The centralized approach to planning pursued so far in poor countries of Asia and Africa has not succeeded in bringing about widespread change in rural life. The trickle down effect has failed, and with it has come a growing realization of the need to make a direct attack on the problem of rural poverty by initiating action at the local level through an area planning approach whereby plans for the integrated development of small areas would be formulated and implemented by local people (Nyerere; and Government of India, 1978a). This planning from below, or grass roots planning, is expected to result in plans for better utilization of rural resources, through local people having better awareness of their needs and preferences and fuller information on the conditions and possibilities of their areas. The area level planners, having a more intimate knowledge of the interdependence of activities at the micro level, would be in a better position to develop integrated programmes which avoid duplication and produce maximum impact with minimum cost. Moreover, a better implementation of development programmes would be ensured through more realistic planning and greater involvement of local people in plan formulation and implementation (Government of India, 1978b).

However, it is not always realized that, in view of the economies of scale which may be present, an overriding concern with decentralized planning, in particular with the objectives of local self-reliance and full utilization of local resources to the neglect of comparative advantage and regional specialization, may tend to offset the beneficial aspects of area planning mentioned above, and, therefore, need not result in an optimal situation. Whether or not it will result in a consistency between local and national plans in an interdependent, multiregional economy is another and a far more important question; for the failure of aggregate supply to match with aggregate demand, or of the structure of production to be in harmony with the composition of national demand is bound to have an unfavourable effect on the pace of development, especially in a public sector dominated economy like India's where supply and demand imbalances tend to provide grounds for slow working of enterprises resulting in delayed execution of projects. However, in the absence of much work on decentralized planning, very little is known on this aspect (Arrow and Hurwicz, Goreux and Manne; Malinvaud; Uzawa; and Westphal). Hence, it is proposed to examine this question in some detail, spell out its implications for rural development, and deal with the manner in which the problem posed here can be resolved. The discussion will be conducted primarily in the light of the institutional characteristics of the Indian economy and against the background of its considerable experience of development. However, the treatment of the subject matter will be made as general as possible.

**The Consistency Problem**

The establishment of autonomous area planning units in a country of the size and dimension of India would result in a multiplicity of public agencies entrusted with the task of making decisions on economic activities affecting production and consumption. Whether or not consistency between micro level and economywide plans would be brought about under such conditions would depend upon the type of assumptions made about the institutional framework of an economy. For example, the problem does not arise in a traditional society with village or local self-sufficiency as the basic motto, where production is for self-consumption, the local market, or both. Nor does it arise in an exchange but
centrally planned economy where decisions at different levels are subservient to those taken at higher or national levels. The problem could arise in a pure capitalist society having millions of independent producers, but, as is well known, is automatically solved due to the working of the competitive market mechanism which brings about equilibrium in the economy at the level of full employment of resources.

Actual reality is far more complex and cannot be fitted into the simplistic theoretical frameworks outlined above. For example, prices in modern capitalistic societies do not conform to the assumption of continuous variation in either direction; they tend to become rigid. Downward and even upward revisions are made by finite steps at discrete time intervals so that equilibrium between demand and supply of goods is often established at the cost of excess capacity and unemployment of resources. The situation in India is still more complex in view of the mixture of several systems. India has an exchange economy with a regional or national market for domestically produced goods, and its scope is increasing. But the market mechanism is not perfect on account of several distortions, including restrictions imposed by the government. Prices of several basic inputs (for example, coal, electricity, steel, cement, and fertilizer) are subject to government control and regulation. And the free adjustment of prices of a number of agricultural commodities such as rice, wheat, raw cotton, and sugarcane is interfered with by the policy of support prices. In addition, there are price rigidities and restrictions on trading and production in several other sectors. Parts of the labour market are subjected to wage rigidity imposed by the trade unions, and parts by the operation of a government regulation prescribing minimum wages. In a strict sense, the labour market does not function and therefore cannot be relied upon to bring equilibrium in the economic system.

Under these conditions, if production decisions come to be taken at the area level in an autonomous manner, equilibrium at the macro level can be brought about only if there is an area (residual) which can absorb all shocks coming from other areas. No such area exists and in its absence there is no mechanism to ensure consistency between local and national planning. Inconsistency may arise on account of the differences in the goals and objective functions of the different decision-making units. For example, maximum growth of national output, national integration, and regional specialization may be objectives of national policy, whereas local self-sufficiency and full employment of local resources may be the goals of area units. Like independent producers in a capitalist system, the area authorities draw up their plans for optimization in the context of their objectives, resources, technology, potential, and problems. But, unlike the capitalist system, there is no automatic mechanism to ensure demand and supply balances at the national level in view of the imperfections of the market mechanism. Due to the intrusion of administered prices into the system, price paid to producers of certain commodities might be prevented from falling even if supply is rising ahead of demand. Disequilibrium may show up in the form of stockpiling with government marketing agencies, which, in due course, may necessitate sale at subsidized rates. Subsidies may be justified only to the extent they are based on differences between shadow prices and market prices. But it is doubtful whether there would be much scope for using shadow prices as policy variables under these conditions. Thus, equilibrium can be brought about only at the cost of massive subsidies by using funds which could have been better spent on rural development programmes. This sort of a situation has arisen quite often in India. Khadi and village industries, foodgrains, and sugarcane are some of the more prominent recent examples. The probability that this situation will occur is high in most of the developing economies because the productive capabilities at the local levels are mostly of traditional goods such as handspun and handloom clothes and village handicrafts, while the structure of demand at the national level has been changing in favour of newer
goods such as nylons, plastics, stainless steel, and aluminum, which require the use of sophisticated equipment and skilled labour not found everywhere.

