

UPAZILA SYSTEM AND AGRICULTURAL DEVELOPMENT IN
BANGLADESH: A CASE STUDY OF DHAMRAI UPAZILA

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ABBREVEATIONS USED

AAEO	Assistant Agriculture Extension Officer
Adl.A.O.	Additional Agriculture Officer
ADAE	Assistant Director Agricultural Extension
ADP	Annual Development Programme
ARDO	Assistant Rural Development Officer
AUDP	Annual Upazila Development Programme
BADC	Bangladesh Agricultural Development Corporation
B.Aman	Broadcast Aman
BBS	Bangladesh Bureau of Statistics
BKB	Bangladesh Krishi Bank
BPATC	Bangladesh Public Administration Training Centre
BS	Block Supervisor
BWDB	Bangladesh Water Development Board
CERDI	Central Extension Resources Development Institute
DAE	Department of Agricultural Extension
DDAE	Deputy Director Agricultural Extension
DTW	Deep Tube-well
FY	Financial Year
HYV	High Yielding Variety
JAEO	Junior Agriculture Extension Officer
JB	Janata Bank
LDA	Lower Division Assistant

LLP	Low Lift Pump
NGO	Non-Government Organization
PC	Planning Commission
PIO	Project Implementation Officer
PP	Power Pump
SB	Sonali Bank
SMO	Subject Matter Officer
SMS	Subject Matter Specialist
SO	Sectional Officer
STW	Shallow Tube-well
T.Aman	Transplanted Aman
T&V	Training and Visit
UAA	Union Agricultural Assistant
UAO	Upazila Agriculture Officer
UCCA	Upazila Central Cooperative Association
UE	Upazila Engineer
UFO	Upazila Fishery Officer
UIC	Upazila Irrigation Committee
UIT	Upazila Irrigation Team
ULO	Upazila Livestock Officer
UNO	Upazila Nirbahi Officer
UP	Union Parishad
URDO	Upazila Rural Development Officer
UZP	Upazila Parishad

SECTION I

INTRODUCTION

Agricultural development status in general reflects the stage of development in the process of transition from traditional to modern economy. Agricultural development in the recent times has been possible largely by major technological breakthrough in biological research in the mid-sixties¹. In the context of Bangladesh, this development is often expressed through the term "Green Revolution". In this study, agricultural development is used symbolically to signify the point of transition from traditional to modern agriculture but its wider connotation will seek to define it in terms of the constraints faced in the continuing effort to spread the new methods as well as the new technology. Innovation and diffusion of new technology in this wider sense have provided the major thrust of agricultural policy in Bangladesh². An examination of the questions as to why such efforts did not succeed in the past will provide the basic framework for an analysis of the relationship between agricultural development and the related variables. This study seeks to look at the implications of the introduction of upazila system for agricultural development in Bangladesh. This will be done first, through the development of a conceptual framework that will delineate the major issues for the analysis and, then, by an analysis of the collected data from the sample upazila.

THE ISSUES

Food production growth has barely kept pace with population growth in Bangladesh and despite the introduction of improved agricultural production technologies per capita rice production has actually declined during the past years. Substantial year-to-year fluctuations in agricultural production, due mainly to natural calamities, have aggravated the situation. A basic element in the agricultural development strategy of the Bangladesh Government has always been to intensify winter crop production by expanding irrigation coverage and by spreading high yielding technologies with new varieties and improved inputs like chemical fertilizer. However, this particular strategy also had very limited success in the past.

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1. Yujiro Hayami and Vernon W. Ruttan, Agricultural Development : An International Perspective. Baltimore and London : The Johns Hopkins University Press, 1971. Also see, Arthur T. Mosher, Thinking About Rural Development. New York: Agricultural Development Council, Inc. 1976.
 2. Government of the People's Republic of Bangladesh, The First Five Year Plan, 1973-78, Dhaka, 1973 : The Second Five Year Plan 1980-85. Dhaka, 1983 and The Third Five Year Plan, 1985-90, Dhaka, 1985.

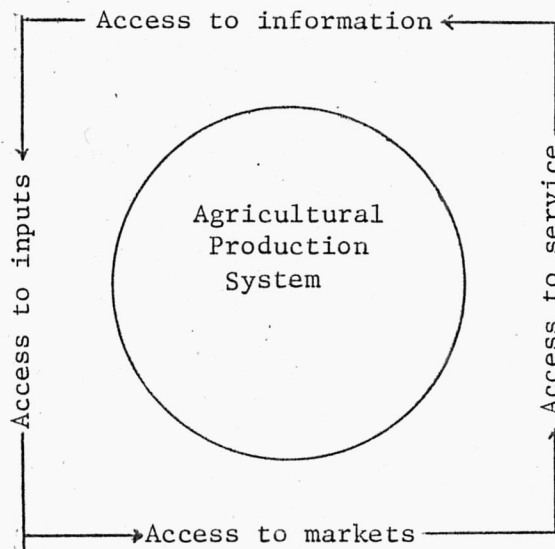
Basic Elements in Agricultural Development

Agricultural development takes place in consequence of changes in the mode of production brought about by the new technology. In order to avail of the opportunities, the farmer must have access to the basic elements in such agricultural development³. These elements are :

- (i) Access to information: This is the key to the modern agricultural production system. Its acquisition ought to occur prior to the acquisition of other facilities. Without a knowledge that a technology exists that can increase output and the further knowledge that demand exists for such an output, there is no incentive for the farmer to procure other complementary inputs. At another level, even the awareness and the acquisition of the technology are not enough unless the farmer also learns to use the improved technology to get better results. Extension and adequate market information are thus important elements for agricultural development.
- (ii) Access to Inputs : Awareness that a technology exists and possession of the skills as to its use would be fruitless if the farmer does not have access to productive land, the right kind of seeds and assured supply of adequate water, all at the right time. He also has to make sure that adequate pesticides will be available to him at the time of pest attacks and enough labour to work on his field when needed. Subsuming all these activities will be his overriding need of easy access to credit so that he can purchase these inputs as and when required by him.
- (iii) Access to Markets : In order to run a viable enterprise the farmer will need to sell his product in the market at a price that will leave him a net profit. This would mean availability of reasonable rural infrastructure, transportation and storage facilities.
- (iv) Access to Social Services : The farmer in order to remain active both physically and mentally will need access to health and educational facilities. The different kinds of access required in an agricultural production system is graphically shown in figure 1.

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3. This sub-section draws heavily from A.T.M. Shamsul Huda, The Small Farmer and the Problem of Access, Dhaka : Bangladesh Agricultural Research Council, 1983.

Figure 1. The Access Constellation



Slow Growth in Agricultural Production

A major study in the early seventies had identified "lack of physical and human capital and lack of access" as the principal causes for slow growth of developing economies in general and of agricultural development in particular⁴. Access literally speaking indicates the availability of means, place or way by which achievement of a goal may be approached. The literature on agricultural development is unanimous in its conclusion that the majority of the farmers lacks access to inputs and services and that even programmes meant specifically to benefit the small farmers end up helping the relatively larger ones⁵.

Among the many causes of lack of access, physical location of service centres and facilities are often mentioned. It is pointed out that the manner of resolution of questions like the location of the service centre and its jurisdiction will have important bearing on access situation. It is generally recognised in the literature on spatial organisation that a centrally located facility with a large command area generally offers poor service to clients at the periphery. Large organisations tend to generate a feeling of isolation on the part of the less-endowed and they may never attempt to receive the services.

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4. Hollis Chenery et al, Redistribution with Growth. London : Oxford University Press, 1974, p.xv.
 5. See Keith Griffin, The Political Economy of Agrarian Change : An Essay on the Green Revolution. Cambridge, Mass : Harvard University Press, 1976. Also See, ILO, Poverty and Landlessness in Rural Asia. Geneva, ILO, 1977.

The relative position of facilities and clientele in space often affects awareness, attractiveness or utilisation of facilities⁶.

The few "success stories" of agricultural development programmes in the developing countries have invariably involved some form of participation by the clientele in the design and implementation of the programme. It would, therefore, be instructive to know as to what induces the farmer to involve himself in a project. An empirical study of eighty projects for small farmer development in Africa and Latin America found the following factors to be significant in generating local involvement⁷ :

- the project focus was area intensive ;
- area-intensity in its turn, ensured some amount of homogeneity in the socio-economic status and cultural background of the participants ;
- an effective communication system that brought the participants and project staff to a better understanding;
- ensuring farmers' voice in the decision-making process; and
- developing a system of accountability whereby the local leaders were made accountable to farmer participants.

6. Elliott R. Morss et al, Strategies for Small Farmer Development : An Empirical Study of Rural Development Projects. Vol. I, Boulder, Colorado, Westview Press, 1976.

7. Morss et al, Ibid, pp 68-74

THE UPAZILA SYSTEM

The upazila system introduced in Bangladesh in 1982 not only effected wide-ranging deconcentration of government functions to small units of administration called upazilas but also led to the transfer of certain powers to them from the centre, to the extent that the newly created upazilas meet the criterion of manageable command area for service delivery it would be worthwhile to examine the implications of these reforms on agricultural development. This is intended to be done by examining the basic features of the system as to their bearing on purported agricultural development and then by analysing the effectiveness of the various factors.

Main Features of the System

Upazila is an elevated designation given to an administrative unit previously called thana or police station. Bangladesh has a unitary form of government where the national level is represented by the various Ministries in the Secretariat with a number of agencies working under them. The national government carries out its functions through a hierarchy of administrative units based on geographical boundaries. These represent different levels of administration. Below the national level are the four divisions which consisted of twenty-four districts prior to the reforms. The districts in their turn consisted of a number of sub-divisions. The 1982 reforms upgraded the sub-divisions into districts. Below the sub-divisions were the thanas which consisted of unions. Normally an union comprises 25-30 villages with an average population of 20,000. An average of 10 unions constitutes a thana or an upazila.

The upazilas are distinctive from their immediate predecessors in that they have consciously been created as another level of government; they embody distinct units of administration and a different level of government. They derive their distinctive character from two elements: the upazila parishad which is the core of the new institution and the transferred functions which delineate the areas of their operation.

The composition, duties and functions of the upazila parishads are set out in the Local Government (Upazila Parishad and Upazila Administration Reorganization) Ordinance of 1982. The Upazila Parishad consists of (a) a Chairman (directly elected), (b) representative members (Chairmen of the Union Parishads and Pourashavas, if any, located in the upazila), (c) three women members (nominated), (d) official members, (e) Chairman of the Upazila Central Cooperative Association and (f) one nominated member. Except official members, all other members have voting right. The upazilas thus have a representative character which was absent in similar organisations at that level in the past.

The functions at the upazila level have been distributed between the centre and the upazila on the basis of "retained" and "transferred" subjects. Retained subjects generally correspond to regulatory functions and development activities of a national and regional character. Such activities include law and order, registration and judicial functions and the collection of major tax revenues. A number of development functions

have also been retained by the centre. In the agriculture sector, these include large schemes affecting more than one upazila or those requiring central supervision and support and large irrigation and flood control schemes.

Transferred subjects to the upazila parishads cover almost all development functions which can be handled at that level including agriculture and extension services, input supplies and minor irrigation. Additionally, the upazilas have been charged with the preparation of the upazila level plan and its implementation and monitoring. The upazilas have been given substantial autonomy in the exercise of these functions being authorised to prepare their own schemes and implement them without requiring these to be approved by the central government.

To carry out the entrusted activities, technical and administrative staff from various line ministries have been deputed to the upazila parishads. Officers dealing with the retained subjects have been made "answerable" to the parishad while the deputed staff are "accountable" to it being administratively under the control and supervision of the Parishad Chairman.

The upazilas are expected to implement their development plan and other activities by generating their own resources through taxes, levies, tolls and fees. Moreover, the central government augments their budget by providing substantial grant.

