | Local | 350,000 |
| Wheat | HYV | 200 |
| | Local | 300 |
| Sugarcane | | 6,000 |
| Total | | <u>1,783,300</u> |

The total fertilizer used in the fiscal year 1977-78 was 23,512 long tons of product for an average of 13.8 pounds of nutrient for every cropped acre.

Rail, water, and highway transportation facilities are available in the district. The meter gauge railway system serving points along the southern part of the district and north of Sylhet to Chattak connects with the 3 fertilizer factories in Bangladesh, Chittagong Port, and Narayanganj. Only about half of the thanas are served by pucca roads, eleven thanas having no roads at all and served only by water transport. The areas depending on water transportation have none during the dry season when the rivers are low or dry.

The fertilizer supply comes from the Fenchuganj urea factory, the Chittagong TSP factory, and imports through the Chittagong Port.

The district office of BADC is located in Sylhet and the sub-divisional offices in Sylhet, Sunamganj, Moulvi Bazar, and Habiganj. The warehouse locations designated as PDPs are at Sylhet, Habiganj, Sreemangal, and Chhatak. The Sylhet PDP consists of 7 owned and leased warehouses with a total capacity of 2830 tons. The Habiganj PDP consists of 9 leased warehouses with a total capacity of 1,570 tons. The Sreemangal PDP consists of 4 owned and leased warehouses with a total capacity of 1,420 tons. The Chattak PDP consists of 6 owned and leased warehouses with a total capacity of 880 tons. The 79 owned and leased thana warehouses have a capacity of 8,800 tons. Thus, the total warehouse capacity is:

| | |
|--------|-------------------|
| 4 PDPs | 6,700 tons |
| Thanas | <u>8,800 tons</u> |
| Total | 15,500 tons |

This capacity compares to the annual sales of 1977-78 sales of 23,512 tons and results in a warehouse capacity to sales ratio of .66 to 1.

TCCAs do not distribute fertilizer in the Sylhet District. However, ammonium sulphate is distributed directly from the Fenchuganj Factory to the tea gardens in the district. These sales are not reflected in any of the data given for BADC.

The Sylhet District fertilizer sales are managed by a District Manager who administers 4 Sub-Divisional Managers, 33 Thana Inspectors, 5 Senior Storekeepers, and 193 other personnel.

BADC owned and operated transportation consists of a jeep for the district manager and 2 trucks to supplement product movement by contractors.

Some sampling of the retail prices indicated that they were at the fixed prices or a little below near the PDPs, except in a few isolated cases where TSP had been sold above the fixed price due to a shortage in the particular area.

Dealers located in the vicinity of the PDPs are happy with the new marketing system because commissions are higher and purchases and sales are unrestricted. Dealers in the more remote areas are content to buy at the thana sales centers at the Tk. 136.1/ton (5 Tk/maund) commission. The additional commission at the PDPs will not offset their additional transportation and handling costs. All of the dealers registered at the Chattak PDP are from Chattak Thana. None of the dealers from the other thanas intended to be served from Chattak came to register. These remote thanas are all in the swampy area requiring water transportation which is not available during the dry season.

Table 16A **Sylhet District Sales**
(Product Long Tons)

