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## SUMMARIES OF GROUP DISCUSSION

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### Subject I

### **Agricultural Development in the North-East: Status, Assessment and Prospect**

**Rapporteur: M.P. Bezbaruah\***

The papers accepted on the theme drove home the point that the compact land mass called the North-East has significant variations within in terms of topography, climate, ethnic composition and socio-cultural practices, as a result of which a singular approach to the problem of agricultural development of the region is not going to be relevant. In structuring the discussions, therefore, these differences were kept in mind and the problems and prospects of agriculture of the hills were dealt with separately from those of the plains in the region. Further, the peculiarities and specific problems of flood-prone areas in the plains also received separate attention. The discussions are summarised here under the following heads: (a) production-related issues of hill agriculture, (b) Institutional issues in the hills, (c) problems of crop production in the plains, (d) difficulties of the flood prone areas, (e) the problem of technology diffusion in the livestock sector, (f) ways to address the marketing difficulties of farmers in the region and (g) the issue of enhancing delivery and absorption of institutional credit. The discussions were concluded with the identification of some key areas under the theme for more intensive probing.

#### *(a) Production Related Issues of Hill Agriculture*

Several papers discussed in the conference amply demonstrated that economically viable and natural resource conserving alternative farming systems are already available. But these systems can be profitably practiced primarily as commercial activities and not as self-consumption orientated subsistence farming. Hence, to switch over to such systems cultivation will have to be supported by the whole chain of activities from input delivery to extension, to post-harvest handling, storage, processing and marketing. Accordingly the issue on which a good deal of discussion centred was the appropriate organisational form for delivery of the support services. In this context, the suitability of various organisational models was considered. It was, however, recognised that well known models, such as the Anand model of co-operatives or the self help group model which has worked successfully

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in specific contexts, may not be readily replicable here. It was pointed out that interventions in the form of introduction of exogenous set-ups have not been generally sustainable in the region. Soon after the intervention period is over the good practices introduced seem to peter off. For sustainability, endogenisation of the system in the local social context is essential. It was, hence, concluded that organisational structure needs to be indigenously devised taking the ingredients from systems such as co-operatives and self-help groups but keeping in view the local socio-economic context.

Assuming that a functioning support system for the alternative crop profile is put in place, quite a few activities may appear to be techno-economically viable. It was, however, suggested that one or two key activities should initially be concentrated upon with full support to start off the process of agricultural transformation. Once such an activity takes off, the rest of the viable activities can then be pushed and will pick up more easily to provide momentum to the transformation process.

In the course of discussion it was emphasised that shifting cultivators in the region are no longer completely unconnected with the market economy. Citing instances from Meghalaya, the house was enlightened that many shifting cultivators operating in relatively better connected locations now produce not only subsistence crops for self-consumption but also such crops which are sold and dispatched to distant markets. This signifies that the mindset of the farmer in the hills is becoming conducive for accepting farming as a commercial activity.

The issue of endogenisation of interventions in the local social context resurfaced while discussing why the watershed development programmes in the hills of the North-East have not been very successful. It was brought out that the implementing agencies often attempt to deploy a programme without securing ownership of the same by the local community. Moreover, one or the other component of the programme is emphasised depending on the agency that implements a project, as a result of which the comprehensive nature of the programme is lost. In the absence of community ownership, such programmes remain exogenous and hence un-integrated to the prevailing socio-economic system. Consequently, the good effects of these well meaning interventions start to peter away as soon as the intervention period is over. Reportedly the results are relatively better in areas where land is community owned signifying a stronger community presence. It was, hence, concluded that in designing and implementing a development programme, the social viability of the intervention package should be given as much consideration as its techno-economic and environmental viability.

#### *(b) Institutional Issues in the Hills*

The process of conversion of community ownership of land to individual ownership has been progressing without concomitant development in the process of formalisation of these changes. It was apprehended that the resulting ambiguity can

adversely affect both efficiency and equity. On the one hand, land can be degraded due to inadequate conservation care. On the other hand, as data on Arunachal Pradesh have revealed, there can be concentration of land holding in the hands of the rich and the powerful leading to deprivation of many from access to land and emergence of landlessness among rural households. To arrest such adverse consequences, it was felt that the state needs to clarify to whom the rights belong. In the event of community allowing privatisation of its traditional rights over land, the state needs to intervene to see that equity is not sacrificed in the transition process. It was further emphasised that cadastral surveys should be carried out and exhaustive land records be prepared in the hills to clear the way for pursuing suitable institutional reforms.

Owing to various institutional barriers, the labour market has not developed or at best has remained very restricted in some of the hill states in the region. In the absence of the open labour market, a clandestine land lease market has emerged in some parts of Arunachal Pradesh, in which typically the tribal land owners are the suppliers and immigrant (usually illegal) workers are the users of land. The emerging pattern does not provide the incentive structure for fuller exploitation of productivity of agricultural land. However, no ready solution to the problem could be suggested though it was agreed that the problem needs greater attention of the policy makers. In particular it was felt that removal of the restrictions that have stood as barriers to the development of the labour market would not be prudent, or even feasible, as these restrictions have been found to serve the cause of prevention of alienation of tribal land in the hills.