The brief overview of the system shows that for the first time in Bangladesh a distinct level of government has been established with a clear mandate to pursue the delineated activities on the basis of plan drawn up by the local people. The various elements of a decentralised structure are in place and it is to be seen as to how far these elements are able to carry forward the movement for further agricultural development.

SCOPE OF AGRICULTURAL DEVELOPMENT ACTIVITIES AT THE UPAZILA LEVEL

Having delineated the basic elements of agricultural development and the need of decentralisation for speeding up the process, the purpose of this section is to examine the extent to which the upazila system can accelerate agricultural development given the visible trends in agricultural investment, local level planning and overall functioning of the upazilas.

Agricultural Investment

The creation of the upazilas had raised the expectation that more investments would be made in the agriculture sector. This has not happened. The upazilas themselves failed to generate the expected revenue: the prospects for the future are also not very bright^a. The level of investment, therefore, depends on two things: the sectoral allocations made by the central government for the agriculture sector in the Annual Development Programme (ADP) and the allocation made by the upazilas themselves for the sector in their Annual Upazila Development Programme (AUDP) out of grants received from the central government.

Allocation for the agriculture sector (crops, fisheries, forestry and livestock) has been declining since the creation of the upazilas. This can be seen from Table-1.

Table-1 reveals that the allocation to agriculture sector in both revenue and development budgets was around 9% on average between 1979-80 and 1983-84. Since then it started declining. Between 1984-85 and 1987-88 the average share of the agriculture sector was below 5%.

The issue as to whether the possible adverse effects of the declining trend in public sector investment on agriculture would be compensated by upazila level development activities would partly depend on the priority attached by the upazila parishad on agricultural development activities and the resources allocated for them. In order to ensure that national investment priorities are followed and misuse of funds prevented, the central government provided strict guidelines for sectoral allocations within the AUDP.

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8. Akbar Ali Khan, "Local Government Finance in Bangladesh : A Survey" Journal of Local Government, Vol.12, No.1, January-June, 1983.

TABLE - 1

ALLOCATION TO THE AGRICULTURE SECTOR BEFORE
AND AFTER THE CREATION OF UPAZILAS

(in crore taka)

Year	Total Allocation (Rev. + Dev.)	Total Allocation in Agriculture (Rev. + Dev.)	3 as % of 2
1	2	3	4
1979-80	3263.96	281.37	8.62
1980-81	4108.03	387.06	9.42
1981-82	4677.80	450.38	9.63
1982-83	5337.63	499.67	9.36
1983-84	5897.80	519.37	8.81
1984-85	6501.00	417.11	6.42
1985-86	7138.72	263.03	3.68
1986-87	8502.00	380.45	4.47
1987-88	9527.00	487.24	5.11

Source : Different Budgets.

The latest government instructions issued in 1988 prescribe a share of 17-30 percent of the AUDP for allocation to the agriculture sector. This is the lowest range so far prescribed. A study of 59 upazilas from 10 districts for the year 1984-85 shows that allocation to agriculture did not even reach the lowest range⁹. A highly disproportionate amount of fund was spent on physical infrastructure at the cost of agriculture. According to this study, 56 percent of the AUDP was spent on physical infrastructure as against the prescribed maximum of 30 percent while only 9 percent was spent on agriculture as against the prescribed minimum of 20 percent. Whatever little amount was spent on agriculture that has also gone for physical construction. It is, therefore, evident that creation of upazila has not been followed by any increasing investment in agriculture by the central government nor has the upazilas been forthcoming in covering up part of the decline by allocating the maximum permissible amount from grant received by them.

9. M.Moniruzzaman, "Resource Utilization: Policies and Practices at the Upazila Level". (Mimeo) Dhaka, 1986.

Fig. 2

Allocation in Agriculture as comparison to the total allocation in the national context.

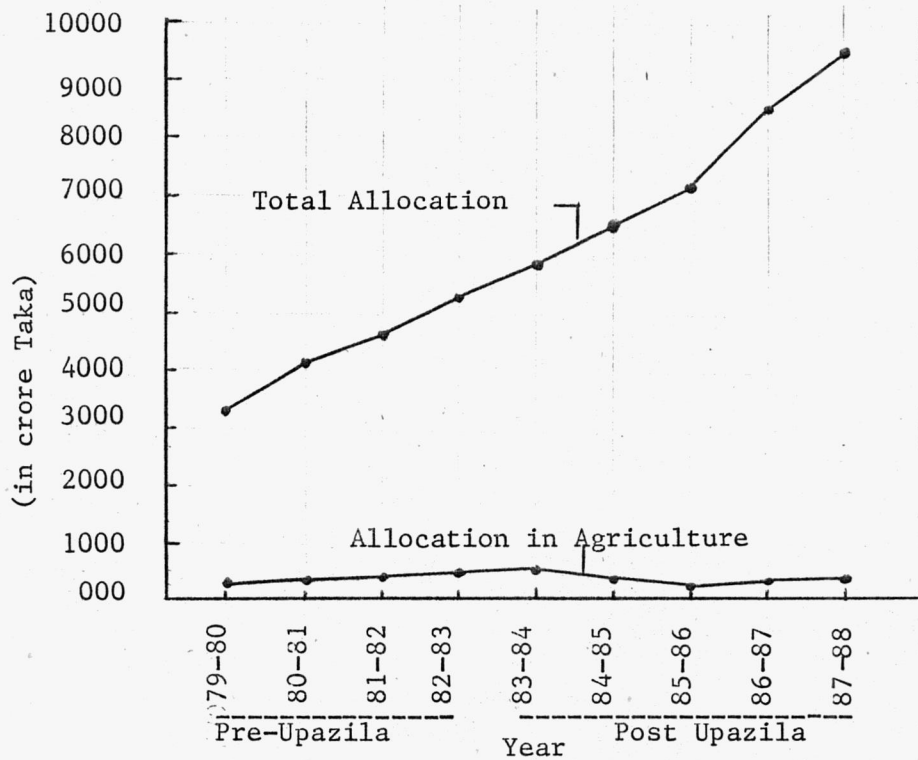
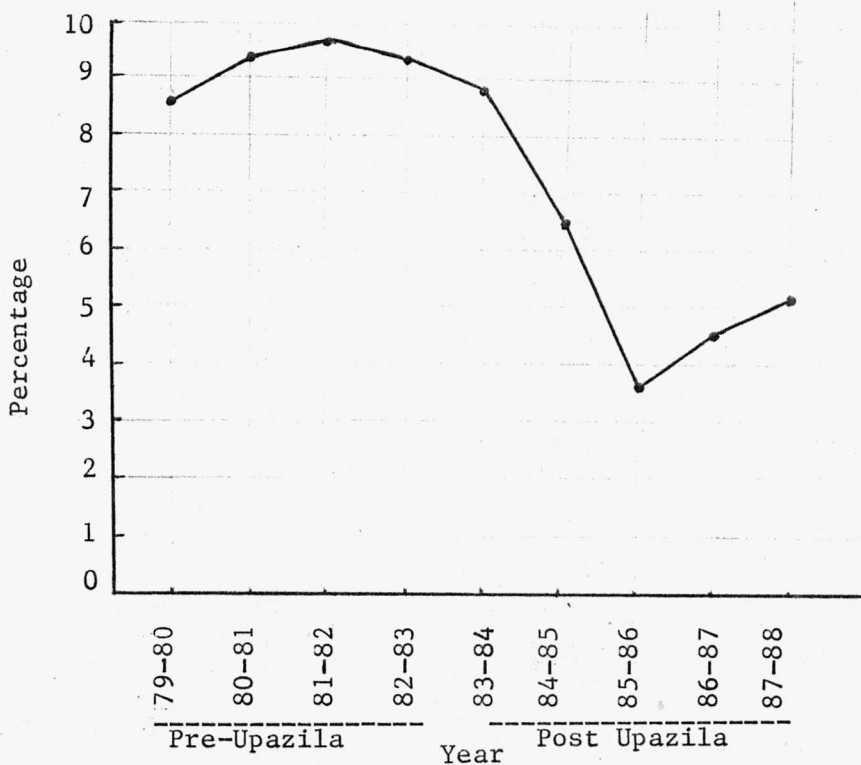


Fig. 3

Allocation in Agriculture as percentage of total allocation in the national context



Local Level Planning

The 1982 Ordinance mandates that the upazilas would prepare development plans on the basis of the Union Development Plans. Planning Commission guidelines, in furtherance of the provisions of the Ordinance, asked the upazilas to prepare Five Year Development Plans, maintain an Upazila Plan Book and prepare an AUDP. However, no serious effort at local level planning is visible. There is no expertise at the upazila level to do the job; recently the significance of planning function has been deemphasized by redesignating the Upazila Planning and Finance Officer as Upazila Finance Officer. There is little effort at collecting basic data, conducting surveys and initiating analysis. The inherent thrust in allocating fund has heavily favoured physical infrastructure and the concerned persons have carefully avoided systematic planning for fear of losing their freedom of action. If this trend continues, there is little hope that agriculture would get its prescribed share of funds.

Delivery of Agricultural Inputs

Deconcentration is generally associated with better delivery of services. However, in the case of Bangladesh, the upazila system will have no significant impact on the distribution of agricultural inputs.

Fertilizer supply and distribution have been privatised to a large extent and the private sector does not operate on the basis of administrative jurisdiction. It will follow the signals from the market and will organise its operations accordingly. For the activities still remaining with the BADC, the upazila system will mean no change in its operations. The BADC had been carrying on its activities on the basis of its marketing needs without any reference to administrative jurisdictions and will continue to do so in the future. This will be equally true of other BADC operations in seed and irrigation water supply.

The same is equally true about the supply of credit. Institutional credit will continue to flow from the branch offices according to central guidance and directive and the upazilas will have little control over their operations. Similarly, the technical and support service provided by the Bangladesh Rural Development Board continue as usual and there is no direct effect of the upazila system on its mode of operations.

Agricultural Extension

It is in the area of agricultural extension that the upazila system has led to a very significant augmentation of technical staff. Previously, there was no presence of agriculture graduate at the thana level; the post of Thana Agriculture Officer was generally held by person having diploma in agriculture. With the introduction of the upazila system, an upazila, besides having an agriculture graduate as the Upazila Agriculture Officer(UAO), has two other agriculture graduates one as Additional Agriculture Officer and the other as Subject Matter Officer (SMO).

They are supported by two agriculture diploma holders as Assistant Agriculture Extension Officer (AAEO) and Junior Agriculture Extension Officer (JAEo) with adequate number of Block Supervisors to carry out extension activities in the field. Organisationally, the required manpower is in place to carry out the much neglected extension activities.

The optimal use of the manpower has been constrained by a few operational problems. The most important issue arises out of the demands of a new relationship at the local level between the elected people and the civil servants. Agricultural extension is a transferred subject and the entire extension staff at the upazila level are deputed to the upazila parishad. However, the district and divisional levels function as the administrative arms of the central government. There are complaints that the upazila extension staff, by being placed under the upazila parishad, has been cut off from their line department. While the upazila level agricultural officers are to be supervised on their technical work by their supervising officers at the district level, this does not happen often time because of the preoccupation of the former in carrying out work assigned to them by the Upazila Parishad Chairman. At times, the agriculture people are asked to do odd types of job which has nothing to do with agricultural extension. The T&V system is geared to close linkage between extension and research. It is also claimed that the upazila system has broken the chain at many points. While research is still under the control of national and regional staff, extension at upazila is firmly under the grip of the upazila system.

OBJECTIVES OF THE STUDY

The broad objective of the study is to have an understanding of the impact of the upazila system on the development of agriculture. Specifically, the study aims at attaining the following:

- (i) Describe the procedure for preparation of upazila agricultural development plan in the selected upazila ;
- (ii) Review the allocation and utilization of public sector fund in agricultural development activities in the selected upazila ;
- (iii) Determine the progress of agricultural development in the selected upazila under upazila system and
- (iv) Identify constraints to management of agricultural development programmes in the selected upazila.