| | Thana | December 1977 | | | | | December 1978 | | | | | | |
|-----|--------------|---------------|-----|-----|----|-------|---------------|------|-----|-----|----|-------|-------|
| | | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | Other | Total |
| PDP | Sylhet | 91 | | 150 | 32 | | 273 | 116 | | 167 | 22 | | 305 |
| | Gowainghat | 3 | | 1 | | 4 | | | | | | | |
| | Balaganj | 7 | | 4 | 1 | 12 | 2 | | | | | | 2 |
| | Tajpur | 12 | | 4 | 2 | 18 | 3 | | 2 | 1 | | | 6 |
| | Biswanath | 62 | | 27 | 17 | 106 | 16 | | 15 | 3 | | | 34 |
| | Fenchuganj | 5 | | 3 | 1 | 9 | 7 | | 4 | | | | 11 |
| | Golapganj | 15 | | 10 | 5 | 30 | 10 | | 8 | 1 | | | 19 |
| | Jaintapur | 1 | | | | 1 | 3 | | 2 | | | | 5 |
| | Kanaighat | 3 | | 1 | 1 | 5 | 6 | | | | | | 6 |
| | Zakiganj | 13 | | 1 | 1 | 15 | 12 | | | | | | 12 |
| | Bennibazar | 5 | | 3 | 2 | 10 | 5 | | 1 | | | | 6 |
| | Moulvibazar | 14 | | 6 | 2 | 22 | 28 | | 54 | 7 | | | 89 |
| | Rajnagar | 12 | | 9 | 1 | 22 | 14 | | 22 | | | | 36 |
| | Kulaura | 47 | | 28 | 6 | 81 | 40 | | 54 | 2 | | | 96 |
| PDP | Srimangal | 19 | | 27 | 39 | 85 | 113 | | 149 | 40 | | | 302 |
| | Kamalganj | 27 | | 5 | 1 | 33 | 22 | | 5 | | | | 27 |
| | Barlekha | 19 | | 7 | 5 | 31 | 23 | | 6 | 3 | | | 32 |
| | Sunamganj | 78 | | 30 | 7 | 115 | 36 | | 14 | 3 | | | 53 |
| PDP | Chattak | 33 | | 19 | 3 | 55 | 35 | | 17 | 3 | | | 55 |
| | Jagannathpur | 4 | | 7 | 2 | 13 | 12 | | 1 | | | | 13 |
| | Tahirpur | 59 | | 33 | 4 | 96 | 9 | | 2 | | | | 11 |
| | Badaghat | 11 | | 8 | 1 | 20 | 9 | | 4 | | | | 13 |
| | Dharampasha | 52 | | 42 | 8 | 113 | 26 | | 10 | 2 | | | 38 |
| | Madhyanager | 80 | | 39 | 9 | 128 | 35 | | 30 | 2 | | | 67 |
| | Derai | 68 | | 32 | 7 | 107 | 31 | | 41 | 3 | | 7 | 82 |
| | Sulla | 37 | | 75 | 3 | 115 | 57 | | 48 | 6 | | | 111 |
| | Jamalganj | 107 | | 75 | 17 | 199 | 60 | | 48 | 16 | | | 124 |
| PDP | Habiganj | 49 | | 35 | 9 | 93 | 127 | | 73 | 11 | | | 211 |
| | Madhabpur | 79 | | 91 | 5 | 175 | 77 | | 2 | 2 | | | 81 |

Source: District Manager

Table 16A (Contd.) Sylhet District Sales
(Product Long Tons)

| <u>Thana</u> | <u>December 1977</u> | | | | | | <u>December 1978</u> | | | | | | |
|--------------------|----------------------|------------|-------------|------------|--------------|--------------|----------------------|------------|------------|------------|--------------|--------------|--------------|
| | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | |
| Chunarughat | 9 | | 78 | | | 87 | 19 | | 5 | 1 | | 129 | |
| Bahubal | 14 | | 8 | 3 | | 25 | 13 | | 5 | 1 | | 19 | |
| Baniachong | 129 | | 59 | 13 | | 201 | 25 | | 6 | 3 | | 34 | |
| Mahiganj | 9 | | 4 | 3 | | 16 | 9 | | 4 | 1 | | 14 | |
| Lakhai | 139 | | 126 | 9 | | 274 | 115 | | 24 | 1 | | 140 | |
| Ajniriganj | 155 | | 13 | 9 | 65 | 242 | 100 | | 94 | 13 | | 207 | |
| Thana Total | 1467 | | 1060 | 228 | 76 | 2831 | 824 | | 501 | 71 | 7 | 1403 | 61.6% |
| PDP Total | | | | | | | 391 | | 406 | 76 | | 873 | 38.4% |
| Grand Total | 1467 | | 1060 | 228 | 76 | 2831 | 1215 | | 907 | 147 | 7 | 2276 | |

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February 22, 1979

Source: District Manager

Table 16B Sylhet District Sales
(Product Long Tons)

