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Food Policy in Bangladesh and the Role of Rural Development Academy, Bogra

A. J. Minhaj Uddin Ahmad*

Abstract

The core theme of food and agricultural development is the national food security. In pursuit of this food policy, the key objective of agricultural development over the past 25 years has been the determination to feed the nation on food grown on its own soil. A large variety of strategies were pursued in order to achieve the vision of self-sufficiency in food production. Keeping in conformity with the government policy, Rural Development Academy (RDA), Bogra has also played a complementary role in achieving the idea of increase in food production through its several activities - training, research and action research projects. In this article an attempt has been made to examine the role of RDA in achieving the idea of increase in food production. The present overview of the RDA experience suggests that through its research, training and experimental projects it has made a significant contribution to the increase in food production in the northern part of Bangladesh. The experience also belies a long-standing notion that the northern region is not rich enough to increase crop production in the absence of sufficient ground water availability for the purpose of mechanised irrigation. RDA, through its experimental projects like Irrigation Management Programme shows that the northern region of Bangladesh has enough potential for agricultural growth. But its experience also underlines the need for continuation of the training programmes so that the diffusion process of HYV technology remains effective. Over and above, equal importance may be given to institutional development. To be sure, the vision of achieving success in foodgrain self-sufficiency is also dependent on adequate institutional arrangements for ensuring access by small farmers to modern agricultural technologies.

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Introduction

Agricultural performance, food sector performance in particular, has a major direct impact on important macro-economic objectives like employment generation, poverty alleviation, human resources development and food security. Meeting the nation's growing food requirements remains a central objective of public policy and there has been a substantial progress in terms of increasing foodgrain (rice and wheat) production. However, loss of food and cash crops due to flood and other natural clamities has become a common phenomeon seriously disrupting the entire economy. The government of Bangladesh has been trying to introduce modern agricultural and irrigation equipment to boost up the production of food and cash crops so that the loss of food and cash crops could be covered easily. It is also necessary to increase food production in Bangladesh because of rapid population growth. Considering all these factors the government of Bangladesh has given top priority in increasing food production and controlling population in all its development plans since independence (GPRB, 1973).

The core theme of food and agricultural development in Bangladesh is the national food security. There are two aspects of such food security - food production and supply of food to all households. In other words, provision of food security means an assumed supply of food at all times to meet at least the minimum nutritional needs of all people, especially of the poor and the hungry. It, therefore, requires not only adequate but also stable food supplies over time. At the same time the poor and the hungry need access to food. In pursuit of this food policy, the key objective of agricultural development over the past 25 years has been the determination to feed the nation on food grown on its own soil. Based on this, self-sufficiency in food has been repeatedly emphasised in various government planning documents. The strategies proposed by the different plan documents are many: (i) incentive prices for growers; (ii) price stabilisation for consumers; (iii) foreign exchange earnings through exports; (iv) elimination of input subsidies to achieve a more favourable income distribution; (v) improving nutritional standards; (vi) privatisation of input distribution; (vii) expansion of irrigated area under High Yielding Varieties (HYV) and fertilizer use; (viii) land reform measures; and (ix) rationing input process (Ali, 1989: 71).

Over the years a large variety of strategies were pursued in order to achieve the vision of self-sufficiency in food. As the achievement of self-sufficiency in this respect is heavily contingent upon the development of agriculture, all the five year plans emphasise the expansion of HYV technology and introduction of appropriate crop

diversification programmes. In case of inputs water and fertilizers were identified as the two critical elements. Other inputs and supportive service development programmes included provision of improved seeds, plant protection services, agricultural extension, research and education, credit, food and fertilizer storage facilities and marketing. In spite of several constraints, Bangladesh has achieved a significant progress in food production following the adoption of the afor-ementioned policies and objectives. Keeping in conformity with the government policy Rural Development Academy (RDA), Bogra has also played a complementary role in advancing the idea of increased food production through its several activities, research and action research projects.

Training Programme

Since its inception in 1974 the Academy has arranged a large variety of training programmes for a wide range of clienteles covering officials, public representatives, cooperators and farmers who are directly and indirectly connected with rural development, especially agriculture related activities. A major aim of its training programme is to assist the farmers in boosting up agricultural production by way of creating awareness and increasing efficiency of the extension workers, the cooperators and farmers. As of now, a total of 66,111 persons of different groups have been covered under its various training programmes. Moreover, in recent years special emphasis has been attached to the enhancement of skill of certain core people so that they can directly contribute to the production function in respect of several specific areas such as fishery, livestock and poultry, horticulture and nursery development, irrigation management and operation of irrigation equipment. Such skill development training programmes have been found to serve twin objectives — creation of self-employment and increase in food production on many counts. The skill development courses include Irrigation Mechanics, Fisheries Technology, Horticulture and Nursery Development, Livestock and Poultry Resources Development, Homestead Gardening and so on.

In a recent evaluation on the performance of the core courses under the Integrated Training, Research and Technology Transfer Under Irrigation Management Programme (ITRTT) project, it has been found that the training has achieved a tremendous result in the technology transfer process and this, in turn, has resulted in boosting up production of agricultural crops by way of ensuring efficient utilisation and management of irrigation equipment and expansion of command area under irrigation equipment (Ahmad, et al, 1997a). Another evaluation on some of the training activities under the Comprehensive Village Development Programme (CVDP) shows that the training has been found highly instrumental for direct production in the field of agriculture. As for instance, the training course on pisciculture was attended by 113 cooperators from 39

CVDP Cooperative Societies. Of them 73% are reportedly making use of training knowledge through cultivating fishes and also advisory services. The rest are involved in advisory services in motivating the pond owners in cultivating fishes. Their activities in the field have already led to an increase in fish production contributing to minimise their protein deficiency (Husain,, 1997: 50-51). Likewise, another training programme on vegetables and fruits production has already provided training to 117 women cooperators of 39 villages. Of them, a large number of participants (86%) are directly involved in growing vegetables and fruits. Aside from that, they can consume more vegetables than earlier and this, in turn, is found helpful for meeting the vitamin deficiencies (Ibid, p. 68). Training on livestock rearing and primary treatment may be cited as another successful example of making direct contribution to the production by way of saving the livestock resources of the country. More than 80% of the respondents are reportedly making effective use of the knowledge and skill acquired from the training course (Ibid, p. 89).

Research Programme

As research is one of the mandated functions of the Academy, it conducts research into a wide range of socio-economic issues of the rural areas of Bangladesh. Major areas as subsumed under research programme are Local Government, Women in Development, Cooperatives, Social Forestry, Primary Health, Rural Education, Population and Family Planning, Fisheries, Irrigation and Water Management, Village Child Development, Rural Credit Programme, Land Ownership Pattern, Leadership Pattern, Local Level Planning, Mass Communication and so on. The research activities of the Academy have both academic and practical values. The main objectives of the research are : (i) to provide the planners and policy makers with new inputs/information in respect of development programmes; (ii) to use the findings of research in developing training materials; and (iii) to generate new ideas for test and experiment through action research. A major thrust of such research is on streamlining the process of production through enhancement of efficiency of productive forces of the rural population. As of now, a total of 193 research projects have been completed, of which 42 research projects are related to agriculture, irrigation and water management. The findings of those research have been found quite useful for overcoming the problems of production function in the field of agriculture and irrigation and water management.

Action Research Projects

The third mandatory function of the Academy is to undertake action research projects on socio-economic problems intending to find out appropriate solutions. The other

objective is to develop replicable models for rural development. The Academy is involved in implementation of a good number of such projects in its laboratory area since its inception in 1974. Some of the projects' findings have already been accepted by the national and international agencies for wider scale replication. These projects are Small Farmers Development Programme (SFDP), Village Child Development Project, Irrigation Management Programme, Local Level Planning and Water Resource Development. Though these projects had multidimensional activities, a common goal of them was to boost up food production in the field of agriculture by strengthening several productive elements that are relevant to food production.

In addition, RDA is currently experimenting with nine projects. Of them, Comprehensive Village Development Programme (CVDP), Integrated Training Research and Technology Transfer under Irrigation Management Programme (ITRTT), Poverty Alleviation Through Social Forestry, Rural Housing Project and Crop Diversification Programme (CDP) are important to mention as they are directly and indirectly related to food production. A brief account of some of these projects may be given.

Comprehensive Village Development Programme: CVDP is a cooperative based government financed project provisioned in the Fourth Five Year Plan. It is being implemented by RDA in 40 villages in the northern region of Bangladesh. This project aims at overall development of all segments of the population of a village by bringing them under the umbrella of one cooperative organisation – one village, one cooperative. The project is under implementation since 1991-92 and has made some progress against the set components. A perceptible change has taken place in respect of institution building and poverty alleviation. The new institutional mechanism as devised by CVDP has streamlined the diffusion of HYV technology among the farmers and this, in turn, has contributed to a significant rise in the production of food.

Integrated Training, Research and Technology Transfer under Irrigation Management Programme (ITRTT) : The main objective of this project is to carry out action research for proper utilisation and management of irrigation equipment in the context of command area development. The ultimate goal of it is to boost up food production by way of gradual increase of efficiency in the management of irrigation equipment. With this end in view, a major component as subsumed under the project is the arrangement of training for the several categories of core people who are directly involved in the management of the irrigation equipment. To date, the project has already given training to 1275 persons covering mechanics and operators of irrigation

equipment, managers of irrigation schemes, model farmers, junior and senior level officials engaged in irrigation activities.

A preliminary survey over the impact of training evinces that a perceptible change has taken place in respect of the increase in the command area of the irrigation equipment and the yield as well. This positive change is put down to the enhancement of efficiency in irrigation management which is again the direct outcome of training under the ITRTT project (Ahmad, et al, 1997b).

Crop Diversification Programme (CDP): The search for food self-reliance in Bangladesh should encompass not only cereals but also other food items. With an increase in per capita income and urbanisation and a consequent shift in the consumption pattern towards the non-cereals and non-crop foods such as fruits and vegetables, livestock products and fish, the need for agricultural diversification gains in urgency. This situation his provided the backdrop for the adoption of an experimental project like Crop Diversification Programme (CDP). CDP aims at increasing the production of diversified crops like pulses, oil seeds, potato, mustard, sunflower and so on to encourage balance diet. To achieve the above objectives the Dutch Executing Agency (DEA) of Crop Diversification Programme (CDP) and RDA, Bogra are jointly conducting varietal screening research of diversified crops since 1992. Apart from that the Academy also arranges a series of field day and workshops in order to demonstrate the results so that the process of technology diffusion can be spurred across the country. To date, the project has gone a long way in respect of crop diversification programme.

Poverty Alleviation Through Social Forestry : Another important project directly related to food production - has been taken up very recently to realise several objectives. However, a major thrust of the project is on the complementary income generating activities, like livestock rearing, horticulture and nursery development, kitchen gardening and so on. As it has just started functioning, it is not the right time to assess the impact on food production. However, it is strongly believed that successful operation of the project is likely to achieve a significant increase in food production in the northern region of Bangladesh.

Demonstration Farm: Apart from the experimental project, the Academy has a demonstration farm to perform some specific responsibilities. The rapid development of agriculture, a pre-condition for increase in food production, requires sustained efforts by the agricultural research and extension systems. The research and extension systems

have contributed significantly to food production over the past quarter century and they have critical roles to play in achieving food self-reliance and food security in the future. However, their efforts in this regard are very often constrained by the manpower shortage and inadequate linkage with research institutions. This, in turn, militates against the diffusion of HYV technology in the field of agriculture (Hye, 1989: 104). Apprehending this constraint on the modernisation of agriculture the Academy has established a demonstration farm intending to disseminate the improved agricultural technologies through demonstration. It conducts trial on newly developed innovated crop varieties and modern technologies. Apart from that, it conducts research on local problems and develop location specific technologies. In doing so, the demonstration farm has achieved a considerable degree of success in the diffusion of HYV technology leading to eventual increase in food production in the northern region of Bangladesh.

Conclusion

The present overview of the RDA experience suggests that through its research, training and experimental projects it has made a significant contribution to the increase in food production in the northern part of Bangladesh. The experience also belies a long-standing notion that the northern region is not rich enough to increase crop production in the absence of sufficient ground water available for the purpose of mechanised irrigation. But RDA, through its experimental projects like Irrigation Management Programme shows that the northern region of Bangladesh has enough potential for agricultural growth. But its experience also underlines the need for continuation of the training programmes so that the diffusion process of HYV technology remains effective. Over and above, equal importance may be given to institutional development, Institutions can play a vital role in rural development, especially when programmes need to cover large number of rural households and when government wants to target special groups to ensure that benefits of development are distributed more equally. To be sure, the vision of achieving success in foodgrain self-sufficiency is also dependent on adequate institutional arrangements for ensuring access by small farmers to modern agricultural technologies. So greater attention is needed to target programmes effectively to such households. Likewise, programmes for bringing employment and income to the rural poor may be expanded. Besides, NGOs are to continue to play an important role concentrating on innovative approaches to food security. However, they should not take on or duplicate the responsibilities of government agencies.

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Thana Level Administration During Post-Upazilla System

A Review

Md. Gias Uddin

Abstract

During the period of Begum Khaleda Zia's government from 1991 to 1995 local self-government function with decentralizing spirit was absent at the thana level. After dissolving Upazilla system the position of thana administration in respect of people's participation became unsubstantial. In fact, administrators were accountable to none, especially power concentrated with civil bureaucrats in case of power exercise and resource allocation. Thus the system turned to a ridiculous matter to the students of politics, public and development administration. Various administrative aspects were hampered and in consequences development process suffered severely and could not reach at expected point. For betterment of the people their participation in politics and administration is very much essential. Viable public representative political system can be a better forum for all types of development activities in local area. If the system is allowed to continue it can be a significant weapon for common peoples development.

Introduction

Now-a-days thana is the lowest basic administrative unit in Bangladesh. It is originated from the establishment of police administration in 1792. In course of time it became the focal point of various development activities including nation building departments of various directorates, autonomous bodies of separate ministries. Thana is regarded as the core executing unit of government policy at lower stage of field administration. Due to multifarious reasons this unit could not complete the tasks assigned to it. The author has a chance to be a observer participant of thana level administration in a thana of northern

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Bangladesh while he worked in an action research programme of the Rural Development Academy (RDA), Bogra. So, the paper is reflection of the author's field level practical experience.

Objective and Scope

The main objective of this paper is to give an idea about the post-upazilla system situation of thana administration. Ershed made Upazilla as a decentralisation process of administration had some serious problems needed to overcome. But the BNP government dissolved it, because it was Ershad's creation. Later on, no suitable instituion was replaced by them. This paper is divided inot two parts. In the first part, as a background of discussion, some talks on Upazilla system will be illustrated. Then post Upazilla system thana administration's real situation will be described. In the second par,t proposed model would be provided by the author which may be a subject of thinking for the students of development administration. This will be followed by a concluding remarks.

Ershad's Upazilla System

Merits and Demarits

During Ershad regime Thana was upgraded and was named Upazilla (Sub-district) keeping consistency with District/Zilla. Central government exercised control over retained subject while Upazilla Parishad on transfered subject. Former Upazilla Parishad was formed including one Chairman directly elected by the people, Chairman of concerned Union Parishad as ex-officio member, government officer's excluding voting right, government nominated members and TCCA chairman, nominated women member, Thana Nirbahi Officer, member-secretary to the Parishad. The system has it's merits and demerits. This is also true in case of former Upazilla system. System survives through trial and error principle. Some scholars opine that Upazilla system had more or less some advantages and disadvantages. These are mentioned below chronologically:

Advantages of Upazilla System

a) a decentralised unit for local level decision making and proper implementation of different programmes;

b) priority was given to the aspiration of local people;

c) administration was sent to the door step of the poor people;

d) people were able to get services from the government departments by public representative's patronage; and

e) administrative men were made subordinate to political men.

Disadvantages of Upazilla System

a) corruption was decentralized with decentralization of administration;

b) a small section of people got more benefits maintaining close contract with Upazilla Chairmen and other officials;

c) Upazilla Chairmen became Upazilla emperor because of having no effective mechanism for him to be accountable;

d) the clash was created between Upazilla Chairmen and Thana Nirbahi Officers due to lack of clear conception of their work, jurisdiction and role in the context of Upazilla Parishad function; and

e) the major complaint about Upazilla system was that Ershad government tried to build up their political base by this system.

The objective for creation of Upazilla system by Ershad was for political interest in lieu of developing viable political and administrative nexus at the Thana level.

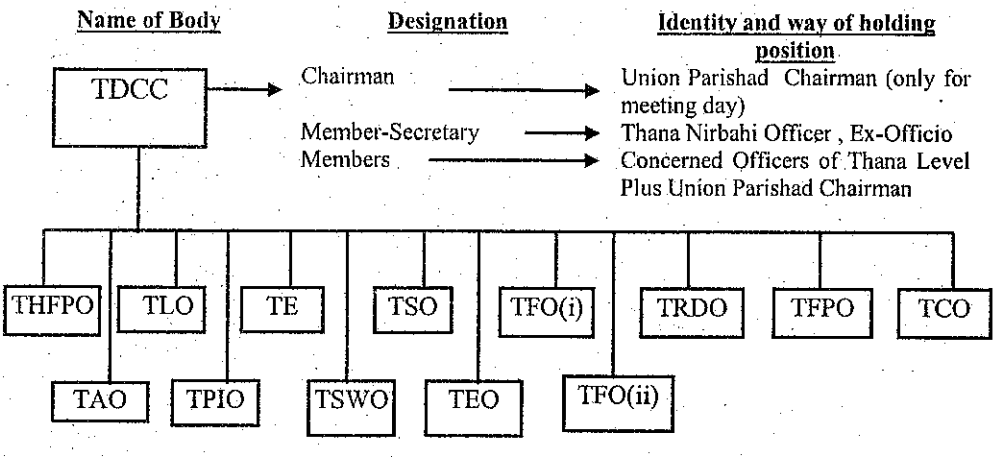
Thana Administrative Pattern Under Khaleda Zia Regime (1991-95)

After Ershad's downfall in the face of people's resurrection BNP came to state power through a transparent election held under caretaker government Justice Sahabuddin Ahmad. Occupaying power Khaleda dissolved former Upazilla system and assured to take necessary measures in the field of local government through proper administrative restructuring. She banned former activities under Upazilla system. Thana Development

Co-ordination Committee (TDCC) was formed for decision making at the highest level of the Thana Parishad.

Formation of Thana Development Co-ordination Committee (TDCC)

Concerned Union Parishad (UP) Chairman and officers of various nation building departments were member of TDCC. One of the UP chairman hold chairmen's position only on meeting day. Chairmanship of TDCC rotates among them. Thana Nirbahi Officer is the Member-secretary to the Committee. In this situation administrative structure of the Thana Parishad can be portrayed as below:



Elaboration of abbreviations

THFPO	=	Thana Health and Family Planning Officer
TAO	=	Thana Agriculture Officer
TLO	=	Thana Livestock Officer
TPIO	=	Thana Project Implementation Officer
TE	=	Thana Engineer
TSWO	=	Thana Social Welfare Officer
TSO	=	Thana Statistics Officer
TEO	=	Thana Education Officer
TFO (i)	=	Thana Food Officer
TFO (ii)	=	Thana Fishery Officer
TRDO	=	Thana Rural Development Officer
TFPO	=	Thana Family Planning Officer
TCO	=	Thana Co-operative Officer

Ineffectiveness of Thana Development Co-ordination Committee

Above organogram shows that TNO is the Member-secretary whereas a Union Parishad chairman becomes chairman once a month on meeting day. TNO is a permanent and experienced civil servant. He is a conscious administrative man having sound theoretical background He is the keyman of administration. Inversely, a chiarman in most cases has negligible academic career and holds office on temporary basis, only for one day. Theoretically, member-secretary is subordinate to the chairman. But in the TDCC meeting TNO occupied the big and pompous chair while chairman took chair beside him. Presiding chairman approached with TNO with the word 'Sir' which indicates the real position of TNO and TDCC chairman. Chairman had no command over the issues of meeting. TNO's decision and choice was final. It was observed that chairman was not conscious of his position or if he was conscious, he was unable to apply his own views because of TNO's extensive power on allocation of resources and maintenance of law and order. Thus, TDCC could not play effective role in the process of development activities at the Thana level. TDCC became an unsubstantial measure of BNP government. The problems accrued from the existing framework of the thana level administration is illustrated below:

Bureaucratic institution is strengthened than the political institution

As authority and power lies with the bureaucrats (TNO) in the absence of political representative body they make necessary arrangements for protecting their class interest. More the bureaucracy exercises power more the political institution becomes weak. This has brought about imbalanced development between politics and administration.

Inter-cadre clash is intensified

Due to absence of permanent public representative as a co-ordinator civil bureaucrats, especially members of administration cadre get more chances to exercise power on other departments. But such syndrome is not cordially accepted by the technical cadre officers. Without some exceptions inter-cadre clash is found between them which is unintended for smooth functioning of development programmes.

Task of co-ordination is hampered

Co-ordination is a fundamental aspect of administration and very essential for inter-departmental work. In absence of public representative as co-ordinator TNO does not get proper response from specialist officers for their dominating behaviour. Nevertheless, thana level officers are controlled by their higher authorities of district administration. So, the thrust for co-ordination becomes a hollow matter which exists only in the literature of administration.

Absence of accountability

Accountability is a core point of administration. Without it all efforts of administration become abortive. The authority exercised and the resources allocated for the purpose by the administrator deserve to be accountable to some one. But in fact, such situation is absent in thana administration because TDCC chairman is a man of no importance while TNO is Member-secretary. Other officers are not under TNO's control. Therefore, absence of accountability is acute.

Ruling party's intention is carried out

Civil bureaucrats are government's representative. Central Government's choice is carried out ignoring local people's need and aspiration by them. Problem solving technique is applied equally irrespective of local variation.

Lack of people's participation

At present people's participation is highly emphasized by the scholars of development. Without viable local government organization peoples participation is impossible in politics and administration.

Local elites are highly benefitted by this system

By the present system of thana administration elite persons of local area enjoy highest benefit maintaining constant communication with administration. Masses have little chance without some exceptions to pursue the administrator for removing their sufferings. Thus resource revolves within a small section of luckiest people.

Administration is detached from people

Though the main motto of administration is to serve people; administrators want to administer development activities excluding people. Imbuing colonial behaviour in their dealings administrator wants to impose their choice upon people as they are well aware of people's problem. Closed system of administration is applied while the task of development is assigned to them. Government has several limitations to provide services to the people, but main one lies with the administrators' behaviour. They feel proud of keeping themselves far a way from people. In view of traditional behaviour of administrator we can say that the present administrative pattern stands far away from people's interest.

Lack of proper delegation, authority and responsibility

Proper delegation, allocation of authority and responsibility are a crying need for providing services to the people quickly. This is conspicuously absent at the Thana level. Different departmental functions are linked with TNO in the name of proper co-ordination which hampers the spirit of concerned officers. Respective individual officer is well matured and better trained for implementing task smoothly, they need only resource and proper authority to exercise. They can bear responsibility only after having reasonable authority and power to exercise. TNO's linkage is a hindrance for rapid action. He is involved more or less in all the functions of Thana administration. In such a way his volume of work increases, files gather on his desk, he can't give proper attention on any particular important issue. Some says he has no function of his own; intentionally, he is linked with other departments' function only for exercising control and showing his superiority over others. I would like to mention that such situation also exists at the upper level of administration. For example, Additional Deputy Commissioner has little work in comparison with Deputy Commissioner's work load. The same is true in case of principal and Vice-Principal of a government College. This condition bears the sign of colonial administration which is not conducive to a newly born independent country like Bangladesh. Problem solving task is very complicated. It needs utilisation of collective intellects.

Only by allocating proper delegation and resource to the individual officer collective effort can be implemented rightly. Chain of command must be maintained, but all

types of colonial cajoling culture must be eradicated from all stages of administrative unit.