METHODOLOGY

The study is conducted in the mode of a case study by selecting and studying the activities relating to agricultural development of a particular upazila. The criteria for selection of the study upazila, method of data collection and manner of their presentation are described in the following pages.

Selection of Upazila

(a) Size of the upazila: A typical upazila of Bangladesh will have an area of about 125sq. miles, with an average population of over 2 lakhs¹⁰. Dhamrai Upazila fulfils this criteria to be regarded as a typical upazila of Bangladesh. Salient features of Dhamrai Upazila have been given at Annexure-A.

(b) Proximity : Since the study was to be completed within a short period of time, it was felt convenient to conduct it in one of the upazilas close to the BPATC. Savar upazila was not considered due to its rapid urbanisation through the development of such institutions as the Jahangirnagar University, Bangladesh Public Administration Training Centre, Cantonment, Dairy Farm and the National Memorial. Dhamrai Upazila has basically maintained its rural character and yet it is close to the centre. For these reasons, Dhamrai was selected for the study.

(c) Likely cooperation of the local authorities and the people: This point was also taken into consideration while selecting the upazila.

Data Collection

(a) Primary data for the study have been collected in the following way:

- (i) Field visits to some project areas;
- (ii) Interviews with the personnel/Officials responsible for planning and implementation of development projects (list of interviewees is given at Annexure-B).
- (iii) Discussion with 94 Foundation trainees (UAO) at CERDI.

(b) Secondary data were collected from relevant government documents, reports, journals, articles and books.

Plan of Presentation

In Section-I theoretical issues, objectives and methodology of the study have been presented. Findings of the study relating to (a) investment in agriculture, (b) local level planning, (c) delivery of inputs, (d) agricultural extension and (e) impact on productivity have been highlighted in Section-II. Section-III deals with some policy and management issues.

10. World Bank, Report on Economic Trends and Development Administration, Vol.I, February 27, 1984 .

SECTION II

FINDINGS OF THE STUDY

An attempt has been made in this section to analyse such issues as : (a) investment in agriculture, (b) local level planning, (c) delivery of agricultural inputs, and (d) agricultural extension service in general as points of reference towards determination of the relationship between the upazila system and agricultural development of Bangladesh.

1. Investment in Agriculture

Agriculture sector covers the following sub-sectors: (i) Crops, (ii) Fishery, (iii) Livestock, (iv) Forestry and (v) Water Resources. Each of these sub-sectors is discussed below:

(i) Crops

Extension Demonstration Farms and Seed Programmes:

The above two programmes constitutes the basic component of agricultural programme under upazila parishad. Demonstration programmes include high yielding variety (HYV) of Aman, Aus, Boro, Jute, Mustard, Fertilizer trials, Farmers meetings, etc.

BADC is responsible for production, procurement and sale of improved seeds. But neither the BADC's Upazila Irrigation Officer, Unit Officers nor their functions are under the control of the upazila. They are supervised by BADC senior staff according to its own organizational structure. Although the location of the seeds stores is at the upazila level, this is only in recomplication of the appropriateness and convenience of this location for seed distribution, rather than any functional link with the upazila activities. Other agricultural inputs such as pesticides and retail distribution of fertilizer have already been privatised.

(ii) Fishery

Digging of Tanks, Reclamation of Derelict Tanks and the Rural Fisheries :

Upazila Parishad excavates or reclaims those tanks owned by the government or whose ownership has been transferred to the upazila.

(iii) Livestock

Development of Poultry and Livestock:

Poultry and livestock programme of the Upazila Parishad consist of Poultry Firm, construction of semi-pacca shed for poultry, construction of veterinary hospital, grass cultivation

- for livestock, etc.
(iv) Forestry

Development of Social Forestry including Roadside Plantation and Horticulture.

- (v) Water Resources

Drainage and Irrigation, Small Flood
Embankment and Small Irrigation Works:

One of the critical factors for agricultural development in Bangladesh is irrigation expansion. The drainage and irrigation works in the upazila include construction of pucca channel, drainage pipe, culvert, drainage culvert, foot bridge, box culvert, reclamation of irrigation canals, etc. Besides these, coordination of BADC's minor irrigation functions such as supply of Deep Tube wells (DTWs), Shallow Tubewells (STWs) and Low Lift Pump (LLPs) with the rest of the agricultural development programme at the upazila level is undertaken through the Upazila Irrigation Committee.

The composition of the Committee is as follows:

- | | | |
|---|---|-------------------|
| 1. Upazila Parishad Chairman | - | Chairman |
| 2. Upazila Agriculture Officer | - | Member |
| 3. Upazila Rural Development Officer | - | Member |
| 4. Upazila Engineer | - | Member |
| 5. Project Implementation Officer (PIO) | - | Member |
| 6. Chairman, UCCA | - | Member |
| 7. Concerned Bank Manager | - | Member |
| 8. Senior Sub-Asstt. Engineer, BADC | - | Member- Secretary |

The functions of the Committee are:

- (i) To supply, maintain and assess irrigation equipment.
- (ii) To supervise new irrigation schemes.
- (iii) To hold enquiry against allegation of irrigation equipment and offer solutions.

For undertaking feasibility study of the irrigation projects (LLP, STW, DTW), there is a Upazila Irrigation Team consisting of the following:

- (i) Sr. Sub-Asstt. Engineer, BADC - Convenor
- (ii) Upazila Agricultural Officer - Member
- (iii) Upazila Rural Development Officer - Member
- (iv) Upazila Engineer - Member
- (v) Sectional Officer (S.O), BWDB(if any) - Member

The above team submits feasibility report to the Upazila Irrigation Committee.

Upazila Parishad makes allocation for agriculture sector in its Annual Upazila Development Programme (AUDP) out of grants received from the national government. For this purpose they have to follow the guidelines issued by the Planning Commission. Table 2 shows the allocation made in agriculture sector vis-a-vis other sectors in AUDP, Dhamrai during the period from 1983-84 to 1987-88.

TABLE - 2
SECTORAL ALLOCATION IN AUDP DHAMRAI
(in lakh Taka)

Sector	1983-84 Allocation	1984-85 Allocation	1985-86 Allocation	1986-87 Allocation	1987-88 Allocation
1. Agriculture, Irrigation & Industry.	16.43 (32.86)	17.05 (35.24)	13.45 (22.84)	9.12 (25.64)	11.29 (22.51)
a) Agriculture & Irrigation	-	-	10.80 (18.34)	6.84 (19.23)	9.03 (18.00)
b) Small & Cottage Industries.	-	-	2.65 (4.50)	2.28 (6.41)	2.26 (4.51)
2. Physical Infrastructure	16.31 (32.62)	13.88 (28.69)	25.23 (42.85)	13.03 (36.63)	15.81 (31.52)
a) Transport & Communication	-	-	20.05 (34.05)	9.77 (27.47)	11.29 (22.51)
b) Housing & Physical Planning	-	-	5.18 (8.80)	3.26 (9.16)	4.52 (9.01)
3. Socio-Economic Infrastructure	10.40 (20.80)	9.90 (20.46)	10.44 (17.73)	4.72 (13.27)	10.39 (20.71)
a) Development of Education	-	-	5.86 (9.95)	2.28 (6.41)	4.52 (9.01)
b) Physical, Mental & Cultural Development of Children.	-	-	-	-	3.39 (6.76)
c) Health & Social Welfare.	-	-	4.58 (7.78)	2.44 (6.86)	2.48 (4.94)
4. Sports & Culture	1.50 (3.0)	4.00 (8.27)	2.89 (4.90)	2.44 (6.86)	3.39 (6.76)
5. Rural Works Programme at Union Level.	-	-	2.59 (4.40)	2.44 (6.86)	2.48 (4.94)
6. Miscellaneous Activities	5.36 (10.72)	3.55 (7.34)	1.29 (2.19)	0.82 (2.31)	1.80 (3.59)
7. Repair & Maintenance of Transferred Buildings.	-	-	3.00 (5.09)	3.00 (8.43)	5.00 (9.97)
Total	50.00 (100)	48.38 (100)	58.89 (100)	35.57 (100)	50.16 (100)

Source : Upazila Parishad, Dhamrai.
Figures in the parentheses indicate percentages.

It appears from Table 2 that during 1983-84 to 1987-88 allocation in agriculture (including irrigation and industry) showed a secular decline, being 32.86% of total allocation in 1983-84 and only 22.51% in 1987-88. On the other hand, allocation in other two major sectors namely physical infrastructure and socio-economic infrastructure remained almost static. This shows that directly productive activities such as crops, fisheries, livestock, forestry and small and cottage industries received less priority than physical infrastructure.

Comparison between sectoral allocation in AUDP and guidelines issued by the Planning Commission has been made in this report as well. Upazila Parishad, Dhamrai made allocation in agriculture sector within the limits prescribed by Planning Commission. Details may be seen in Table 3.

TABLE - 3

ALLOCATION IN AGRICULTURE OF AUDP DHAMRAI
(in lakh Taka)

Year	Total Allocation	Allocation in Agriculture*	Allocation in Agriculture as % of Total Allocation	Guidelines**	
				Minimum Share	Maximum Share
1983-84	50.00	16.43	32.86	30%	40%
1984-85	48.38	17.05	35.24	30%	40%
1985-86	58.89	10.80	18.34	15%	25%
1986-87	35.57	6.84	19.23	15%	25%
1987-88	50.16	9.03	18.00	12%	20%
Total	243.00	60.15 (24.75)			

* Agriculture sector includes crops, fisheries, livestock, forestry and irrigation.

** Planning Commission: Guidelines for Upazila Parishads.

Although Dhamrai Upazila Parishad made allocation in agriculture sector within the prescribed limits, there were great variations in allocation within the sub-sectors of agriculture sector. This information is presented in Table 4.

Fig. 4

Annual Allocation in Agriculture
as compare to total Allocation of
AUDP, Dhamrai.

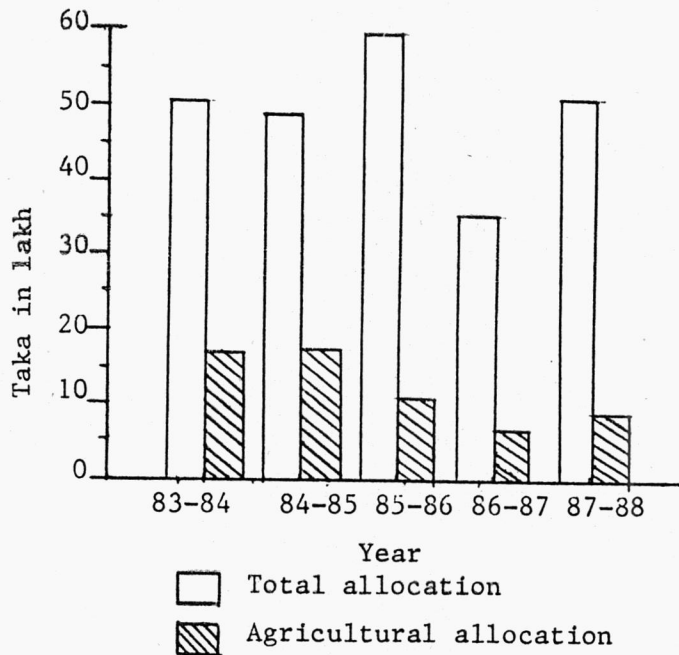


Fig. 5

Year-wise allocation in Agriculture
as compare to (i) total allocation in
Dhamrai & (ii) allocation as per planning
Commission(PC) Guidelines (in percentage).