| | Thana | January 1978 | | | | | January 1979 | | | | | | |
|-----|--------------|--------------|-----|-----|----|-------|--------------|------|-----|-----|----|-------|-------|
| | | Urea | DAP | TSP | MP | Other | Total | Urea | DAP | TSP | MP | Other | Total |
| PDP | Sylhet | 75 | | 33 | 7 | | 115 | 45 | | 38 | 3 | | 86 |
| | Gowainghat | 5 | | 3 | 2 | | 10 | 3 | 3 | 1 | | 7 | |
| | Balaganj | 9 | | 4 | 1 | | 14 | 3 | | | | 3 | |
| | Tajpur | 8 | | 4 | 2 | | 14 | 5 | 1 | | | 6 | |
| | Biswanath | 29 | | 11 | 2 | | 42 | 1 | | | | 1 | |
| | Fenchuganj | 19 | | 14 | 3 | | 36 | 10 | 3 | | | 13 | |
| | Golapganj | 6 | | 2 | 1 | | 9 | 3 | 1 | 1 | | 5 | |
| | Jaintapur | 3 | | 3 | 1 | | 7 | 1 | | | | 1 | |
| | Kanaighat | 4 | | | | | 4 | 4 | | | | 4 | |
| | Zakiganj | 3 | | | | | 3 | 2 | | | | 2 | |
| | Beanibazar | 10 | | 4 | 2 | | 16 | 7 | 1 | 1 | | 9 | |
| | Moulvibazar | 16 | | 6 | 2 | | 24 | 14 | | 6 | | 20 | |
| | Rajnagar | 31 | | 10 | 3 | | 44 | 15 | 1 | | | 16 | |
| | Kulaura | 58 | | 14 | | | 72 | 29 | 7 | 1 | | 37 | |
| PDP | Srimangal | 15 | | 39 | 1 | | 55 | 77 | 7 | 1 | | 85 | |
| | Kamalganj | 28 | | 6 | 3 | | 37 | 10 | 3 | 2 | | 15 | |
| | Barlekha | 13 | | 7 | 5 | | 25 | 5 | 2 | | 7 | | |
| PDP | Sunamganj | 72 | | 26 | 10 | | 108 | 37 | | 12 | 5 | 54 | |
| | Chattak | 91 | | 29 | 12 | | 132 | 57 | 4 | 13 | 5 | 81 | |
| | Jagannathpur | 35 | | 13 | 2 | | 50 | 34 | | 2 | 1 | 37 | |
| | Tahirpur | 30 | | 4 | | | 34 | 5 | | 2 | | 7 | |
| | Badaghat | 13 | | 7 | | | 20 | 15 | | 3 | | 18 | |
| | Dharampasha | 16 | | 9 | 2 | 8 | 35 | 18 | | 6 | 1 | 25 | |
| | Madiyanagar | 49 | | 36 | 2 | | 87 | 32 | | 14 | 1 | 47 | |
| | Derai | 45 | | 30 | 1 | | 76 | 75 | | 21 | 8 | 104 | |
| | Sulla | 173 | | 30 | 15 | 2 | 220 | 113 | | 13 | 1 | 137 | |
| | Jamalganj | 53 | | 18 | 10 | | 81 | 76 | 2 | 15 | 8 | 101 | |
| PDP | Habiganj | 135 | | 65 | 16 | | 216 | 276 | | 35 | 3 | 314 | |
| | Madhabpur | 82 | | 114 | 1 | | 197 | 42 | | 5 | 3 | 50 | |

Source: District Manager Sylhet

**Table 16B (Cont) Sylhet District Sales
(Product Long Tons)**

| <u>Thana</u> | <u>January 1978</u> | | | | | | <u>January 1979</u> | | | | | | | |
|--------------------|---------------------|------------|------------|------------|--------------|--------------|---------------------|------------|------------|-----------|--------------|--------------|--------------|-----------|
| | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | | |
| Chunarughat | 15 | | 10 | | | 25 | 2 | | 1 | | | 3 | | |
| Bahubal | 28 | | 17 | 1 | | 46 | 16 | | 6 | | | 22 | | |
| Baniachong | 133 | | 104 | 13 | | 250 | 141 | | 20 | 2 | | 163 | | |
| Mahiganj | 12 | | 6 | 1 | | 19 | 12 | | 3 | | | 15 | | |
| Lakhai | 192 | | 202 | 2 | | 396 | 286 | | 47 | 5 | | 338 | | |
| Ajmiriganj | 554 | | 100 | 9 | | 663 | 400 | | 42 | 3 | | 445 | | |
| Thana Total | 2060 | | 990 | 132 | 10 | 3192 | 1416 | 2 | 234 | 50 | 10 | 1712 | 75.2% | 43 |
| PDP Total | | | | | | | 455 | 4 | 93 | 12 | 2 | 566 | 24.8% | |
| Grand Total | 2060 | | 990 | 132 | 10 | 3192 | 1871 | 6 | 327 | 62 | 12 | 2278 | | |

February 22, 1979

Source: District Manager

5. Evaluation of the Chittagong Hill Tracts NMS

The Government's administrative headquarters for this district is located in Rangamati. The district is divided into 13 thanas and has three principal cities, Ramgarh, Rangamati and Bandarban. The district is divided into three sub-divisions, Ramgarh, Rangamati (Sadar) and Bandarban.