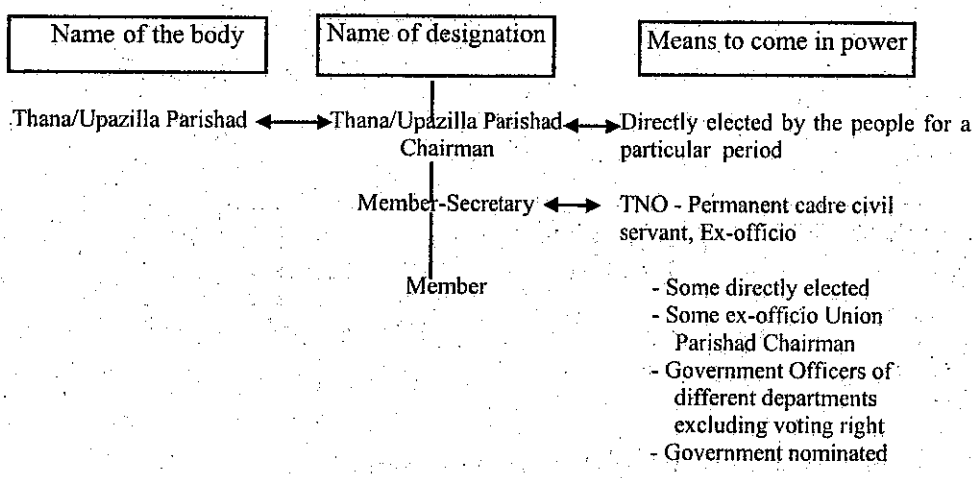
How To Make Thana Level Administration More Effective

It is needless to mention that for rural development and common people's betterment Thana administration can play a vital role. So, restructuring of thana administration is essential for meeting changing demand of local citizen. Decentralization of administration must be ensured. Public representatives and government representatives are two components of proposed Thana/Upazilla Parishad Administration.

Making Thana/Upazilla Parishad

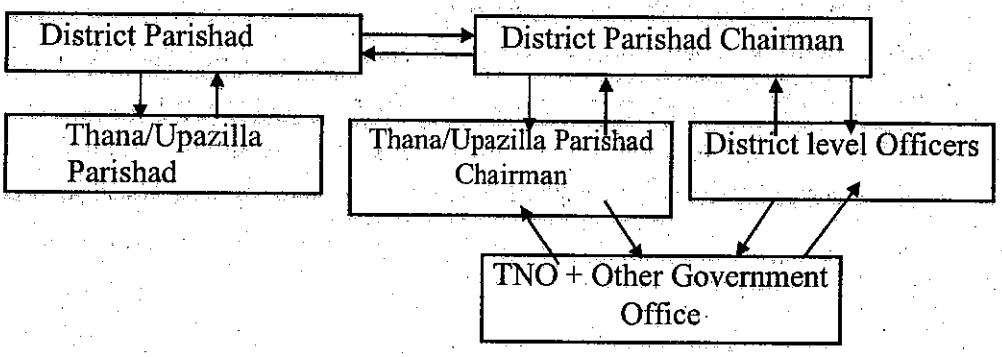
Thana/Upazilla Parishad System should be revived. A Parishad will have a chairman and members. Chairman and some of the members would be elected directly by the people. Thana Level Government Officials will be member excluding voting right in decision making of the Parishad. Thana/Upazill Parishad will have some sources of income for conducting development activities. For small infrastructural projects parishad will finance from its own fund. In case of heavy engineering projects central government will provide required fund. Project will be finally selected by the Thana/Upazilla Parishad after completing feasibility study. Experts of respective fields will assess project's viability. Thana/Upazila parishad will have a planning section. At the beginning Planning Commission's resource person will work on deputation. Next,

graduates and post-graduate citizens of the country would be able to work having proper training under guidance of planning experts. Proposed Thana/Upazilla administrative system can be portrayed as below:



How Accountability Can Be Eensured

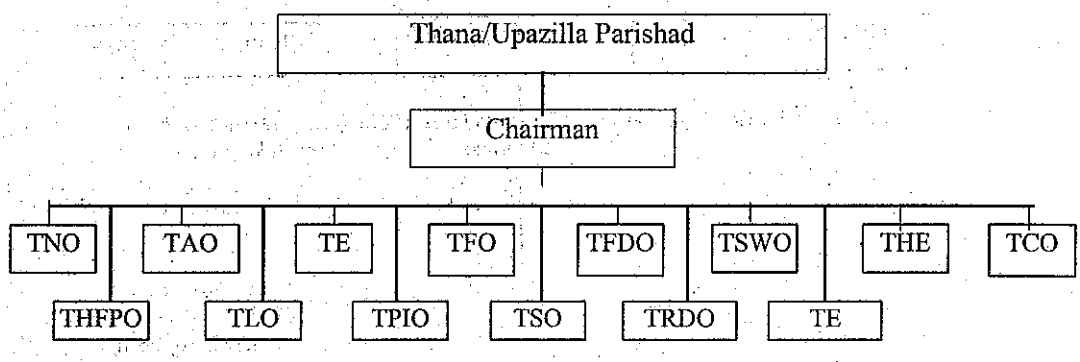
Dual control is inevitable in the proposed model. Administrators would be accountable to two higher authorities. One is the Parishad and the other is their higher authority of district administration. The chain of accountability is drawn as follows:



How Co-ordination Could Be Made Effective

All efforts of various nationbuilding departments of thana level will go on under the proper guidance of the Thana/Upazilla Parishad Chiarman. Parishad Chiarman will extend his helpful hand if an officer faces any problem in his respective field to carry out specific assignment. Some problems will arise for dual controlling authority, expecially in case of co-ordination and authority exercise. This problem can be solved

by demarcating specific duties, authorities and responsibilities and along with maintaining close contact with District Parishad Chairman. Thana/Upazilla Parishad Chairman would be the Ex-officio members of District Parishad. Sound hierarchical system is essential in this regard. Proposed hierarchy is as follows:



N.B: In case of Upazilla system all 'T' would be converted into 'U'

Status, Position and Facilities Of Upazilla Chairman

Thana/Upazilla Parishad Chairman will hold the post of chief executive at the thana/upazilla parishad. His rank and status would be equivalent to deputy secretary. He would be a class one co-ordinator and well aware of development problems. A suitable amount of monthly honorarium along with government residence and vehicle would be provided so that he can play active role in various government functions having no involvement in financial corruption. He should have conspicuous knowledge that government officers are an important factor for development and ignoring them achievement of development is impossible. He should maintain good rapport with government officials and be sympathetic of their problem. Public representatives and government representatives will carry out their respective task on the basis of reciprocal regard and confidence.

Power Of Thana/Upazilla Parishad Chairman To Be Exercised Over Thana Level Officers

Thana/Upazilla Chairman will exercise some power on officers of various nationbuilding departments. These are as follows:

i) He will grant all types of leaves.
ii) He will recommend the bill of TA/DA for final approval by the higher authority.
iii) In case of grave offence committed by an officer he will send the message to the accused officer's higher authority for taking necessary action.
iv) The increment will be given on recommendation by the Parishad chairman.

Impeachment of Thana/Upazilla Parishad Chairman

Thana/Upazilla Parishad Chariman would be accountable for his work to the Parishad directly. The provision of his impeachment would be executed in case of grave offence or financial scandal on the basis of reslution by two-third of the directly elected and ex-officio Union Parishad chairmen. Minister for Local Government, Rural Development and Cooperatives will dismiss him being conspicuously aware of the offence settled by a high-powered Enquiry Committee. Such step is essential for this reason that most of the Upazilla Paarishad chiarmen of Ershad regime played ducks and drakes with public money.

Benefits Of Proposed System

Some desired changes will be brought about by implementing proposed system., These are mentioned below in brief:

i) Administration will carryout it's function under representative political authority.
ii) Administrative experience and efficiency of political man will be augmented.
iii) Check and balance of power will exist between chairmen and members.
iv) Local body would be capable of solving local problems within shortest possible time.
v) Democratic spirit and leadership would be developed by ensuring peoples participation.
vi) Inter-cadre clash will be decreased at a notable degree.

Concluding Remarks

In the light of above discussion it can be said that proposed Thana/Upazilla Parishad administrative pattern would be more effective to solve local problems. Historical events remind us that former governments of this country used local government institutions for their political interest and concentrated power by making the institution financially dependent upon them. Such condition is not intended for sustainable development. For making a viable local self-government institution introducing decentralized principles of administration ruling party's political and administrative commitment is utmost needed. Change will come at the upper level of government in course of time, but the system should not be dissolved. On the country, the system should be allowed to continue through necessary modifications the system will go forward through trial and error. In such a way democratic norms and values will take root and be evolved in institutional environment. The success of the proposed system entirely depends on the ruling party's good will on the unified conscious efforts of the public and government representatives.

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Performance of Family Planning Component of the Model Village in Rural Development Project

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Abstract

The present study is an attempt to evaluate the impact of family planning programme of an action research project named " Model Village in Rural Development" being implemented by the Rural Development Academy (RDA), Bogra.

It was found that the Contraceptive Acceptance Rate (CAR) in the project village was significantly higher than the national rate and that of local thana as well. Again, the CAR among the members of the project was also higher than the non-members. This is clear that the project has a positive impact on the acceptance of family planning methods among the members as well as the other couples of the village. It is important to point out that BRAC was also found working in the same village. So impact of family planning programme of BRAC assessed in order to draw a comparative picture. It was found that CAR among the members of BRAC was also higher than the non-members. Both the members of MVRD and BRAC members were well informed about the use and side-effects of the widely used methods like pill, injection and IUD. But by contrast, non-members were found with very poor knowledge about the above methods. This indicates a positive impact of people's organisation on the family planning promotion at the village level.

Findings of several studies show that the socio-demographic characteristics like education, age, number of children etc. of the women partner of the relevant couples had a relationship with the acceptance of the family planning methods. But no such clear relationship was found in the project village. This suggests that the project has overcome these barriers in the study village.

The findings of the present study suggest that poverty focused project dovetailing with family planning component may create an impact in enhancing the CAR and increasing in the knowledge among the project members.

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Introduction

Model Village in Rural Development (MVRD) project is being tested by the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) in its 11 member countries in the Asia-Pacific region. The main objective of the project is to develop a model for uplifting the socio-economic status of the rural poor. Almost all the CIRDAP member countries are mostly dependent on agriculture and the standard of living of the people of these countries is poor in terms of health, education and other basic amenities of life. This project was launched in 1991 to find out the ways and means for improving the condition of the rural poor. In Bangladesh the Rural Development Academy (RDA), Bogra and the Bangladesh Academy for Rural Development (BARD), Comilla are involved in implementing the project. in two villages. RDA is responsible for the operation of the project in a village named Magurgari in Sherpur thana of Bogra district. The major components of the project are income generating activities (IGA), family planning, sanitation, capital accumulation through thrift savings and so on (Haq, 1995).

Bangladesh is the eighth populous country in the world (Planning Commission, 1991). Currently the population density and population growth rate of the country are 793 per sq. km and 1.81 per cent respectively (Statistical Yearbook, 1995). If the present population growth continues the population of the country is expected to be doubled by 2022 A.D leading to serious adverse consequences on the socio-economic condition in respect of food, housing, education, health and other necessities of life. To overcome this crisis Government Organisations (GOs) and Non-government Organisations (NGOs) have undertaken family planning as one of the important components in almost all their projects. Considering the possible danger of high population growth rate. MVRD project has also introduced family planning programme in its project village since its inception in 1991.

In 1996 the project has completed its fifth year and the time has come to assess the progress of family planning component of the project. This study is thus an attempt to look into the achievement of the family planning component of MVRD project in Magurgari village. The study has also tried to show the relationship between socio-demographic characteristics of the married women and adoption of family planning methods which might help policy formulation of the government in the field of family planning.

Objectives of the Study

The main objectives of the study were:

i) to assess the attitude, knowledge and practice of the beneficiaries and other villagers about family planning methods;

ii) to identify the causes of not practising family planning methods; and

iii) to enumerate the socio-demographic characteristics of the users and non-users of family planning methods.

Methodology of the Study

All the households of Magurgari village were selected as sample for the study. A structured questionnaire was administered to the heads of all the households to know some of the general information of the households. Then a list of all the couples of the village was prepared and a structured questionnaire was administered among the women partners of the respective couples to know about different aspects of family planning programme of the project. Apart from them, a focus group discussion was made with female partners of the eligible couples. Data were collected by the female interviewers of the Research Section of the Academy and the female researcher associated with the project.

Family Planning Activities of MVRD project

The family planning component of the project was implemented in a number of ways. The beneficiaries were motivated to adopt family planning practices by the project personnel in the monthly meetings. It was also discussed and followed-up by the group leaders in the weekly meetings. Bangladesh Education Extension Service (BEES), a non-government organisation (NGO), working in the project area, was requested for providing services and supplies concerning family planning. BEES had made positive response to the request and one of their female field workers visited the village once a month.

Services Provided by the Field Worker

Beneficiaries were asked about the type of services and supplies they got from BEES. Most of the married women (95%) reported that the field worker of BEES visited them at least once a month.

According to the statement of most of the respondents (around 80%) the field worker provided family planning materials at the time of her visit. A good number of the respondents (13%) also reported that they got necessary advice about different methods of family planning from the field worker. Besides, some (11%) women reported that the field worker also checked the health condition of their children .

Sources of Supplies of the Materials

An attempt was made to know the sources where from the users received their family planning materials. It was reported that only oral pills and condoms were supplied by the field worker.

However, most of the pill users (90% MVRD members and 77% other respondents) and all the users of condoms got their supplies from field worker. The acceptors of injection got injection from the nearby Family Welfare Centre and IUD was inserted in the Thana Health Complex. All the villagers especially members of the MVRD groups have a very close linkage with the field worker and this is the main reason of getting their supply from them. However, the worker gave the priority to supply the materials to the MVRD groups at the time of scarcity of supply.

Findings of the study

Socio-economic and Demographic Characteristics

An attempt has been made to get an idea about the socio-economic and demographic characteristics of the villagers in respect of their land holding, occupation, education, family size, age at marriage of married women and such others.

Land Holding Pattern

The number of households in the study village was 189 of whom 68.25% were functionally landless having land 0.50 acre and below (Table-1). This amounts to 20.45% higher than the national figure which is 47.80% (BBS, 1996).

Table-1: Household According to Their Land holding Size.

Land holding Size (Acre)	Number of Household	%	Land Owned (Acre)	%
00-0.50 (Landless)	129	68.25	12.77	7.10
0.51-2.50 (Small Farmer)	37	19.58	47.67	26.50
2.51-7.50 (Medium Farmer)	21	11.11	93.63	52.05
7.51 + (Large Farmer)	2	1.06	25.81	14.35
Total	189	100.00	179.88	100.00

The percentage of small farmers medium farmers and large farmers in the village were 19.58%, 11.11% and 1.06% respectively. The findings also show that 68.25% landless households owned only 7.10% of total land.

Population Distribution

Total population of the study village at the time of survey were 839 of whom 390 (46.48%) were male and 449 (53.52%) were female (Table-2).

Table-2: Population According to Age and Sex

Age (Year)	Male	%	Female	%	Total	%
0-04	40	10.26	57	12.69	97	11.56
05-14	98	25.13	123	27.39	221	26.34
15-49	205	52.56	222	49.44	427	50.89
50-59	22	5.64	25	5.57	47	5.60
60 & Above	25	6.41	22	4.90	47	5.60
Total	390	100.00	449	100.00	839	100.00

It was found that the percentage of dependent population (under 15 and above 60 years) was 43.50% of total population. Among female population 49.44% were found in the

reproductive age (15-49 years) and 10.47% crossed their reproductive age and 40.08% were yet to reach the reproductive age.

Education

It was found that out of the total population 742 have crossed their sixth birth day and among them 35.31% were completely illiterate, 13.75% could only sign their names and rest 50.94% were educated in school (Table-3).

Table-3: Educational Level of Respondents

Level	Male	%	Female	%	Total	%
Completely Illiterate	98	28.00	164	41.84	262	35.31
Can sign only	50	14.29	52	13.27	102	13.75
I-V	97	27.75	124	31.63	221	29.78
VI-X	68	19.43	45	11.48	113	15.23
S.S.C	17	4.86	4	1.02	21	2.83
H.S.C	16	4.57	3	0.76	19	2.56
Graduate	4	1.14	-	-	4	0.54
Total	350	100.00	392	100.00	742	100.00

The literacy rate of Bangladesh was 32.4% in 1992-93 (BBS, 1994) which is much less than the literacy rate of the study village.

Among the male and female population of six years or above 37.79% and 44.89% were educated in school respectively (Table-6). Female literacy rate was found more than double of the national rate of 21.7% in 1991 (Ibid.).

Occupation

It was found that total active male population of the study village was 230. Out of them 87.84% were reportedly engaged in single occupation and the rest 13.47% had more than one occupations (Table-4).

Table-4: Active Male Population According to Their Occupation

Occupation		Number	%
Principal	Secondary		
Farming	-	75	32.61
Day labourer	-	62	26.96
Service	-	19	8.26
Business	-	14	6.09
Skill work	-	15	6.52
Van Padding	-	14	6.09
Farming	Mechanics	3	1.30
Day labour	Farming	8	3.48
Service	Farming	3	1.30
Business	Farming	17	7.39
Total		230	100

Among the active males who had single occupation the highest number (32.61%) were involved in farming which was followed by selling day labour (26.96%). It was found that 8.26%, 6.09%, 6.09% and 6.52% of them were servicemen, businessmen, vanpullers and skilled workers respectively. Those who had more than one occupations the highest number (7.39%) had taken business as the principal occupation along with farming as the secondary occupation. Most of the female (87.31%) were housewives (Table-5).

Table-5: Active Female Population According to Their Occupation

Occupations		Number	%
Principal	Secondary		
House wife	-	23	87.31
Maid servant	-	11	4.10
Service	-	3	1.12
Day labour	-	2	0.75
House wife	Farming	15	5.60
Housewife	Service	3	1.12
Total		268	100.00

Apart from this, 1.12%, 4.10% and 0.75% were found service women, maid servants and day labourers respectively. Only 5.60% and 1.12% of the house-wives were engaged in farming and service as a secondary occupation (Table-5).

Family Size

Total number of households in the village were 189 and average family size was 4.44 which is lower than the national average of 5.32 (BBS, 1992). Highest number (50.79%) of the households had 3 to 4 members in their family (Table6).

Table-6: Distribution of Household According to Categories of Farmers and Their Family Size

Family Size	Categories of Farmer				
	Landless	Small Farmer	Medium Farmer	Large Farmer	Total
1-2	12 (9.30)	1 (2.70)	- (00.00)	- (00.00)	13 (6.88)
3-4	68 (52.71)	22 (59.46)	5 (23.80)	1 (50.00)	96 (50.79)
5-6	42 (32.56)	8 (21.62)	8 (38.10)	(00.00)	58 (30.69)
7 & Above	7 (5.43)	6 (16.22)	8 (38.10)	1 (50.00)	22 (11.64)
Total	129 (100.00)	37 (100.00)	21 (100.00)	2 (100.00)	189 (100.00)

Note : Figures within the parenthesis indicates the column percentages

The findings show that the family size of the majority of landless (52.71%) and small farmers (59.46%) ranged from 3 to 4 members which is smaller than the average family size in of the village This indicates that larger the landholding smaller the family size and vice versa.

Age at Marriage

Median age at first marriage among the ever married women in the study village was 16.15 years (Table-7). The findings of Demographic and Health Survey 1994-95 show that median age at first marriage among the women of 20-24 years of age was 14.4 years (Mitra, 1994) compared to 17.14 years among the same age group of the study village.

Table-7: Age at Marriage of Ever Married Women According to Their Current Age

Current Age (Year)	Age at First Marriage (Year)				Median Age at Marriage
	14 & Below	15-19	20-24	Total	
Below 14	1	-	-	1	14
15-19	3	13	2	18	17.69
20-24	6	35	1	42	17.14
25-29	15	18	2	35	15.69
30-34	14	20	-	34	15.75
35-39	5	11	-	16	15.38
40-44	12	13	1	26	15.00
45-49	9	8	-	17	14.69
50 & above	9	8	-	17	14.69
Total	74	126	6	206	16.15

The findings of the study also show that median age at marriage has a negative correlation (0.45) with the cuurent age of the women i.e. the younger women got married at higher age.

Birth and Death Rate

One year back from the survey time 26 children were born in the village and the birth rate was 30.99 per thousand population which is lower than the national rate of 32.8 in 1991 (BBS, 1992). The death incidence in the same period was 5. So the death rate was 5.96 per thousand which is half of the national rate (11.3%) in 1991 (Ibid.).

Knowledge, Attitude and Practice

This section deals with knowledge and attitute of the eligible couple about family planning methods and their practices. It is worthwhile to memtion that BRAC , one of the leading NGOs, has been working in the project village. So the women of the village were classified into three groups -- membres of the MVRD group, members of the BRAC group and non-

members who were not affiliated to any of the groups. In some cases analysis has been done on the basis of the membership of women.

Knowledge

An attempt was made to get an idea about the familiarity of different family planning methods to the ever married women.

The findings show that all the members of MVRD and BRAC groups were found aware of the most popular methods i.e., pill, injection and IUD, whereas among the non-members about 4%, 10% and 11% did not know the name of the above methods respectively. About 2% of MVRD members, 4% BRAC and 8% of non-members did not hear the name of condom (Table-8).

Table-8: Knowledge on Family Planning Methods among the Ever Married Women

Name of Methods	Number of Women familiar with Methods			
	MVRD Member	BRAC Member of	Non-member	Total
Pill	97 (100.00)	26(100.00)	80(96.39)	203(98.54)
Injection	97 (100.00)	26 (100.00)	75 (90.36)	198 (96.11)
IUD	97 (100.00)	26 (100.00)	74 (89.16)	197 (95.63)
Tubectomy	87 (89.69)	24 (92.31)	64 (77.11)	175 (84.95)
Vasectomy	77 (79.38)	20 (76.92)	57 (68.67)	154 (74.76)
Condom	95 (97.94)	25 (96.15)	76 (91.57)	196 (95.15)
Foam Tablet	5 (5.15)	- (00.00)	2 (2.41)	7 (3.39)
Periodical Abstinence	5 (5.15)	- (00.00)	1 (1.20)	6 (291)
Withdrawal	- (00.00)	- (00.00)	- (00.00)	- (00.00)

Note : Figures within the parenthesis shows the percentage over total number of respondents of each categories i,e.MVRD member 97, BRAC member 26 and non-member 83.

A nationwide study also shows that most of the ever married women knew the name of the above method (Mitra, 1994). A large number of women did not know about the permanent

methods like tubectomy (Ligation) and vasectomy. It was found that 10% of the MVRD members, 8% of the BRAC memebrs and 23% of the non-members did not know the name of tubectomy and likewise 21%, 23% and 31% of the same groups did not know the name of vasectomy respectivley. Most of the respondents had no idea about the methods like foam tablet, calendar method and withdrawal.

The above findings indicate that the group members were more informed about the methods compared to the non-members. A focus group discussion with the members of the groups revealed that apart from the field worker, they got these types of information from their peer groups in the weekly meetings.

An attempt was also made to know about the knowledge of women in terms of proper use and side effects of three widely used methods -- pill, injection and IUD. The findings show that almost all the members of MVRD and BRAC groups were aware of the proper use of pill and its side effects. By contrast, only 69.88% of non-members knew the use of pills and among them 79.5% had knowledge about the side effects . In case of injection 61.86%, 65.28% and 53.11% respondents representing MVRD members, BRAC members and non-members respectively knew the actual effective period and similarly 68.04%, 46.15% and 51.81% knew the side effects.

