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POLICIES, PLANNING  
AND MANAGEMENT  
FOR AGRICULTURAL DEVELOPMENT

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## SPECIAL GROUP C

Chairman: Paolo Gajo  
University of Florence, Italy

Rapporteur: Clifton W. Loomis  
Cornell University, U.S.A.

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### *The Peasant and the Planner: the Elusive Equation\**

J. P. BHATTACHARJEE

India

In the peasants' domain of work and living, the planner has made his entry very recently; the 'confrontation' dates back no more than twenty years even in India which has the longest history of planning among developing countries with high population density. Displaying an intellectual zeal modified only by political and administrative constraints and armed with sharp analytical tools and expert advice from abroad, the planner was looked upon as an intruder into a world of relationships and behaviour fashioned by tradition and environmental uncertainty. For a time, the mutual communication and understanding were far from satisfactory. The planner felt baffled in his attempts to impose a national discipline and a central pattern of decision-making, while the peasant, appreciative of the promises and real benefits here and there, grew wary of controls, bottlenecks and ill-coordinated schematic approach and found inadequate incentive for his own investment decisions. This phase seems to have ended, at least for the time being, under the pressure and initiative of the enterprising farmers who have found new political strength as 'green revolutionaries'. But the weaker and more numerous peasants are still there and their problems have taken on new dimensions. Fortunately, the planner seems better educated now, and that is where we begin.

The high-density developing countries are going through an exciting period of agricultural transition. It is not possible within the size-limits of this paper to deal adequately with the varied experience of these countries in different aspects of planning for agricultural development and with all the changes that have been taking place among the peasantry. The best that I can attempt is to highlight *some* of the unresolved issues in the realms of development objectives and strategy, resource mobilization and allocation, production and other programmes, prices, incentives and institutional structure in so far as they have a bearing on the dynamics of peasant farming. Brief references will also be made to the more important of the assumptions and ideas that have fallen by the wayside—the skeletons in our professional cupboard.

\*The paper deals with selected issues arising out of the experience of countries with high density of rural population, in the field of planning and development of peasant agriculture. Because of the concentration of such countries in South and East Asia, the paper has a definite Asian slant.

*Development Objectives and Strategy*

In the determination of medium term goals and objectives of development, the planner in these countries has often found a limited field and range of choice. The high growth rate of an already large rural population, the heavy dependency load and the concentration of low-income groups and classes in agriculture are some of the factors which have forced on him a philosophical acceptance of limited prospects for raising the level of income and employment and reducing poverty among the peasantry at large. The income redistribution objective which in effect implies a rise in the incomes of mini-farmers, tenants and agricultural labourers at rates higher than that of large and medium farmers, has received partial recognition from politicians, despair from economists with their concern for raising growth and savings rates and opposition from institutions and administration. The outlook for the future appears no better. According to FAO's Indicative World Plan, nearly one-half of the *increase* in population in developing countries between 1962 and 1985 would need to be absorbed in the agriculture sector. How this can be done without reducing farm size and efficiency, lowering per capita farm income and real wages of agricultural labour and increasing the skewness of income distribution raises a number of unresolved questions of strategy in regard to farm mechanization, rural industrialization and capital formation through the use of food-aided labour. I am afraid economic analysis is still inadequate and inconclusive on some of these points.

Under these circumstances, the development objective has generally been pitched to modest increases in the consumption level and these have been taken into account in setting national targets of growth in total agricultural and specific commodity production. The inelasticity in the export markets for most agricultural commodities has introduced a large element of uncertainty in target setting for these crops and, indeed, in much of the exercise in foreign exchange budgeting. Perhaps, more attention could have been given to export promotion through cost reducing techniques. Anyway, import substitution has been adopted as a more feasible strategy, to which urgency was lent by the rising imports of grains. This inevitably introduced a cost-of-living and consumer bias in the development strategy. The targets were thus geared to the politically favoured policy of self-sufficiency (demand projection became the central exercise) but betrayed inadequate consideration given until recently to production possibilities and alternatives as well as to choice of priority and instruments like prices.

This phase seems to have run its course for the time being, with brightening prospects of self-sufficiency or even surplus in grains. New problems (apart from the surplus itself) are now emerging, both for the planner and the peasant. For the former, an important question is in what direction and how the production pattern is to be diversified. Dairy and livestock production have received inadequate emphasis and priority in the past with the result that the appropriate strategy, organization and methods suitable for dairy and livestock development under peasant farming conditions have yet to be worked out. As for the peasant, he may have to make new decisions on allocation of land and labour resources and the

present spiralling land values may make such adjustments financially unattractive.