The district has a total area of 5,083 square miles made up of rolling forested hills criss-crossed by branches and tributaries of the Karnaphuli River. Between the hills are valleys which are farmed.

Total cropped area is around 250,000 acres or about 8% of the total area of the district. Scattered small farming areas in remote locations are farmed by hill tribal people. Poor communications characterize this district, one of the most under developed districts in Bangladesh.

The cropped acres reported for 1978-79 are as follows:

Table 17 Chittagong Hill Tract Cropped Area 1978/79

| <u>Crop</u> | <u>Season</u> | <u>Acres</u> |
|----------------|---------------|---------------|
| Rice Paddy | Aus | 90,675 |
| | T.Aman | 64,390 |
| | Boro | 25,420 |
| Jute | | 425 |
| Sugarcane | | 1,660 |
| Oil Seed Crops | | 13,120 |
| Wheat | | 85 |
| Others | | <u>54,225</u> |
| Total: | | 250,000 |

The Chittagong Hill Tracts District fertilizer sales were 0.4% of BADC total sales in 1977-78. Fertilizer use in the district for 1977-78 was only 2,641 long tons of product, the lowest of any district in Bangladesh, and represents only 11.2 pounds of nutrient per cropped acre.

Transportation into the district is limited to 3 roads from the Chittagong District and country boat traffic up the Karnaphuli River. Roads do not connect the administrative center (Rangamati) to the various thanas in the district. The Karnaphuli River, its branches

and tributaries, are used for some inter-district transportation and for outgoing produce. Road transport to thanas in the remote valleys is expensive due to poor road conditions and great distances.

Fertilizer is currently being transported from Chittagong where a transit warehouse of 1,625 ton capacity on the Strand Road has been set aside to serve the Chittagong Hill Tracts. This warehouse is under the control of the Chittagong Hill Tracts District Manager but the warehouse is administered by the Chittagong District Manager. This transit warehouse currently supplies the Chittagong Hill Tract thana at Ramgarh and the PDP at Rangamati.

The Chittagong District PDP at Dohazari is currently supplying the Chittagong Hill Tracts thanas at Bandarban, Lama and Nakhiongchari.

Currently in the Chittagong Hill Tracts District only one PDP is operating, Rangamati. This PDP's sales to dealers is marginal as shown by Table 18.

The Chittagong Hill Tracts District owned/operated and hired warehouses, excluding the Strand Road warehouse, have a total capacity of 2,503 tons and compared with sales in 1977-78 of 2,641 product tons, achieved a warehouse capacity to sales ratio of 1.06 to 1.

The district currently has 1 truck used for transporting fertilizer between the PDP and thanas in the Rangamati area and 1 jeep.

Reports are that prices at remote thanas are above official prices as the PDP discount does not cover transport, handling and warehouse costs. In addition it is reported that dealers buying from thanas at the current 7 Tk. /maund discount and faced with difficult and expensive transport problems (head loads etc.) find they must sell over the official price to show a profit.

Fertilizer knowledge by tribal farmers in this district is low to minimal. Extension efforts to educate farmers have made little headway. Farmers claim their soil is rich and are afraid fertilizer may hurt their fields. All these factors contribute to low fertilizer usage in this district.

Only 29 customers are registered at the Rangamati PDP of which only 9 are local dealers. Customers from other districts came to the PDP in December and January to buy the PDP's stock of black colored TSP which is in high demand in other districts. Stock of this particular color TSP is now exhausted and PDP sales problems caused by customers from other districts have ended. Stocks of TSP at the PDP are adequate with the planned arrival of DAP.

The New Marketing System needs to be modified to serve the particular problems of Chittagong Hill Tracts District.