The above findings suggest that as regards family planning methods the members of the MVRD groups are better aware than others. The members of MVRD groups stated that this was the outcome of the special emphasis on family planning by the project. Discussion on family planning is one of the common agenda of the weekly and monthly meetings of the project groups and village society. The field worker also attended the weekly meetings of MVRD groups to motivate and discuss the family planning methods among the group members.

Moreover, , it was reported that only 8.25%, 3.85% and 2.41% of MVRD members, BRAC members and non-members respectively knew how long IUD could be kept inside and 5.15%, 3.85% and 1.20% of them had the knowledge about the side effects of this method respectively.

Attitude Towards Family Planning

The women were asked about their views on the use of family planning in the light of religion, health, old life security and social power. Among them, the MVRD members, BRAC members and non-member representing 23.70%, 30.77% and 27.72% respectively expressed that the use of family planning methods were not acceptable on religion ground (Table-9).

According to 52.58%, 50.00% and 46.98% representing the above categories, the family planning methods caused health hazard. As to the question wheather more children means old age security and social power, most of the women replied in the negative.

Table-9 : Attitude of the Ever Married Women Toward the Use of Family Planning Method

Attitude	MVRD Member			BRAC Member			Non -member		
	Agreed	Not agreed	Don't know	Agreed	Not agreed	Don't know	Agreed	Not agreed	Don't know
Contraception is against the will of God	23 (23.71)	57 (58.76)	17 (17.53)	8 (30.77)	15 (57.69)	3 (11.54)	23 (27.72)	53 (63.86)	7 (8.43)
Contraception is harmful to health	51 (52.58)	44 (45.36)	2 (2.06)	13 (50.00)	13 (50.00)	- (00.00)	39 (46.98)	41 (49.39)	3 (3.61)
More children bring the old life security	1 (1.03)	78 (80.41)	18 (18.55)	2 (7.69)	23 (88.46)	1 (3.85)	3 (3.61)	61 (73.5)	19 (22.89)
More children bring prestige and power in the society	- (00.00)	78 (80.41)	19 (19.59)	- (00.0)	25 (96.15)	1 (3.84)	1 (1.2)	63 (75.9)	19 (22.89)

Note : Figures within the parenthesis show the percentage over number of respondents of each categories

Practice

The study shows that number of eligible couple in the village was 189, among them contraceptive acceptance rate (CAR) was 75.13% compared to 44.60% of the national rate. It is to be mentioned that CAR of Sherpur Thana was 63.49% at the time of survey. The study also suggests that 77.42%, 84.00% and 69.01% of the eligible couple among the

MVRD members, BRAC members and non-members respectively were using family planning methods (Table-10). The above findings indicate that percentage of users among the members of any MVRD and BRAC groups is higher than the non-members. Again the percentage of the users among the non-member of the project village is higher than the percentage of users of the thana. So it can be said that the project has a positive impact on the use of contraceptives among the group members as well as the non-member of the project village. A study on the members of Grameen Bank, BRAC and non-members in six villages reveals similar findings (Schuler and Hashemi, 1994). Findings of another study show that many women learnt about the family planning methods from their female relatives of the same age and their peers (Mitra and Simmons, 1995). All the above findings suggest that the effect of any family planning programme in a community directly influences the project members to accept the family planning methods and the non-members are also indirectly influenced by their relatives and peers who are the members of the project.

Table-10: Users According to Methods

Methods	MVRD Member	BRAC Member	Non-member	Total
Pill	45 (48.39)	10 (40.00)	37 (52.11)	9 (4.76)
Injection	10 (10.75)	3 (12.00)	2 (2.82)	15 (7.94)
Condom	7 (7.53)	- (00.00)	1 (1.41)	8 (4.23)
IUD	3 (3.23)	4 (16.00)	2 (2.82)	9 (4.76)
Tubectomy	5 (5.38)	3 (12.00)	2 (2.82)	10 (5.29)
Vasectomy	1 (1.08)	1 (4.00)	4 (5.63)	6 (3.17)
Herbal	1 (1.08)	1 (4.00)	1 (1.41)	3 (1.59)
Total	72 (77.42)	21 (84.00)	49 (69.01)	142 (75.13)

Note : Figures within the parenthesis indecates percentage over number of eligible couple of each categories i,e MVRD member 93, BRAC member 25 and non-member 71.

Pill was found to be the most popular method. Since tubectomy and vasectomy are the permanent methods of family planning, more emphasis is given by the family planning programme on these two methods. But it was found that only 6.46% of MVRD members, 16% of the members of BRAC groups and 8.45% of non-members were using these methods (Table-10).

Table-11: Distribution of the Users According to Duration of Use

Duration	MVRD Member	BRAC Member	Non-member	Total
One Year or Below	28 (38.89)	10 (47.62)	19 (38.78)	57 (40.14)
Two Years	7 (9.72)	3 (14.29)	2 (4.08)	12 (8.45)
Three Years	10 (13.89)	1 (4.76)	7 (14.29)	18 (12.68)
Four Years	12 (16.67)	1 (4.76)	5 (10.20)	18 (12.68)
Five Years	2 (2.78)	- (00.00)	2 (4.08)	4 (2.81)
Six years and Above	13 (18.06)	6 (28.57)	14 (28.57)	33 (23.24)
Total	72 (100.00)	21 (100.00)	49 (100.00)	142 (100.00)

Note : Figures within the parenthesis indicates the column percentages

Efforts were being made to know the duration of the use the family planning methods among the present users. It was found that 38.89%, 47.62% and 38.78% users from MVRD, BRAC and non-members respectively were using the methods for a year. It means that a large number of users started using contraceptives for the last one year. The MVRD project was launched before six years in 1991. So the study has tried to know the impact of family planning programme undertaken by the MVRD project . It was found that 18.06% of present users of MVRD members, 28.57% of BRAC members and 28.57% of non-members started using contraceptives before 6 years i.e. before launching the project (Table-11). At the moment users among the MVRD members, BRAC members and Non-members were 77.42%, 84.00% and 69.01% respectively which indicates that the users among the above groups increased by 59.36%, 55.43% and 40.44% respectively subsequent to the implementation of the project . The above findings show that the acceptance rate of family planning methods after launching the projects is higher among the MVRD members than others.

Reasons for Using Contraceptives

The users of MVRD members pointed out three major reasons for using family planning devices : (a) limit their family size (79.17%); (b) spacing between two children (18.06%); and (c) delaying first birth (2.78%). The non-members of the project village also expressed similar views representing 87.76%, 8.16% and 4.08% respectively. All the users among the members of BRAC groups mentioned limiting their family size as the only reason for using family planning methods (Table-12).

Table-12 Users According to Their Intension of Contraceptive use

Intension of Contraception	MVRD Member	BRAC Member	Non-member	Total
Limiting Family Size	57 (79.17)	21 (100.00)	43 (87.76)	121 (85.21)
Spacing	13 (18.06)	-	4 (8.16)	17 (11.97)
Delaying Birth	2 (2.78)	-	2 (4.08)	4 (2.82)
Total	72 (100.00)	21 (100.00)	49 (100.00)	142 (100.00)

Note : Figures within the parenthesis indicates the column percentages

Reasons for Not Using Family Planning Methods

The reasons for not using family planning methods by 47 non-users were as fillows: (a) more than 38.30% did not have child, they want child; (b) about 28% were found breast feeding for their children and they considered the use of contraceptive unnecessary at this stage; (c) a handful of them (6.38%) considered family planning methods harmful to their health; (d) desire more child by 6.38% ; (e) religiuos restriction (2.13%); and (f) stoppage of cycle (19.15%). It is to be mentioned that the eligible couples were identified considering age (15 to 49 years) of their women partner. So cycle of some of the women may naturally be stopped before they reached to 49 years of age .

Relationship between Socio-demographic Characteristics and Contraceptive Use

It is believed that some of the socio-demographic characteristics of the woman partner of a couple influence the use of family planning methods. In this chapter an attempt has been made to know the relationship between the use of family planning methods and some of the socio-demographic characteristics of the women of the study village.

Age and Contraceptive Use

No clear relationship was found between age of the women and contraceptive use. Chi-square test also confirmed the finding at 5% level of significance. However, it was found that contraceptive prevalence was the highest among the women belonging to the age group of 39-49 years (Table-13).

Table-13: Relationship Between Age of the Eligible Couple and Use of Family Planning Method

Age	User	%	Non-user	%	Total
Below 18	-	0.00	2	100.00	2
18-29	67	71.28	27	28.72	94
30-39	42	85.71	7	14.29	49
40-49	33	75.00	11	25.00	44
Total	142	75.13	47	24.87	189

Note: Percentage has been calculated from row total.

The above findings indicate that the project has succeeded in motivating the beneficiaries to accept family planning methods among all the couples irrespective of their age.

Women's Education and Contraceptive Use

Among the illiterate women 75.42% were using family planning methods and in case of the literate with educational qualification I-V class and VI-X class representing 75.00% and 83.33% respectively adopt the similar practices (Table-14).

No relationship between educational qualification and use of family planning methods was found from Chi-square test at 5% level of significance . Results from Demographic and Health Surveys of several countries show that the educational qualification of the women has a positive impact on the use of contraceptive methods (Martin, 1995).

Table-14: Relationship Between Education of the Women Partner of Eligible Couple and Use of Family Planning Method

Level of Educational	User	%	Non-user	%	Total
Illiterate	89	75.42	29	24.58	118
I-V	33	75.00	11	25.00	44
VI-X	20	83.33	4	16.67	24
S.S.C	-	00.00	-	00.00	-
H.S.C	-	00.00	3	100.00	3

Note : Percentage is calculated from the row total

Experience in this project area reveals that literacy level of women is not a major factor for accepting the family planning methods. Motivation along with regular supply of support-services can play an important role to the adoption of family planning devices.

Number of Children and Contraceptive Use

It was found that users among the couples having 1-2 and 3-4 children were 82.80% and 87.50% respectively. However, a decreasing trend was found among the women having 5 or more children. It might be due to the reason that the women having 5 or more children had crossed their reproductive age. It is remarkable that 26.09% couples had no children,but adopted the family planning methods to delay the first birth (Table-15).

Table-15: Relationship Between Number of Children and Use of Family Planning Methods Among the Eligible Couple

Number of Children	User	%	Non-user	%	Total
0	6	26.09	17	73.91	23
1-2	77	82.80	16	17.20	93
3-4	49	87.50	7	12.50	56
5-6	9	60.00	6	40.00	15
7 & above	1	50.00	1	50.00	2

Note: Percentage has been calculated from the row total

From the above findings it can be said that in the study village motivation of using family planning methods has made a headway among all groups of people irrespective of their number of children and age. This appears to be a great achievement of the project

Landholding Size and Contraceptive Use

The households of the eligible couples were classified into four groups considering their land holding size -- landless, small farmers, medium farmers and large farmers. It was found that 76.47%, 74.36% and 72.41% eligible couples representing landless, small and medium farmers respectively adopted the family planning methods (Table-16).

Table-16: Relationship Between Landholding Size and Use of Family Planning Methods Among the Eligible Couple

Landholding Size (Acre)	User	%	Non-user	%	Total
Landless (00.00-0 .50)	91	76.47	28	23.53	119
Small Farmer (0.51-2.50)	29	74.36	10	25.64	39
Medium Farmer (2.51-7.50)	21	72.41	8	27.59	29
Large Farmer (7.51 & above)	1	50.00	1	50.00	2

Note : Percentage is calculated from the row total

The findings speak of an inverse relationship between the land holding size and the use of contraceptives. Two eligible couples were found among the large farmers and of them one accepted a family planning methods. As the sample size of large farmers was only two, the above analysis is made exclusive of this group.

Age of Last Issue and Use of Family Planning Methods

It was found that the age of last issue of all the acceptors of permanent methods i.e. tubectomy and vasectomy were 7 years and more. Among the temporary methods IUD is considered as a method for longer duration and it was found that age of the last issue of the acceptors of this method were at least 3 years (Table-17). Thus it can be said that the age of the last issue was higher for the users of the permanent/ long last mehtods.

Table-17: Relationship Between Age of Last Child of the users and Type of Methods Used

Age of Last Child	Pill	Injection	Condom	IUD	Tubec-tomy	Vasec-tomy	Herber
No Child	6	-	-	-	-	-	-
Below 1	3	1	3	-	-	-	-
1-2	17	4	4	-	-	-	-
3-4	25	7	4	1	-	-	-
5-6	13	2	1	2	-	-	-
7 & Above	28	1	2	1	10	3	-
Total	92	15	14	4	11	3	3

Note : Percentage is calculated from the row total

However, no clear trend was found among the users of other short durative temporary methods like pill, injection, condom, etc

Conclusion and Recommendations

The present study evaluated the performance of family planning component of the " Model Village in Rural Development" project being implemented by the Rural Development Academy (RDA), Bogra.

The findings of the study show that the " Contraceptive Acceptance Rate (CAR) " in the project village was significantly higher than the national rate and that of local thana as well. Again , the CAR among the members of the project was also higher than the non-members. So it is clear that the project has a positive impact on the acceptance of family planning methods among their members as well as the other couples of the village. The project also has succeeded in increasing the knowledge of the project members about the methods available for the family planning.

Findings of several studies show that the socio-demographic characteristics like education, age, number of children etc. of the women partner of the relevant couples have a relationship with the acceptance of the family planning method. But no such clear relationship was found in the project village. This suggests that the project has overcomed these barriers in the study village.

The present study suggest that poverty focused project dovetailing with family planning component may create an effective influence in enhancing the CAR and increasing the knowledge among the project members.

The above findings show that the project has a positive impact on the acceptance of the family planning methods. However, the acceptance rate can be increased further by taking the following measures:

i) One of the main reasons for not accepting family planning methods was health hazard. So proper medical care can be taken on this matter in consultation with medical personnel of the family planning department;

ii) In may cases religious barriers stood in the way of adopting family methods. Motivation to all, especially the religious leaders can play effective role in overcoming the problem.

iii) A large number for women thought that they did not need to use family planning methods at the time of breast feeding. This is misconception and they should be properly educated on this aspect;

iv) Acceptors of permanent methods were few in number. But these methods are safe with minimum side effects. So those couple who has already taken their desired number of children they can be motivated to accept these methods;

v) Acceptance of male methods like cum & Vasectomy was very low. But side effects and health hazards of these methods are minimum compared to female methods. So more attention should be given to motivate the male partners to adopt family planning methods.

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Dependency Theory: Quest for Development in Underdeveloped Countries

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Abstract

This paper attempts to trace out the nature of developed and underdeveloped countries and examines the bearings of dependency on underdeveloped countries. In doing so, the framework of dependency macro and micro level studies have been taken into consideration. Because, they have different kinds of offering to the development in LDCs. Development economics and development strategies can be regarded as examples of the two above level studies. Development strategical research work conducted in Latin American countries has been chosen as examples for explicating the Marxist insight offerings to the development discourse. In one sense, we would find the present state of underdevelopment in the third world countries as the product of relationship between the metropolitan countries and the satellite. There are a lot of criticisms regarding dependency theory. Despite that criticisms, the dependency theory is a useful concept, it has given us new insights and outlook regarding the phenomenon of development and underdevelopment in LDCs in particular.

Introduction

The concept of dependency basically originated from the analysis of development and underdevelopment in Latin American countries. The dependency concept borrows heavily from the Marxist insights and therefore, it has a close association with the Marxist concept. Some of the famous definitions of dependency may be stated here.

According to Andre Gunder Frank, there exists a dialectical relationship between the developed countries and the underdevelopment of the Third World. It implies that the developed countries are developed at the expense of the underdeveloped ones. That is, the present state of underdevelopment in the Third World countries is the product of relationship between the metropolitan countries (today's developed countries) and the satellite (today's underdeveloped countries).

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A country is developed when a society has effectively applied the full range of modern technology to the bulk of its resources. Overall per head capital increases as the economy matures. After technological maturity a balance is struck between three possible objectives of the national pursuit – external power and influence, the welfare of the state and a less emerged attempt to maximize out put and an expansion of consumption level.

On the other hand, the main elements of the structure of a underdeveloped country include, among others:

(i) a large and very backward agricultural sector characterized by a small-scale peasant and a parasitic landlord class;

(ii) a small but relatively advanced industrial sector, partly foreign owned, producing for the restricted local market;

(iii) a number of enterprises producing for export, typically foreign owned and producing primary products; and

(iv) finally, a large sector of traders including large scale merchants who control foreign trade and have close links with foreign capital as well as petty traders who penetrate into the remote rural areas.

According to Frank this relationship between metropolis and the satellite countries developed in three rough phases.

The phases are:

(i) the mercantile capitalist phase

(ii) the colonial phase; and

(iii) the neocolonial phase

The first phase started with the initiation of imperialism which, according to Hobson means a combination of economic expansion and political domination. Simply put, imperialism is a system of capital accumulation based on the export of captial from advanced countries to less developed regimes accompanied by the utilization of political and military resources to protect and maintain the means of production over which control has been acquired. That is, the theory of imperialism assumes that the system works primarily to the benefit of capital controlled by citizens of the dominant country, not necessarily to the benefit of the dominant country as a whole.

During the mercantile capitalist phase the main purpose of the European traders was to look for slaves, spies and gold and to explore the existing trade routes. They sought to increase their capital through commercial accumulation. The main aim of their commercial exchange was to earn profit by purchasing commodities at a cheaper price and selling them dear. Thus, the commercial accumulation during this phase worked as a necessary condition for economic development of the European countries.

The colonialism is the second phase in the dialectic of development and underdevelopment. The dominant features in this period were the control of market outlets by the European manufactures.

The third phase is the neo-colonialism. Since the market for western manufacturers became secured they considered political decolonization to be budget–saving and humanitarian act. But the market was kept under their control through various means. According to Marx, dependency was the product of foreign trade and the expansion of capitalism.

Anyway, dependency is a situation in which a certain number of countries have their economy conditioned by the development and expansion of another placing the dependent countries in a backward position exploited by the dominant countries.

Samir Amen also analysed dependency situation in terms of centre and periphery. He says that the capitalist relation in peripheral countries has been imposed from outside whereas in central countries it is an indigenous growth.

Dependency is, in fact, a result of interaction of different complicated variables. The advocates of dependency view the phenomenon of development and underdevelopment from the point of the world system perspective. According to them capitalist development in the centre countries has resulting effect of underdevelopment in peripheral countries.

Thus, based on different concepts of dependency stated above the main characteristics of dependent economy can be summarized as follows:

(i) heavily dependent on the world for the market of their own production;

(ii) all the principal income-generators are foreign owned and dependent on foreign expertise, skill, capital and markets, banking and financial service;

(iii) the international monopolies penetrate national economy in search of raw-materials and market outlets, so as to use and add to their increasing economic surplus;

(iv) over the years and phases of history they are socially, structurally and institutionally backward.

In fact, the western model of development led to greater dependence on foreign trade and marginalization of rural masses. The state enterprises in LDCs although was created with the fundamental aim of favouring private initiative, the capitalist development provided an economic force for promoting a civil military bureaucracy and technocracy which sought to impose their own conception of development in LDCs as in Latin America.

The theory of development, therefore, must take into consideration the internal contradiction prevailing in development process of the LDCs.

Dependency and Development Strategies

There are a number of different opinions with respect to the nature of identification of the problems of dependency situation and the type of measures to be adopted for overcoming the problems of dependency. Tin Bergen suggests that the problems associated with external centralized decision-making process should be left to international organisations. And the problems associated with external effects should be left to the decentralized decision-making process. By centralized decision-making he means an international organization consisting of ten to fifteen members representing equal number of regions like China, Western Europe, America etc. which will deal with special international problems only.

Anyway, Tin Bergen's suggested strategy seems to be arbitrary. If the high rate of growth in the LDCs seems to contribute to the growth of modern sector in LDCs the slow rate of growth will lead to a decline in the same.

Stavenhagen suggests three alternatives such as :

(i) continuation of dependent development;

(ii) autonomous capitalist development; and

(iii) revolutionary socialism to overcome the problems of dependence.

Cardoso indentifies some of the crucial problems of LDCs like population growth, food shortage, housing problem, diseases, malnutrition, misuse of resources, lack of appropriate technology, environmental pollution etc. In order to remedy the problems Cardoso lays emphasis on another development strategy which is based on the concept of "participatory democracy". According to him, at the international level any decision with respect to any problem will be undertaken on the basis of general decision of workers, educational and political communities concerned. The general decision should aim at the achievement of collective benefit. The world order should be reorganized and concrete measures should be undertaken to face the critical situation of the third world countries. The international agency should not impose anything of development on LDCs, rather they should work and cooperate with the LDCs on the basis of equality and respect.

In fact, for facing the problems of dependency well-defined and well-thought policies are necessary, because the mutually contradictory policies will tend to negate the expected result. Besides, the more representation of different classes of people from different countries in the international organization will not help solve the problem. The problem is where the control switch lies. So long as the big power blocks are selfish and so long they have a tendency to dominate, they will be in a position to dominate and override the majority decision as is evident from the role of the UN and International Court of Justice.

Criticism

Bill Warren makes a pertinent criticism of the dependency theory. He criticises dependency theory on the following grounds :

(i) The centre-periphery paradigm which is the central theme of the dependency theory is largely unexamined. Therefore, the dependency theory is a static one.

(ii) It is not true that the under-developed countries have no bargaining power. They have at least some degree of bargaining power.

(iii) It is not always true that third world countries are characterised by dependent development. There may be a kind of non-dependent development also.

On the other hand, the advocates of dependency theory refutes Bill Warren's criticism on the following grounds :

(i) Bill Warren failed to distinguish between growth and development.

(ii) The exceptions can not be regarded as a rule. The significant growth in some peripheral countries is an example of exception to the general rule.

(iii) It has over simplified the question of interrelationship among countries.

(iv) The political structure and historical cultural-traditions are not given due respect in dependency perspective.

(v) The policy analysis and prescriptions of dependency theory are vague. There is no social force in the theory.

(vi) The dependency theory failed to prescribe for alternative social changes.

Conclusion

Despite the criticisms, the dependency theory is a useful concept. It has given us new insights and outlook regarding the phenomenon of development and underdevelopment in LDCs in particular. it has helped us understand LDC situation in greater dimensions and in new perspective.

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Rice Production in Bangladesh

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Abstract

Rice is the staple food of the people of Bangladesh. Farmers have been growing this crop from time immemorial. But the changes occured over the years in terms of yield and area coverage are not clearly know to many. This paper has made an attempt to identify the changes in respect of both yield and area coverage. It has also highlighted the existing status of irrigation and fertilizer use and possible areas of intervention. Information for the study were collected both from primary and secondary sources.

It has been found that 73 percent of the total cropped area is under rice cultivation which covers both local and HYVs. But their yield falls far below expectation. A number of factors like acute deficiency in organic matter, imbalanced use of inorganic fertilizer and absence of proper management practices are responsible for this. In view of the fact, a few areas for intervention have been recommended to increase rice yield. These include: (i) bringing more land under HYV cultivation; (ii) enriching soil quality through applying organic matter; (iii) using proper dose of inorganic fertilizer after soil analysis; and (iv) proper management of all agricultural practices. Finally, adequate linkage with agricultural extension and dissemination of updated knowledge including education of the farmers are suggested.

Introduction

Rice (Oryza sativa) is the staple food of Bangladesh. Many people of this country consider it an essential item in their daily dishes some way or other. Besides their normal lunch and dinner, some people take it as breakfast either by cooking in the morning or by cooked rice in the previous night. This habit is so dominant among them that despite taking many

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other foods they feel that they have not eaten anything in case rice is not eaten. Although there is a significant change in dietary habit from rice to wheat mainly due to economic and medical reasons but the demand for rice seems to have not decreased at all.