Over the years, certain aspects of development strategy have undergone significant changes or shifts. One relates to the extent of reliance on market forces, as distinct from administrative instruments, for resource allocation. This has been increasing, as will be discussed later. Another aspect concerns formulation of an integrated programme approach and its concentrated application in selected promising areas. The package programme and the intensive area development are the outcomes of this new strategy and have combined with the development of high-yielding crop varieties to usher in the 'green revolution'. Its apparent success should not blind us to some of the problems it has also been instrumental in creating. In the first place, political pressures in the selection of the areas are suicidal for the programme. Secondly, the data requirements for a rational selection—according to criteria such as low orders of environmental uncertainty, assured irrigation, resource potential, adequate credit, marketing and institutional arrangement—are often difficult to meet. However, when these difficulties have been met and the programme succeeds even moderately, it also serves to accentuate the rural disparity.

I am not criticizing the strategy, but merely drawing attention to the disequilibrating impact which all strategies for unbalanced growth have. In large countries like India, this may accelerate the rate of growth but not of development, until and unless strategies are worked out and resources mobilized for programmes suitable for the masses of peasants in high-uncertainty dry-farming areas. This has still to be done and will require collaborative multi-disciplinary work. We do not know what are the likely resource requirements for such an approach, and what may be the pay-off.

#### *Institutional Structure and Reform*

Many, but not all, of the countries under discussion have emphasized in their development policy and programme, but not adequately implemented, reform of the land tenure and tenancy system, extension of institutional credit and input supply, organized marketing, and agricultural extension services. The major assumption underlying this approach has been that the rigidities and inequities in the traditional institutional structure perpetuate social injustice, hamper the initiative of peasants and tenants, and are a serious obstacle to agricultural transformation. Recent developments tend to indicate that appreciable improvements in technology and output can occur even without thorough-going institutional reform. Indeed, in the initial flush of enthusiasm consequent on the spread of the high-yielding varieties, some economists took the opportunity to raise an unnecessary issue with the sociologists on the validity of the latter's professional findings. I believe this is another instance of short-sightedness on the part of the former. The dynamics of agriculture would demand continuing changes and improvements in the institutional structure, as is already more than evident in South and East Asia, where further spread of the new technology requires better landlord-tenant arrangements, dynamic and flexible procedures in credit institutions,

improved marketing system and a host of other changes. However, it is not within the capability of most of these countries to institute and implement reforms simultaneously in all these directions. Two key issues deserve further study in this field: what could be a minimum packaging of these, such as would be feasible of implementation, and what is the optimum sequential timing for the whole system.

### *Resource Mobilization and Allocation*

I need not refer here to the broader issues of saving, investment and capital formation in the agriculture sector, nor to the inter-sectoral transfer of resources for development. The issues underlying priority for agricultural development are now better understood and more realistically determined. The cross-section picture of the countries indicates a tendency towards acceleration of the marginal savings' rate in agriculture as growth rate and level of income increase (leaving aside the question of income distribution earlier discussed). One important problem that is presently baffling a political solution relates to taxation of the agriculture sector and mobilization of at least a part of the increased income of the more affluent farmers, say in India, who are getting the profits of early comers in the breakthrough. I wonder if the problem is only political and whether there are not some economists also who tend to confuse incentives with indulgence. There are many facets to this problem other than the general one of the level of land tax or agricultural income tax. For example, most of the countries provide highly subsidized irrigation water as a result of which the financial returns on the investments are lower than the marginal cost of capital and in many projects even the operation and maintenance costs are not fully covered by the water charges. This sort of situation reduces allocative efficiency and often leads to wasteful use. There are two ways of looking at the problem, one from the national fiscal angle and the other from the point of view of generation and mobilization of resources for re-investment on specific projects and programmes. Perhaps the latter approach may be more amenable to a political solution than the former; certainly it is easier to explain to the public. Further empirical work designed to throw light on different alternatives open to each country can go a long way to meeting the needs of economic education of pressure groups and politicians.

At the micro-level, the problems and methods of resource allocation by farmers and peasants are probably better understood than ever before. The rationality of the farmer's behaviour in the face of uncertainty is now one of the settled controversies. The rising level of use of fertilizers, pesticides and other inputs has been made possible by the sharp rise in their marginal returns relative to that of land and points to the possibility of diversion of land from grain production to other uses such as dairy and livestock production mentioned earlier. Planning methods and programme choices in this respect can be helped with a better understanding and assessment of the margins of use for different categories of land for particular types of farming under different levels of prices and costs. A rational allocation of land for particular use categories promises to be a major issue in countries facing the prospect of

grain surplus produced at high cost. The peasant's allocation decisions in the short run will not necessarily be the same as a socially rational allocation; and to bring about a satisfactory equation between the two would involve some cost and payments. This is another area deserving of further studies.