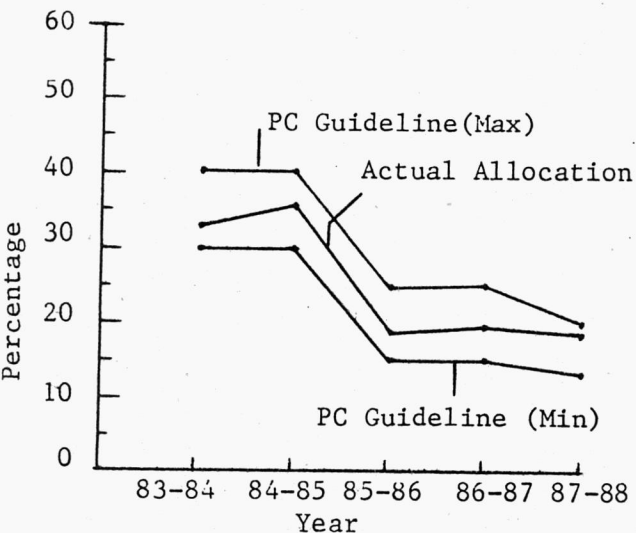


Fig. 6

Allocation trends in the sub-sectors
of Agriculture as percentage of total
allocation in Dhamrai.

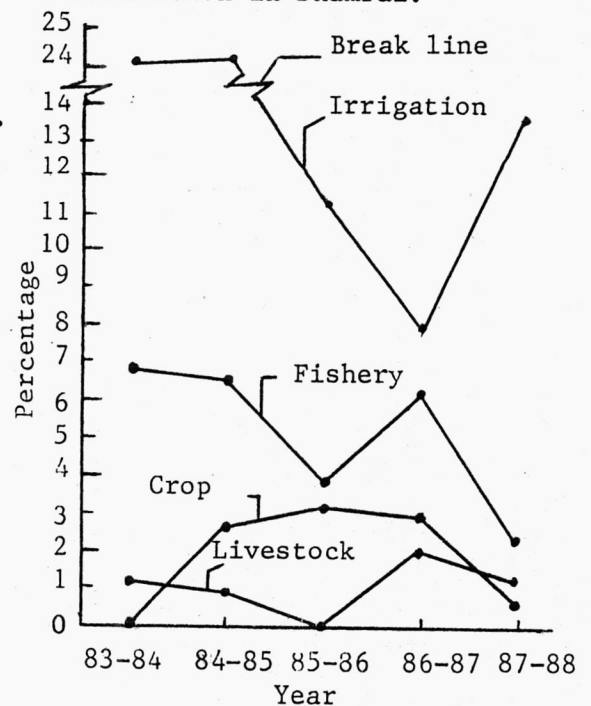


TABLE - 4

ALLOCATION IN THE SUB-SECTORS OF AGRICULTURE

(in lakh taka)

Year	Total Alloca- tion	Allocation in Agriculture				Agriculture	
		Crops	Fishery	Live- stock	Fores- try	Irri- gation	Sector Total
1983-84	50.00	-	3.86 (7.72)	0.55 (1.10)	-	12.02 (24.04)	16.43 (32.86)
1984-85	48.38	1.28 (2.64)	3.63 (7.5)	0.40 (0.83)	-	11.74 (24.27)	17.05 (35.24)
1985-86	58.89	1.85 (3.14)	2.34 (3.97)	-	-	6.61 (11.23)	10.80 (18.34)
1986-87	35.57	1.06 (2.98)	2.20 (6.19)	0.74 (2.08)	-	2.84 (7.98)	6.84 (19.23)
1987-88	50.16	0.34 (0.68)	1.22 (2.43)	0.66 (1.32)	-	6.81 (13.57)	9.03 (18.00)
Total	243.00	4.53 (7.53)	13.25 (22.03)	2.35 (3.91)	-	40.02 (66.53)	60.15 (100)

Source : Upazila Parishad, Dhamrai.

Figures in the parentheses indicate percentage.

Table 4 reveals that among the sub-sectors of agriculture, irrigation received the highest allocation (66.53%) followed by fishery (22.03%). On the other hand, no fund was allocated to forestry sub-sector.

Because of the skewed pattern of allocation of funds in the sub-sectors of agriculture, there is marked variation in the nature of programme proposed by Upazila Agriculture Officer and actual programme undertaken by the Parishad.

In FY 1987-88 UAO proposed the following programmes for crop sub-sector (Table 5).

TABLE - 5

AGRICULTURE PROGRAMMES FOR 1987-88 SUBMITTED BY UAO

Sl.No.	Name of Programmes	Demand (Tk.)
1.	Demonstration Farm	40,000
2.	Fertilizer demonstration	16,000
3.	Block demonstration	10,000
4.	Farmers training	30,000
5.	Field visit	24,000
6.	Field day	16,000
7.	Progressive farmer's Workshop on improved technology	5,000
8.	Integrated pest control programme	4,000
9.	Purchase of spray machine	2,00,000
10.	Purchase of pesticide for buffer stock	2,00,000
Total		5,45,000

Source: UAO, Dhamrai Upazila.

It appears from Table 5 that for the above programmes in crop sub-sector, UAO proposed to the Parishad for an allocation of Tk.5,45,000 against which only Tk.2,984(0.55%) was allocated for making signboards at Sundergram under Sutipara Union.

Year-wise allocation and expenditure in sub-sectors of agriculture during the period from 1985-86 to 1987-88 is shown in Table 6.

Table 6 shows an erratic trend in total expenditure in agriculture sector. In 1985-86 97.04% of total allocation was spent while the figure in 1986-87 was 87.57% and 105.75% in 1987-88. It may be mentioned that during 1986-87 allocation in crops sub-sector was to the tune of Tk. 72,008 against which only Tk. 11,808 was spent. Remaining amount was diverted to a nursery project during 1987-88. This was mainly responsible for actual expenditure exceeding 100% of allocation of FY 1987-88.

TABLE - 6

R-WISE ALLOCATION & EXPENDITURE IN SUB-SECTORS
(in taka)

-86	1986-87		1987-88	
	Expen- diture	Allo- cation	Expen- diture	Allo- cation
	84,500	1,06,508	31,808	33,674
	02,382	2,19,516	2,39,627/ 49	1,22,276
11		73,874	42,525	66,386
		-	-	-
53	2,84,023	2,84,940/ 86	6,80,864	6,09,473/ 47
	6,83,921	5,98,901/ 35 (87.57%)	9,03,200	9,55,096 .47 (105.75%)

had, Dhamrai.

ad undertook too many projects with the limited
ure. During the period from 1983-84 to 1987-88
as 112 projects in agriculture, the largest
65(58.04%) followed by fisheries 25(22.32%).
ited in Table-7.

TABLE - 7
IN AGRICULTURE, DHAMRAI

Projects	Total	
	Forestry	Irrigation
-	14	20
-	19	33
-	11	19
-	10	23
-	11	17
-	65	112
-	(58.04)	(100)

indicate percentage.

Project wise allocation in agriculture sector of Dhamrai Upazila for the years 1983-84 and 1984-85 and both allocation and expenditure for the period from 1985-86 to 1987-88 is given at Annexure - C.

2. Local Level Planning

Steps for planning and implementation of upazila agricultural development projects are given below:

- (i) Upazila Parishad in its meeting first makes a sectoral allocation of development assistance fund received from the national government.
- (ii) Project Selection Committee consisting of both elected members and government officials (not exceeding 7 in number) identifies the agricultural development projects by paying visits to the unions/wards of the upazila and talking to the local people.
- (iii) On the basis of the identification of projects by Project Selection Committee, Upazila Agriculture Officer prepares agricultural development schemes in prescribed proforma (Annexure -D) and places the same for consideration of the committee.
- (iv) Project Selection Committee scrutinizes the project proposals, undertakes feasibility studies, fixes priority and finalizes the schemes.
- (v) Approval of the schemes by the Upazila Parishad and allocation of funds for each approved project.
- (vi) Implementation of the projects by Upazila Agriculture Officer.

It has been observed that Dhamrai Upazila Parishad more or less followed the steps mentioned above.

3. Delivery of Agricultural Inputs

Agricultural inputs such as seed, fertilizer, irrigation, credit etc. are essential for agricultural development of a country. In this study issues such as (i) sale/distribution of seeds of major crops by BADC, (ii) sale of fertilizer, (iii) irrigation by BADC and (iv) disbursement and recovery of credit have been highlighted.

(i) Sale/Distribution of Seeds by Major Crops

Generally on the basis of the requisition for seeds submitted by BADC local seed office to the district office, seeds are supplied. After the receipt of seeds by the local office, Upazila Seed Inspector

informs Upazila Parishad Chairman, UNO, UAO and other concerned officials. Then Upazila Parishad makes publicity to the farmers through Block Supervisors. On receipt of the information regarding availability of seeds in local godown, farmers purchase seeds direct from the BADC godowns.

There have been some noticeable increase in the sale/distribution of improved seeds for different crops particularly in wheat, potato and T. aman rice. This may be attributed to extension work which motivated the farmers to adopt HYV seeds. The decline in sale/distribution of Boro seeds (BR-3) during the period from 1981-82 to 1987-88 was mainly because farmers themselves produced seeds in their own lands. Details may be seen in Table 8.

TABLE - 8

SALE/DISTRIBUTION OF SEEDS BY MAJOR CROPS

(in kg.)

Seed	1981-82		1987-88		Differences
	Receipt	Sale/ Distri tution	Receipt	Sale/ Distr bution	
Aman	1,227.6	1,031.4	4,480.00	4,480.00	+3,448.6
Aus	1,469.4	786.8	2,400.00	990.00	+ 203.2
Boro	4,863.9	4,584.9	1,900.00	1,900.00	-2,684.9
Total Rice	7,560.9	6,403.1	8,780.00	7,370.00	
Wheat	56,185.00	10,693.00	30,040.00	27,640.00	+16,947.00
Total Food- grain	63,745.9	17,096.1	38,820.00	35,010.00	
Jute	-	-	6,944.0	6,907.0	+ 6,907.0
Mustard	172	25	91	91	+ 66
Potato	1,116.0	1,116.0	38,000.0	31,720.0	+30,604.0
Total	65,033.9	18,237.1	83,855.0	73,728.0	

Source : UAO, Dhamrai.

(ii) Sale of Fertilizer

Fertilizer is an important input for agricultural development. Fertilizer sold at Dhamrai Upazila during 1983-84 and 1987-88 is given in Table 9.

TABLE - 9
FERTILIZER SOLD AT DHAMRAI UPAZILA

(Tons)

Types of Fertilizer	1983-84				1987-88				Difference
	Summ er	Autu mn	Win ter	Total	Summ er	Autu mn	Win ter	Total	
Urea	374	1728	3170	5,272	360	1710	3,225	5,295	+23 (.4%)
T.S.P.	350	576	870	1,796	325	595	1,035	1,955	+159 (8.85%)
M.P.	95	90	145	330	14	97	238	349	+19 (5.76%)
Zinc	-	-	3	3	-	-	3	3	0
Zypsam	-	-	10	10	-	-	10	10	0
Total	819	2,394	4,198	7,411	699	2,402	4,511	7,612	201 (2.7%)

Source : U.A.O

Figures in the parentheses indicate percentage.

In Table 9 it appears that there has been marginal increase in sale of fertilizer during the period from 1983-84 to 1987-88.

(iii) Irrigation by BADC

In Dhamrai Upazila expansion of irrigation facilities by BADC was marginal i.e. 3.77% increase in irrigated area during the period 1981-82 and 1987-88. This is shown in Table 10.

TABLE - 10
IRRIGATION BY BADC

Nature of irrigation equipment	1981 -82		1987-88	
	No. of irrigation equipment	Area under irrigation (in acres)	No. of irrigation equipment	Area under irrigation (in acres)
DTW	108	5400	218	10,274
STW	121	1089	155	1,600
LLP/PP	212	8480	115	3,660
Total	441	14,969	488	15,534 (3.77%)

Source : BADC(Mech.) ,Dhamrai

Figure in the parenthesis indicate percentage of increase in area under irrigation by BADC.