Table 18A Chittagong Hill Tracts District Sales

(Product Long Tons)

| Thana | December 1977 | | | | | December 1978 | | | | | Total | % | |
|--------------------|---------------|----------|-----------|-----------|----------|---------------|------------|----------|------------|-----------|----------|------------|--------------|
| | Urea | DAP | TSP | MP | Other | Urea | DAP | TSP | MP | Other | | | |
| PDP Rangamati | 12 | | 10 | 12 | | 34 | 2 | | 76 | 1 | | 79 | |
| Chandraghona | 7 | | 8 | 2 | | 17 | 19 | | 31 | 1 | | 51 | |
| Barkal | 6 | | 6 | 8 | | 20 | 10 | | 9 | 9 | | 28 | |
| Longadu | 3 | | 1 | 2 | | 6 | 5 | | 5 | 6 | | 16 | |
| Baghaichari | 2 | | 1 | | | 3 | 6 | | 3 | | | 9 | |
| Bandarban | 9 | | 4 | | | 13 | | | | | | | |
| Lama | 2 | | 2 | | | 4 | 42 | | 23 | | | 65 | |
| Naikhyongchari | 3 | | 2 | | | 5 | 12 | | 16 | 1 | | 29 | |
| Ramgarh | 4 | | 9 | 1 | | 14 | 1 | | 9 | | | 10 | |
| Khagrachari | 1 | | | | | 1 | 1 | | | | | 1 | |
| Mahalchari | | | | | | | 1 | | | | | 1 | |
| Dighinala | | | | | | | 1 | | | | | 1 | |
| Thana Total | 49 | | 43 | 25 | | 117 | 98 | | 96 | 17 | | 211 | 72.7% |
| PDP Total | — | — | — | — | — | — | 2 | — | 76 | 1 | — | 79 | 22.3% |
| Grand Total | 49 | | 43 | 25 | | 117 | 100 | | 172 | 18 | | 290 | |

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February 22, 1979

Source: District Manager

Table 18B Chittagong Hill Tracts District Sales

(Product Long Tons)

| | <u>Thana</u> | <u>January 1978</u> | | | | | <u>January 1979</u> | | | | | | | |
|-----|--------------------|---------------------|------------|------------|-----------|--------------|---------------------|-------------|------------|------------|-----------|----------|--------------|--------------|
| | | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | <u>Other</u> | <u>Total</u> | <u>Urea</u> | <u>DAP</u> | <u>TSP</u> | <u>MP</u> | | <u>Other</u> | <u>Total</u> |
| PDP | Rangamati | 15 | | 7 | 6 | | 28 | 21 | | 31 | 8 | | 60 | |
| | Chandraghona | 28 | | 27 | 3 | | 58 | 15 | | 12 | 3 | | 30 | |
| | Barkal | - | | | | | - | - | | | | | - | |
| | Longadu | 7 | | 6 | 11 | | 24 | 3 | | 2 | 2 | | 7 | |
| | Baghaichari | 1 | | 1 | | | 2 | 6 | | 2 | | | 8 | |
| | Bandarban | 23 | | 8 | | | 31 | 6 | | | | | 6 | |
| | Lama | 13 | | 14 | 2 | | 29 | 13 | | 6 | | | 25 | |
| | Naikhyongchari | 11 | | 10 | 1 | | 22 | 37 | | 31 | 4 | | 72 | |
| | Ramgarh | 11 | | 13 | 2 | | 26 | 8 | | 62 | 1 | | 71 | |
| | Khagrachari | 5 | | 1 | 1 | | 7 | 2 | | | | | 2 | |
| | Mahalchari | - | | | | | - | - | | | | | - | |
| | Dighinala | | | | | | | 1 | | | | | 1 | |
| | Thana Total | 114 | | 87 | 26 | | 227 | 97 | | 115 | 10 | | 222 | 78.7% |
| | PDP Total | — | — | — | — | — | — | 21 | — | 31 | 8 | — | 60 | 21.3% |
| | Grand Total | 114 | | 87 | 26 | | 227 | 118 | | 146 | 18 | | 282 | |

Source: District Manager

February 22, 1979

F. Suggestions

The suggestions were offered by the IFDC Consultants as some of the ways the NMS could possibly be improved and to meet the objectives of the NMS. It is too early in the NMS to make a final decision on all of these suggestions, but they have been accepted by BADC and USAID as worthy of serious consideration.

(1) Warehousing Improvement

The ongoing warehouse construction program should be concentrated at the PDP locations and at those locations where storage inadequacies are the most critical.

PDPs should be staffed adequately to handle customer sales promptly along with regular receiving and shipping operations.

- i. The BADC employee designated to register dealers, take bank drafts and issue warehouse orders should be located at the PDP warehouse.
- ii. Longer operating hours might be needed with personnel working on shifts.
- iii. Procedures for store-keeper's accountability should permit simultaneous receiving and shipping or multiple simultaneous shipments.