Area under this crop is the highest among the various field crops cultivated in the country. It was cultivated in 2,46,64000 acres of land in 1993-94 and 2,51,510.00 acres in 1992-93 which were 73.83 percent and 74.28 percent of total cropped area respectively. (Year Book, Agricultural Statistics, 1994). There are a number of varieties of rice available in the country which are cultivated by the farmers according to their choice.

During the Sixties, varieties like IRRI-8 of International Rice Research Institute (IRRI) and later on variety like purbachi of China locally known as Chinese were introduced in the country. Now Bangladesh Rice Research Institute (BRRI) has developed a number of varieties and released those for cultivation at the farmers' level. Many of those have been adopted by the farmers in the meantime and some are yet to be adopted. It is already known to many that rice is cultivated three times a year viz. Aman rice from July to November (Rainy season), Boro rice from November to March (Winter rice) and Aus rice from April to July (Summer Rice).

Both local and high yielding varieties are cultivated. Local varieties are usually fine rice which taste good and they are cultivated mainly in rainy season. High yielding varieties of rice are usually coarse and take more time to ripe than the local varieties. However, BRRI has developed some high yielding varieties which include fine rice and are available at the farmers' level.

Rice is cultivated in Bangladesh from a long time ago. Over this long span of years changes in terms of yield and area coverage have taken place in this sector . But changes are not known to many of us with data. With this view in mind an attempt has been made in this study to identify the top districts highlighting the present situation in terms of coverage of local and high yielding varieties and their yield. It has also highlighted the existing irrigation facilities and application of fertilizer at the farmers' level and finally pinpointed the areas of intervention to increase the yield.

Objectives of the Study

The specific objectives of the study were :

i) to find out the top ten rice growing districts;
ii) to find out the top ten rice yielding districts;
iii) to highlight the existing irrigation facilities and application of fertilizer at the farmers' level vis-a-vis their recommended dose; and
iv) to pinpoint the areas of intervention where attention may be drawn for accelerating the yield of rice.

Methodology of the Study

The study was conducted based on the primary and secondary data. Information were gathered mainly from the various Year Books of Statistics published by the Bangladesh Bureau of Statistics (BBS). Agriculture related reports published by RDA and field reports written by the trainees of various training courses arranged by RDA were also consulted. In the study primary information were collected from the farmers on their existing fertilizer dose of the crop. Later on, soil analysis of those locations were made and variation of dose of fertilizer was observed.

Data covering a period of 10 years were collected from the above reports and articles with a view to drawing a good picture on the objectives set for the study. Simple calculations like average and percentage were made in some cases where there were necessary.

Findings of the Study

Top Ten Rice Growing Districts

Ten districts were ranked on the basis of area for rice cultivation during the period of last ten years beginning from 1982-83 to 1991-92. On this basis, Rangpur stood first, Sylhet 2nd, Rajshahi 3rd, Comilla 4th, Barisal 5th, Faridpur 6th, Dinajpur 7th, Jessore 8th, Kishorganj 9th and Dhaka 10th and on an average the areas under these districts were 2349300 , 2114700, 1584900, 1547400, 1517800, 1380800, 1369300, 1285100, 1279000 and 1230900 acres respectively.

The above areas included both local and high yielding varieties. From Table -1 it is found that area under local varieties was more in all districts and area under high yielding

varieties was less. But these figures did not remain constant. It changed in the subsequent years----- quickly in four districts while slowly in other six districts . The four districts where area of high yielding varieties increased quickly were Rangpur, Rajshahi, Dinajpur and Jessore. The area under HYVs of Rangpur district was only 16.19 percent in 1982-83 and it became 50.63 percent in 1991-92. Likewise, the area under HYVs of Rajshahi increased from 13.10 percent to 56.43 percent within the above period. It also increased from 12.67 percent to 47.29 percent in Dinajpur and from 16.88 percent to 61.18 percent in Jessore district.

Out of six districts Comilla, Kishorganj and Dhaka had the higher coverage of HYVs from the beginning. So the area under HYVs of these districts increased steadily in the subsequent years. As per Table-1 the area under these districts were 39.25, 42.86 and 32.29 percent in 1982-83 and it increased to 61.40, 62.82 and 53.79 percent in 1991-92. Sylhet and Faridpur had only 16.25 and 8.65 percent HYVs coverage and it stood to 31.35 and 25.56 percent in the same period of time. The area under HYVs of Barisal district was different. It was more in the beginning year and became less in the subsequent years.

Table-2 : Top Ten Districts in Rice Production- Variety wise production expressed in ton//acre

	1982-83		1983-84		1984-85		1985-86		1986-87		1987-88		1988-89		1989-90		1990-91		1991-92		1992-93	
District	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV
Bogra	0.45	0.93	0.47	0.96	0.53	1.02	0.53	1.07	0.50	097	0.55	1.01	0.58	0.96	0.93	1.65	0.62	1.07	0.63	1.02	0.67	1.05
Dhaka	0.42	1.04	0.43	1.00	0.41	0.95	0.43	0.96	0.43	1.02	0.39	0.93	0.33	0.97	0.44	1.04	0.82	1.06	0.40	1.10	0.42	1.06
Kishorgong	0.43	0.93	0.46	0.87	0.51	0.93	0.50	0.85	0.50	0.89	0.57	0.96	0.50	0.99	0.52	0.96	0.58	0.88	0.56	0.96	0.49	0.97
Rangpur	0.45	0.95	0.46	0.91	0.47	0.92	0.49	0.94	0.49	0.91	0.51	0.89	0.53	0.80	0.58	0.96	0.54	0.94	0.53	0.94	0.55	0.95
Chittagong	0.48	0.92	0.50	0.92	0.49	0.87	0.51	0.89	0.52	0.91	0.54	0.92	0.53	0.82	0.53	0.88	0.58	0.80	0.56	0.93	0.58	0.94
Khulna	0.46	0.80	0.48	0.83	0.56	0.89	0.53	0.89	0.46	0.85	0.51	0.92	0.41	0.95	0.55	0.95	0.55	0.91	0.53	1.00	0.54	0.99
Rajshahi	0.42	0.93	0.44	0.97	0.42	0.94	0.43	0.95	0.43	0.98	0.40	0.98	0.47	0.85	0.32	0.95	0.76	0.74	0.50	1.05	0.52	1.05
Dinajpur	0.46	0.83	0.48	0.94	0.47	0.93	0.49	0.85	0.49	0.84	0.48	0.83	0.52	0.81	0.49	0.88	0.61	0.95	0.52	0.91	0.54	0.91
Comilla	0.44	0.90	0.46	1.14	0.44	0.92	0.43	0.89	0.43	0.91	0.43	0.96	0.43	0.98	0.43	0.52	0.54	0.99	0.49	1.00	0.50	0.99
Sylhet	0.43	0.84	0.46	0.85	0.48	0.84	0.44	0.75	0.45	0.78	0.48	0.80	0.45	0.71	0.49	0.75	0.71	0.87	0.55	0.88	0.53	0.83
Mymensingh	0.37	0.83	0.40	0.79	0.39	0.81	0.43	0.84	0.42	0.79	0.46	0.83	0.45	0.82	0.55	0.91	0.45	0.86	0.45	0.90	0.46	0.91
Barisal	0.39	0.91	0.42	0.88	0.41	0.85	0.44	0.81	0.44	0.83	0.46	0.85	0.42	0.83	0.53	1.12	0.50	0.91	0.46	0.90	0.50	0.94

Source: Year of Statistics: Bangladesh Bureau of Statistics, 1991, 1992, 1993 and 1994

Top Ten Rice Yielding Districts

The yield of rice either for local or high yielding varieties did not show any increasing trend during the last 10 years (Table-2). There was always ups and downs in yield. From Table- 2 it was understood that per acre yield of local varieties of rice in most of the districts remained below 0.50 metric ton although the range of per acre yield of the same was from 0.32 to 0.82 metric ton. The lowest yield was found in Rajshahi in 1989-90 while the highest yield was found in Dhaka in 1990-91.

In case of high yielding varieties of rice per acre yield was below 1.00 metric ton and its range was from 0.52 to 1.65 metric ton. The lowest yield was found in Comilla in 1989-90 while the highest yield was in Bogra in the same year.

Existing Irrigation Facilities

Irrigation facilities were created during sixties to grow crops mainly in Boro season. With this view in mind, the government in different times has distributed Deep Tubewells (DTWs), Shallow Tubewells (STWs), Low Lift Pumps (LLPs) and Manually Operated Pumps (MOPs). Until 1994-95, a total of 7,05,120 above irrigation equipment were found to operate in the fields. The following is the break-up of irrigation equipment showing a comparison of two different years. Details of irrigation equipments of 1994-95 has been shown in table- 3.

Irrigation Equipment in operation :

	1992-93 (Nos)	1994-95 (Nos)
Deep Tubewells :	25714	26745
Shallow Tubewells :	348875	488869
Low Lift Pumps :	52217	57090
Manually Operated Pumps:	134718	132424
Total	561524	705128

Source : NMIDP 1992 and 1995

Table-1 : Top Ten Districts in Rice Cultivation and Their Area in Percentage

District	1982-83		1983-84		1984-85		1985-86		1986-87		1987-88		1988-89		1989-90		1990-91		1991-92	
	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV	LV	HYV
Rangpur	83.81	16.19	82.17	17.83	80.76	19.24	74.58	25.42	69.82	30.18	66.27	33.73	59.77	40.23	54.90	45.10	51.50	48.50	49.37	50.63
Sylhet	83.75	16.25	83.81	16.19	80.70	19.30	78.91	21.09	76.12	23.88	72..87	27.13	67.19	32.81	73.92	26.08	65.32	34.68	68.65	31.35
Rajshahi	86.90	13.10	84.87	15.13	83.41	16.59	77.61	22.39	73.57	26.43	69.04	30.96	60.52	39.48	72..20	27.80	45.32	54.68	43.57	56.43
Comilla	60.75	39.25	63.70	36.30	62..15	37.85	63.30	36.70	61.32	38.68	55.78	44.22	40.87	59.13	43.03	56.97	41.03	38.97	38.60	61.40
Barisal	82..18	17.82	83.99	16.01	84.26	15.74	86.28	13 72	85.57	14.43	85.35	14.65	88.55	11.45	87.13	12..87	85.55	14.45	85.83	14.17
Faridpur	91.35	8.65	92.00	8.00	87.45	12 .55	92.02	7.98	89.84	10.16	88.21	11.79	84.89	15.11	82.66	17.34	74.25	25.75	74.44	25.56
Dinajpur	87.33	12.67	85.65	14.35	82.11	17.89	77.15	22.85	75.22	24.78	74.13	25.87	69.80	30.20	66.62	33.38	55.30	44.70	52.71	47.29
Jessore	83.12	16.88	83.00	17.00	76.60	23.40	78.90	21.10	78.41	21.59	73.64	26.36	61.26	38.74	43.08	56.92	40.77	59.23	38.82	61.18
Kishorgong	57.14	42.86	62.30	37.70	58.79	41.20	59.24	40.76	56.91	43.09	50.87	49.13	37.31	62.69	40.57	49.43	38.29	61.71	37.18	62.82
Dhaka	67.71	32.29	71.64	28.36	68.88	31.12	68.18	31.82	70.68	29.32	64.75	35.25	57.28	42.72	51.10	48.90	23.59	76.41	46.21	53.79

Source: Year Book of Statistics: Bangladesh Bureau of Statistics, 1991, 1992, 1993 and 1994

The coverage/command area of the various irrigation equipment varies according to the type and discharge capacities. Other factors are also associated with this. It is, however, recommended that normally the command area of a DTW and a STW should have 60 and 11 acres respectively. In case of LLP of less than 1cusec, 1 cusec, 2 cusecs and more than 2 cusecs the command area should be 7.5, 15, 30 and 60 acres respectively. But the picture in reality is found different. The command area of some irrigation equipment remains below the expected level and some are found to achieve good result. This can be seen from the figures of 1994-95 shown in Table-3.

Table- 3 : Break-up of Irrigation Equipment according to Types and Discharge Capacity : 1994-95.

Irrigation Equipment	Number
Deep Tubewells (DTW) :	26745
Shallow Tubewells (STW) :	488869
STW upto 71/s	234,545
STW over 71/s	242,429
Deep set STW	11786
Very deep set	109
Force Mode TW	138
Low Lift Pumps (LLP):	57090
LLP upto 28L/s	32480
LLP upto 56L/s	23326
LLP over 56L/s	1284
Non mechanized :	132424
Treadle	115451
Rower	8018
Hand Tubewell	8955

According to the NMIDP Census Report 1995-96 the highest concentration of DTWs was found in the Rajshahi division which is 46 percent of total DTWs under operation followed by the Dhaka division which is 32 percent. Among the districts of highest concentration of DTWs, Mymensing (2908 DTWs) under Dhaka division stood first and Naogaon (2056 DTWs) under Rajshahi division stood second. Other districts where more concentration of DTWs were found also include Comilla, Tangail, Rajshahi, Bogra, Dinajpur, Jessore and

Nawabganj. Although the concentration of DTWs was found in the above districts, but their average command area was lower than the expected level. Districts like Rangpur, Naogaon, Gazipur and Jessore had far below the expected result.

Highest concentration of STWs was also found in the Rajshahi division (55% of the total) followed by the Dhaka division (22%). Bogra, Dinajpur, Naogaon, Serajganj and Jessore were the districts where a large number of STWs are in operation. In general the performance of these tubewells was relatively better than DTWs. According to the NMIDP report the command area of STWs in most of the districts reached above 8 acres and the rest were below 8 acres in place of required 11 acres under a STW. The performance of LLPs, in general, was not well too. The coverage under LLPs of different discharge capacity was less in all locations which varied from 30 to 40 percent except in Habiganj. It may be pointed out here that Chittagong , Noakhali and Comilla were the three top districts where the highest concentration of LLPs were found.

Farmers irrigate their crops with the above iirrigation equipment. About 30 percent of the total cultivable area have been brought under irrigation with those equipment. But 40 to 50 percent of the total area could have been brought under the same. This could not be done mainly because of the problems linked with the weak institutional arrangement and managerial capability.

On the otherhand, farmers used these equipment for irrigation only in winter season. They did not use these for other two seasons viz. Aman and Aus season except in extreme drought cases. It was a wastage either in case of late rainy season or scanty rainfall during the season. Moreover, these should have been used to grow crops which overlaps for timing. By using these equipments proper timing could have been maintained to implement the proper cropping patterns and thus it could have contributed for more increase in the production of crops.

Table- 4 : Average Command Area of Various Irrigation Equipments : 1994-95.

Irrigation Equipment	Average Command Area (Acre)
Deep Tubewells (DTW) :	46.31
Shallow Tubewells (STW) :	8.28
STW upto 71/s	7.27
STW over 71/s	9.27
Deep set STW	7.88
Very deep set	10.65
Force Mode TW	11.85
Low Lift Pumps (LLP):	
LLP upto 28L/s	13.32
LLP upto 56L/s	35.50
LLP over 56L/s	52.78

Existing Application of Fertilizer Vis-a-Vis Their Recommended Dose

Application of proper dose of fertilizer in right time is one of the important factors for good production. It is also one of the major items of cost of production. Hence it is very important to know the existing practices of fertilizer application of farmers and then to recommend the proper dose of the same. For the purpose six IMP schemes were taken into

consideration. Table- 5 gives a comparative picture of application of existing fertilizer dose and the recommended one.

Table -5 : Average Fertilizer Dose Used by the Farmers and Recommended Dose of Fertilizer:1996

Name of Scheme	Urea	TSP	MP	Zinc	Sulpher
Shibpur KSS Garidah, Sherpur, Bogra					
	117	45	30	3	-
Boro Rice (HYV)	(121)	(87)	(66)	(4.5)	(66)
Aman Rice (HYV)	71	42	18	3	-
	(80)	(72)	(54)	(4.5)	(45)
Pakuria KSS, Sherpur, Bogra					
	93	45	35	-	-
Boro Rice (HYV)	(123)	(70)	(67)	(4.5)	(50)
Aman Rice (HYV)	54	40	24	-	-
	(80)	(72)	(54)		
Sashibadani KSS, Bogra Sadar, Bogra					
	96	48	32	-	-
Boro Rice (HYV)	(123)	(87)	(67)	4.4)	(67)
Aman Rice (HYV)	47	32	18	-	-
	(61)	(72)	(54)	(4.5)	(45)
Raiti Norail KSS Polashbari, Gaibanda					
	124	35	23	3	19
Boro Rice (HYV)	(123)	(70)	(67)	(4.5)	(67)
Aman Rice (HYV)	105	37	17	-	-
	(80)	(54)	(54)	(4.5)	(45)
Tulat KSS, Gobindaganj, Gaibanda					
	71	45	32	3	11
Boro Rice (HYV)	(123)	(88)	(67)	(4.5)	(67)
Aman Rice (HYV)	68	41	32	3	-
	(80)	(72)	(54)	(4.5)	(45)
Chandaikona KSS, Raiganj, Serajganj					
	96	40	31	-	-
Boro Rice (HYV)	(123)	(79)	(67)	(4.5)	(50)
Aman Rice (HYV)	71	31	10	-	-
	(80)	(72)	(54)	(4.5)	(45)

Note : *Figures in the parenthesis indicate the recommended dose of fertilizer*
KSS= Krishak Samabaya Samity (Farmers' Cooperative Society).

Source : Soil analysis Report of the Project Sites under Irrigation Technology Transfer Project, RDA, Bogra, Bangladesh.

From Table-5 it is found that the existing practice of fertilizer use was far below from the recommended dose for almost all the items. Only the application of Urea for Boro rice was almost close to the recommended dose except Tulat KSS where farmers applied Urea less than 42 percent of the dose. The application of TSP was less than 34 to 54 percent of the recommended dose.

Table- 5 also shows that variation of application of fertilizer for Aman rice was very much noticeable. Farmers except of Raitinorail KSS applied low dose of Urea which ranged from 11 to 32 percent less than the recommended dose. Farmers in Raitinorail KSS applied 31 percent higher than the normal dose of Urea which is nothing but wastage. The application of TSP was found 31 to 55 percent less and MP 40 to 81 percent less.

Farmers were aware that Zinc and Sulphur fertilizers were to be applied now-a-days. But most of them, due to lack of information of the symptoms that require these two fertilizers, did not use and some did not bother much for these to apply in their lands.

Organic matter content of the soil is also an important point for maintenance of soil fertility and good harvest. But the organic matter content was found very poor in soil in comparison to its requirement of 5 percent. The actual organic matter content of soil of the six schemes (indicated earlier in Table-5) is mentioned below after their chemical analysis.

Sl.No.	Name of Scheme		Organic Matter Content (%)
1.	Shibpur KSS	:	0.52 - 1.04
2.	Pakuriapara KSS	:	1.58 - 2.14
3.	Shashibadani KSS	:	1.51 - 2.08
4.	Raitinorail KSS	:	0.88 - 1.62
5.	Tulat KSS	:	0.62 - 1.08
6.	Chandaikona KSS	:	1.36 - 1.75

To meet the above deficiency farmers applied only cowdung at the rate of 2800 to 3000 kg per acre which was not upto the requirement. The cropping pattern as found in different schemes were also not helpful for improving the fertility of soil. So the condition of soil was deteriorating further.

Areas Of Intervention To Increase Rice Yield

From the tables discussed earlier it was clear that the area under HYVs have been brought to a satisfactory level but not to a significant level. On the other hand, yield per unit area either for local varieties or HYVs was not satisfactory. It does not mean that the yield of rice has not increased as a whole in the country. Statistics indicate that yield of rice has increased over the years due to introduction of HYVs in the areas where previously local

varieties were cultivated. So it is the conversion of LVs area into HYVs, not in increase per unit area of a specific variety. Hence there are ample scope for increase in the yield of rice.

But how these can be accomplished ? Here are some hints where intervention can be made:

1) More Area Under HYVs :

The present area for HYV rice (1991-92) varies from 14.17 to 62.82% of the total rice area. This has to be increased on an average upto 70-75%. For this area with low coverage districts like Sylhet, Rangpur have to be targeted mainly for Aman and Aus rice.

2. More Yield of Rice :

Yield of rice in Bangladesh either of HYVs or LVs is poor in comparison to high yielding rice growing countries. Yield of rice per unit area has to be increased to a satisfactory level by all means. In doing so the following interventions need to be launched:

a) Organic matter content of soil varies according to location. The average organic matter is very low as mentioned earlier. But it has to be increased to at least 3 percent. To bring the organic matter content at this level cultivation of Dhaincha (Sesbania sp.), a green manuring crop, has to be fit compulsorily in the cropping patterns. Other attempts like cultivation of pulse crops and putting more cowdung/compost/ rubbishes in the plots have to be continued with more attention. Attempt for preparation of quick compost (within two weeks) has to be spread over at the farmers' level through the method and result demonstration.

b) Line transplantation with proper spacing has to be practiced. Line transplantation is still practiced sporadically in different parts of Bangladesh but it covers little area. It has to be practised in more areas, particularly in the irrigated areas for cultural advantages.

c) Land preparation with good land levelling has to be maintained in all plots.

d) Healthy seedlings of proper age are to be selected always for transplantation.

e) In order to fill up the gaps where seedlings are not transplanted by mistake or seedlings are damaged in someway or other, locations of these gaps are to be identified by walking around the field and required seedlings are to be transplanted immediately.

f) Two to three cm water is to be maintained/restored in the field for a week or more so that the emergence of weeds gets slowed down.

Conclusion

Historically, farmers in Bangladesh are involved in growing rice from time immemorial. It still continues to occupy the highest area among all other crops grown in the country. Over the long span of time there has been change in cultivation from LVs to HYVs, but yield of rice has not increased per unit area as expected. Rather stagnancy has been found in rice production. In a recent study it is found that the growth rate of rice shows a downturn for the last four years (1990-91 to 1993-94). The growth rate of total rice production was estimated around 3.1 percent during 1984-85 to 1989-90 whereas in reality it has come down to only 0.4 percent during 1990-91 to 1993-94. As pointed out in the study there are a number of reasons for this decline. Among other things, the application of requisite quantity of organic matter, developing suitable cropping patterns including compulsory provision of soil enrichment and application of recommended dose of fertilizers are not followed. Moreover, varietal change vis-a-vis rational use of irrigation water are equally important in this respect.

Agriculture is always time-bound. It proceeds with the nature's rhythm. So more attention needs to be focused on the timeliness of work. This means, management aspect of different agricultural operations is to be given top priority. In this connection 3-ps which include proper time for cultivation of crop, proper dose of manure/fertilizers and pesticide and proper management are the key points for having good harvest of HYVs. Any imbalance in those points will not only dismay the harvest, but also affect the environment. This has already happened and it still persists. To achieve success, farmers are to be placed first and they should always be targeted first. They should not only be provided with necessary information continuously, they should also be trained through extension service so that they

can comprehend the subjects and apply acquired knowledge in the fields. Monoculture, that is, rice after rice in a same plot for years together is also a problem which should be avoided. A crop which requires very less water should be dovetailed with the cropping pattern so that trace elements do not become scarce in the soil.

The government has taken up a number of new projects to accelerate rice production targeting 23.40 million metric tons by 2002 (Fifth Five Year Plan). In achieving this target, findings of this study as well as other relevant studies appear to be instrumental and as such they may be taken into account in implementing these project.