### *(c) Problems of Crop Production in the Plains*

The problems of agriculture in the plains of the region are typically those of rain-fed agriculture anywhere in the country. Fuller utilisation of the potentials of the high-yielding variety (HYV) seed–fertiliser technology in the plains of the region was long thought to be constrained by the problem of water management. The belief was also largely vindicated when area and production of summer rice increased sharply in the mid-1990s following extensive deployment of tube well irrigation in the Brahmaputra valley. But as this increase was not sustained for long, it became clear that making provision for irrigation and drainage is only half the solution. The other half is ensuring remunerative price for the marketable surplus of the farmer. It was agreed that the procurement and price support system available for foodgrain producers elsewhere in the country should be made functional in the region for fuller utilisation of the potential of the HYV seed–fertiliser technology in its plains. If necessary, farmers need to organise themselves to generate the necessary political pressure to ensure that some system of guaranteeing a minimum support price is put in place.

*(d) The Difficulties of the Flood Prone Areas*

In the flood prone areas, agricultural operations are effectively restricted only to the flood free seasons. But these areas being very fertile and suitable for crops like HYV paddy, oil seeds, black gram and vegetables, and supply of agricultural land in the plains being inelastic, it was felt that the potentials of these areas should be exploited. But farmers in these areas operate under extremely difficult conditions relating to connectivity and provision of basic services. To enable them to exploit the productive potential of these areas, a specific system of provision of input supply, extension and market linkage has to be devised. Conventional delivery mechanism cannot service these areas due to their difficult accessibility.

*(e) The Problem of Technology Diffusion in the Livestock Sector*

While discussing the potentials of the livestock sector in the region it was found that crossbreeding technology can be economically more rewarding than the methods largely in practice in the dairy sector. But just as in case of the alternative farming system for hill agriculture, wider adoption of this technology also hinges upon organisation of the support chain of input supply and market linkage.

*(f) Ways to Address the Marketing Difficulties of Farmers in the Region*

Given the respective natural resource endowments, ideally the hills and the plains of the region should specialise in complementary cropping patterns. While in the plains emphasis can be on production of foodgrains with more intensive use of the HYV seed-fertiliser technology, the hills can concentrate on exploiting their natural conditions for growing high value horticultural crops. However, it was felt that despite the complementarities, it would not be possible to absorb all the increase in production, especially those of high value horticultural crops, within the region itself. Hence, ultimately fuller utilisation of potential of agriculture in the region will depend on the success in linking up with the national and the global markets. The need for interventions to provide this link was strongly felt. On the one hand, it is necessary to enable farmers in the region to access facilities like market information systems created at the national level. On the other hand, there is also the need for institutional aggregation of supplies gathered in *haats* and other forms of local markets so that the supply flows can be augmented to higher levels to attract big players to come forward for procurement and processing.

Due to seasonality in the output flow of horticultural crops, concerns were raised about commercial viability of processing plant which would remain unutilised in the off-season. In this context the house was informed about development of multi-product semi-processing plants which can process different horticultural products. As these plants can process output of different horticultural crops harvested in different

seasons, they are likely to be better utilised round the year and hence commercially viable too.

*(g) Enhancing Delivery and Absorption of Institutional Credit*

The possibility of utilising the Community Based Organisations (CBO) as banking correspondents and business facilitators for enhancing financial inclusion and better delivery of bank credit was discussed. While the suitability of traditional CBOs could not be ascertained, it was felt that the modern CBOs like the Field Management Committees (FMC) can be developed as joint liability groups for the purpose.

SOME PRIORITY RESEARCH AREAS

It was felt that research output in the following areas can contribute towards enhancing the farmers' capacity for fuller exploitation of potentials of agriculture in the region.

- (i) Reduction of post-harvest losses: Since horticulture has been identified as one of the thrust areas for future development of agriculture in the region and as such crops are more susceptible to post-harvest losses, development of technology and processes that minimises such losses can enhance the economic viability of these crops.
- (ii) Revamping of the Extension Services: The state of extension services is a concern throughout the country. Considering the relative backwardness of the region, revamping the service is of greater concern.
- (iii) Development of market intelligence support system: Following the application of information technology market intelligence has become more widely accessible. However, farmers in the region are yet to extensively access such information. The need for development of a support system customised for the farming communities in the region was felt.
- (iv) Mapping of the land tenure systems in the hills: The land tenure systems in the hill are not rigorously documented. Mapping of these systems can help in formulation of suitable institutional reforms for eliminating ambiguities in land rights.
- (v) Status of *Jhum* cultivation: Despite frequent discussion in academic forums, concrete information about the present extent of *jhum* cultivation, its sustainability in different locations, etc., is not available. More information on these issues will be useful for designing more relevant policy package.