(iv) Disbursement and Recovery of Agricultural Credit

Credit is an important input for agricultural development. In order to review agricultural credit disbursement and recovery situation and take necessary measures for improvement, Upazila Agricultural Credit Committee has been formed with the following:

1. Upazila Parishad Chairman - Chairman
2. Upazila Nirbahi Officer - Member
3. Upazila Agriculture Officer - Member
4. Upazila Rural Development Officer - Member
5. Manager, Krishi Bank(local branch) - Member-Secretary
6. Managers of all other Banks in the Upazila. - Member
7. Chairmen of Union Parishads - Member

Data collected from one branch each of Krishi, Sonali and Janata Bank of Dhamrai Upazila reveal spectacular downward trend in respect of both credit disbursement and recovery. In 1982-83 Krishi Bank made disbursement and recovery of credit to the tune of Tk. 184.50 lakh and Tk. 92.67 lakh respectively, the recovery rate being 50.23%. But in 1987-88 the Bank credit disbursement and recovery amounted to Tk. 20.74 and Tk. 3.43 lakh respectively with recovery rate at 16.54%. Similar trend is observed in case of Sonali Bank and Janata Bank credit position. Details may be seen in Table-11

TABLE - 11

AGRICULTURAL CREDIT SITUATION AT DHAMRAI UPAZILA

(Taka in lakh)

Year	Krishi Bank			Sonali Bank			Janata Bank		
	Dis burse ment	Reco very	Reco very Rate %	Dis burse ment	Reco very	Reco very Rate %	Dis burse ment	Reco very	Reco very Rate %
1982-83	184.50	92.67	50.23	5.75	4.87	84.70	5.77	5.39	93.41
1983-84	177.85	83.72	47.07	6.77	5.70	84.19	3.18	2.14	67.30
1984-85	100.90	42.94	42.56	7.45	5.75	77.18	2.08	1.95	93.75
1985-86	85.44	39.14	45.81	6.21	5.73	92.27	-	-	-
1986-87	31.21	25.21	80.78	7.19	1.27	17.66	.79	.08	10.13
1987-88	20.74	3.43	16.54	3.81	0.02	0.52	1.42	-	-
Total	600.64	287.11		37.78	23.34		13.29	9.56	

Source : Krishi Bank, Sonali Bank and Janata Bank Branches of Dhamrai Upazila.

4. Agricultural Extension System

Before the introduction of the upazila system, agricultural extension activities in the field of agriculture were undertaken by the officers and staff belonging to the Department of Agricultural Extension posted at the thana level. The following officers were engaged in the extension activities at the thana level:

(i) Thana Extension Officer (1)

(ii) Thana Agriculture Officer (1)

These officers were assisted by Plant Protection Assistant and other supporting staff such as Union Agricultural Assistant(UAA), Gram Krishi Karmi etc.

For agricultural inputs and services, the following officers of BADC worked at the thana level:

1. Seed Inspector (1)
2. Fertilizer Inspector (1)
3. Unit Officer (1)
4. Sub-Unit Officer (2)
5. Sectional Officer(S.O) (1)
(STW)
6. Sectional Officer(S.O) (1)
(DTW)

They were assisted by supporting staff. The principal task before BADC officials was to ensure procurement and distribution of inputs to the farmers. With the creation of upazila system, both agricultural extension and input supply and service have been brought under the control of UAO. As per organogram of Upazila Parishad, the office of UAO consists of two wings: (i) agriculture extension wing and (ii) input supply and service wing. Subsequently input supply and service wing was taken out of the office of UAO.

(i) Agricultural Extension Service : The manpower position of agricultural extension service at Dhamrai is given in Table 12. It is interesting to note that out of 59 sanctioned posts in Agricultural Extension Service, 62 people were found to be in position (Table-12). It is pertinent to mention that Department of Agricultural Extension has been formed by merger of six organisations namely: (i) Directorate of Agriculture (Extension and Management), (ii) Directorate of Agriculture (Jute Production), (iii) Directorate of Plant Protection, (iv) Horticulture Development Board, (v) Tobacco Development Board, (vi) Central Extension Resources Development Institute (CERDI).

The actual position of staff shown in Table-12 belonged to these six organisations, whereas sanctioned strength is as per organogram of the Upazila Parishad. It may be mentioned here that 3 surplus personnel (shown in Table-12) have been facing problems regarding their pay and allowances.

TABLE-12
STAFFING OF AGRICULTURAL EXTENSION SERVICE

Name of Post	Sanctioned strength	In position
1. Upazila Agriculture Officer	1	1
2. Additional Agriculture Officer	1	1
3. Subject Matter Officer	1	1
4. Assistant Agriculture Extension Officer	1	1
5. Junior Agriculture Extension Officer	1	1
6. Plant Protection Inspector	1	1
7. Spray Mechanic	1	1
8. Plant Protection Makaddam	2	2
9. Head Assistant-cum-Accountant	1	1
10. L.D.A.	1	2
11. Office Attendant	1	1
12. Office Guard	1	2
13. Sweeper	-	1
14. Block Supervisor	46	46
Total	59	62

Source: UAO, Dhamrai.

(ii) Input Supply and Service (BADC) : The staff position of BADC (seed and irrigation) is shown in Table-13.

It appears from Table-13 that out of 58 sanctioned posts, 36 (62.07%) posts are filled up leaving 22 (37.93%) posts vacant.

TABLE-13

STAFFING OF BADC (SEED & IRRIGATION)

Name of post	Sanctioned strength	In position
1. Senior Sub-Assistant Engineer	3	3
2. Sub-Assistant Engineer	3	3
3. Upazila Inspector(Seed)	1	1
4. Store Keeper	4	3
5. Mechanic	9	6
6. Assistant Mechanic	31	13
7. MLSS/Peon	3	3
8. Chowkider	4	4
Total	58	36

Source: BADC.Dhamrai.

It was found in Dhamrai Upazila that expenditure for development projects in crops was meagre in comparison with revenue expenditure (salary and allowances of officers & staff). Details may be seen in Table-14.

TABLE-14

REVENUE AND DEVELOPMENT EXPENDITURE FOR AGRICULTURE (CROPS SUB-SECTOR ONLY) IN DHAMRAI UPAZILA, 1985-86 TO 1987-88

Year	Revenue	Development	4 as %	4 as %	
	Salary & other expend.(tk)	Alloc. Expenditure (tk)	of 3 (tk)	of 2	
1985-86	13,71,458	1,84,500	1,84,500	100%	13.45%
1986-87	15,86,149	72,008	11,808	16.40%	0.74%
1987-88	18,05,418	2,984	2,984	100%	0.17%
Total	47,63,025	2,59,492	1,99,292	-	-

Source : Upazila Agriculture Office, Dhamrai.

It is evident from Table-14 that development expenditure as percentage of revenue expenditure for agriculture (crops) shows a downward trend, being 13.45% in 1985-86, 0.74% in 1986-87 and 0.17% in 1987-88.

5. Impact on Agricultural Productivity

It is not very easy to assess the impact of upazila system on agricultural productivity. The net effect of this new administrative system on agricultural productivity status of a given upazila can not be specifically estimated as there are various supplementary and complementary development programmes at the upazila including both government programmes as well as programmes of various NGOs. Besides, agricultural production system in Bangladesh is still dependent on nature i.e. good or bad harvest in most of the time is conditioned by the climatic factors, namely flood, draught, cyclone etc.

An attempt has been made however to look at the agricultural production scenario for two different time periods one for 1981-82 the year immediately prior to introduction of upazila administrative system and the other for 1987-88, the most recent year during the post upazila system.

A simple comparison of total crop production situation in terms of land use intensity, use of modern crop varieties and other inputs and the resultant changes in production between the two periods under reference (1981-82 and 1987-88) reveals that the new system of upazila administration i.e. decentralisation of local level administration together with other complementary factors helped to increase overall agricultural productivity in the study upazila. Intensification of agricultural production system can be demonstrated by the fact that total rice production of the Dhamrai Upazila increased from 49,961 tons to 54,672.54 tons with even less area under rice cultivation from 70,644 acres to 59,473 acres in 1981-82 and 1987-88 respectively.

In respect of total crop production there has been 17.54% increase i.e. 66,837 tons to 78,559 tons in this upazila in 1987-88 compared to the level of total crop production in 1981-82 with even reduced total cultivated area from 93,384 acres to 82,473 acres (12% reduced area). This implies that productivity per unit of land has been increased from 0.72 tons in 1981-82 to 0.95 tons in 1987-88. Application of improved technology particularly use of high yielding varieties has been noticeably increased in case of Aus and Boro rice, wheat and potato (table-15).

TABLE-15

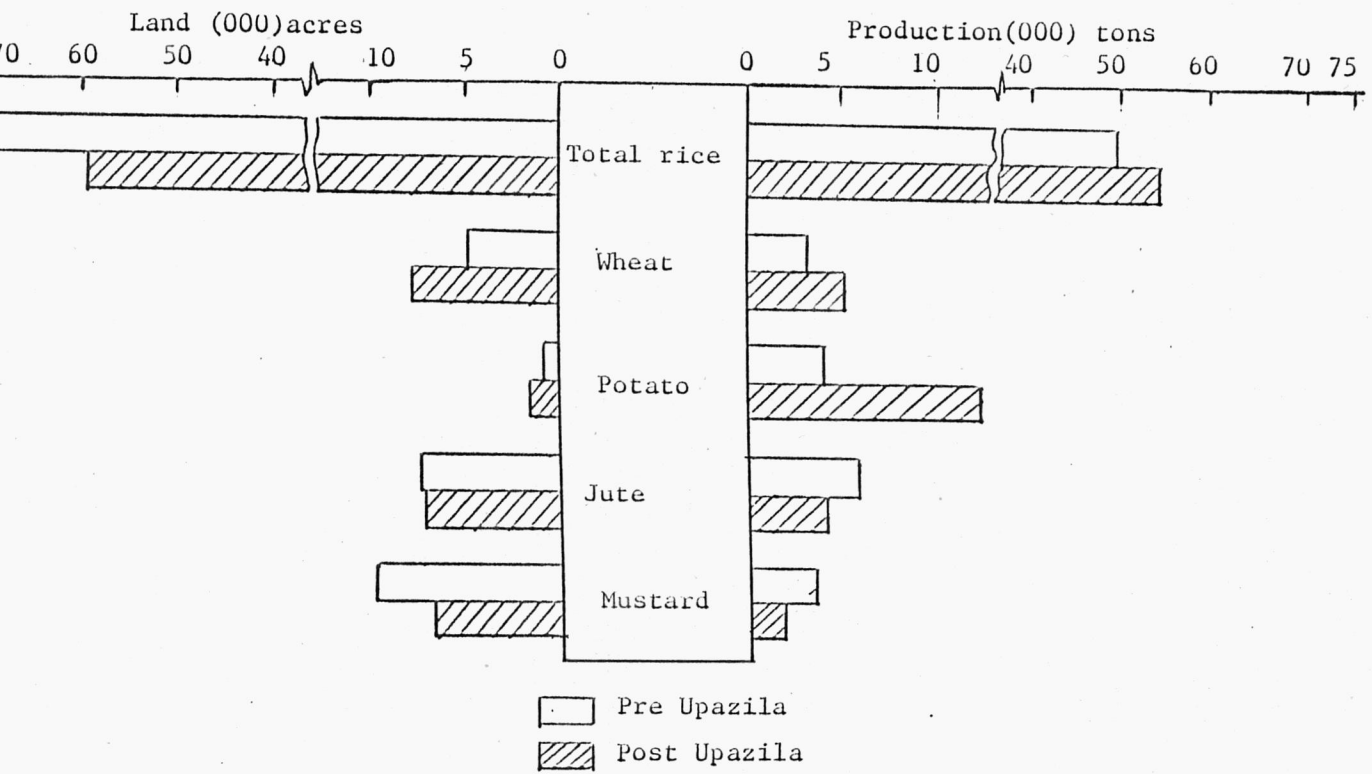
CULTIVATED LAND AND PRODUCTION BY MAJOR CROPS

Crops	Pre-upazila(1981-82)		Post -upazila (1987-88)	
	Land (Acres)	Production (Ton)	Land(Acres)	Production (Ton)
1. Aus:				
Local	19,000	9,672	19,000	10,363
HYV	2,000	2,500	4,500	5,072
Sub-total	21,000	12,172	23,500	15,435
2. B.Aman	25,000	13,636	15,584	6,926
T.Aman:				
Local	5,450	2,378	554	362
HYV	1,130	1,026	335	313
Sub-total	31,580	17,040	16,473	7,601
3. Boro:				
Local	839	552	450	369.54
HYV	17,225	20,197	19,050	31,267.00
Sub-total	18,064	20,749	19,500	31,636.54
Total Rice	70,644	49,961	59,473	54,672.54
4. Wheat: HYV	4,860	3,181	7,600	5,251
Total Foodgrain	75,504	53,142	67,073	59,923.54
5. Potato:Local	560	1,710	200	690
HYV	280	2,443	1,400	11,799
Sub-total	840	4,153	1,600	12,489
6. Jute : Local	6,200	4,734	5,000	2,986
HYV(Tosha)	960	1,216	2,100	1,411
Sub-total	7,160	5,950	7,100	4,397
7. Mustard	9,880	3,592	6,700	1,949
Grand Total	93,384	66,837	82,473	78,558.54

Source : UAO, Dhamrai.