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Agro-Economic Profile of Mixed Cropping

A Learning from the Innovative Farmers

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Abstract

Mixed cropping of Chilli + Bittergourd + Turmeric + Pigeonpea - an innovative practice was studied to gather information and to document the same. Personal contact, field visit and workshop on the practices were the means of collecting information. The practice followed (at Uthali and adjacent villages, Shibgonj Thana under, Bogra District) in the old Karatoya floodplain rainfed medium high land sandy loam soils. The growing period of chilli (February - October), bittergourd (early March - late June), turmeric (mid April - early February) and pigeonpea (mid April - late January) were recorded, which yielded 7026, 5233, 3452 and 743 kg/ha of green chillies, bittergourd, cured turmeric and pigeonpea respectively. Compared to sequential cropping (Broadcast Aus Rice-Fallow-Potato), the gross margin (Tk. 95,325/ha) obtained from mixed croping was 101% higher than the gross margin (Tk. 47,476/ha) obtained from sequential cropping. The MRR of mixed cropping was 469%. Mixed cropping also gave the higher benefit cost ratio of 3.59. Necessary arrangement of leaves, roots, placement of crops in different strata and risk coverage were also focused in the mixed cropping principles.

Introduction

Farmers are professional scientists in their fields but their skills and knowledge have not yet been fully recognized. They were doing jobs, according to their own ways rather than following scientific procedures. They discover new combination of mixed cropping, such

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as quick maturing dry land rice grown with pigeonpea in India (Manrya and Botrall, 1987). They select the crop variety by their own selection methods, changes the management practices or device means to identify new methods to adjust their variable environmental condition. Juma (1987) reported that in Bungoma, Kenya, farmers are by nature, 'experimenters' and in that they continually try out and adjust their practices and uses plants in response to changing conditions. Similarly with the increased pressure on land arisen out of population growth and to face the hazardous situation, the farmers of Bangladesh try to identify ways to intensify production per unit area. Mixed cropping of chilli, bittergourd, turmeric and pigeonpea is one of those ways. Farmers seldom record their accomplishment, rarely wrote papers on the discoveries and do not attach their names and patents to their invention, as a result the history of Agriculture is written without reference to the main innovators (Rhoades, 1987). Though many scientists find it difficult to learn from the experience and knowledge of farmers (Chamber and Jiggins, 1986) many others recognize that there exists tremendous scope for such learning. Therefore, the present piece of work was undertaken to gather information about the technology from the farmers as well as to document the same. The information will be helpful for the scientists, extension personnel and other users either for necessary modification or to disseminate the whole packages to the similar Agro-ecological domain.

Methodology

Documentation Procedure

After continuous field visit to the different parts of Bogra district and discussing with the extension personnel from district to the field levels and with the farmers- an attractive farmers' innovative practice (technology) was noted at Uthali and adjacent villages of Shibgong Thana. Having identified the practice, information was collected through personal contact and continuous field visit. To know the agro-economic and technical know-how of the practice with greater boundaries a formal innovative farmers' workshop was held on 1st January,1996 at Uthali High School premises. Innovator farmers (as speaker), scientists, extension personnel including thirty other farmers were the participants of that workshop. All the version given by the speakers were recorded in the audio tape. The critical aspects of the technology were then vividly discussed and corrected from the participants. The whole things about the technology was then written and read prior documentation. Agro-economic data of the sequential cropping was also collected for comparison.

About the technology

Under rainfed situation in the old karatoya floodplain medium high land sandy loam soils, farmers generally follow Broadcast Aus Rice and or Jute-Fallow-Potato cropping sequence but cultivate chilli, bitter gourd, turmeric and pigeonpea as mixed crop on the same land once in a three years cycle to allow the soil to restore its fertility. Farmers mostly used organic manure and small quantities of chemical fertilizers for this system. Hence, completion of one mixed cropping cycle with different crops having varied nutrient uptake habit resulted slight deficit of soil fertility. Again, proper accomodation of all these crops in the second cycle is also problem for why the fermers followed this mixed cropping system once in a three years (i.e. after two sequential cropping). From sequential cropping, farmers harvested potato crop as their earliest possible time and started mixed cropping system.

They generally raised their main field by cutting soils from the deep canal made around the boundaries. These canals are the reservior of waste materials, decomposed plant residues having good manural value. In addition to keep the main field well drained, the canals play a vital role in controlling free grazing animals and some creeping insects. The land was ploughed 3-4 times followed by laddering to have a good tilth. At the time of final land preparation along with basal fertilization, Dieldrin 20 EC @ 1200-1500 ml. (mixed with 5-6 kg rice bran) per hectare was used for soil sterilization. The whole plot was then divided into several 'Kups' (i.e. beds) of 120-125 cm width, keeping 15-20 cm spacing between the 'Kups'. The interbed space later on used for earthing up and drainage of excess water.

Results and Discussions

Chilli

This is the first crop of the technology. For raising seedlings a seed bed of 1m x 3-4 m size was made (generally inside the potato field) during late November. During early-to mid February 50-65 day old chilli seedlings of local cultivar 'Barshali morich, or Ashari morich' (i.e. rainy seasonal chilli) were transplanted in a 25 cm wide paired rows on both edges of the 'Kup' with an interspace of 50-55 cm between the pairs of rows. In a paired row seedlings were transplanted by maintaining 80-85 cm spacing from pair to pair. Towards the paired row an additional seedling was transplanted 20 cm apart from the pair (to make a triangle) to avoid risk generally caused by wind, storm or by any other insect pest damages.

Indigenous experience suggests that an additional seedling to the pair support each other against rain or storm destruction.

Bittergourd

The seeds of bittergourd of local cultivar'Barshali Karala', (i.e. rainy seasonal bittergourd) were allowed to soak in water for 48 hours. The seeds were then collected and wrapped up with clean sacks to enhance sprouting. Sometimes non-sprouted seeds also used for planting. The advantages hidden here as mentioned by the innovative farmers that the sprouted seed germinate earlier than that of non-sprouted one even under slightly moisture stress situation.

In the middle of the 'Kup' along the chilli seedling pit of 5 cm depth and 5 cm diameter was made and a series of pits were made along the 'Kup' maintaining similar distance (80-85 cm) as in chilli. Three sprouted seeds were then planted in each pit during early March and compact the soil only by one palm pressure which consequently enhance the quicker germination of the same. Only one row of bittergourd was grow on each 'Kup'.

Turmeric

During mid-late April when chilli attains 25-30 cm in height and bittergourd creeps upto 20-25 cm in length, the field was fertilized with mustard oil cake and ploughed to make furrows along the breadth of the 'Kup' with country plough. Before ploughing, the vines of bittergourd where necessary kept twisted together to facilitate ploughing and thereby avoiding injury. The very interesting thing can be mentioned here that the farmer as well as the cattle used for making furrows are accustomed to plough in such a way so that they can avoid much injury to the standing crops. Again, furrowing was done along the breadth of the 'Kup' rather than along the length with the logic spelled out by the innovators that furrowing along the breadth caused less injury than along the length. After furrowing, the twisted bittergourd vines were opened.

Along the breadth of the 'Kup' 3 (three) lines or furrows with equal distance were made in the middle of each 4 (four) paired chilli plants of two consecutive paired rows. Necessary cleaning of the lines or furrows were made by hand plough. Five to six rhizomes or fingers of turmeric (local cv. Kukurmoni) were then planted in the line of the 'Kup' maintaining equal spacing.

Pigeonpea

A furrow having 5 cm in depth was made along the field boundaries through hand plough and seeds of pigeonpea (local tall) were sown continuously as a fence crop during mid April to mid May. Sometimes few plants with distant spacing were also sown along the chilli rows.

Fertilization

The following manures and fertilizers were used for the growth and development of the crops.

Fertilizer	Dose/ha (Kg)
Cowdung	12000 -14000
Mustard oil cake	600-700
Urea	150 - 200
Triple superphosphate	40 - 50
Muriate of potash	30 - 40

All the cowdung, Triple superphosphate and Muriate of potash were applied during final land preparation. Mustard oil cake and Urea were applied in three equal instalments. First instalment of Mustard oil cake was applied on "Kup' during turmeric plantation (mid April). Second instalment of mustard oil cake and $^1/_3$ rd of urea were applied after the harvest of second chilli 'flush' (Mid June). After rainfall during mid July another $^1/_3$ rd of urea was applied. Rest mustard oil cake and urea were applied during early-mid August. Few farmers applied urea with more splits i.e. after harvest of each chilli 'flush'.

Light earthing up was done on the 'Kup' after application of mustard oil cake.

Intercultural operation

First weeding followed by mulching were done (to conserve soil moisture) after 30-40 days of chilli transplantation. After a splash of rain second weeding and mulching were done to break the upper soil crust and thereby making the soil loose. Third weeding and mulching were done during late June after uprooting the bittergourd plant. Similarly fourth weeding and mulching were done after uprooting of chilli plants (late October). Farmers discussed their observations that timely weeding, mulching and fertilization contributed much to the yield of chilli and bittergourd.

Though it was scientifically proved yet indigenous knowledge again suggests that earthing up to the exposed rhizomes or fingers (caused by rain erosion) kept the plant upright. First earthing up was done just after turmeric plantation. Second and third one were done following 2nd and 3rd mustard oil cake application. Earthing up was done very carefully so that it does not damage the bittergourd plant.

Pest and diseases

Chillies and bittergourd plants were found to be attacked by mole cricket, field cricket and cutworm at the early stage of growth. To prevent it Dieldrin 20 EC was used for soil sterilization as mentioned earlier and to control the same Dieldrin 20 EC mixed with rice bran and molasses were used as poison bait. As opined by the innovator farmers, standing water in some cases may encourage the attack of one kind of insect larvae at the rhizomes that cause the plant light yellow and later on redish in colour, rottening occurs at the base consequently the plant dies up. Rhizome rot is also a serious problem. Keeping interbed space and canals to the field boundaries was the technique adopted by the innovators ensured well drained condition of the field and thereby evade this insect attack. Fruits of pigeonpea found to be attacked by fruit borer. Farmers generally do not take any control measures.

During late August, chilli plants were found to be attacked by leaf and stem rot diseases (5-10% plant) locally called 'Pocharay'. Indigenous experiences indicate that incidence of these diseases become more serious in foggy weather coupled with high temperature. No control measures were taken against these diseases. At the early stage of growth chilli plants were attacked by a disease locally called "Babray" (leaves become darkish, curled and crinkled, growth stunted). In this case uprooting was done by the innovators. Though it can not be identified at the moment about'Babray' but it can be mentioned here that as per symptom concern it might be a viral disease. Similar opinion was also made by Rashid (1983).

Yield

Green chilli harvesting started from mid may i.e. the first 'flush' and continued (4-5 flushes) upto October. Thus split harvesting yielded a total of 7026 kg/ha, plant uproots during late October. Similarly bittergourd harvesting continued from mid May to late June and yielded 5233 kg/ha. Plant uproots during late June. Synchronous harvesting of turmeric was done

after maturity during late January- early February, yielded 13808 kg green turmeric per hectare (equivalent to 3452 kg cured turmeric). Pigeonpea was harvested during late January and yielded 743 kg grain and 5143 kg stalks per hectare, respectively.

Socio-agro-eco specificity of the technology

Comparative study of mixed and sequential cropping from table-1 revealed that the gross margin (Tk.95325/ha) obtained from mixed cropping was 101% higher over the gross margin (Tk.47476/ha) obtained from sequential cropping. The Marginal Rate of Return (MRR) of mixed cropping was 46.9%. Mixed cropping also gave the higher benefit cost ratio of 3.59 (Table-1).

In addition to monitory advantage relate to the innovative practice it has manifold advantages. It ensures ready and continuous supply of daily necessities specially by green chillies and bittergourd. Again, the false stem of turmeric and stalks of chilli and pigeonpea contribute much to solve the fuel scarcity. In addition to fencing as mentioned earlier pigeonpea in the border also act as a wind breaker and thereby prevents lodging of the other crops.

Spices, vegetables and pulses in the mixed cropping system was an unique combination. Shallow rooted crops with deep rooted one, broader leaved turmeric with narrow leaved chilli, placement of crops in different strata viz. bittergourd in the bottom, chillies in the middle, turmeric in the upper part and pigeonpea in the border was a nice and compatible adjustment. Therefore, necessary arrangement of leaves, roots and strata distribution with a balanced and integrated microlevel ecosystem contributed maximum utilization of time, space, nutrient and energy for year round crop production. Again, different crop combination ensures compensation of the failure of any.

This sorts of innovation might be helpful for the scientists, extension personnel and other users.

Conclusion and Recommendations

In review of the results of the study it may be concluded that the mixed cropping system followed by the innovators has higher degrees of productivity than that of sequential cropping system. Therefore, it can be disseminated to the other parts of the country in the same agro-climatic situation with the following recommendations:

1. Before large scale dissemination the disease problem of chilli (virus disease) and turmeric (Rhizome rot) should be solved.
2. The local varieties of all the crops in the mixed cropping system need to be changed by high yielding varieties. For this purpose the performance of the high yielding varieties need to be studied in this system.
3. In new areas small scale demonstration trial may be conducted before large scale adoption.
4. The planting system and the cultural techniques followed by the innovators may be complex to the new adopter. Therefore, training on this aspects should be provided to the new adopter.

Table-1: Economic performance of innovative mixed cropping pattern compared to the predominant sequential cropping pattern.

Information	Sequential Cropping			Total	Mixed Cropping				Total
	B. Aus	Fallow	Potato		Chilli + Bittergourd + Turmeric + Pigeonpea				
Variety	Boaula	-	Lalpakri		Barshali	Barshali	Kukurmoni	Local (tall)	
Seed rate (kg/ha)	85	-	900	-	0.6	5.5	1300	55	-
Fertilizer	-	-	-	-		-		-	-
U-TSP-MP-CD	75-0-0-0	-	120-76-82		176-45-35	-	0-0-0-0	-	-
MOC (kg/ha)	0-0	-	9500-0		13000-0	-	700	-	-
Yield (kg/ha)									
a) Product	1512	-	16300	-	7026	5233	3452	743	-
b) by product	2014	-	-	-	-	-	-	5143	-
Gross return (Tk/ha)	8945	-	65200	74145	21078	30090	69040	12198	132406
Total variable Costs (Tk/ha)	5727	-	20942	26669	11930	3280	20045	1626	36881
Gross margin (Tk/ha)	3281	-	44258	47476	9148	26810	48995	10572	95325
Increase in gross margin whole pattern basis (%)	-	-	-	-	-	-	-	-	101
Marginal variable cost whole pattern basis (Tk/ha)	-	-	-	-	-	-	-	-	10212
Marginal gross margin whole pattern basis (Tk/ha)	-	-	-	-	-	-	-	-	47849
Benefit cost ratio	-	-	-	2.78	-	-	-	-	3.59
MRR (%)	-	-	-	-	-	-	-	-	469

Note. B.Aus = Broadcast Aus (Rice),
U = Urea,
TSP = Triple Superphosphate,
MP = Muriate of Potash,
CD = Cowdung,
MOC = Mustard Oil Cake.
MRR = Marginal Rate of Return

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Establishment of Chickpea Using Different Seeding Depth in Barind Soil

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Abstract

An experiment was conducted at the Agricultural Research Station, Bogra during Rabi season 1993-94 to establish chickpea using different seedling depth in Barind soil. Three different seeding depth viz. 4cm, 8cm were chosen and 12cm were chosen and four different chickpea cultivars viz. Nabin, ICCL-83228, ICCL-38105 and Rajshahi local were distributed in randomized complete block design with three replication. Among different seeding depth, 8cm significantly gave the highest grain yield (1140 kg/ha) and 4cm seeding depth gave the lowest grain yield (985.5 kg/ha). Cultivar Nabin significantly gave the highest grain yield (1298.0 kg/ha) and Rajshahi local gave the lowest grain yield (885.7 kg/ha). Interaction between seeding depths and cultivars had significant effect. Cultivar Nabin complied with 8cm seeding depth gave the highest grain yield (1450 kg/ha) and cultivar Rajshahi local compiled with seeding depth 4cm gave the lowest grain yield (857 kg/ha).

Introduction

Chickpea (Cicer arietinum L.) is one of the major pulse crops grown in Bangladesh. But the farmers of level barind tract, Bogra do not cultivate chickpea or any other pulse crop in Rabi season. Chickeea is normally grown after transplanted aman rice but the farmers of this area normally do not use their land at this time, although the agro-climatic conditions and soil of this area are congenial for its successful production. The demand for food, acute shortage of pulses and the basic need of life will continue to increase because of the increasing population pressure. But there is an advantage over agriculture

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in Bangladesh that most of cultivable land are intensively cultivated and are used to grow two to three or even more crops a year. And also, efforts were being made for increasing cropping intensity and per unit production by the adoption of improved technologies. But they do not cultivate, it may be due to non-availability of suitable cultivars, lack of modern component technologies such as placement of seeds in different soil depth, plant spacing, fertilizers, moisture availability etc. As the barind area is relatively dry and without irrigation it is very difficult to manage and establish crop in Rabi season. But if we establish suitable cultivar of chickpea using optimum depth, the fallow land will be used and the total production will be increased.

Apart from the cultivar and operation means for maintaining the different depths of soil for placement of different cultivar's seeds, depth of soil itself would, no doubt, also determine the germination ensuring a desirable and uniform stand of the crop over the field while poor germination produces wide gaps of low plant population stand and consequently causes low yield. Optimum seeding depths may facilitate the availability and absorption of nutrients and soil water for field crop plants which ensure the crop establishment for the better growth and yield. Hillel (1972) stated that soil water potential controlled seeds germination and emergence either thorough effect on conductivity during imbibition or like temperature thorough effect on physiological processes during embryonic development and seedling growth. Fehar et.al. (1973) investigated the ability of six cultivars to emerge from different planting depths, seeding rates and soil temperatures. Of these, planting depths (5 cms) was the only factor which had significant influences on emergence. From the above little information, the present piece of work has been undertaken to establish chickpea using different seeding depth in barind soil.

Materials and Methods

The experiment was conducted at the Agricultural Research Station (ARS), Bogra during Rabi season, 1993-94. The land was medium high and the soil was clay loam to silty clay loam in texture which belongs to level Barind Tract (AEZ-25). The experiment was laid out in randomized complete block design with three replications. The unit plot size was 4m x 4m. Three different seeding depths viz. seeding depth at 4cm (D1), seeding depth at 8cm (D2), seeding depth at 12cm (D3) were chosen and four different chickpea cultivars viz. Nabin (V1), ICCL-83228 (V2), ICCL-83105 (V3) and Rajshahi local (V4) were distributed. The crop was fertilized with 20-40-20-1.5 kg N-

$p_2 0_2$-k_2-B/ha. All the fertilizers were used during final land preparation. The crop was sown on 30 November, 1993 maintaining 40cm x 10 cm plant spacing. Seeds were sown into the furrows with different depths as prescribed in the treatments. The crop was grown under rainfed condition. One weeding was done at 25 days after emergence (DAE). To control cutworm insecticide darsban @ 750 ml/ha was applied at 40 DAE. The crop received 14ml rainfall at January '94. The crop was harvested on 15 March, 1994. Data for yield and yield components were collected from whole plot and 10 plants from each plots respectively. The recorded data were statistically analysed and mean values were adjudged by Duncans' Multiple Range Test (Gomez and Gomez, 1984).

Results and Discussions

Seed yield and other yield contributing characters as influenced by the different cultivars and depth level of soil for the placement of seeds were presented in Table-1.
Soil depth treatments had significant effect on almost all plant characters studied (Table-1). Plant population after emergence was not significantly influenced by the different seeding depths, however, the highest plant population (25/m2) was obtained at 8cm seeding depth. At harvest, significantly higher plant population (22/m2) was obtained from 8cm seeding depth which was identical to 12cm (21/m2) and the lowest (17/m2) in 4cm. Significantly highest plant height (34.01cm) in 4cm which was identical to 12cm seeding depth. Number of branches/plant was also significantly influenced by the depth of seeding. Maximum number of branches/plant (7.14) was counted with 8cm and the minimum number of branches/plant (6.53) was obtained from 4cm. Significantly highest number of pods/plant (45.58) was obtained from 8cm and the lowest (41.08) from 4cm. Number of seeds/pod and 1000 grain weight had no significant effect among the treatments. Though the grain weight was not significantly influenced by the seeding depth, the heaviest weight (144.30 g) was recorded with 8cm. Under 8cm seeding depth the seeds and fertilizers were placed at the moist soil zone in the furrows. This helped higher seed germination, and better utilization of fertilizers and soil moisture which contributed much to the better plant stand, plant height, branches/plant, number of pods/plant, thousand grains weight. Such beneficial effect of soil moisture could not be obtained in 4cm depth and also in the 12cm depth where deeply tillage operation cause deplation of soil moisture. Besides this, it might be due to the fact that the productive capacity of the soil had a limit in its' depth and continuous control operation generally done at the depth of 12cm.

Significantly highest grain yield (1140 kg/ha) of chickpea was recorded at 8cm and the lowest (985.5 kg/ha) at 4cm. Siddique and Loss (1996) reported that optimum sowing depth for chickpea in Western Australia was 5-8 cm. Similar results were obtained by Fehar et al. (1973); Rahman and Sobhan (1979) in case of soybean. The highest grain yield in 8 cm might be due to cumulative influence of the significant increase in number of branches/plant, number of pods/plant and the higher thousand grain weight. In case of straw, yield had no significant effect but the straw, yield followed the similar trend of results as in grain yield, where the highest straw yield (1.71) t/ha) was obtained from 8cm.

Cultivars showed significant effect on almost all the characters studied (Table-1). Although the plant population at days after emergence and at harvest had no significant difference among the cultivars, the numerically highest plant population (21/m2) was found in Nabin at harvest. Significantly highest plant height (37.02cm) was obtained from ICCL-83105 (V3) and lowest (29.18cm) in Rajshahi local (V4) and the intermediate (35.42cm) in Nabin (V1). Cultivars had significant effect on number of branches/plant. The highest number of branches/plant (7.82) was obtained from V4 and the lowest (6.0) in V3 which was identical to V2 and the intermediate (7.17) in V1. The number of pods/plant also varied significantly among the cultivars and the highest number of pods/plant (54.56) was obtained from V1 and the lowest (29.22) from V3. Seeds/pods had no significant effect but the numerically highest (1.56) in Nabin. Different cultivars of chickpea varied significantly on thousand grain weight. The heaviest grain weight was recorded from V3 (188.1 g) and the lowest (109.1 g) from V4. Highest grain yield was obtained from V1 (1298 kg./ha) which differed significantly from other cultivars. The lowest grain yield was obtained from V4 (885.7 kg/ha). The highest grain yield in Nabin might be due to the highest number of plant population and pods/plant. Biomass yield also differed significantly among the caltivars under study. The highest biomass (1.38 t/ha) was found in V4 which was identifical to V2. The varietal difference might be, due to their different varietal characteristics.

Combined effect of seeding depths and cultivars had significant effect on plant population/m2 at harvest, plant height, number of branches/plant, number of pods/plant, thousand grain weight and grain yield. Highest plant population stand (23/m2) was also found in D2V1 and D2V3 which was identical to D2V4 (22/m2) and the lowest (17) in D1V2, D1V3 and D1V4 treatment plots. Significantly highest plant height was obtained

from D2V3 (38cm) and the lowest in D1V4 (28.5cm0 which was identical to D3V4 (28.67cm). Interaction of seeding depths and cultivars had significant effect on number of branches/plant. Maximum number of branches/plant (8.17) was obtained from D2V4 and the lowest in D1V3 (5.7). Significantly highest number of pods/plant was obtained from D2V1 (58.67) and lowest in D1V3 (27.33). Number of seeds/pod had no significant effect but the numerically highest number was obtained from D2V1 (1.67). The 1000 grain weight was significantly highest in the combined treatment of D2V3 (188.6g) which was identical to D1V3 and D3V3 and lowest in D1V4 (108.5 g) which was statistically similar to D2V4 and D3V4. Significantly highest grain yield was also obtained from D2V1 (1450 kg/ha) and the lowest 857 kg/ha) in D1V4. Seeding depth, D2 couple with cultivar Nabin V1 gave the highest grain yield (1450 kg/ha) due to the cumulative influence of significant increase of plant population, number of pods/pant and higher number of seeds/pod. Straw yield had no significant effect.