External resources for the development of agriculture have posed problems in respect of adequacy, certainty, quality and commitment for a long enough period. In a number of countries, the claims of agriculture for external assistance were till lately given low priority which resulted in prolonging the period of construction of irrigation projects with consequent lags in returns, inadequate availability of fertilizers, agro-chemicals, etc. Fortunately, the importance of agriculture's claim on external resources and foreign aid seems now to have been better established in the thinking of governments. The irony of the present situation is that the aid climate in some donor countries, especially the United States, has turned unfavourable at a time when the developing countries can more effectively absorb a larger volume of aid and push up their growth rate. Under the circumstances, India, for example, has taken the road, in its present approach to planning, of trying drastically to reduce its dependence on foreign aid and in the process sacrificing the growth rate. I can only hope that this situation will not last very long.

#### *Choice of Programmes and Technology*

With the advantage of hindsight, it is now easy to see what could have been done to improve programme choice and project formulation in the earlier years and what still needs to be attempted. There had been more than a bit of romanticism in the planner's approach to these, resulting in neglect of certain crucial aspects and an unrealistic belief in the mystique of some programmes. A central piece in the area of neglect was research, especially in the biological, chemical and water-use fields. What contributed most to this was the advice to planners and administrators, oft-repeated from abroad, that technology for the improvement of agricultural productivity on tropical peasant farms was already there, almost ready-made except for minor adaptation. Fortunately, this complacency is now gone and the high pay-off on investments in research is being strongly emphasized. I may stress here the importance of including in future research efforts genetic, agronomic and economic studies on crops and husbandry under dry farming conditions of high uncertainty. I need not add the 'second generation problems' of green revolution because these are now well talked about.

A corollary to the prevailing complacency about technology was the emphasis on the community development and general extension approach which created a mystique of its own and did not help in bringing about the right equation between the programmes drawn up from the top and the farmer's behaviour. The transformation of peasant farming requires extension and education of a sophisticated type, and programmes for investment in human resources need to be given greater emphasis as well as technical orientation. This is an area of policy and programme choice which admittedly requires greater attention in the developing countries.

Among many aspects of choice of programmes and technology, space

allows me to refer to only one general problem, namely, formulation of programmes and projects. One of the basic problems in equating the planner and the peasant is the recurring uncertainty in attempts to relate the investment and physical programmes drawn up from the top with the plans and investments of the farmers at the bottom. There has been a lot of discussion of the approach and method of planning from below. However, a meaningful approach to village planning and district planning has yet to be worked out. Apart from studies, there is need for pilot projects of the action-research type.

In some countries the emphasis on the administrative approach to planning has resulted in the investment programme in medium term plans being largely allocated to broad programme fields without adequate project content. This has created various problems in annual planning and budgeting and delays in implementation. Furthermore, selection of projects on the basis of rational economic criteria has not received the attention it deserves. By and large, project selection and formulation as well as implementation need far more attention than these are receiving. The available expertise in the countries seems to be specially weak in respect of the economic, organizational and institutional aspects of project formulation.

#### *Incentives and Prices*

A substantial proportion of the resources investment in agriculture, sometimes in bulk, comes from the farmers themselves, at best aided by some credit from institutional sources. The inadequacy of the data and information system relating to private investment has hampered the planner in resource allocation in the past. However, there was also a bias in favour of public sector planning. Fortunately, opinion in the developing countries is increasingly in favour of reliance on the market forces. Many factors have been instrumental in bringing about this reorientation. One of these is closest to our profession and deserves mention even though it is a dead horse. The rationality of the farmer's behaviour and his response to economic incentives are no longer questioned, even though a few years back some economists were still trying to fit a backward-sloping supply curve under conditions of high-density peasant farming.

The approach to the field of prices and incentives is bound to be somewhat different as between the planner and the peasant; the former cannot abrogate all responsibility in the matter of price change and regulation to the market forces, especially when the organization of the market is full of imperfections. The economic lessons that he has generally come to accept are: the greater the price ratio of output to input under different types of farming, the more the incentive to the farmer; the outputs of competing crops can be suitably altered by manipulating their price ratios; and a realistic price-support programme is imperative in the interests of reducing the market uncertainty facing the farmer. However, this is only part of the story because the planner is concerned not only with raising the production of particular crops, but of all crops simultaneously, except for marginal adjustments. In this situation, the main issue relates to the terms of trade of agriculture which



can be manipulated in favour of agriculture up to a point and for some time. The limits as well as the period are the crucial issues, the answers to which are not very clear.