Fig. 7

Comparison of pre and post Upazila cultivated land & production by major crops in Dhamrai.



Per Acre Yield

Yield per acre has increased in most of the food crops excluding Aus HYV and B.Aman, while in non-food crops there has been decline in per acre yield which was mainly caused by 1987 flood (Table-16).

TABLE-16
YIELD PER ACRE BY MAJOR CROPS

		(Ton)		
Crops	Pre-upazila 1981-82	Post-upazila 1987-88	Difference	
1. Aus:Local	0.51	0.54	+0.03	
HYV	1.25	1.12	-0.13	
2. B.Aman	0.54	0.44	-0.10	
T.Aman:Local	0.43	0.65	+0.22	
HYV	0.91	0.95	+0.04	
3. Boro:Local	0.66	0.82	+0.16	
HYV	1.07	1.44	+0.37	
4. Wheat:HYV	0.65	0.69	+0.04	
5. Potato:Local	3.05	3.45	+0.40	
HYV	8.73	8.43	-0.30	
6. Jute:Local	0.76	0.60	-0.16	
HYV	1.26	0.67	-0.59	
(Tosha)				
7. Mustard	0.36	0.29	-0.07	

Source :UAO,Dhamrai.

Land Use Intensity

There has been remarkable increase in land use intensity between the two periods under reference. The intensity of land use in 1987-88 for the Dhamrai Upazila on average was 211% compared to the land use intensity of 177% in 1981-82. Major changes in land use have been noticed in increase in double cropped area, the increased been 40% during the period from 1981-82 to 1987-88. On the other hand, the corresponding decrease in single cropped area during the above period was 93% (Table-17).

TABLE-17
CROPPED AREA BY TYPE

("000" acres)

Year	Total Area	Current fallow	Cropped Area by Type	Gross Net	Intensity of cropping
			Single Double Triple		
1981-82	75	1	29 32 8	69	117 170
1987-88	75	-	2 45 8	55	116 211

Source: UAO, Dhamrai.

SECTION III

POLICY AND MANAGEMENT ISSUES

From the analysis of the data presented in Section II, the following issues emerge:

1. Declining Allocation to Agriculture Sector

During 1984-85 to 1987-88 period the average allocation (revenue & development) to the agriculture sector was below 5 percent which is about half of the share received by the sector during 1979-80 to 1983-84 period (Table-1). This declining trend in public sector investment in agriculture persists even at the upazila level. In 1983-84 the total allocation in agriculture at Dhamrai Upazila was 16.43% of the total allocation which was reduced to only 9.03% in 1987-88 (Table-4). Thus it is evident that both national government and Upazila Parishad investment in agriculture declined substantially over the years.

2. Emphasis on Physical Infrastructure

Physical infrastructure sector received the highest allocation of funds (Table-2). Whatever little fund was available for investment in agriculture that went mainly for physical construction i.e. construction of pucca channels, drainage pipe, drainage culvert etc. It is evident from Table-4 that physical construction for irrigation received highest priority (66.53%) during the period from 1983-84 to 1987-88 at Dhamrai Upazila. The reasons for giving emphasis on physical infrastructure are as follows:

- (i) The urge on the part of Upazila /Union Parishad Chairmen to leave some visible symbols of their achievement in the hope of re-election ;
- (ii) There is the pressure from the Union Parishad Chairmen to apportion the allocation fairly equally among the unions rather than development projects ;
- (iii) There is the obvious lure of construction contracts and kick-backs;
- (iv) The need to keep the channels of political patronage and graft.

3. Neglect of Forestry Sub-sector

In the guidelines issued by the Planning Commission, forestry has been included as a sub-sector of agriculture. During the period under study, no fund was allocated for undertaking forestry programmes in Dhamrai Upazila.

4. Too Many Projects

During 1983-84 to 1987-88 Dhamrai Upazila Parishad undertook too many schemes (60 on average) with the limited fund (about Tk.49 lakh on average) available for development activities. In agriculture sector, Parishad took as many as 22 projects on average with an average amount of Tk.12 lakh per year during the period mentioned above (Table-7). In spite of taking too many projects by the Dhamrai Upazila Parishad during 1985-86 to 1987-88, average implementation status of agricultural projects was above 80%.

5. Declining Trend of Agricultural Credit Disbursement and Recovery

Agricultural credit situation of Dhamrai Upazila showed spectacular downward trend in respect of both credit disbursement and recovery.

6. Coordination Gap Between Agricultural Extension Service and BADC

After the introduction of upazila system input supply and service of BADC was placed under the control of UAO for better coordination between extension and input supply. Subsequently by an order of the Ministry of Agriculture, BADC officials working at the upazila level were taken out of the office of UAO. Now BADC officials at the upazila level work independently of UAO. They are supervised by BADC senior staff according to their own organisational structure. This is clear departure of the organisational structure of the upazila system. As a result, there exists coordination gap between extension and agricultural inputs supply and services.

7. Coordination of Agricultural Activities at the Upazila Level

Agriculture (extension) has been made a transferred subject of the Upazila Parishad. The services of the officers and staff working in the field of agriculture at the upazila level have been placed at the disposal of the Parishad. It is the Parishad which undertakes planning and implementation of development projects in accordance with the guidelines issued by Planning Commission.

The organisational structure of the agricultural extension department has suffered from a break in the chain of command following the introduction of the upazila system. Since the extension staff in the upazila have to report to the Parishad and the district/national level staff have only advisory authority over them, there is an evident break in the DAE chain of command between district and upazila (UAOs/SMOs) staff. As a result, there is a gap in the administration and supervision between the district and upazila level.

Government places funds including those for agricultural development activities at the disposal of Upazila Parishads. So UAOs have to depend upon the Parishad to meet their needs. It may be mentioned here that the main function of officers and staff engaged in agriculture office at the upazila level is agricultural extension meaning transfer of improved technology to the farmers. This process involves regular training and visit by Block Supervisors & other officials of agriculture deptt., farmers rallies, demonstration farms etc.

It is found from records that only one project related to extension service(demonstration farm for T.Aman) was undertaken and implemented in 1985-86. During 1986-87 allocation was made for three demonstration projects, but none of them were implemented as funds were diverted to a nursery project in the following year. During 1987-88 UAO proposed an allocation of Tk.5.45 lakh for crop sub-sector against which only Tk.2,984(0.55%) was allocated for making a signboard.

From Table-15, it appears that there was marginal increase in overall agricultural productivity of Dhamrai Upazila. Had adequate number of extension related projects been undertaken and implemented by the Parishad, ceteris paribus, agricultural productivity might have increased substantially.

8. Effectiveness of the Committees

Committees formed for agricultural development at Dhamrai Upazila were not found to be very effective. For example, while as many as 7 meetings of Upazila Irrigation Committee were held during 1984-85, the average number of meetings came down to 2 annually during 1985-86 and 1986-87.

It has been observed that the functions of UIC and UIT are merely confined to LLP, STW and DTW. Irrigation channels, culverts etc. are not covered by them. As a result, they are not optimally used.

9. Information Gap

It has been observed that officials working in the field of agriculture at the upazila level do not have adequate access to information. Informations containing Government Orders, circulars etc. received by Upazila Parishad Chairman and UNO are not generally transmitted to them in time. As a result, they face problems in planning and implementation of development projects.

BIBLIOGRAPHY

Ali, Shaikh Maqsood et al, Decentralization and People's Participation in Bangladesh. Dhaka: National Institute of Public Administration, 1983.

Arulpragasam, L.C., Upazila Decentralisation and Agricultural Development, UNDP, Dhaka, 1988

Bangladesh Young Economists Association, Papers and Proceedings of the National Seminar on the Role of Decentralisation at Upazila Level in Development, Dhaka, April, 1986.

Centre for Integrated Rural Development for Asia and the Pacific, Decentralization Policies and Programmes: Bangladesh, Indonesia, Nepal. Dhaka: CIRDAP, 1986.

Chenery, Hollis B. et al, Redistribution, with Growth. London: Oxford University Press, 1974.

Government of the People's Republic of Bangladesh, The First Five Year Plan 1973-78. Dhaka: Planning Commission, 1973.

-----, The Second Five Year Plan 1980-85, Dhaka: Planning Commission, 1983.

-----, The Third Five Year Plan 1985-90, Dhaka: Planning Commission, 1985.

-----, Guidelines for Utilisation of Development Assistance Provided through ADP, 1983 (Revised in 1985 and 1988), Dhaka: Planning Commission.

Griffin, Keith, The Political Economy of Agrarian Change : An Essay on the Green Revolution. Cambridge, Mass: Harvard University Press, 1976.

Hayami, Yujiro and Vernon W. Rutton, Agricultural Development : An International Perspective. Baltimore and London: The Johns Hopkins University Press, 1971.

Hossain, Mahabub, Decentralization of Administration and Agricultural Development in Bangladesh, A paper presented in the workshop on "The Role of Local Government in Development" held on December 26-28, 1987 at BPATC, Savar.

Huda, A.T.M. Shamsul, The Small Farmer and the Problem of Access. Dhaka: Bangladesh Agricultural Research Council, 1983.

International Labour Organisation, Poverty and Landlessness in Rural Asia. Geneva: ILO, 1977.

Khan, Akbar Ali, Local Government Finance in Bangladesh : A Survey in the Journal of Local Government, Vol. 12, No. 1, January-June, 1983.

Moniruzzaman, M., "Resource Allocation: Policies and Practices at Upazila Level" in the Young Economist, Upazila Seminar, Dhaka, 1986.

Morss Elliott R. et al, Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects, Vol. 1, Boulder, Colorado: Westview Press, 1976.

Mosher, Arther T, Thinking About Rural Development. New York: Agricultural Development Council, Inc., 1976.

Quasem, M.A., "Decentralization and Agricultural Development in Bangladesh : A Case Study of Kaliakair Upazila" in the Young Economist, Upazila Seminar, Dhaka, 1986.

Rondinelli, D.A. and John R. Nellis, "Assessing Decentralization Policies in Developing Countries : The Case for Cautious Optimism", Development Policy Review (SAGE, London, Beverly Hills and New Delhi), Vol. 4, 1984.

The World Bank, Bangladesh: Adjustment in the Eighties and Short-term Prospects Washington D.C.: The World Bank, 1988.