Thus, from the results of the study it can be inferred that the treatment seeding depth 8cm couple with cultivar Nabin may be suitable for the establishment of chickpea and higher yield in Barind soil

Table-1: Effect of Seeding Depths and Cultivars on Yield and Yield Contributing Characters of Chickpea

Treat m-ent		Plant population after emergence	Plant population at harvest	Plant height (cm)	No. of branches/ plant	No. of pod plant	No. of seed/pod	1000-seed wt.(g)	Grain yield (kg/ha)	Straw yield (t/ha)
D1		23	17b	33.01b	6.53b	41.08c	1.47	143.7	985.5c	1.48
D2		25	22a	34.63a	7.14a	45.58a	1.48	144.3	1140.0a	1.71
D3		22	21a	33.48b	6.78ab	43.08b	1.47	143.8	1009.0b	1.59
V1		23	21	35.42b	7.17b	54.56a	1.56	120.3c	1298.0a	1.64b
V2		24	19	33.16c	6.27c	38.67c	1.47	158.2b	1045.0b	1.49c
V3		23	20	37.02a	6.00c	29.22d	1.37	188.1a	950.0c	1.87a
V4		24	20	29.18d	7.82a	50.58b	1.52	109.1d	885.7d	1.38c
	V1	23	18bc	34.67c	6.90bcd	51.67c	1.60	120.5c	1205.0c	1.53
	V2	24	17c	32.53e	6.00de	36.67h	1.43	158.0b	980.0g	1.40
D1										
	V3	23	17c	36.33b	5.70e	27.33k	1.33	187.8a	900.0i	1.76
	V4	23	17c	28.50g	7.50abc	48.67e	1.53	108.5d	857.0k	1.30
	V1	25	23a	36.53b	7.60abc	58.67a	1.67	120.5c	1450.0a	1.77
	V2	25	21ab	33.60d	6.50cde	40.67f	1.53	158.5b	1150.0d	1.57
D2										
	V3	24	23a	38.00a	6.30de	30.67i	1.43	188.6a	1030.0e	1.98
	V4	26	22a	30.37f	8.17a	52.33c	1.60	109.1d	930.0h	1.47
	V1	21	21b	35.07c	7.00bcd	53.33b	1.60	120.1c	1240 0b	1.63
	V2	22	20abc	33.33de	6.30de	38.67g	1.43	158.1b	1005.0f	1.50
D3										
	V3	22	21ab	36.87b	6.00de	29.67j	1.33	188.0a	920.0h	1.87
	V4	22	19abc	28.67g	7.80ab	50.67d	1.53	109.0d	870.0j	1.37
CV (%)		10.0	10.0	2.0	9.0	1.0	11.0	1.0	1.0	4.0

Figures in a column show means followed by a common letter (s) do not differ significantly at 1% level by DMRT

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সার্বিক গ্রাম উন্নয়ন মডেল ঃ একটি পর্যালোচনা

মোঃ হাবিবুর রহমান*

বস্তুসার

সার্বিক গ্রাম উন্নয়ন কর্মসূচী একটি প্রায়োগিক গবেষণা প্রকল্প। এর চূড়ান্ত লক্ষ্য হ'ল গ্রাম ভিত্তিক একক সমবায় কাঠামোর আওতায় গ্রামের সকল পেশা ও শ্রেণীর জনগোষ্ঠীর আর্থ-সামাজিক তথা সামগ্রিক উন্নয়ন সাধন করা সম্ভব কি-না তা যাচাই করে দেখা। অর্থাৎ গ্রামভিত্তিক একক সমবায় সমিতি গঠন, সকল জনগোষ্ঠীর অন্তর্ভূক্তকরণ ও সামগ্রিক উন্নয়ন ভাবনা এ প্রকল্পের মূল প্রতিপাদ্য। অনুসন্ধানে দেখা গেছে যে, প্রকল্পভূক্ত সমবায় সমিতিসমূহে গ্রামের নারী-পুরুষ, যুবক-যুবতী, ধনী-গরীব এবং কামার-কুমার নির্বিশেষে সকল পেশা ও শ্রেণীর লোক অন্তর্ভূক্ত হয়েছে। আবার সমিতিগুলো সদস্য/সদস্যাদের সকল দিকের অর্থাৎ আর্থিক, সামাজিক, সাংস্কৃতিক তথা সামগ্রিক উন্নয়ন অনেকাংশে নিশ্চিত করেছে। প্রকল্পের প্রশিক্ষণ কার্যক্রম ও থানা পর্যায়ের সেবা-সহায়তা এ ক্ষেত্রে প্রভূত অবদান রেখেছে। পরবর্তীতে এ প্রবণতা যাতে অব্যাহত থাকে তা খেয়াল রাখা দরকার। কিন্তু প্রকল্পটি এখন পর্যন্ত গ্রামভিত্তিক একক সমবায় সমিতি হিসেবে গড়ে তোলার পক্ষে যথেষ্ট ইতিবাচক পরিবেশ তৈরী করতে সক্ষম হয়নি। এ ক্ষেত্রে এনজিও কার্যক্রমের অবাধ প্রসারতাকে অনেকাংশে দায়ী করা যায়।

সার্বিক গ্রাম উন্নয়ন কর্মসূচীর পরীক্ষাধীন 'উন্নয়ন মডেল' গ্রামোন্নয়নে যে আশার সঞ্চার করেছে তাকে প্রাতিষ্ঠানিক রূপ দিতে অবশ্যই থানা পরিষদ, ইউনিয়ন পরিষদ ও প্রস্তাবিত গ্রাম পরিষদের কার্যক্রমকে গ্রামভিত্তিক সমবায় সমিতির সাথে সমন্বয় করা অপরিহার্য। এ প্রয়াসকে অধিকতর বেগবান করতে এনজিওসমূহের সকল কর্মকান্ড বিশেষতঃ ঋণ কার্যক্রম সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে পরিচালিত করার প্রয়াস নেয়া যেতে পারে। যদি তা করা যায় তাহলে গ্রামের সাথে উন্নয়ন পরিসীমায় সকল পর্যায়ের সংস্থার সুদৃঢ় প্রাতিষ্ঠানিক ও দীর্ঘস্থায়ী একক কাঠামো গড়ে উঠবে যা 'এক গ্রাম এক সংগঠন' ধারণাকে জোর সমর্থন করে।

* উপ-পরিচালক, পল্লী উন্নয়ন একাডেমী, বগুড়া

ভূমিকা

বাংলাদেশে পল্লী উন্নয়ন প্রক্রিয়া শুরু হয়েছে অনেক আগে থেকেই। বলা চলে স্থানীয় স্বায়ত্ব শাসিত আইন ১৮৮৫ চালুর মাধ্যমে এর যাত্রা। ১৯০৪ সালে সূচিত সমবায় আন্দোলন এ প্রক্রিয়াকে এক ধাপ এগিয়ে নিয়েছে। তখন কৃষক ও দরিদ্র শ্রেণীকে সমবায়ের আওতায় সংগঠিত করে প্রধানতঃ ঋণ সহায়তার মাধ্যমে দারিদ্র বিমোচনের প্রয়াস নেয়া হয়। তবে পরিকল্পিত পল্লী উন্নয়ন ভাবনা মূলতঃ পঞ্চাশের দশক থেকেই শুরু। ১৯৫৩ সালে ভি-এইড কর্মসূচীর যাত্রা এবং ১৯৫৯ সালে বাংলাদেশ পল্লী উন্নয়ন একাডেমী (বার্ড), কুমিল্লা প্রতিষ্ঠার মাধ্যমে পরিকল্পিত পল্লী উন্নয়নের সূচনা ঘটে। ষাটের দশকে বার্ড উদ্ভাবিত 'দ্বি-স্তর সমবায়' পদ্ধতির পরীক্ষা শুরু এবং স্বাধীনতার পর সমন্বিত পল্লী উন্নয়ন কর্মসূচীর আওতায় সমগ্র দেশে সম্প্রসারিত আকারে এর বাস্তবায়ন আরম্ভ হয়। বস্তুতঃ এ কর্মসূচীর মাধ্যমে উন্নয়ন পরিকল্পনা প্রণয়ন ও বাস্তবায়ন প্রক্রিয়ায় গ্রামবাসী, জনপ্রতিনিধি ও সরকারী কর্মকর্তাদের অংশগ্রহণকে গুরুত্ব দেয়া হয়।

বাংলাদেশে পল্লী উন্নয়নের কৌশল ও প্রক্রিয়া এখনও পরীক্ষা-নিরীক্ষা পর্যায়ে রয়েছে। সার্বিক গ্রাম উন্নয়ন কর্মসূচী একটি পরীক্ষামূলক ও গবেষণাধর্মী প্রকল্প যার শিকড় প্রোথিত রয়েছে ষাটের দশকে সৃষ্ট দ্বি-স্তর সমবায়ের গোড়াতে। এ কর্মসূচী স্থানীয়ভাবে প্রাপ্ত সম্পদের সদ্ব্যবহার এবং গ্রামের সকল জনগোষ্ঠীকে উন্নয়ন প্রক্রিয়ায় সম্পৃক্ত করে উন্নয়ন প্রচেষ্টা চালানোর পথিকৃৎ। এ ক্ষেত্রে থানা পর্যায়ের বিভিন্ন জাতিগঠনমূলক বিভাগের সাপোর্ট-সার্ভিসকে সহায়ক শক্তি হিসেবে বিবেচনা করা হয়েছে।

পল্লী উন্নয়ন একাডেমী (আরডিএ), বগুড়া কর্তৃক গবেষণাধর্মী সার্বিক গ্রাম উন্নয়ন প্রকল্পটি রাজশাহী ও খুলনা বিভাগের শেরপুর (বগুড়া), সাদুল্যাপুর (গাইবান্ধা), মিরপুর (কুষ্টিয়া) ও ঝিনাইদহ সদর (ঝিনাইদহ) থানাসমূহের ৩৯টি গ্রামে ১৯৯২ সাল হতে বাস্তবায়িত হচ্ছে। সার্বিক গ্রাম উন্নয়ন কর্মসূচীর মূল লক্ষ্য হ'ল গ্রামের সকল জনগোষ্ঠীকে একটি সমবায় সংগঠনের আওতায় এনে ধনী-দরিদ্র, নারী-পুরুষ, যুবক-যুবতী নির্বিশেষে সকল পেশা ও শ্রেণীর বিশেষ করে ক্ষুদ্র কৃষক, ভূমিহীন ও দুঃস্থ পরিবারসমূহের আর্থ-সামাজিক তথা সামগ্রিক উন্নয়নের সোপান তৈরী করা। তাছাড়া এ প্রকল্পের অপর অন্যতম লক্ষ্য হ'ল সমগ্র দেশে প্রয়োগযোগ্য একটি 'সার্বিক গ্রাম উন্নয়ন মডেল' উদ্ভাবন করা। এ কথা মনে রেখে সিভিডিপি নিম্নোক্ত কৌশল বা নীতিমালার উপর ভিত্তি করে পরিচালিত হচ্ছে ঃ

১) গ্রাম ভিত্তিক একক সমবায় সংগঠন সৃষ্টি করা;
২) গ্রামের সকল পেশা ও শ্রেণী নির্বিশেষে সমগ্র জনগোষ্ঠীকে একই সংগঠনের আওতায় আনা;
৩) নিয়মিত প্রশিক্ষণ প্রদানের মাধ্যমে সদস্যদের জ্ঞান ও দক্ষতা বৃদ্ধি করা;
৪) স্থানীয় সম্পদ চিহ্নিত করে তার পরিকল্পিত ব্যবহার নিশ্চিত করা;

৫) স্থানীয় সম্পদের সাথে থানা পর্যায়ের সরকারী সেবা-সহায়তার সমন্বয় ঘটিয়ে সর্বোচ্চ উপকার লাভ করার উদ্দেশ্যে প্রাতিষ্ঠানিক যোগাযোগ স্থাপন করা; এবং

৬) সদস্যদের সংগৃহীত পুঁজির সাথে প্রকল্প ঋণের সমাবেশ ঘটিয়ে প্রশিক্ষণলব্ধ জ্ঞান ও দক্ষতা কাজে লাগিয়ে সদস্যদের কর্মসংস্থান সৃষ্টি এবং আয়বৃদ্ধি তথা সামগ্রিক উন্নয়ন সাধন করা ।

প্রায় পাঁচ বৎসর যাবৎ প্রকল্পটি বাস্তবায়নাধীন রয়েছে । সিভিডিপি'র মত বহুমাত্রিক কর্মকান্ড-সমৃদ্ধ প্রকল্পের ক্ষেত্রে এ সময়কাল খুব বেশী বলে মনে হয় না । এ স্বল্প সময়ে প্রকল্পটির বিভিন্ন দিকের উপর অনুসন্ধানমূলক দৃষ্টি রাখা হয়েছে । বর্তমান নিবন্ধে প্রকল্পের প্রাতিষ্ঠানিক দিক বিশেষ করে (১) গ্রাম ভিত্তিক একক সমবায় সংগঠন সৃষ্টি; (২) সকল পেশা ও শ্রেণীর জনগোষ্ঠীকে সংগঠনভূক্তকরণ; এবং (৩) থানা পর্যায়ের সরকারী সংস্থাসমূহের সাথে গ্রাম সমিতির প্রাতিষ্ঠানিক সম্পর্ক স্থাপন বিষয়ে পর্যালোচনা করা হয়েছে । তাছাড়া কর্মসংস্থান ও আয়বৃদ্ধি ব্যাপারে সমিতিগুলোর ভূমিকা খতিয়ে দেখারও প্রয়াস রয়েছে । এ থেকে প্রকল্পের মধ্যবর্তী পর্যায়ের ফলাফল সম্পর্কে সম্যক ধারনা পাওয়া যাবে ।

একক সমবায় সংগঠন সৃষ্টি

এক গ্রাম এক সমিতি÷নীতিতে সার্বিক গ্রাম উন্নয়ন কর্মসূচীটি বাস্তবায়িত হচ্ছে । সমবায় আন্দোলনকে উৎসাহিত করার লক্ষ্যে গঠিত "ম্যাকলাগান কমিটি" (১৯১৪-১৫) প্রায় একই ধরনের একটি সুপারিশ রেখেছিল ঃ "As a good general rule there should be one society to one village and one village to one society" (হোসেন ও রহমান '৯৪) । পূর্বাভাসটি যে খুবই যথার্থ ছিল তা আজকে প্রমাণিত হয়েছে । প্রকৃতপক্ষে ষাটের কিম্বা সত্তরের দশকের মধ্যভাগ পর্যন্ত এ নীতির পুরোপুরি বাস্তবায়ন দেখা যায় নি । দ্বি-স্তর সমবায়ের গোড়াতে কিন্তু এরূপ একটি সংগঠনের মাধ্যমে গ্রামের সামগ্রিক উন্নয়নের কথা বলা হয়েছিল । দেশের অর্থনীতি কৃষি নির্ভর হওয়ায় এবং তখন কুমিল্লা এলাকা কৃষিতে পশ্চাদপদতার কারনে উন্নয়ন পরিকল্পনায় কৃষির স্থান ছিল সর্বাগ্রে । কৃষিকে ভিত্তি করে শুরু হল 'টার্গেট গ্রুপ' পদ্ধতিতে দ্বি-স্তর সমবায়ের যাত্রা । দ্বি-স্তর সমবায় দর্শন বাস্তবায়ন করতে গিয়ে প্রথমে কৃষক সমবায় সমিতি (কে এস এস) ও পরে মহিলা সমবায় সমিতি (এম এস এস) সৃষ্টি করা হয় । উপরন্তু সমবায় অধিদপ্তরের বিভিন্ন পেশা ভিত্তিক সমবায় সমিতি তো ছিলই । তদুপরি দেখা গেল, সমাজের এক বিরাট অংশ এসব সংগঠনের বাইরে থেকে গেছে । সংগঠন বহির্ভূত এ জনগোষ্ঠীকে সংগঠনভুক্ত করার লক্ষ্যে গঠন করা হ'ল বিত্তহীন (পুরুষ-মহিলা) সমবায় সমিতি (বিএসএস/এমবিএসএস) । এসব উদ্যোগ ছিল পর্যায়ক্রমিক ও নিরবিচ্ছিন্ন । ফলে কালক্রমে সমিতিভুক্ত জনগোষ্ঠীর তুলনায় সংগঠনের আধিক্য বৃদ্ধি পেতে লাগলো । গ্রামকে বহু দলে বিভক্ত করা হ'ল । এতে দেখানোর চেষ্টা করা হল, কে ভূমির মালিক আর কে ভূমিহীন । ফলে সমন্বিত ও সুষম উন্নয়ন প্রয়াস ব্যহত হ'তে লাগলো । এ পরিস্থিতিতে

গ্রামকে ঐক্যবদ্ধ করে একই সূত্রে গাঁথার মানসে সার্বিক গ্রাম উন্নয়ন ধারণার অবতারণা করা হয় । এটিও কিন্তু বার্ড-এর নিরন্তর গবেষণার ফল । বিশেষ করে ১৯৭৫-৮৫ সময়কালে একাডেমীর নিজস্ব উদ্যোগে ষাটের দশকে গঠিত কৃষি ও অকৃষি সমবায় সমিতিগুলোকে কেন্দ্র করে এ কর্মসূচী চালানো হয় (তোফায়েল '৯৩) । এ সমিতিগুলোর কর্মপরিসর ঠিক রেখে কৃষি আধুনিকায়ন, গবাদি পশু ও হাঁস-মুরগী পালন, মাছ চাষ, স্বাস্থ্য, পুষ্টি ও পরিবার পরিকল্পনা, শিক্ষা, কুটির শিল্প, মহিলা ও শিশু উন্নয়ন, সাংস্কৃতিক ও ধর্মীয় অনুষ্ঠানাদি, সমাজ কল্যাণ প্রভৃতি ক্ষেত্রে উন্নয়ন প্রয়াস নেয়া হয় । নিয়মিত প্রশিক্ষণ প্রদান ও পুঁজি গঠনকে সর্বাধিক গুরুত্ব দেয়া হয় । থানা ও ইউনিয়ন পর্যায়ের বিভিন্ন সংস্থার সাপোর্ট-সার্ভিসকে কাজে লাগানোর প্রয়াস অব্যাহত থাকে । পরবর্তীতে এটি সরকারের পাঁচশালা পরিকল্পনার অন্তর্ভূক্ত হয় । এতকিছু আয়োজনের প্রধান লক্ষ্য হচ্ছে গ্রামকে বহুধা বিভক্তির স্থলে সামাজিক, সাংস্কৃতিক, ঐতিহাসিক ও ঐতিহ্যবাহী ধারা বজায় রেখে একক সংগঠনের উপর দাঁড় করানো । অর্থাৎ 'গ্রামে একটি একক উন্নয়ন সংস্থা সৃষ্টি করা' (তোফায়েল '৯৩) । কুমিল্লা অভিজ্ঞতার আলোকে বার্ডের বিভিন্ন গবেষণা প্রতিবেদনে এ ব্যাপারে আশাবাদ ব্যক্ত করা হয় । কিন্তু দেশের অন্যান্য জায়গায় এর প্রতিক্রিয়া বা প্রভাব কী হতে পারে তা খতিয়ে দেখার প্রয়োজন অনুভূত হয় ।

১৯৯১-৯২ সালে সার্বিক গ্রাম উন্নয়ন কর্মসূচীর প্রায়োগিক সম্ভাবনা পরীক্ষা-নিরীক্ষা তথা মডেল উদ্ভাবনের জন্য আরডিএ-কে সম্পৃক্ত করা হয় । কথা ছিল সমবায় সমিতিমুক্ত গ্রাম প্রকল্পভূক্ত করা হবে । সত্যি বলতে যাত্রালগ্নে সংগঠনমুক্ত গ্রাম প্রায় ছিল না । কোন না কোন বেসরকারী সংগঠন সেখানে কর্মরত ছিলই । তবে সমবায় সংগঠনমুক্ত গ্রাম শেষ পর্যন্ত প্রকল্পের অন্তর্ভূক্ত করা সম্ভব হয় । এখানে লক্ষ্যণীয় যে, বর্তমানে সিভিডিপিভূক্ত গ্রামসমূহে পূর্বাপেক্ষা এনজিও সম্পৃক্তি বৃদ্ধি পেয়েছে । কচুয়াদহ সমবায় সমিতি ছাড়া প্রতিটি গ্রামে কমপক্ষে একটি এবং সর্বোচ্চ ছয়টি বেসরকারী সংস্থা কাজ করে যাচ্ছে । গ্রামীণ ব্যাংক, ব্রাক, টিএমএসএস, কেয়ার, মৈত্রীসহ ২৭টি এনজিও এসব গ্রামে কাজ করছে । এর জন্য অবশ্য সরকারের অবাধ এনজিও প্রবেশাধিকার নীতিমালা এবং তাদের সহজলভ্য ঋণ প্রদান কার্যক্রমকে দায়ী করা যায় । বস্তুতঃ সিভিডিপির 'এক গ্রাম এক সংগঠন' ধারণাকে সুদৃঢ় প্রাতিষ্ঠানিক রূপ দিতে এনজিও কার্যক্রম নেতিবাচক প্রভাব ফেলেছে । এখানে উল্লেখ্য যে, সিভিডিপি এমন এক সময় মাঠে গেছে যখন গ্রামে গ্রামে বিভিন্ন এনজিও পুর্ণোদ্যোমে তাদের কর্মকান্ড পরিচালনা করছে । কিন্তু কুমিল্লা এলাকায় এরূপ ঘটেনি । অর্থাৎ সেখানে সমবায় সংস্কৃতি বহু পূর্বে গড়ে উঠেছে । ফলে এনজিওগুলো অধিকাংশ ক্ষেত্রে কুমিল্লা এলাকায় প্রভাব ফেলতে সক্ষম হয়নি । দেখা যাচ্ছে যে, ইতোমধ্যে এ ধরনের একক সমবায় সংগঠন সুদৃঢ় প্রাতিষ্ঠানিক ভিত্তি লাভ করেছে । যেমন দিদার, জয়পুর (দঃ), চাংগিনী, বামইল ইত্যাদি । এসবের পিছনে

কেটিসিসিএ লিঃ এর পৃষ্ঠপোষক ভূমিকাকে খাটো করে দেখা যায় না । পক্ষান্তরে আরডিএ গবেষণা এলাকায় প্রাথমিক পর্যায়ে জড়তা থাকলেও খয়েরপুর,চৌদুয়ার, কচুয়াদহ, ফকিরাবাদ (মিরপুর), কাঞ্চনপুর, গোয়ালপাড়া (ঝিনাইদহ) খোর্দরুহিয়া, জয়েনপুর (সাদুল্যাপুর), সীমাবাড়ী, খানপুর , ঘোগা (শেরপুর) প্রভৃতি সমবায় সমিতি ইতোমধ্যে শক্তিশালী ভিত্তি ভূমি পেয়েছে ।

