CHAPTER - X

FACTORS AFFECTING PERFORMANCE AND GROWTH

10.1 Factors Affecting Variations in Performance

- 10.1.1 The study identified factors which affected variations in performance of the associations. These were local leadership including support from NGOs, attitude of the Irrigation Department, status with regard to availability of adequate and timely supply of water, financial support provided by government or outside agencies, socio economic cohesiveness of members, the manner in which decisions were taken whether by consensus or by majority, machinery for resolution of conflicts among members, attitude of local officials of Irrigation Department, control over delivery of water to farmers and associated flexibility with respect to cropping pattern, water scheduling procedure, extent of equity in water distribution, freedom with regard to collection of water charges and ability to generate a surplus, etc. condition of the irrigation infrastructure at the time of transfer quality of maintenance. Most of these factors have been discussed earlier in detail. A few of them, however, need to be highlighted again.
- 10.1.2 The formation as well as contiuned survival of VASFA in Bihar for nearly three decades was mainly due to dedicated service rendered by Shri K.D. Dewan, a noted social worker. Support provided by the concerned government department was another important factor behind its remarkable success. Both these factors were also responsible for the success of the Palkhed WUA in Maharashtra where Samaj Parivartan Kendra under the leadership of Shri Bhau Saheb Upadhya played an important role. The role played by Aga Khan Rural Support Project in the formation and functioning of Baldeva and Lakhigam associations in Gujarat was quite significant.
- 10.1.3 How the availability or scarcity of water can make or mar the functioning of a WUA was illustrated by Loni association in Maharashtra and Karjon in Gujarat both of which were examples of unsucessful associations. In Loni, inadequacy of water resulted in disinterestedness among farmers since they perceived little benefits from the association. In Karjon, adequacy of water availability even without the association reduced the need for the association;as a result hardly 20 percent of the farmers could be persuaded to become members of the association. Adequate and timely availability of water was indeed the most important factor affecting performance of WUAs. The very purpose of forming a WUA was to obtain water for the crops. The factors which influence availability of water would be mentioned later on.
- 10.1.4 Examples of Paliganj in Bihar and Palkhed in Maharashtra show how the status of irrigation

infrastructure had a bearing on functioning of WUAs.Irrigation structures received by Paliganj farmers were in a dilapidated condition. This proved to be a liability for the association which had grossly inadequate funds for their restoration and renovation. As a result, much of water was lost. In the case of Maharashtra,however the walk through joint survey by I.D and farmers and subsequent rectification work done by I.D. before transfer made it convenient for WUAs to maintain the structures in good conditions. Similarly WUAs having good maintenance would be better off as compared to those having poor maintenance. In other words, physical condition of the water conveyance system played an important part in affecting the performance of WUAs.

- 10.1.5 An important reason for success of experiments in both Maharashtra as well as Gujarat lay in farmers control over delivery of water and freedom of crops to be grown. Farmers in Palkhed and Parunde saved water in the rabi and utilised it in raising high valued crops in the summer. Farmers in such projects were given complete freedom to grow crops of their choice and thereby raise their gross income from farming. The restrictions on cropping pattern were waived by officials of the Irrigation Department.
- 10.1.6 Much also depended on the freedom given to WUAs in fixing water rates from water users. In Palkhed and Parunde, WUAs had complete freedom in this respect. They paid water rates to the government on volumetric basis but charged higher rates from farmers on crop/ area basis. In this process they ensured the financial viability of their associations. This enabled them to spend more on maintenance than that was made availabe to them from the government. In contrast, in Paliganj, the WUA charged the rates prescribed by and to be paid to the government. Consequently, the Paliganj WUA had no surplus of its own. Maintenance of the field channals suffered.
- 10.1.7 Scheduling of water was another impotarnt factor influencing performance. The Maharashtra system of delivery of water first from the tail end helped to ensure equity and thereby to raise the confidence of farmers in WUA. The manner in which decisions were taken namely through consensus and disputes settled amicably through persuasion and discussion helped in smooth functioning of WUAs as organisational entities.

10.2 Conditions for Success of WUA

- 10.2.1 The analysis made in the preceding pages enables us to indicate the conditions nesessary for sucess or otherwise of water users associations. These are listed below.
 - (i) A suitable legal framework recognising water users rights for allocation of agreed quantum

of water and for the freedom to run the association as per their judgement so as to safeguard their interests.

(ii) Adequate and timely availability of water which in turn is a function of (1) adequate availability of water in the canal system, (2) ability of WUA to negotiate required releases from the I.D authorities, (3) avoidance of water loss through seepage and wastage, (4) distribution of water to farmers as per their requirement and consistent with approved norms and rules.

(iii) Satisfactory condition of the physical infrastructure at the time of the transfer and availability of adequate funds for taking care of necessary repairs and maintenance.

(iv) Financial viability which in turn implies that the income of the WUA from water charges from farmers and other sources must be more than expenditures including payment to be made to government for the water received by WUA. It is essential for this that the associations have adequate freedom to fix rates from bothe members as well as non members includinga system of rebates and penalties to facilitate timely payment of dues.