Salient Features of Dhamrai Upazila

A upazila in the district of Dhaka, Dhamrai is located about 25 miles north-west from Dhaka City. The boundaries of the upazila are Savar at the east, Kalia-Kair of Gazipur and Mirzapur of Tangail at the north, Satoria of Manikgonj at the west and Singair at the south. It has an area of 117 square miles (74,880 acres) with a population of 2,65,593. The density of population is 2270 per square mile. About 95% of the total population are Muslims. The literacy rate (5 years and above) in 1981 was 19.1%, which is below national average. The upazila consists of 16 Unions.

The total cultivable land at Dhamrai is 54,580 acres which is about 75% of the total land. The main crops grown at Dhamrai are rice, jute, wheat, mustard and potato. The following table shows the cultivable land type and crop distribution at Dhamrai.

LAND TYPE AND CROP DISTRIBUTION

Type of land	Area of land (Acres)	Main crop distribution
1. High land	250	(a) Aus-Mustard/Wheat/Potato (b) Jute-Wheat/Mustard/Potato (c) Aus-Aman-Mustard/Potato (d) T. Aman-Mustard/Potato (e) Wheat-Jute-Local T. Aman
2. Medium land	36,000	(a) Aus/T. Aman-Mustard/Wheat/ Potato (b) Aus/Jute-Wheat/Mustard /Potato (c) Boro-T. Aman (d) Boro-Mustard/Wheat
3. Low land	18,330	(a) Boro(single) (b) B. Aman-Pulse (c) Jute-T. Aman

Source : UAO, Dhamrai.

The cropping intensity of Dhamrai is 211%. In the upazila 23,000 acres of land are under irrigation which is 42% of total cultivable land.

The total number of households at Dhamrai is 43,914, average size of household is 6.1 and per capita availability of land is 0.28 acres. Most of the population about 71.6% among the occupationalists of Dhamrai are engaged in agriculture as shown in the following table.

OCCUPATIONAL CLASSIFICATION OF POPULATION

(1981)

Number of Occupational Classification(10 years and above)							
Cropping	Agriculture		Non-agriculture			Others	Total
	Non-cropping	Total	Manufac- turing	Busi- ness	Total		
49,946	1,510	51,456 (71.6%)	1,764	6,307	8,071 (11.2%)	12,321 (17.2%)	71,848 (100%)

Source: Upazila Statistics (1979-80 to 82-83) Vol.1,BBS,p.63.

There are 29,069 farm households at Dhamrai. The sizes of the farming classes are as follows :

- 2.7% large farmers,
- 26% medium farmers,
- 52.7% small farmers
- 18.6% landless

Classwise farm households and cultivable land are presented in the following table :

CLASSWISE DISTRIBUTION OF FARM HOUSEHOLDS AND
CULTIVABLE LAND

Farmers Class	Large farmer 7.5 & above (acres)	Medium farmer 2.50-7.49	Small farmer .50-2.49	Landless 0 - .49	Total
No. of Farm households	786 (2.71%)	7,550 (26%)	15,309 (52.7%)	5,424 (18.65%)	29,069 (100%)
Cultivable land(acres)	7,770 (14.43%)	27,673 (51.39%)	17,318 (32.16%)	1,084 (2.02%)	53,845 (100%)
Irrigated land(acres)	2,665	9,498	6,537	418	19,114

Besides agriculture, some industrial enterprises such as pharmaceutical, textile, ceramics, shoe making industries are located in Dhamrai. The upazila is well communicated with Dhaka by Dhaka-Aricha Road.

LIST OF PERSONS INTERVIEWED AT DHAMRAI

1. UZP Chairman	Mr.A.M.Shariful Islam Sharif
2. UNO	Mr.Abdul Wahab Patwary
3. UAO	Mr.A.B.M.Tofazzal Hossain
4. UE	Mr.Sardar Mainul Hossain
5. Adl.A.O.	Mr.Tara Shankar Bashak
6. S.M.O.	Mr.Nirmal Kumar Shaha
7. UFO	Mr.Zahirul Hoque Patwary
8. ULO	Mr.Abdus Salam
9. URDO	Mr.Abdul Baten
10. ARDO	Mr.Syed Abdur Rahim
11. A.A.Officer	Mr.Habibur Rahman
12. Sr.S.Asstt.Engg.(Mech.)BADC	Mr.Mohammed Shamsul Haque Mollah
13. Sr.S.Asstt.Engg.(Mech.)BADC	Mr.Kairul Alam
14. Sr.S.Asstt.Engg.(Mech.)BADC	Mr.Mohammad Hossain Khan
15. Stat. Officer	Mr.Abdur Rashid
16. Upazila Seed Inspector(BADC)	Mr.Abdus Salam
17. Manager,Sonali Bank, Dhamrai Bazar	Mr.Abdul Gafur Bhuiyan
18. Manager,Bangladesh Krishi Bank	Mr.Belayet Hossain
19. Manager,Janata Bank	
20. Dhamrai UP Chairman	Mr.Golam Mahammad
21. Kulla UP Chairman	Mr.Kafiluddin
22. Sombagh UP Chairman	Mr.M.A.Jalil
23. Kushara UP Member	Mr.Md.Abdul Gani
24. Kushara UP Member	Mr.Sarfai Islam
25. B.S.	Mr.Faiz Hossain

ANNEXURE-C

PROJECT-WISE ALLOCATION IN AGRICULTURE OF DHAMRAI UPAZILA
DURING FY 1983-84 TO 1984-85 AND BOTH ALLOCATION AND EXPEN-
DITURE FOR THE PERIOD FROM 1985-86 TO 1987-88

Project-wise Allocation in Agriculture during FY 1983-84

Sub-sector	Sl. No.	Name of Location of Project	Allocation (in Tk.)
FISHERIES	1.	Re-excavation of Bokhteur channel at at Baishakanda Union	25,587
	2.	Re-excavation of Boinna Pond at Kushura Union	23,044
	3.	Re-excavation of A.R.Khan Pond at Kathalia, Kushura	19,212
	4.	Re-excavation of Khas Pond at Nagrail, Sombagh Union	2,13,953
	5.	Re-excavation of Khararchar Madrasha Pond at Boil Union	1,04,086
		Sub-total	3,85,882
LIVE-STOCK	6.	Construction of a Veterinary Centre near Balia Union Office	54,958
IRRIGATION	7.	Construction of Pucca drain at Nandesshary, Amta Union	47,551
	8.	Pucca drain construction at Agjethail, Amta Union	58,030
	9.	Construction of Pucca drain and development work beside this at Balia Union	1,53,375
	10.	Construction of Pucca drain of deep tube-well at Toper Bari, Kushura Union	63,163
	11.	Construction of drainage pipe at Sanora Union	58,380

12.	Construction of drainage pipe at Sanora Union	49,375
13.	Construction of a drainage culvert at Ganggutia Union	2,21,048
14.	Construction of a drainage Culvert on the road Kalia-Aralia at Kulla Union	1,54,067
15.	Sinking of a deep tube-well and construction of pucca drain at Nannar Union	48,746
16.	Construction of drainage pipe culvert at Jalshin, Nannar Union	60,000
17.	Construction of drainage culvert at Gokhara, Jadabpur Union	1,04,333
18.	Construction of drainage culvert at Bawja, Kushura Union	1,02,914
19.	Construction of drainage pipe culvert at Malancha, Vararia Union	40,500
20.	Construction of drainage culvert at Hatipara, Vararia Union	40,880
	Sub-total-3	12,02,362
	Total	16,43,202

Project-wise Allocation in Agriculture during FY 1984-85

Sub-sector	Sl. No.	Name & Location of Project	Allocation (in Tk.)
CROPS	1.	Boro HYV demonstration farm	32,000
	2.	HYV Jute demonstration farm	16,000
	3.	Purchase of agricultural product	80,000
		Sub-total-1	1,28,000
	4.	Grass cultivation project for cattle	20,000

LIVESTOCK	5.	Cock exchange project	15,000
		Sub-total-2	40,000
	6.	Re-excavation of Vadalia Pond at Suapur Union	85,544
	7.	Re-excavation of Goshpara Pond at Suapur Union	49,853
	8.	Re-excavation of Suapur College Pond	22,325
FISHERIES	9.	Re-excavation of Tatipara Pond at Vararia Union	55,619
	10.	Re-excavation of Baichaile Pond at Balia Union	30,000
	11.	Re-excavation of Berosh Pond at Baishakanda Union	30,000
	12.	Re-excavation of Boinna-2 Pond at Kushara Union	30,000
	13.	Re-excavation of Bannal Pond	30,000
	14.	Fish seeds production project at Ashulia, Dhamrai Union	30,000
		Sub-total-3	3,63,341
	15.	Construction of drainage pipe culvert on the road Baikuntapur-Ragunathpur	30,000
	16.	Construction of drainage pipe culvert at Baishakanda Union	30,000
	17.	Construction of drainage pipe culvert of Sanora Union	30,000
IRRIGATION	18.	Construction of drainage pipe culvert at Vararia Union	30,000
	19.	Construction of drainage pipe culvert on the road Amta-Shimulia	30,000
	20.	Construction of drainage pipe culvert at Boaile Union	30,000

21.	Construction of incomplete portion of Hatkora drainage culvert at Ganggutia Union	74,169
22.	Construction of incomplete portion of drainage culvert at Kalia-Aralia Road, Kulla Union	74,169
23.	Construction of drainage culvert on the road Kalia-Aralia	1,25,421
24.	Construction of 3'-0"dia RCC pipe on the road Jayapura-Sonartekh at Sombagh Union	60,000
25.	Construction of drainage pipe culvert on the road Vabonhati-Saturia at Balia Union	60,000
26.	Construction of drainage pipe culvert on the road Dhamrai-Kalampur at Dhamrai Union	60,000
27.	Construction of drainage pipe culvert at Rajapur, Chowhat Union	65,000
28.	Construction of drainage pipe culvert on the road Kalampur-Balishar at Sutipara Union	60,000
29.	Construction of drainage pipe culvert on the road Amta-Shimulia at Jadabpur Union	65,000
30.	Construction of drainage pipe culvert on the road Dhamrai-Kalampur, Sombagh Union	1,20,000
31.	Construction of pipe culvert at 20 places in Sanora Union	80,000
32.	Construction of drainage pipe culvert on the road Lalitnagar-Kawkhali	1,20,000
33.	Construction of drainage pipe culvert behind Balia Union Office	30,000
Sub-total-4		11,73,759
Total		17,05,100

Allocation, Expenditure and Status of Agricultural
Projects during FY 1985-86

Sub-sector	Sl. No.	Name & Location of Project	Allocation (in Tk.)	Expenditure (in Tk.)	Project Status
CROPS	1.	Purchase of insecticide	1,16,000	1,16,000	100%
	2.	Purchase of Spray Machine	52,500	52,500	100%
	3.	Demonstration(T.Aman)	16,000	16,000	100%
		Sub-total-1	1,84,500	1,84,500	
FISHERIES	4.	Re-excavation of Amrail Khas Pond at Jadabpur Union	24,400	-	-
	5.	Re-excavation of of Bilkushnai Khas Pond at Jadabpur Union	40,000	64,400	100%
	6.	Re-excavation of Baghmara Khas Pond at Baishakanda Union	56,475	56,475	100%
	7.	Re-excavation of Patal Khas Pond at Baishakanda Union	53,507	53,507	100%
	8.	Re-excavation of Digalgaon Khas Pond at Vararia Union	60,000	28,000	100%
		Sub-total-2	2,34,382	2,02,382	
IRRIGA-TION	9.	Construction of a foot bridge over dunat channel at Chawhat Union	1,20,000	1,20,000	100%
	10.	Construction of pucca drain for deep tube-well at Kushara Union	50,000	50,000	100%