গ্রাম ভিত্তিক একক সংগঠন সৃষ্টি এ কর্মসূচীর প্রথম ও প্রধান লক্ষ্য (তোফায়েল '৯৩) । সত্তর দশকের মধ্যভাগে বার্ড এ উদ্দেশ্যে গবেষণা কাজ চালাতে শুরু করে । এর অব্যবহিত পরেই সরকারের পল্লী উন্নয়ন নীতিমালায় এ ধারার বিপরীতমূখী পরিবর্তন আসে । সমবায়ের মাধ্যমে গ্রামোন্নয়নের ভাবনাকে যথাযথ গুরুত্ব না দিয়ে বিচ্ছিন্ন কিছু কর্মকান্ড গ্রহণ করা হয় । একদিকে যেমন গ্রাম সরকার গঠন, খাল খনন, গুচ্ছ গ্রাম ইত্যাকার কার্যক্রম সরকারী তরফ থেকে গৃহীত হয়েছে, অন্যদিকে তেমনি এনজিও কর্মসূচীকে অবাধে বিস্তার লাভের সুযোগ করে দেয়া হয়েছে । ফলে গ্রামে গ্রামে অসংখ্য সংগঠন গড়ে উঠেছে । তারা বিভিন্নমুখী কর্মসূচী গ্রহণ করেছে । এ সমস্ত কর্মকান্ড ও সেবা-সহায়তা সহজেই সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে সম্প্রসারিত করা সম্ভবপর ছিল । গ্রামোন্নয়নে যেখানে সার্বিক সমবায় সমিতিকে মূখ্য ভূমিকায় থাকার কথা সেখানে তাকে এনজিও সৃষ্ট সংগঠনের সাথে (বিশেষ করে ঋণের ক্ষেত্রে) প্রতিযোগিতা করে টিকে থাকতে হচ্ছে । এতদসত্ত্বেও এ কথা দৃঢ়তার সাথে বলা যায় যে, প্রকল্পভুক্ত গ্রামসমূহে অধিকাংশ ক্ষেত্রে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিগুলো অপরাপর যে কোন সংগঠনের তুলনায় অধিকতর ক্রিয়াশীল । আরডিএ পরিচালিত খয়েরপুর, কাঞ্চনপুর, সীমাবাড়ী ও জয়েনপুর প্রভৃতি সমিতির দৃপ্ত পদচারণা এর প্রমাণ বহন করছে । ব্যাপক গণ সম্পৃক্তি এর প্রধান কারণ হতে পারে ।

গ্রামের আয়তন এবং জনসংখ্যার আকার গ্রামভিত্তিক একক সংগঠন সৃষ্টিতে প্রভাব ফেলেছে বলে মনে হয়েছে । যেমন- বেশ কিছু গ্রাম ৪/৫টি পাড়া নিয়ে গঠিত । ফলে সাংগঠনিক "Cohesiveness' এর অভাব পরিলক্ষিত হয়েছে । অপেক্ষাকৃত ছোট গ্রামে এর বিপরীত অবস্থা বিরাজমান । অর্থাৎ ছোট গ্রামসমূহে যত সহজে সমগ্র গ্রামকে একক সংগঠনের আওতায় আনা সম্ভব হয়েছে বিভিন্ন পাড়ায় বিভক্ত বড় বড় গ্রামে তা সম্ভব হয়নি । প্রায় একই সমস্যা দেখা যায় অধিক জন অধ্যুষিত গ্রামে । দু'একটি ছাড়া সমিতিভুক্ত অধিকাংশ গ্রামে ১৫০ থেকে ৫০০ পরিবার রয়েছে । এদের একটিমাত্র সংগঠনের আওতায় আনা সম্ভব হলেও ব্যবস্থাপনা ও নিবিড় তদারকী সম্ভব নাও হতে পারে । পরিবার যেহেতু এ কর্মসূচীর মূল উন্নয়ন একক, তাই একটি সংগঠনের আওতায় পরিবার সংখ্যা কত হবে তার সর্বোচ্চ সংখ্যা নির্ধারিত থাকা প্রয়োজন । তাই সুষ্ঠু ব্যবস্থাপনা ও নিবিড় তদারকীর সুবিধার্থে ১০০ পরিবারের জন্য একটি গ্রাম

সংগঠন হওয়া সম্ভবতঃ অধিক সুবিধাজনক (তোফায়েল ও অন্যান্য '৯৩) । একই বিষয়ে গত ডিসেম্বর ১৯৯৩ মাসে ঢাকাস্থ পল্লী উন্নয়ন ও সমবায় বিভাগে অনুষ্ঠিত সিভিডিপি'র কেন্দ্রীয় সমন্বয় কমিটির তৃতীয় সভায় বিষয়টি নিয়ে পর্যালোচনা করা হয় । উক্ত সভায় পরামর্শ দেয়া হয় যে, "কুমিল্লা এলাকায় গ্রামের আয়তন, পরিবার ও সদস্য সংখ্যাজনিত সমস্যা দেখা দেয়ায় আয়তন ও পরিবার সংখ্যার দিক থেকে বৃহত্তর গ্রামগুলোকে পাড়াভিত্তিক সংগঠনে বিভক্ত করা হয়েছে এবং ঐসব গ্রামগুলোর সংগঠনের মধ্যে পরিবার সংখ্যা ১০০ থেকে ১৫০ এর কাছাকাছি রাখার বিষয়টি বিবেচনা করার জন্য মাঠ পর্যায় থেকে সুপারিশ করা হয় । এভাবে কুমিল্লার কিছু গ্রামে সংগঠন করা হয়েছে । ভবিষ্যত সংগঠন করার সময় বিষয়টি বিবেচনায় রাখতে হবে " । প্রকৃত অর্থে এতেও গ্রামের সংগঠন সংখ্যা বৃদ্ধির সম্ভাবনা থেকে যায় । পরবর্তীতে প্রকল্পটি পাইলট স্কীম হিসাবে চালু করা হলে বিষয়টি আন্তরিকতার সাথে মনে রাখা দরকার । অভিজ্ঞতায় দেখা যায় যে, এদেশে গবেষণাধীন কোন প্রকল্প পরীক্ষামূলক স্তর উত্তীর্ণ হলেও বাস্তবায়ন পর্যায়ে তা প্রত্যাশিত ফল আনতে সক্ষম হয় নি । দ্বি-স্তর সমবায়ের কথাই এখানে উল্লেখ করা যায় । তাই সিভিডিপি'র ক্ষেত্রেও এর পুনরাবৃত্তি রোধ করার ভাবনা এখন থেকেই ভাবতে হবে ।

গ্রামভিত্তিক একক সমবায় সংগঠন যা আক্ষরিক অর্থেই গ্রামোন্নয়নের নিয়ন্ত্রক শক্তি হিসাবে কাজ করবে তা অধিকাংশ ক্ষেত্রে প্রাতিষ্ঠানিক রূপ পায়নি । তবে দীর্ঘ অনুশীলন ও পরিচর্যা এবং ব্যাপক সাপোর্ট-সার্ভিস প্রদানের মাধ্যমে তা সম্ভব হতে পারে । এ ক্ষেত্রে অন্ততঃ পরীক্ষা-নিরীক্ষাকালে প্রকল্পভুক্ত গ্রামসমূহে এনজিও কার্যক্রম স্থগিত রাখা অথবা এখন হতে তাদের সকল কর্মকান্ড সিভিডিপি সমবায় সমিতির মাধ্যমে পরিচালনা করা ছাড়া বিকল্প পথ খোলা নেই । এক্ষেত্রে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির সাথে সরকারের সদ্য ঘোষিত 'গ্রাম পরিষদ' এর সমন্বয় কী ভাবে করা হবে তাও পরিস্কার হওয়া দরকার ।

সকল জনগোষ্ঠীকে সংগঠনভুক্তকরণ

সার্বিক গ্রাম উন্নয়ন কর্মসূচী একটি পরীক্ষামূলক প্রকল্প । এর অন্যতম একটি উদ্দেশ্য হলো গ্রামভিত্তিক একক সমবায় কাঠামো গড়ে তোলা এবং এতে সকলের অংশগ্রহণ নিশ্চিত করা । অর্থাৎ সমিতিভূক্ত এলাকা তথা গ্রামের নারী-পুরুষ, ধনী-দরিদ্র, কামার-কুমার, যুবক-যুবতী নির্বিশেষে সকল পেশা ও শ্রেণীর লোক সমবায় সমিতির উপ-বিধির শর্ত পূরণ সাপেক্ষে সংগঠনভুক্ত হতে পারবেন । সমাজের ভারসাম্যপূর্ণ উন্নয়ন ঘটাতে হলে ভূমির মালিক ও ভূমিহীন, বিত্তহীন বা বিত্তবান, দরিদ্র পুরুষ কিম্বা মহিলা কাউকেই পরস্পর থেকে আলাদা করার অবকাশ নেই । গ্রামের জনসাধারনকে বহু দল ও উপ-দলে বিভক্ত না করে তাদের সকলকে একটি মাত্র 'সমবায় ছাতার' নীচে সংগঠিত করার প্রয়াস এ কর্মসূচীতে রয়েছে । ফলে

সমাজের বিভিন্ন স্তরের মানুষের মাঝে সৌহার্দ্য, সামাজিক সম্প্রতি ও সংহতি স্থাপিত হয়েছে । সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির শ্রেষ্ঠত্ব এখানেই । টার্গেট গ্রুপ পদ্ধতিতে কাজ করতে গিয়ে প্রচলিত সমবায় এবং এনজিওসমূহ গ্রামবাসীদের বহু দলে ও মতে বিভক্ত করে ফেলেছে । কিন্তু সার্বিক গ্রাম উন্নয়ন সমবায় সমিতি কারো মাঝে কখনো রেখা (Demarcation) টানেনি । তাই গ্রামে গ্রামে দেখা যাচ্ছে ধর্ম, বর্ণ নির্বিশেষে সকল পেশা ও শ্রেনীর জনগোষ্ঠী সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির সদস্যভুক্ত হয়েছে ।

প্রকল্পভুক্ত গ্রামের জনগোষ্ঠীকে যদি ভূমিহীন ও ভূমি মালিক -- এ দু'শ্রেণীতে ভাগ করা হয় তাহলে দেখা যাবে যে, উভয় শ্রেণী হতে সমবায় সমিতির কর্মকান্ডে তাদের সম্পৃক্তি ঘটেছে (সারণী - ১) । দেখা গেছে যে,

সারণী - ১ ঃ ভূমি মালিকানা অনুসারে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিতে সদস্য ভর্তি.

ভূমি মালিকানার স্তর∞	গ্রামের মোট পরিবার		সংগঠনভুক্ত পরিবার		সমিতিভুক্ত মোট পরিবারের শতকরা হার
	সংখ্যা	%	সংখ্যা	%	
ভূমিহীন	৩,৪৭৪	৫৫.৭৬	১,৪৫২	৪৫.৬২	৪১.৮০
ক্ষুদ্র কৃষক	১,৮৬৬	২৯.৯৫	১,২১৭	৩৮.২৩	৬৫.২২
মধ্যম কৃষক	৭২৪	১১.৬২	৪৪৭	১৪.০৫	৬১.৭৪
বড় কৃষক	২৩৫	৩.৭৭	৬৭	২.১০	২৮.৫১
মোট	৬,২৯৯	১০০.০০	৩,১৮৩	১০০.০০	৫০.৫৩

∞ভূমিহীন ঃ ০.৫০ একর ক্ষুদ্র কৃষকঃ ০.৫১-২.৫০ একর মধ্যম কৃষকঃ ২.৫১-৭.৫০ একর বড় কৃষকঃ ৭.৫০ একরের উর্দ্ধে

প্রকল্পভুক্ত গ্রামসমূহে মোট ৬,২৯৯টি পরিবার আছে । তন্মধ্যে ৩,১৮৩ টি (৫০.৫%) পরিবার ইতোমধ্যেই সমবায় সমিতিভুক্ত হয়েছে । বিশ্লেষণ করলে স্পষ্টভাবে দেখা যায় যে, ভূমিহীন থেকে ভূমি মালিক সকলেই এ সমিতির সদস্য হওয়ার সুযোগ লাভ করেছে । সমিতিতে ভূমিহীন ও ক্ষুদ্র কৃষকের প্রাধান্য চোখে পড়ার মত । যাদের কোন জমি নেই তাদের অংশগ্রহণ সংগতিপূর্ণ মনে হয়েছে । বৃহৎ কৃষকের সমাগম কম হলেও তাদের অংশগ্রহণ নিশ্চিত হয়েছে । আর এদের সমিতিভুক্ত হওয়া বা না হওয়া সমান কথা । কারণ তারা সর্বদাই শক্তিশালী ও সর্বক্ষেত্রে তাদের প্রবেশাধিকার অবাধ । সংগঠনভুক্ত না হয়েও তারা অধিকাংশ ক্ষেত্রে তাদের প্রয়োজনীয় চাহিদা মিটাতে সক্ষম । তবে সার্বিক দৃষ্টিকোণ থেকে তাদের অংশগ্রহণ অর্থবহ অবদান রেখেছে । এ প্রবণতা (Trend) থেকে বোধ হয় বলা যায় যে, গ্রামভিত্তিক একক সমবায় কাঠামোতে ধনী, দরিদ্র, ভূমিহীন ও ভূমি মালিক এবং নারী, পুরুষ, যুবক, যুবতী নির্বিশেষে সকল শ্রেণীর জনগোষ্ঠীকে সংগঠিত করা সম্ভব । এ পর্যন্ত অর্জিত অভিজ্ঞতা অন্ততঃ তাই বলে ।

অপরদিকে প্রকল্পভুক্ত সমিতিসমূহে মোট ৪,৯৫৭ জন সদস্য রয়েছে যা গ্রামের সদস্যযোগ্য মোট লোকসংখ্যার শতকরা ১৯.৩ ভাগ । তন্মধ্যে পুরুষ ২,৫৩০ (৫১.৪৫%), মহিলা ১,৬৩০ (৩২.৮৮%) ও

ক্ষুদে ৭৯৭ (১৬.০৮%) জন । প্রাপ্ত তথ্যে দেখা যায় যে, সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির সদস্যরা নানা পেশায় নিয়োজিত । উল্লেখযোগ্য হারে যে সকল পেশা থেকে লোকেরা সদস্যভুক্ত হয়েছে সেগুলো হল কৃষি, ব্যবসা, দিনমজুরী, চাকুরী, জেলে-তাঁতী ইত্যাদি (সারনী-২) । সদস্যদের একটি বিরাট অংশ সম্পৃক্ত রয়েছে সাংসারিক কর্মকান্ডে (Household chores) যা নিরংকুশভাবে মহিলাদের দখলে । এদেরই খানিকটা হাঁস-মুরগী পালন, সেলাই, কুটির শিল্প প্রভৃতিতে নিয়োজিত । ব্যবস্থাপনা কমিটির সদস্য পদ লাভের মাধ্যমে বর্তমানে সমিতির পরিকল্পনা প্রণয়ন ও সিদ্ধান্ত গ্রহণ প্রক্রিয়ায় তাদের সম্পৃক্ত করা সম্ভব হয়েছে ।

সারণী-২ঃ সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির সদস্যদের পেশাগত বিন্যাস

পেশার নাম	সদস্যযোগ্য লোকসংখ্যা	সদস্যভুক্তি	সদস্যভুক্তির শতকরা হার
কৃষি	৪,৩৭৫	১,৩৪৬	৩০.৮
ব্যবসা	১,৪৯৪	২৮৭	১৯.২
চাকুরী	৬১৯	১৫৯	২৫.৭
গৃহকর্ম	৬,২৩৪	৯১৭	৯.২
দিনমজুরী	২,৯২৮	১,০৬৩	৩৪.৩
ভ্যান/রিক্সা চালক	-	২০৩	-
কামার/কুমার	৩৯	৩	৭.৭
জেলে/তাঁতী	১৫০	২৭	১৮.০
দর্জি	-	৬৮	-
অন্যান্য	১০,০৩১	৮৮৪	৮.৮
মোট	২৫,৮৭০	৪,৯৫৭	১৯.৩

উপরের সারণী থেকে এটি পরিস্কার যে, সমাজের বিভিন্ন পেশার লোকের সমাগম ঘটেছে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিতে । সবচেয়ে বেশী সমাগম ঘটেছে কৃষি পেশার লোকজনের । তার পরেই রয়েছে ভূমিহীন । এ দলে প্রকৃতপক্ষে দিনমজুর, ভ্যান/রিক্সা চালক প্রভৃতি রয়েছে । অপর দিকে গৃহিনী পেশায় নিয়োজিত সকলেই মহিলা, তাদের সদস্যভুক্তি তাৎপর্যপূর্ণ । অর্থাৎ কৃষক, কৃষি শ্রমিক, ভ্যান চালক বা ব্যবসায়ীর মধ্যে এমন এক সংহতি ও সৌহার্দ্যবোধ সৃষ্টি হয়েছে যা তাদের একত্রিত হওয়ার ক্ষেত্রে নিয়ামক হিসাবে কাজ করেছে । এ অবস্থা প্রমাণ করে যে, গ্রাম ভিত্তিক একক সংগঠনে সকল পেশাজীবির সম্মিলন ঘটেছে । অর্থাৎ 'টার্গেট গ্রুপ' পদ্ধতির উপর 'কম্প্রিহেনসিভ' পদ্ধতির প্রাধান্য স্পষ্ট ।

এতদসত্বেও দেখা যাচ্ছে যে, প্রত্যাশিত হারে গ্রামবাসীরা সমিতির সদস্যভুক্ত হচ্ছে না এবং কোন কোন ক্ষেত্রে হতে পারছে না । বহুবিধ কারনে তা ঘটছে না । প্রথমতঃ এনজিওসমূহের ব্যাপক প্রসার । এক হিসাবে দেখা গেছে যে, এ পর্যন্ত প্রকল্পভুক্ত সমবায় সমিতিতে গ্রামের মোট পরিবারের ৫০.৫৩% সদস্য হয়েছে । অপর দিকে এনজিও এবং অন্যান্য সংগঠনভুক্ত হয়েছে ২৮.০০% যাদের সিভিডিপিভুক্ত হওয়ার সম্ভাবনা আপাততঃ নেই । বাকী ২১.৪৭% পরিবার রয়েছে সংগঠন বর্হিভূত এবং এদের অধিকাংশই বড় ও

মাঝারী কৃষক । কারণ এনজিওসমূহের অন্তর্ভুক্ত সকল পরিবার ভূমিহীন এবং যদি তা হয় তাহলে সমিতি এলাকায় মোট ভূমিহীনদের প্রায় ৭০.০০% (সিভিডিপির ৪১.৮% সহ) ইতোমধ্যে অর্ন্তভুক্তি পেয়েছে । অবশিষ্ট ৩০.০০% ভূমিহীন পরিবার ভবিষ্যতে সংগঠনভুক্ত হওয়ার কথা । এক্ষেত্রে এনজিওদের পাল্লা ভারী হওয়ার সম্ভাবনাই বেশী । দ্বিতীয়তঃ বাস্তবিক অর্থে সকলকে সংগঠনভুক্ত করার সম্ভাবনা খুবই ক্ষীণ । গ্রামে কিছু কিছু অসমবায়ী মনোভাবাপন্ন লোক রয়েছে । তাদের সদস্য করলে সমিতির ক্ষতির সম্ভাবনা একেবারে উড়িয়ে দেয়া যায় না । তাছাড়া ঋণ গ্রস্থ, কলহপ্রিয় ও অসৎ প্রকৃতির লোকদের কখনোই সমিতিতে নেয়া হয় না । এ সমস্ত দিক খেয়াল রেখে ব্যবস্থাপনা কমিটি সদস্যভর্তি করে থাকে । এসব বিবেচনায় আনলে বলা যায় যে, প্রকল্প এলাকায় শতকরা ৮০ ভাগের অধিক পরিবারকে সমিতিভুক্ত করা সম্ভব না ও হতে পারে । কুমিল্লা সমবায় সমিতিসমূহের অভিজ্ঞতাও তা বলে (তোফায়েল ও অন্যান্য '৯৩) । তৃতীয়তঃ সমবায় সমিতির নেতৃত্বের অনিরপেক্ষ স্বভাব, সামাজিক দ্বন্দ্ব ও অসদ্ভাব সম্পন্ন লোক সদস্যভুক্তি হওয়ায় কোন কোন ক্ষেত্রে নেতিবাচক প্রভাব ফেলেছে । সমবায় সমিতি যেহেতু গণতান্ত্রিক ব্যবস্থাপনায় পরিচালিত সেহেতু নির্বাচনের মাধ্যমে ব্যবস্থাপনা কমিটির ক্ষমতায়ন একটি স্বাভাবিক প্রক্রিয়া । অধিকাংশ সমিতিতে আলাপ-আলোচনার মাধ্যমে নতুন কমিটির ক্ষমতায়ন ঘটেছে । কিছু কিছু সমিতিতে শেষ পর্যন্ত নির্বাচন পর্যন্ত যেতে হয়েছে । দেখা গেছে যে, নির্বাচনে পরাজয়ের গ্লানিতে বিজিত দল পরবর্তীতে সমিতির কার্যক্রমে অংশগ্রহন থেকে বিরত থেকেছে । ফলে সদস্যভুক্তি যথেষ্ট বাহত হয়েছে । বলা চলে, এ ধারা কোনভাবেই জাতীয় রাজনৈতিক প্রেক্ষাপট থেকে বিচ্ছিন্ন নয় । চতুর্থতঃ কোন কোন সমিতি এলাকায় ঋণের বিপরীতে সুদের আদান-প্রদান, সামাজিক দ্বন্দ্ব, নেতৃত্বের কোন্দল ইত্যাদি কারণে কিছু পরিবারের লোক সদস্য হওয়া থেকে বিরত থেকেছে ।

সার্বিক গ্রাম উন্নয়ন কর্মসূচীর মাধ্যমে অন্ততঃ এটুকু প্রমাণিত হয়েছে যে, গ্রামভিত্তিক একক সমবায় সংগঠনের মাধ্যমে গ্রামের সকল শ্রেণী ও পেশার লোকদের সংগঠিত করা সম্ভব । এখানে প্রতীয়মান হয়নি যে, শুদ্রের পাশে ক্ষত্রিয় বসবে না কিম্বা গরীবের সাথে ধনী কাজ করবে না । কেউ বলে নি যে, মহিলা ও পুরুষ একসাথে কাজ করতে পারবে না । বরং অবস্থাদৃষ্টে মনে হয়েছে, যদি সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে বিভিন্ন এনজিওসমূহকে কর্মসূচী বাস্তবায়নে একটি নীতিমালার মধ্যে আনা যায় তাহলে নিশ্চিতভাবে গ্রামোন্নয়নে ব্যাপক সাড়া পড়বে ।