Maintain uniform stacking in all warehouses to protect inventory and permit physical verification of stock balances at any time.

Maintain adequate inventories of required products including DAP at all locations.

A specific suggestion is that the Strand Road warehouse in Chittagong that is assigned to Chittagong Hill Tracts be reassigned to the Chittagong FDP for better utilization. The Chittagong Hill Tracts District Manager should be permitted to issue movement orders on any Chittagong District PDP/transit warehouse in coordination with the Chittagong District Manager. Additionally, the ground rock phosphate at the Strand Road warehouse should be sold or shipped to other districts or sold to the TSP factory as it has been consuming considerable space for over two years.

Should the TCCAs decide not to function as a wholesale dealers or as a retail dealers they should be requested to return leased BADC warehouses back to BADC. BADC can utilize some of them, particularly in the Comilla District. The others could be sold or leased to active wholesale dealers.

b. Transportation and Coordinating Shipments

It is recommended that uniform transportation remuneration rates be established by BADC competitive with those of other government companies and private industry to enable BADC to effectively secure adequate transportation conveyances.

Transportation contracts should be awarded on the basis of contractor qualifications, such as owning trucks, having signed contracts for sufficient transportation conveyances, and ability to post bond or guarantee to cover cargo transported. Contracts should remain valid until reissued for changes or canceled for non-performance. Enhancement of rates could possibly be permitted by contract on BADC rates for local conditions or circumstances increasing costs. BADC rates should be reviewed regularly and revised as necessary.

The Divisional Manager and his District Managers should coordinate with the Manager Shipping and assist in determining all movement orders for shipments into the districts to the extent of allotments established by BADC/Dacca. This authority will permit the Divisional Manager to route and dispatch for timely arrivals of the required products at the required locations and in the required quantities. He can then adjust the program for unexpected product demand, space availability, or transportation restrictions.

The movement order procedures should be reviewed to insure that they in no way are restrictive to efficient operations. Movement orders should be coordinated with the Manager Shipping to avoid double handling and not to restrict efficient operations in the port.

(2) Adding And Deleting Sales Locations

Certain warehouse locations have been designated as PDP's under the new marketing system. These PDPs should be selected to maximize the following criteria: (a) at the intersection of major transport modes, (b) near a major commercial area, (c) has adequate storage capacity, and (d) serves the maximum number of dealers in several thanas.

PDPs should be filled first. No fertilizer should be moved to thanas until all PDPs are adequately stocked. It will become apparent that some areas are being adequately served by the selected PDP areas and other areas are not. The thana sales at some locations will drop and some will not. If thana sales drop 50% or more from previous sales they should be closed because the area can be adequately served from the PDP. If thana sales remain steady it is an indication that the sales location is needed and should be maintained.

If a PDP's sales are low or if it is found to be serving only one thana, then its status as a PDP should be reconsidered.

(3) Dealer Classification

The NMS principle that dealers may register without restrictions or approvals is essential for a free marketing system. However, certain qualifications such as requiring dealers to bring a valid form of identification add needed assurance that the registrant is using his correct name and address. This appears to have almost eliminated people using fictitious names and addresses.

Under the current NMS, it has become difficult or impossible to determine sales of fertilizer to dealers in given areas. Wholesale dealers are free to sell anywhere they choose and can now buy anywhere they wish in the Chittagong Division. Local Government officials are vitally interested in knowing that stocks and sales are adequate to meet demand in their jurisdictions and justly so.

A dealer classification system is one way to solve several of the NMS problems currently reported by District Managers. These are as follows:

- (a) Estimation of sales for given thana and administrative areas.
- (b) The need to identify and verify which dealers maintain a warehouse, its location, capacity and address.
- (c) The need to identify dealers' points of sale and locations of any sub-dealers.
- (d) The need to provide BADC with a means to recommend to banks dealers worthy of credit for warehouse construction or operating loans.
- (e) A means to direct farmers to authorized dealers to exchange bank fertilizer credit slips for fertilizer.
- (f) An incentive for dealers to attend training programs.
- (g) A means of rationing fertilizer under critical shortage situations.

There are several possible ways a dealer classification system could be structured to solve these NMS problems and still maintain a truly free marketing system.