11.	Construction of RCC box culvert on the road Nabagram Durburia at Kushara Union	40,000	40,000	100%
12.	Construction of box culvert on the road Baikuntapur-Ragunathpur at Baishakanda	40,000	40,000	100%
13.	Construction of a box culvert on the road Ragunathpur-Gairakul at Patol in Baishakanda	40,000	40,000	100%
14.	Construction of 2 box culverts one at Gorakanda Canal and other is at Kulli canal on the road Srirampur-Kaimtara	80,000	80,000	100%
15.	Construction of RCC pipe culvert on the road Balia-Suapur at Sutipara Union	40,000	40,000	100%
16.	Construction of 2 box culverts at north and south side of Nawgahati on the road Kalampur-Balishar.	80,000	80,000	100%
17.	Construction of Manderchap pipe culvert at Vararia Union	40,000	40,000	100%
18.	Construction of 12'-0" box culvert at Gorakanda on the road Srirampur-Kaimtara at Nanner Union	90,863	90,863	100%
19.	Construction of 3'x3' box culvert on the road Jashine Ragunathpur at Nanner Union	40,000	40,000	100%
Sub-total-3		6,60,863	6,60,863	
Grand Total		10,79,745	10,47,745	

Allocation, Expenditure and Status of Agricultural
Projects during FY 1986-87

Sub-sector	Sl. No.	Name & Location of Project	Allocation (in Tk.)	Expenditure (in Tk.)	Project Status
CROPS	1.	Demonstration farm of T.Aman, Aus, Boro and Mustard	32,900	-	-
	2.	Fertilizer Demonstration	2,800	-	-
	3.	Farmers Rally	3,500	-	-
	4.	Establishment of a Upazila Soil Testing Laboratory	21,000	-	-
	5.	Signboard for information centre at Sunder village, Sutipara Union	11,808	11,808	100%
	6.	Plantation at Sutipara Sunder Village	20,000	20,000	100%
	7.	Establishment of Upazila Nursery	14,500	-	-
		Sub-total-1	1,06,508	31,808	
FISHERIES	8.	Upazila fish demonstration farm (Nagraill Pond), (including cost of a Honda)	1,47,516	1,53,342.74	100%
	9.	Re-excavation of Sundar gram Pond at Sutipara	42,000	56,284.75	100%
	10.	Re-excavation of Boail High School Pond	30,000	30,000	100%
		Sub-total-2	2,19,516	2,39,627.49	100%
LIVES-STOCK	11.	Training of livestock workers & supply of working tools	17,525	17,525	100%
	12.	Bee-keeping at Sunder Village, Sutipara Union	25,000	25,000	100%

	13.	Establishment of a upazila poultry farm at Sutipara Sundar village.	31,349	-	-
		Sub-total-3	73,874	42,525	
IRRIGA- TION	14.	Completion of drainage culvert over Dotal canal at Chowhat	14,000	58,421	100%
	15.	Maintenance of drainage channel at Indara-Jangalia	8,400	9,000	100%
	16.	Maintenance of drainage channel of Jalshabashi canal	24,500	24,500	100%
	17.	Construction of pucca drain for deep tube-well of Marampur	24,500	29,388.86	100%
	18.	Construction of drainage culvert on the road Jalshin-Gorakanda	84,697	1,20,000	100%
	19.	Construction of drainage culvert over the Bahutkui canal on the road Kararchar-Aralia	43,924	-	-
	20.	Completion of a box culvert at Nabagram on the road Nabagram-Durburia	28,002	22,631	100%
	21.	Canal water drainage project from Bara Narayanpur Krishnachandra Sarkar house to Nayacher bridge	3,500	3,500	100%
	22.	Construction of pucca drain for deep tubewell at West Bashna	17,500	17,500	100%
	23.	Maintenance of drainage channel from Bashkata to Kandahati	35,000	-	-
		Sub-total-5	2,84,023	2,84,940.86	
		Grand total	6,83,921	5,98,901.35	

Allocation, Expenditure and Status of Agricultural
Projects during FY 1987-88

Sub-sector	Sl. No.	Name of Projects / Programmes	Allocation (in Tk.)	Expenditure (Tk.)	Project Status
CROPS	1.	A Signboard at Sundar village, Sutipara Union	2,984	2,984	100%
	2.	Construction of a nursery and plantation at UT&DC	30,690	1,50,000	100%
		Sub-total-1	33,674	1,52,984	
	3.	Digging a Pond at Sundar Village, Sutipara Union	10,569	60,000	100%
FISHERIES	4.	Re-excavation of govt. pond at Nagrail, Sombagh Union	63,107	46,371	100%
	5.	Maintenance of a Pond and fish production, Upazila Complex, Dhamrai	48,600	-	-
		Sub-total-2	1,22,276	1,06,371	
LIVE-STOCK	6.	Construction of a semi-pucca shed for poultry at Sutipara Union	66,386	86,268	100%
		Sub-total-3	66,386	86,268	
	7.	Construction of a culvert on the road Dimukha-Delutia at Chowhat Union	54,347	1,16,490.47	100%
	8.	Maintenance of irrigation channel at Indara-Janggalia, Balia Union	3,000	3,000	100%
	9.	Maintenance of irrigation channel at Ganggutia Union	5,890	5,890	100%
IRRIGATION	10.	Construction of irrigation channel Srirampur, Sutipara Union	8,064	3,265	100%

11.	Construction of a culvert on the road Jalshin-Gorakanda at Nanner	3,80,593	2,50,677	100%
12.	Construction of a culvert at Bahutkul, Roaile Union	1,42,076	1,72,755	100%
13.	Construction of a box culvert at Balishar, Sutipara Union	18,825	18,825	100%
14.	Construction of a culvert on the road Nobagram-Borburia at Kushura Union	45,766	13,768	100%
15.	Maintenance of irrigation channel at Bara Narayanpur, Amta Union	1,500	1,500	100%
16.	Construction of deep tube-well drain at Sanora Union	5,803	23,303	100%
17.	Maintenance of irrigation channel at Jadabpur Union	15,000	-	-
Sub-total-5		6,80,864	6,09,473.47	
Grand Total		9,03,200	9,55,096.47	

UPAZILA PROJECT PROFORMA(UPP)

1. Name of the Project :
2. Implementing Agency :
3. Nature, purpose, importance and justification. :
4. Total cost and annual phasing :
5. Major physical items of work with estimated cost :

	Quantity	Cost
--	----------	------

- | | | |
|----------------------|--|--|
| (a) Land | | |
| (b) Labour | | |
| (c) Materials | | |
| (i) Bricks | | |
| (ii) Cement | | |
| (iii) Steel | | |
| (iv) Other items | | |
| (d) Transportation | | |
| (e) Land Development | | |
| (f) Others | | |

6. Implementation period :
 - (a) Date of commencement
 - (b) Date of completion
7. Location of the project :
8. Source of financing :
 - (a) Government
 - (b) Local contribution
 - (c) Others

9. Mode of implementation: :
contract/otherwise
10. Manpower requirement :
(a) Skilled
(b) Unskilled
11. Arrangement for maintenance :
of project work or facilities
after completion
(a) Annual requirement of
staff and their training. :
(b) Annual requirement of
spares and consumables :
and other materials for
maintenance and repairs.
(c) Annual recurring cost :
(d) Proposed mode of financing
the recurring costs and :
securing the necessary
manpower and skills.
12. Is there a similar project of the :
national government or regional body
in the Upazila ? If so, the reason
for undertaking the proposed project
may be indicated.
13. What other complementary investments :
by the Upazila Parishad or national
government are necessary for deriving
full benefit out of the proposed
investment?
14. Does the project require acquisition of :
land ? If so, what arrangements have been
made for land acquisition for the project.
15. Estimated/expected benefit due to :
implementation of the project.
(a) In terms of money
(b) In terms of employment.

(c) Socio-economic well being
(please describe).

(d) Estimated benefit/cost ratio.

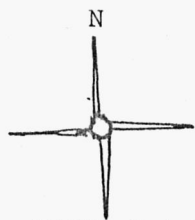
16. How did the project idea originate ? :
17. Has any survey/study been made before initiating the project ? :
18. Does the project strictly adhere to the revised guidelines for undertaking development schemes by the Upazila Parishad ? :

Signature of the Sponsoring Authority

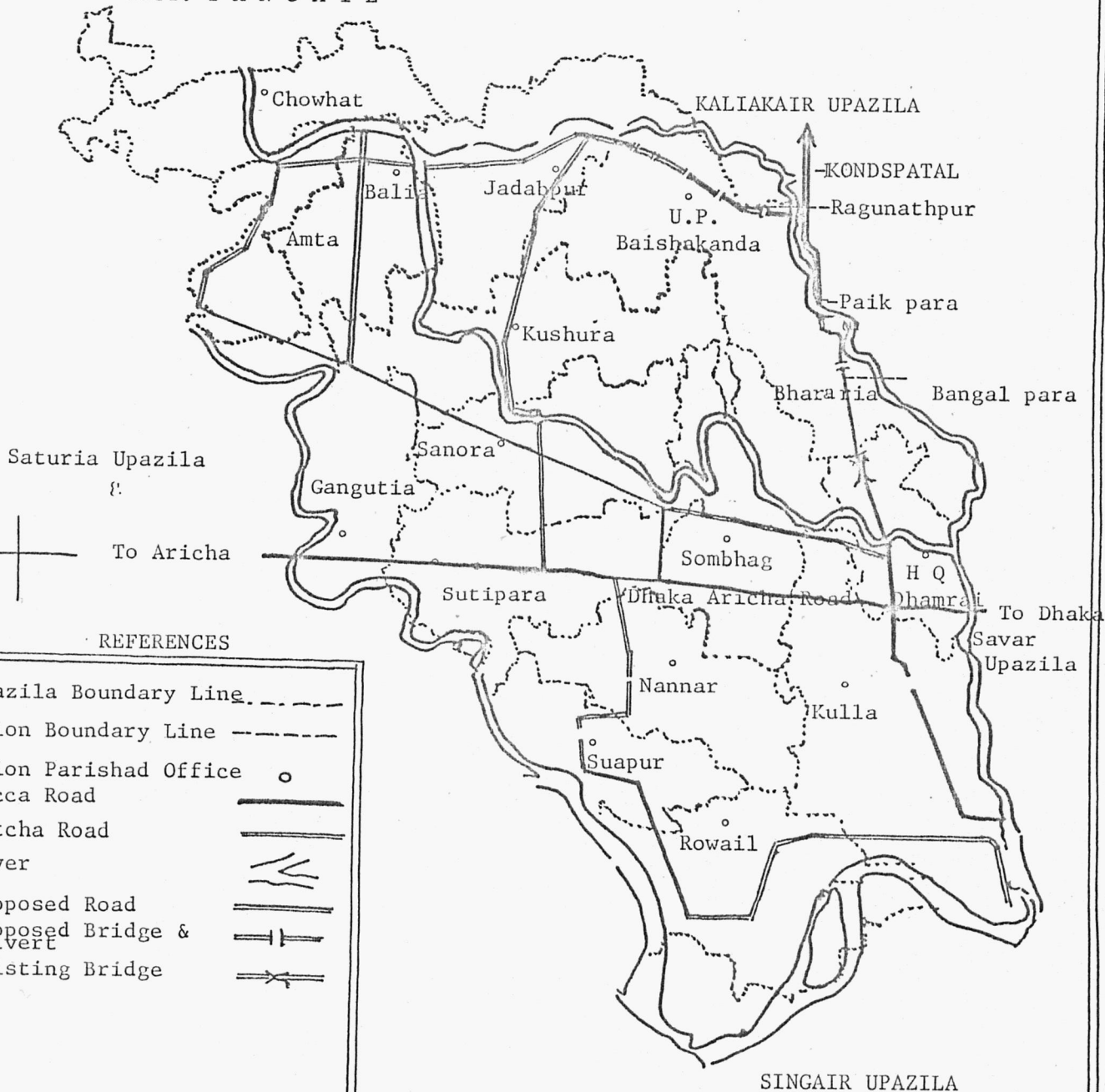
UPAZILA DHAMRAI

DISTRICT DHAKA

SCALE 1" = 1 MILE



DIST. TANGAIL



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