জাতিগঠনমূলক সংস্থাসমূহের সাথে যোগাযোগ স্থাপন

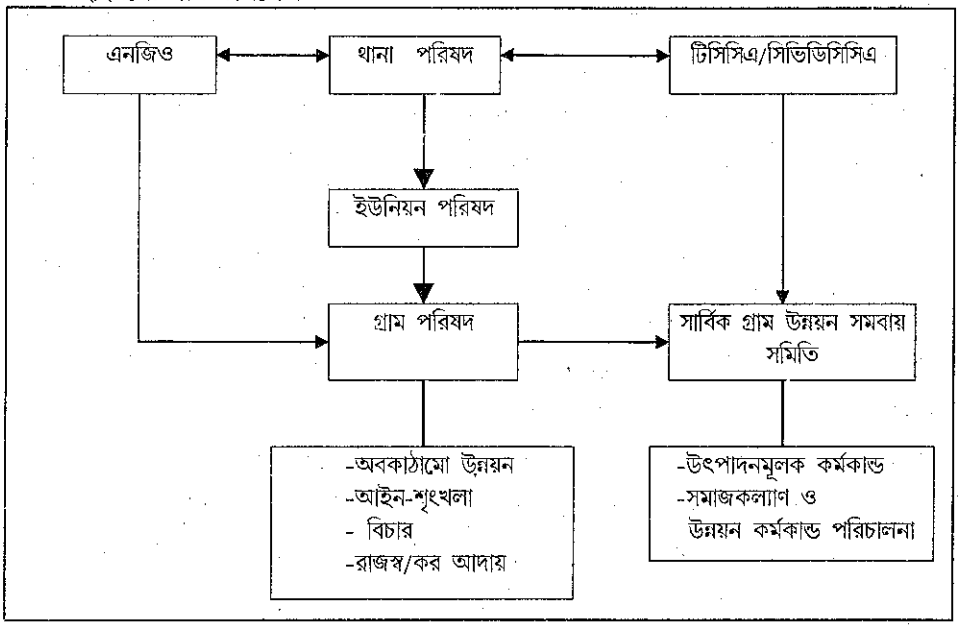
প্রকল্পের মূল কথা হল গ্রামের সামগ্রিক উন্নয়ন সাধন করা। এ লক্ষ্য অর্জনের জন্য সার্বিক গ্রাম উন্নয়ন সমবায় সমিতি সমূহের সাথে থানা পর্যায়ের বিভাগসমূহের কর্ম সম্পর্ক প্রতিষ্ঠাকে অন্যতম কৌশল হিসাবে বিবেচনা করা হয়েছে। অর্থাৎ এ প্রক্রিয়ায় সেবা গ্রহণকারীকে সেবা প্রদানকারীর সন্নিকটে নিয়ে আসার সর্বাত্মক প্রয়াস রয়েছে যাতে করে সদস্যরা চিন্তা, চেতনা ও কর্মে স্ব-নির্ভর হয়ে উঠতে পারে। এখানে সমন্বয়ের ব্যাপারটি গুরুত্ব পেয়েছে নিঃসন্দেহে। বর্তমানে সিভিডিপি সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিগুলোর যাবতীয় কাজের সমন্বয়, পরামর্শ ও প্রয়োজনীয় সার্ভিস গ্রামবাসীদের নিকট পৌছাতে মুখ্য ভূমিকা রেখেছে। পরবর্তীতে এ সার্ভিস কে দেবে। সরাসরি থানা কেন্দ্রীয় সমবায় সমিতি লিঃ (টিসিসিএ) না-কি সার্বিক গ্রাম উন্নয়ন কেন্দ্রীয় সমবায় সমিতি (সিভিডিসিসিএ) নামে আলাদা ফোরামের হাতে দেয়া হবে তা ভেবে দেখা দরকার। অভিজ্ঞতায় দেখা যায় যে, ধীরে ধীরে গ্রামগুলো সরকারের জাতিগঠনমূলক বিভাগসমূহের কাছাকাছি আসছে। সমবায়ীরা থানা পশু সম্পদ কর্মকর্তা, থানা স্বাস্থ্য ও পরিবার পরিকল্পনা কর্মকর্তা, থানা কৃষি কর্মকর্তা, থানা সমবায় কর্মকর্তা প্রমুখের সাথে তাদের সমস্যা নিয়ে আলোচনা করে সমাধান খুঁজে নিচ্ছে। এসব বিভাগের মাঠকর্মীগণও সমিতির বিভিন্ন কার্যক্রমে আগ্রহ দেখাচ্ছেন। তবে এর মাত্রাগত ভিন্নতা রয়েছে। নিখুঁতভাবে পর্যবেক্ষন করে দেখা গেছে যে, যেখানে থানা পর্যায়ের সাপোর্ট-সার্ভিস সহজে গ্রামবাসীরা পেয়েছে সেখানে সমিতির কার্যক্রম বেগবান হয়েছে। এ থেকে প্রমাণিত হয় যে, গ্রাম উন্নয়নে থানা পর্যায়ের সরকারী বিভাগসমূহের সার্ভিস অত্যাবশ্যক এবং তা অবশ্যই হতে হবে সমবায় সংগঠনের মাধ্যমে। এ প্রচেষ্টা আরও জোরদার করার লক্ষ্যে সরকারের তরফ থেকে একটি নির্দেশনা জারী খুবই দরকার।

দু'তরফের অর্থাৎ সমবায় সমিতি ও সরকারী বিভাগসমূহের মধ্যে যোগাযোগকে প্রাতিষ্ঠানিক রূপ দেয়ার ক্ষেত্রে কতিপয় সমস্যা বা বাধা উড়িয়ে দেয়া যায় না। কোন কোন ক্ষেত্রে এমন যে, 'গাড়ী পেলে গ্রামে যাবো'। সেবা করার মানসিকতা বা গরজ যথেষ্ট অনুভত হচ্ছে না। প্রসংগক্রমে উল্লেখ্য যে, দ্বি-স্তর সমবায়ের অকার্যকারিতা শুধু ঋণ আদান-প্রদানে অসফলতা নয় বরং থানা পর্যায়ের সেবা-সহায়তা সমবায় সংগঠনের (বিশেষতঃ কেএসএস) মাধ্যমে গ্রামে না পৌছা অপর অন্যতম কারণ। অর্থাৎ গ্রামের উন্নয়নে সমবায় সংগঠনকে ব্যবহার করার দৃঢ় অঙ্গিকার সম্বলিত সরকারী নীতিমালা অনুপস্থিত আজও। এতদসত্বেও প্রকল্পভুক্ত গ্রামবাসীরা তাদের সমস্যা নিয়ে কর্মকর্তাদের সাথে আলাপ করছে, সমাধান খুঁজে নিচ্ছে। সরকারী কর্মসূচী বাস্তবায়নে এ প্রকল্পের সমবায়ীরা অগ্রবর্তী ভূমিকা পালন করে থাকে। যেমন, জাতীয় টিকা দিবস, কৃষি মেলা ইত্যাদি ক্ষেত্রে সরকারী বিভাগসমূহ সমিতিগুলোকে ব্যবহার করছে। এটি

নিঃসন্দেহে একটি ইতিবাচক দিক । ফলে কর্মসম্পর্ক আরও নিবিড় হয়েছে । প্রকল্পের প্রশিক্ষণ কর্মসূচী, র‍্যালী, সম্মেলন প্রভৃতি এ ক্ষেত্রে নিয়ামক ভূমিকা পালন করছে । কোন কোন সমিতি ইতোমধ্যেই বিভিন্ন বেসরকারী সংস্থা যথা- ব্রাক, গ্রামীণ ব্যাংক, কফিলউদ্দিন ফাউন্ডেশন প্রভৃতির সাথে কর্মসম্পর্ক প্রতিষ্ঠা করতে সক্ষম হয়েছে । সর্বোপরি গ্রামবাসীদের এখন পূর্বাপেক্ষা যথেষ্ট আস্থাশীল মনে হয়েছে । আশা করা যায় যে, সরবরাহ ও গ্রহণ ব্যবস্থা (Delivery and Receiving Mechanism) মধ্যে কার্যকর যোগাযোগ স্থাপন করা সম্ভব । ইউনিয়ন পরিষদসমূহ এ ক্ষেত্রে কার্যকর ভূমিকা পালন করতে পারে । গ্রামের উন্নয়ন পরিকল্পনা ফলপ্রসু করার লক্ষ্যে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতি এবং ইউনিয়ন পরিষদকে অবশ্যই একটি সমন্বিত ও পারস্পরিক জবাবদিহিতার কাঠামোয় দাঁড় করানো সমীচীন । তবে 'এ রূপরেখার বাস্তবায়ন তখনই সম্ভব হবে যখন দেশের গ্রামগুলোকে একক উন্নয়ন সংগঠনের আওতায় সংগঠিত করার জাতীয় পর্যায়ের সিদ্ধান্তের আলোকে সরকারী/বেসরকারী সকল উন্নয়ন সংস্থার জন্যে সমন্বিত প্রচেষ্টার একটি কাঠামো বা রূপরেখা সৃষ্টি করা সম্ভব হবে' (তোফায়েল '৯৩) । এ ক্ষেত্রে সরকারের প্রস্তাবিত গ্রাম পরিষদ এর ভূমিকা সচেতনভাবে নির্ধারন করা দরকার । বলা বাহুল্য যে, সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির কর্মধারা গ্রাম পরিষদের অনুসরণীয় হতে পারে । অর্থাৎ সমাবায় সমিতিসমূহ সমগ্র উৎপাদন ব্যবস্থা পরিচালনা করবে আর গ্রাম পরিষদ বিভিন্ন প্রাতিষ্ঠানিক সাপোর্ট-সার্ভিস যেমন-অবকাঠামো সৃষ্টি, আইন-শৃংখলা রক্ষা, মেরামত ও সংস্কার প্রভৃতির ক্ষেত্রে পরিব্যাপ্ত থাকবে । এ ব্যাপারে ছক-১ স্পষ্ট দিক নির্দেশনা দিতে পারে ।

এখন পর্যন্ত সরকারী 'সম্পদ ভান্ডার' হিসেবে থানাকে চিহ্নিত করা হয় । এ সম্পদ যত কম সময়ে গ্রামে পৌঁছানো যায় ততই মঙ্গল । থানা ও গ্রামের মধ্যবর্তী পর্যায়ে অযথা স্তর (Tier) বাড়ানো সমীচীন হবে না । তাই থানা পরিষদ, ইউনিয়ন পরিষদ এবং প্রস্তাবিত গ্রাম পরিষদ স্থানীয় সরকার কাঠামোকে ঠিক রেখে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে সামগ্রিক কর্মকান্ড পরিচালনা করতে পারলে ইতিবাচক ফল পাওয়া সম্ভব । বেসরকারী উন্নয়ন সংস্থাকে সহযোগী হিসেবে থানা পরিষদে সমন্বয় করে সরাসরি গ্রাম পরিষদের সাথে সম্পৃক্ত করা হয়েছে । এতে আন্তঃ প্রাতিষ্ঠানিক ভিত্তি যেমন শক্তিশালী হবে তেমনি গ্রামোন্নয়ন প্রক্রিয়া ত্বরান্বিত হবে এবং একটি স্থায়ী রূপ পেতে পারে । তবে বিষয়টি আরো গবেষণা ও অনুসন্ধানের দাবী রাখে ।

ছক-১ঃ থানা পর্যায়ের বিভিন্ন সংস্থার সাথে গ্রাম সংগঠনের মধ্যে কর্ম সম্পর্ক প্রতিষ্ঠার একটি হাইপথেটিক্যাল কাঠামো ।



দ্রষ্টব্যঃ গ্রাম পরিষদের অনুপস্থিতিতে ইউনিয়ন পরিষদ তার কাজগুলো করবে । আর সে ক্ষেত্রে সার্বিক গ্রাম উন্নয়ন সমবায় সমিতি হবে গ্রামের একক সংগঠন ।

অর্থনৈতিক ও উৎপাদনমূলক কর্মকান্ড

সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিগুলো সদস্যদের আর্থিক, সামাজিক, সাংস্কৃতিক তথা সামগ্রিক উন্নয়ন নিশ্চিতকল্পে বাস্তবায়িত হচ্ছে । এ লক্ষ্যে পুঁজি গঠনের উপর অপরিসীম গুরুত্ব দেয়া হয়েছে যেন তাদের বাইরের কোন পুঁজি বা ঋণের অপেক্ষায় বসে থাকতে না হয় । সেজন্য এ প্রকল্পের একটি অন্যতম শ্লোগান হল ঋণ নয় প্রশিক্ষণ' । ধরে নেয়া হয়েছে যে, প্রশিক্ষণলব্ধ জ্ঞান ও দক্ষতার সদ্ব্যবহার করে ও নিজস্ব পুঁজি বিনিয়োগের মাধ্যমে সদস্যরা নিজেদের কর্মসংস্থান ও আয়বৃদ্ধিতে সক্রিয় ভূমিকা রাখতে পারবে । অর্থাৎ সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিকে উৎপাদনমূখী কর্মকান্ডের সহায়ক প্রতিষ্ঠান হিসাবে দাঁড় করানোর মাধ্যমে সমাজের বিভিন্ন স্তরের মানুষের মাঝে সৌহার্দ্য, সম্প্রীতি ও সংহতি স্থাপনসহ অর্থনৈতিক স্বাচ্ছন্দ্য দান করার একটি সচেতন প্রয়াস এ প্রকল্পে রয়েছে ।

বর্তমানে প্রকল্পভুক্ত সমবায় সমিতিতে মোট ৪,৯৫৭ জন সদস্য রয়েছে । তাদের সংগৃহীত পুঁজির মোট পরিমাণ ৩৮.৪৩ লক্ষ টাকা । তন্মধ্যে শেয়ার ১৩.৬১, সঞ্চয় ১৮.৫৬ ও অন্যান্য ৬.২৬ লক্ষ টাকা

(এপ্রিল৯৭) । এর সাথে আরও যোগ হয়েছে ১৫.০০ লক্ষ টাকা যা প্রকল্পের সীড ক্যাপিটাল হতে ব্যাংকের মাধ্যমে ঋণ হিসাবে সরবরাহ করা হয়েছে । এক হিসাবে দেখা গেছে যে, সমিতিগুলোর মোট কার্যকরী মূলধন দাঁড়িয়েছে ৫০.৮৭ লক্ষ টাকা যার পুরোটাই সমিতিগুলোর অর্থনৈতিক ও উৎপাদনমূলক কর্মকান্ডে বিনিয়োগ করা হয়েছে । এর সিংহভাগ অর্থাৎ ৪২.৫০ লক্ষ টাকা রয়েছে সমিতির সদস্য পর্যায়ে ঋণ হিসেবে এবং অবশিষ্ট ৮.৩৭ লক্ষ রয়েছে সমিতি পর্যায়ে গৃহীত প্রকল্পে । পুর্বোক্ত ৪২.৫০ লক্ষ টাকা মোট ২,৩৭৯ জন সদস্যের মধ্যে ঋণ হিসাবে বিতরণ করা হয়েছে যা ঋণ পাওয়ার যোগ্য সদস্যের শতকরা ৫৪.৪৫ ভাগ । মাথাপিছু ঋণের পরিমাণ ১,৮০৪/- টাকা যা আপাতঃ দৃষ্টিতে কম মনে হলেও গ্রামীণ প্রেক্ষাপটে (যেখানে সমাজের নিম্নস্তরে পুঁজি সরবরাহ সীমিত) তা যুক্তিযুক্ত । এ ঋণের পরিমাণ ৫০০/- টাকা থেকে সর্বোচ্চ ৩,০০০/- টাকা পর্যন্ত বিস্তৃত । ঋণ গ্রহীতাদের সাথে মত বিনিময়কালে অবশ্য মনে হয়েছে যে, লাভজনক বিনিয়োগের জন্য এ ঋণের পরিমাণ বাস্তবিকই স্বল্প । তাই সমবায় সমিতিগুলোর আর্থিক বুনিয়াদ শক্তিশালী এবং বর্ধিত ঋণ চাহিদা মিটানোর লক্ষ্যে পুঁজি গঠনের উপর সবিশেষ গুরুত্ব দেয়া হয়েছে । শুরুতে সদস্য পিছু ৩.০০ টাকা হারে সাপ্তাহিক সঞ্চয় দেয়া হতো; বর্তমানে ৫..০০ টাকা এবং কোন কোন সমিতি ১০.০০ টাকা হারে সঞ্চয় করছে । নিয়মিত লভ্যাংশ বিতরনের ফলে শেয়ার মূলধনও বৃদ্ধি করা সম্ভব হয়েছে । ফলে পুঁজি বৃদ্ধির সাথে সাথে ঋণ প্রবাহ বহুগুণ বৃদ্ধি পেয়েছে । সঙ্গতকারনে কতিপয় গ্রামে দু'একটি এনজিও তাদের ঋণ কার্যক্রম গুটিয়ে নিতে শুরু করেছে । সমবায়ীরা এটিকে ভালো সূচনা বলে মনে করছেন ।

সমিতিগুলো বিভিন্ন ধরনের আয়বৃদ্ধিমূলক প্রকল্প হাতে নিয়েছে । যেমন, হাঁস-মুরগী ও গরু-ছাগল পালন, মাছ চাষ, শাক-সব্জী ও ফলমূল উৎপাদন, নার্সারী স্থাপন, বৃক্ষরোপন, ভূট্টা চাষ, সূর্যমুখী চাষ, স্লাব ও রিং তৈরী, ভ্যান/রিক্সা ক্রয়, ক্ষুদ্র ব্যবসা, কুটির শিল্প স্থাপন প্রভৃতি উল্লেখযোগ্য । এসব কর্মকান্ড উত্তরোত্তর বৃদ্ধি পাচ্ছে । বিগত বৎসরসমূহের বিনিয়োগ সিডিউল থেকে দেখা যায় যে, সমবায় সমিতিগুলো পর্যায়ক্রমে বিনিয়োগ বাড়াতে সক্ষম হয়েছে । ফলে কর্মসংস্থান এবং নীট লাভও ক্রমবর্ধমান হারে বৃদ্ধি পেয়েছে (সারণী-৩) । আরো লক্ষ্য করা গেছে যে, সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিগুলোর মাধ্যমে সমিতিভূক্ত গ্রামে ও তৎসংলগ্ন এলাকায় প্রযুক্তির ব্যাপক হস্তান্তর (Technology transfer) ঘটেছে । উল্লেখযোগ্য ক্ষেত্রগুলো হলে কৃষি বিশেষতঃ ভূট্টা চাষ, কলা চাষ, সূর্যমুখী, কৃষিতে আধুনিক সরঞ্জাম (পাওয়ার টিলার, গম মাড়াই কল) ব্যবহার, উন্নত জাতের মুরগী পালন ইত্যাদি । এছাড়া উন্নত চুল্লী স্থাপন করে সমিতিগুলো গ্রামের পরিবেশ উন্নয়নে ইতিবাচক ভূমিকা রাখছে ।

সারণী-৩ ঃ সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিসমূহ কর্তৃক বছরওয়ারী বিনিয়োগ ও লাভ

বৎসর	মোট বিনিয়োগ (লক্ষ টাকায়)	নীট লাভ	কর্মসংস্থান (জন)
১৯৯২-৯৩	০.২৭	-	-
১৯৯৩-৯৪	৫.৩৭	০.২২	৩৯
১৯৯৪-৯৫	২৬.৬৮	২.৭২	৪০১
১৯৯৫-৯৬	৩৫.৯৮	৬.০৬	৭১২

বৃক্ষরোপনে ব্যাপক সাফল্য অর্জিত হয়েছে এ স্বল্প সময়ে । দুই লক্ষাধিক কাঠ, ফল ও অন্যান্য জাতীয় গাছ রোপন করা হয়েছে । ফলে পরিবেশ সংরক্ষনের পাশাপাশি প্রচুর আয় করা সম্ভব হয়েছে । যেমন- কচুয়াদহ (মিরপুর) ও পোড়াহাটি (ঝিনাইদহ) সমিতি দু'টি প্রায় ৫৬,০০০ বাবলা, শিশু, মেহগনি ও ইপিল ইপিল গাছ লাগিয়েছে । এ থেকে ৭/৮ বৎসর পর প্রায় ১২.০০ লক্ষ টাকা আয় আশা করা হয়েছে । তাছাড়া প্রকল্পভুক্ত সকল সমিতি সমাজ কল্যাণমূলক বিভিন্ন কর্মকান্ড পরিচালনা করে । যেমন- রাস্তাঘাট মেরামত, ধুমপান নিরোধ ও যৌতুক বিরোধী অভিযান, সামাজিক সালিশ নিষ্পত্তি, ধর্মীয় অনুষ্ঠান, ক্রীড়া ও বিনোদনমূলক অনুষ্ঠান, দরিদ্র পিতার কন্যা বিবাহে আর্থিক সহায়তা ইত্যাদি সেবাধর্মী কাজ সম্পাদন করে । ফলে এসব সমিতিতে গণ অংশগ্রহণ ব্যাপক ও বিস্তৃত যা সমিতির প্রতি সর্বস্তরের গ্রামবাসীদের আস্থার নামান্তর ।

লক্ষ্য করলে সহজেই বুঝা যায় যে, সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে গ্রামের সামগ্রিক তথা সুষম উন্নয়ন সংস্কৃতি ক্রমশঃ গড়ে উঠছে । তবে কোন কোন ক্ষেত্রে যেমন- গবাদি পশু পালন, পরিবাব পরিকল্পনা ইত্যাদি বিষয়ে থানা পর্যায়ের সহযোগিতা ও সহায়তা আরো অধিক হারে প্রয়োজন । তাছাড়া সমিতিগুলোতে অধিকহারে পুঁজির সমাবেশ ঘটানো দরকার । এক্ষেত্রে সমিতিগুলো কর্তৃক বর্ধিত হারে শেয়ার বিক্রয় করার বিষয়টি অগ্রাধিকার পাওয়া উচিৎ । এনজিওসমূহের কর্মকান্ড বিশেষ করে ঋণ কার্যক্রম সমবায় সমিতির মাধ্যমে পরিচালনা করলে এ সমস্যার স্থায়ী সমাধান আসতে পারে ।

উপসংহার

সার্বিক গ্রাম উন্নয়ন দর্শনে গ্রামভিত্তিক একক সমবায় সংগঠনের মাধ্যমে গ্রামের আপামর জনগোষ্ঠিকে সংগঠিত করে তাদের আর্থ-সামাজিক তথা সামগ্রিক উন্নয়নের পথ রচনা করার নিরন্তর সাধনার সাথে সাথে একটি মডেল উদ্ভাবনের পরীক্ষা-নিরীক্ষা চলছে । বলা চলে সমবায় সমিতিতে সকল পেশা ও স্তরের জনগোষ্ঠির সমাগম ঘটাতে এ দর্শন উত্তীর্ণ হয়েছে । অপর দিকে তাদের সকল দিক অর্থাৎ কৃষি, স্বাস্থ্য ও পরিবার পরিকল্পনা, শিক্ষা, কর্মসংস্থান, আয়বৃদ্ধি প্রভৃতি ক্ষেত্রে বহুমুখী কর্মকান্ড গ্রহনের মাধ্যমে ইতিবাচক ফল লাভ সম্ভব হয়েছে । এ ক্ষেত্রে থানা পর্যায়ের সেবা-সহায়তা আরো গতিশীল ও নিরবিচ্ছিন্নভাবে গ্রামে পৌঁছানো দরকার । প্রশিক্ষণপ্রাপ্ত কর্মীগণও অধিকাংশ ক্ষেত্রে এ ফলাফল অর্জনে প্রত্যাশিত ভূমিকা রাখছে । একথা সন্দেহাতিতভাবে বলা যায় যে, গ্রামভিত্তিক 'একক সমবায় সংগঠন' দাঁড় করাতে পারলে সেখানে অবশ্যই সকল পেশা ও শ্রেণীর সমগ্র জনগোষ্ঠিকে সংগঠিত করা যাবে । এতে গ্রামের সামগ্রিক ও সমন্বিত উন্নয়ন নিশ্চিত হবে । তবে গ্রামভিত্তিক একক সমবায় কাঠামো গড়ে তোলার বিষয়টি এখন পর্যন্ত অমীমাংসিত থেকে যাচ্ছে । কেননা গ্রামে গ্রামে লাগামহীনভাবে এনজিও সংগঠন গড়ে উঠেছে । এ সমস্ত বেসরকারী সংস্থাসমূহের ব্যাপক বিস্তৃতি নিয়ন্ত্রণ করে গ্রামভিত্তিক একক সমবায় কাঠামোর মাধ্যমে সামগ্রিক উন্নয়ন কর্মকান্ড পরিচালিত হলে প্রায়োগিক সম্ভাবনা সম্পর্কে মন্তব্য করা সহজতর হতো । তাই সাময়িকভাবে প্রকল্প এলাকায় এনজিও কার্যক্রম নিয়ন্ত্রিত হওয়াই যুক্তিযুক্ত । এ সময়কালে এনজিও সমূহ এবং জাতি গঠনমূলক সকল সংস্থা তাদের সকল সার্পোট-সার্ভিস সার্বিক গ্রাম উন্নয়ন সমবায় সমিতির মাধ্যমে উদ্দীষ্ট জনগোষ্ঠির নিকট পৌঁছাতে পারে । এতে ভালো ফল পাওয়ার সম্ভাবনাই বেশী । কারণ সার্বিক গ্রাম উন্নয়ন সমবায় সমিতিসমূহের অধিকাংশই এখন সাংগঠনিক ও প্রাতিষ্ঠানিকভাবে বেশ শক্তিশালী ও মজবুত ।

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