The peasant's appreciation of his terms of trade is bound to be somewhat different. His immediate concern relates to prices received vis-a-vis prices paid and the taxes and subsidies. In each of these fields, there is sympathy for his claim for an advantageous position but what is an economist to do when the claims get compounded with political pressures? The situations in the countries indicate varying levels of prices and costs and it is difficult for an economist to say what exactly should be the level of the incentive price and how best incentives could be administered through product and input prices. Obviously, a compromise equation has to be established in the conflicting claims of the agriculturist and of the urban-industrial consumers. How far these conflicts could be satisfactorily resolved by the market forces without causing unfavourable political developments is more than an economic question.

### SPECIAL GROUP C REPORT

The tone of the discussion that followed Dr. Bhattacharjee's presentation indicated general agreement with and approval of the ideas expressed in the paper.

In discussing the planning process, several of the speeches pointed out that the peasant farmer must be involved in planning agricultural development in order for the plans to be implemented at the local level. The importance of local plans with an effective extension organization, practically oriented, was strongly stressed.

Several discussants mentioned the importance of giving thought to political considerations in the planning process and made the point that politicians are often not economists and that economists were usually not politicians. One speaker particularly mentioned that since the cost of data gathering and analysis were so high in the planning process, political consideration should not be overlooked. He also particularly agreed with Dr. Bhattacharjee that the high uncertainty dry-farming areas presently offer relatively low returns on investment, and therefore the scope and returns on investment in such areas might well be considerably improved through new but presently not discovered alternative methods and technology of production.

In the subject of national planning at lower levels, it was pointed out that such planning was difficult, and that it was frequently not practical to interpret, apply, and implement national plans in the local areas. It was also stressed that when institutional changes are made ideas must be obtained from 'below' as well as 'above'. The further point was made that there was need for institutional changes and incentives at all levels for the successful implementation of the plans. The use of selective credit was particularly mentioned as an example of such a change. It was also stated that in regard to

mobilization of resources, more consideration should be given to the role of agricultural taxation, and that such taxes were not intended primarily for income distribution as mentioned in Dr. Bhattacharjee's paper.

The Soviet economists expressed great interest in the problem of the high density countries as analysed and presented by the main speaker. They mentioned that the U.S.S.R. had also gone through this stage soon after the Revolution when even the lowest income peasants increased home consumption with no attempt to change their methods of production. In this connection the importance of radical reforms in the land system and other institutions was emphasized as a key to structural change and the introduction of new technology. The danger of permitting too wide a gap between the announcement of planning goals and their actual implementation in the field was stressed. Such a gap encourages the use of outmoded agrarian structures and an increasing class polarization of the people. In other words, it was pointed out, ideal planning would involve a combination of the idea with rapid implementation.

Another speaker also stressed the need for close inter-relationship between the politician and the planners. He felt that 'the elusive equation' might well be changed to a triangle involving the peasant, the planner, and the politician.

Others mentioned that continued and more attention should be given to land reform and in this connection there was a great need for improvement in landlord-tenant arrangements with a view to ensuring security of tenure, compensation for improvements and equitable distribution of production in favour of tenants.

Another speaker said that the proper choice of farm production techniques, keeping in view the employment criteria, deserves much greater attention and further progress in this matter would necessitate the use of shadow pricing in planning decisions. He further said that incentives should be provided, such as tax rebates and other measures, to bring about larger use of labour in the agricultural production and processing industry. In further discussing the use of incentives he said that a pure rent element has to be considered for the innovator in order to secure rapid adoption of a new technique or enterprise. Planners and governments should consider using short-time subsidies that could be socially justified for a limited period and later withdrawn. After the limited period and withdrawal the general demonstration effect will lead to innovation and a reduction in income inequality.

Another speaker pointed out that the problems of assisting and advising farmers becomes tremendously magnified by the growth of population and the consequential reduction in the land-man ratio. According to F.A.O. information, probable increases in acreage, changes in both cropping patterns and levels of technology would provide additional employment to the extent of 15 to 18 per cent in the developing countries of the WORLD. Under these circumstances future plans must be more and more employment oriented both in development objectives and strategy. Attention will also have to be given to the selection of cropping patterns and land use with a view to bridging the protein gap.

Among the participants in the discussion were A. Genel *Mexico*, V. G. Rastiannikov *U.S.S.R.*, A. A. Nikonov *U.S.S.R.*, Ruth Walter *German Democratic Republic*, G. H. Ward *U.S.A.*, M. Bagayoko *Mali*, R. J. Belshaw *United Kingdom*, M. A. H. Mallick *Pakistan*, I. W. Moomaw *U.S.A.*, V. S. Vyas *India*, S. Lousandori *Mongolia*, R. N. Poduval *India*.