One suggestion is to have BADC PDP Sales Representatives (a suggested new name for Thana Inspectors) visit once each month dealer warehouses and dealer points of sale. The PDP Sales Representative would estimate dealer stocks on hand, verify dealer and sub-dealer addresses, obtain dealers' data on sales volume, visit with nearby farmers and obtain first hand information on retail prices they are paying for fertilizer. The Sales Representative should have a firm understanding of the fertilizer requirements of his area, dealer and farmer credit needs, and be able to communicate current fertilizer recommendations. Based on these monthly reports (plus information on dealer purchases recorded in the "Customer Lifting Record" maintained at warehouses) the PDP Sales Representative would classify each dealer into one of three classifications.

CLASSIFICATIONREQUIREMENTA.
(Blue Card)

1. Have a warehouse of 20 tons or more capacity.
2. Have a permanent point of sale.
3. Have purchased from a PDP or thana 50 tons or more fertilizer in the last season.
4. His regular retail selling prices to farmers are at or below the official retail prices.
5. He must have more than one retail point of sale or have sub-dealers.
6. Have attended a fertilizer training course and passed a simple written test on the correct use and storage of fertilizer or passed the test without taking the course.

B.
(Red Card)

1. Have a warehouse of 5 tons capacity or more.
2. Have a permanent retail point of sale.
3. Have purchased from a PDP or a thana 10 tons or more fertilizer in the last season and sold it to farmers at or below the official retail price.
4. Have attended a fertilizer training course and passed a simple test on the correct use and storage of fertilizer or passed the test without taking the course.

C.
(Yellow Card)

1. Any registered dealer who does not meet requirements of classification A or B or who does not want to be classified. This dealer must make a purchase every six months or his registration will be cancelled. All new dealers will be given yellow cards until they have qualified for red or blue cards.

Incentive for dealers to be classified A or B could be the following:

1. During times of fertilizer shortage crisis, A and B classified dealers would get a monthly fertilizer allotment based on percentage of their purchases from the PDP or thana during the last season. C dealers would get no allocations.
2. A and B dealers would be eligible to receive BADC recommendations to banks for credit, when and if banks have funds to loan to dealers.
3. A and B dealers only would be eligible to redeem farmer bank credit slips at BADC PDPs or thanas for fertilizer and receive from BADC the prevailing discount.
4. A, B and C dealers would be eligible to lease from BADC a large painted wood or metal sign stating his authorized dealer classification. Should for appropriate reasons, the PDP Representative change the dealer's classification, the sign would be returned to BADC for one with his new classification. If a dealer challenges his re-classification the Sub-District Manager would make the final ruling.

(4) Dealer Training

Dealer training is essential under the NMS for the system to function efficiently and also to assure that costly fertilizer being provided and subsidized by the Government is not wasted by poor dealer management. In addition dealers should be sources of information to the farmers on correct fertilizer usage.