(v) Farmers would be willing to pay higher rates if they succeed in deriving adequate benefits from irrigation water. This implies that farmers should have freedom to use water in the manner considered best by them during any season. An important condition, therefore, is the choice of crops to be grown by farmers. How to make this condition consistent with the macro situation demanding a national cropping pattern is an issue that would be taken up in the next section.

(vi) A cordial relation between WUA and local officials of the Irrigation Department is another condition. It would be difficult for any WUA at the present juncture to survive for long if I.D adopts an obstructionist approach. A hostite I.D. can easily delay supply of water or impose restrictions for raising of specific crops etc. A friendly I.D can not only provide adequate and timely supply of water but help the farmers in terms of technical advice also.

(vii) Organisational viability is another condition. This requires that the WUA should function in such a manner that it keeps on enjoying the full confidence of its members. For this purpose, the decision making machinery should rely on consensus and dispute resolution mechanism should be and quick harmonious. Absolute transparency would be needed.

10.3 Some Macro Implications

10.3.1 Evaluation of WUAs undertaken so far in India has been in isolation. The usual practice is to evaluate the performance and impact of a selected WUA. This study has also followed the same approach which is micro and not macro. A question arises as to what woule be the scenario if the entire or at least a majority of the irrigated area is covered by WUAs. In other words, what would be the macro implications of WUAs ? A few such implications are examined below.

Implications for Water Availability

10.3.2 The critical role of adequate availability of water for promotion and smooth functioning of WUAs raises an important point to which no attention has been paid so far. It is possible for WUAs operating in a distributary or sluice or other limited areas of a canal command to arrange assured water for the small number of their members. But is it possible to do so for the entire command if adequate water to meet the requirements of all beneficiaries throughout the command area is not available? As is well known, the declared irrigation potential is sometimes an inflated figure to get the project sanctioned by showing a favourable benefit cost ratio. Moreover, in the case of canal irrigation schemes in lower riparian areas, additional water scarcities arise because of the subsequent development of canal irrigation in upper riparian areas. Insufficient management of headworks also results in lower supplies. Hence providing assured water to the entire command of all the canal irrigation schemes would be feasible only after augmenting supply of water in the main canal. Some augmentation is, of course, possible by reducing wastage of water through improved maintenance of the system and more efficient delivery mechanisms evolved and operated by WUAs. But the extent of this would not be unlimited. It is therefore, necessary that simultaneous attention is given to water augmentation aspects if PIM is to make fast progress in the country.

Macro Implications of Changes in Cropping Pattern

10.3.3 Changes in cropping pattern and the resulting prosperity of the farmers at the micro level may seem alright so long as we look at it from a micro angle only. The spread of WUAs so far has been too limited to produce any impact on the overall cropping pattern of the country or a state or even of a command area of an irrigation project as a whole. But the picture would be quite different if the movement spreads to cover all or most parts of the irrigated area. In that case, there is a risk that the resulting cropping pattern may be different from the desired cropping pattern, If all the farmers start growing more profitable crops like sugarcane and other crops then there may be a shortage of foodgrains which is needed for feeding the

masses. This shortage may force a rise in their prices which would be harmful from the point of view of the poorer section of the society.

- 10.3.4 There is another macro implication of microlevel changes in cropping pattern. The command area of an irrigation project is worked out on the basis of a designed cropping pattern. It does not matter much so long as the number of farmers deviating from the designed cropping pattern is small as has been the case so far. But if all or most of the farmers within a command area start adopting their own cropping pattern without confirming to the designed cropping pattern, then enough water may not become available for meeting the requirements of all farmers in the command area. In that case, the boundaries of the command areas have to be redrawn.
- 10.3.5 The crucial issue is how to reconcile the two confliciting objectives, of farmers and the nation as a whole with respect to cropping pattern. Imposing restrictions on the cropping pattern as provided for in the existing Irrigation Acts would not serve the purpose. At the same time national interest can not be ignored either. A way out of this impasse lies in making use of the pricing mechanism so that relative prices are so influenced and they inturn induce farmers to grow the crops which are in national interest. Government may supplement this by devising an incentive package for farmers.

Implications for Water Charges

10.3.6 What can be done to persuade farmers Punjab, Haryana, Western U.P and elsewhere to form WUAs? How to make WUAs a peoples movement and not something propped up artificially by government machinery, or WALMIs or external donor agencies as has by and large been the case so far. Punjab farmers have no incentive to form WUA. They get assured supply of water because of Warabandi. And they pay water charges which are subsided by the government. Adoption of a self regulatory mechanism like WUA would result in higher water charge, like WUA would result in higher along with added botheration of running an association. The situation would of course, change if subsidy on water rates is removed completely and farmers are asked to pay the full cost of water. In that situation farmers' association would become useful as it would provide on opportunity to farmers to reduce the cost through a more efficient water delivery system. It appears, therefore, that full cost pricing of water emerge, as an important condition for spread of WUAs in Punjab, Haryana, Western U.P and other parts of the country where WUAs are not spreading.