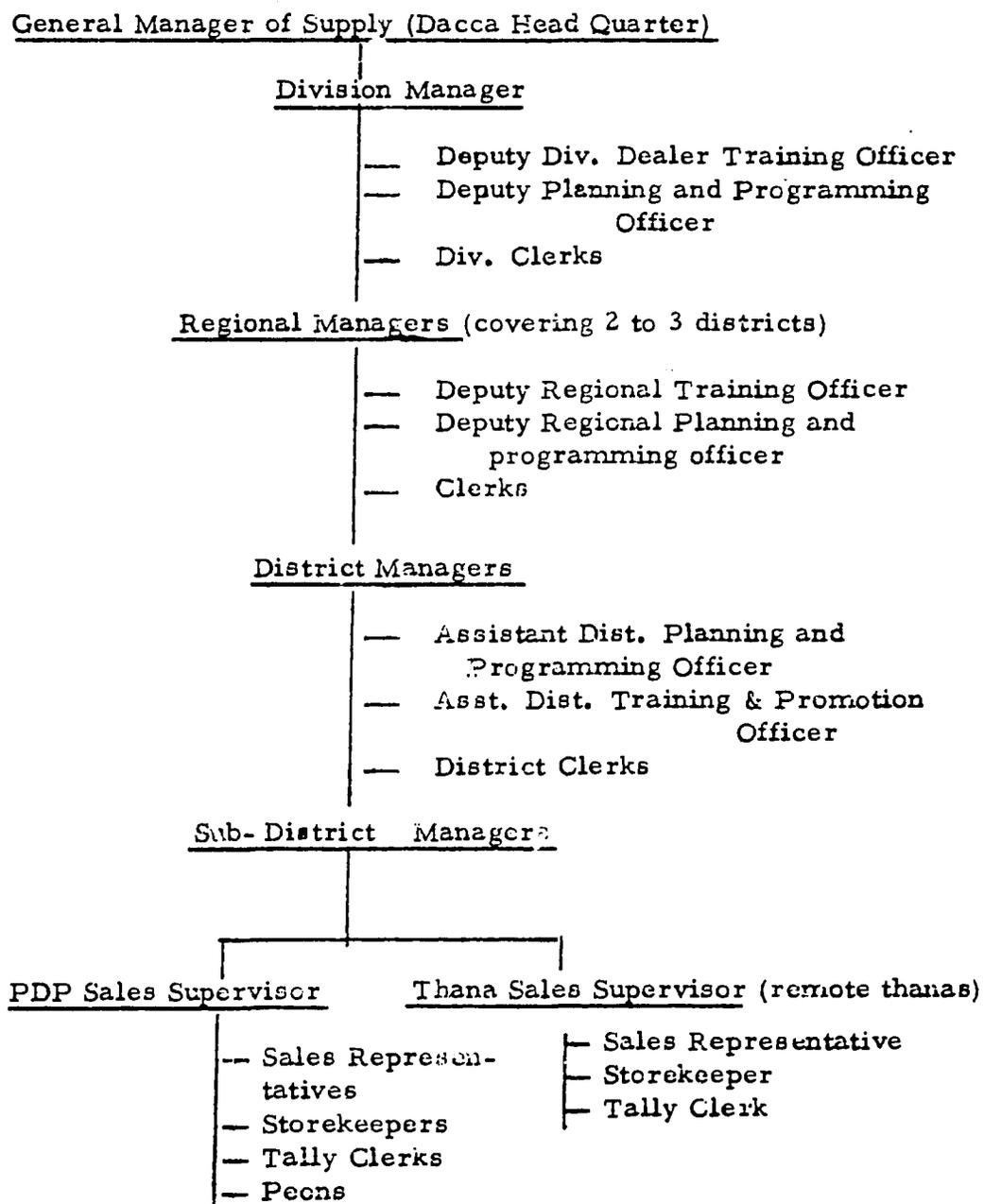
As thana warehouses and points of sale are closed these personnel should be reassigned to new jobs and functions such as dealer training or PDP or Thana Sales Representatives.

Training of all BADC personnel in a division is needed to teach them how to upgrade their skills for future promotions and above all to direct their efforts to serve the most important persons in any marketing organization, the customers.

(5) Staffing Pattern For the New Marketing System

The current staffing pattern designed for the old marketing system is not adequate to service the high volume sales of PDP's and reduced emphasis on thana sales. It is suggested that a new staffing pattern be designed to meet the challenge.

One possible NMS organizational chart could look like the following:



(6) NMS Costs and Prices

- (i) It is suggested that an IFDC short term consultant economist or market analyst, as provided in the IFDC/BADC contract, spend 1 to 1½ months in Bangladesh to determine BADC marketing costs under the NMS, compared to costs of the old Marketing system. In addition he would evaluate wholesaler and retail dealer costs. This is to provide NMS managers with answers relevant to whether discounts should be raised or lowered, and to assure that an adequate profit incentive exists within the context of Bangladesh business conditions for wholesalers and retail dealers under the NMS.
- (ii) BADC should require that all registered dealers sign an agreement to not sell over official retail prices. Dealers who violate this agreement would be barred from future purchases from BADC for period of say four months.
- (iii) BADC should provide "Price Posters" showing official retail prices for all fertilizer products sold in Bangladesh. Dealers would be required to display this "Price Poster" in a prominent place in his store visible to all customers. This should also be a requirement of the dealer registration at any permanent point of sale. BADC could possibly charge 5 or 7 Taka for each poster to defray part of BADC printing and poster distribution costs.
- (iv) Based on the NMS cost evaluation, a determination needs to be made whether to raise or lower discounts or develop a new discount (commission) schedule.
- (v) Minimum quantity purchases at PDPs need to be re-evaluated with the possibility of raising the minimum tons per purchase.
- (vi) BADC Thana sales centers where sales in January and February confirm that sales have dropped 50% or more compared to sales for the same months last year should be closed by the end of March. Decision to close additional BADC thana sales centers should be made in May and again in July.