However, the above line of reasoning is not valid for the nontradable activities like land contouring and leveling, drinking water supply, construction of dug wells, distribution of water from an outlet, social forestry, or primary education, which are no less important for rural development. This list can be extended to cover commodities having only a local market. The problem really arises in the case of commodities entering regional and national markets, and may become more acute for areas producing specialized products for widespread markets, such as copper in the Singhbhum district of Bihar in India, whose development plans cannot be finalized until the micro plans of other areas are known, and vice versa. We may generalize this and state that consistency between local and national planning is easy if decisions made in one area do not cause economic scarcities in the rest of the economy. The smaller the area, the more difficult it becomes to fulfill this condition. Therefore, in such cases, complete autonomy of planning at the area level is ruled out. The need to take the overall demand and supply balances into account requires that the area level plans are prepared within a macro framework.

The problem is not confined to products alone, but extends to factors of production like labour and capital, which are mobile and have a market which goes beyond the area boundary. Here, also, there is no mechanism to ensure consistency between the total demand by all areas and aggregate supply. Various types of problems may arise in practice. For example, if jobs for all labour in an area are provided in the area itself under some sort of an employment guarantee scheme (of the type attempted in some states of India) and at some minimum wage rate high enough to meet their reasonable needs, then there will be little incentive for labour to move from surplus to deficit areas, in which case optimum development would not be assured. In the case of capital, which is usually very mobile, a disproportionately greater part may find its way from the less developed rural to more developed urban areas on account of several factors, including the operation of the economic forces of prices, wages, credit, and interest rates. Such problems can be resolved only within a macro framework with a suitable mix of general and differential policies formulated at the national rather than area level.

The problem of inconsistency may also arise with respect to use of resources like river water held in common with other areas. The possibility of the aggregate requirements of different areas turning out to be more than the total supply of the resource cannot be ruled out. Moreover, if every area started preparing plans for its own optimization without looking into the adverse effects of its policy on neighbouring areas (that is, external diseconomies), the result would be utter confusion and a gross misutilization of resources, which would not be in the best interests of rural development. For example, in the case of flood control, an embankment on one side of the river or in one area tends to produce adverse effects on the other side or in upstream or downstream areas. Similarly, a drainage scheme for an area may result in drainage congestion for the contiguous area below. Similar problems of reconciling inconsistent area plans may arise in the case of the creation of such infrastructural facilities as major roads and bridges, railway lines, power plants, storage, or marketing, which are necessary for rural development but go beyond area boundaries. Such activities should be taken out of the purview of area planning and decided at the appropriate regional or national level.

**Multilevel Planning**

It follows from the above that the problem of consistency as posed here can be resolved by formulating area plans for marketable commodities within a macro framework and by an appropriate devolution of functions at different levels:
local, regional, and national. The planning exercise would be carried out, not at any one level (area or national), but at several levels with appropriate links established between them so as to arrive at a mutually consistent set of quantitative allocations and prices. This would imply disaggregation of economic activities and plan targets by regions and areas. On the other hand, the need to ensure demand and supply balances would require the planning exercise to be disaggregated with respect to specific kinds of activities or sectors of the economy as usually takes place in economywide planning models. Thus both the regional and sectorial ramifications of multilevel planning are relevant here. This would require formulation of multisectorial and multiregional planning models. It will take a long time before such models are developed and come to be generally accepted. Meanwhile, an attempt may be made to identify and demarcate the fields of activities where planning bodies at different levels should have exclusive, dominant, or marginal responsibilities. It can be inferred from what has been said earlier that the scope for the devolution of functions at the area level is not insignificant in the context of rural development. Activities like soil conservation, social forestry, land reclamation, village roads, minor irrigation, animal husbandry, education and social services, water supply, health, housing, and local transportation are liable to planning at the area level. Given the low capital base and low level of productivity in rural areas, the thrust of rural development in the initial years would be on development of activities of the type mentioned above. It is therefore feasible to make use of the area planning approach for bringing about rural development.

Iterative Procedure

An important question that arises here is whether plans at the higher level would be prepared first and those at the lower levels be worked out within the framework already decided at the higher level or vice versa. In other words, should planning be from above or below? India, which has explicitly recognized the role of multilevel planning, seems to have opted for the first alternative. "It has been decided that a block will be taken as the primary area for local planning. At the same time, it is realized that the block level planning will have to be built in a framework of district level planning which has to be adjusted to the overall state plan. The state plan already forms a part of the national plan" (Government of India, 1978a). This is in keeping with the centralized approach to planning pursued so far, which, though justifiable on grounds of efficiency and administrative ease, has been found inadequate to bring about widespread rural development. However, the other alternative of planning from below is also not the ideal solution because it may result in inconsistency at different levels; that is, the totality of plans prepared by the units on a level of hierarchy may not be compatible with the plan of the higher level of units of which they form constituent parts.

Hence, what is needed for rapid rural development is neither planning from above nor planning from below but something in between, which can be brought about by an iterative procedure in which the planning agencies at the area, regional, and national levels would participate, each giving information related to the productive activity to be undertaken by it and revising its programme in the light of information received from lower and higher agencies. As compared to purely centralized planning, the process will take more time and pose greater administrative problems. Conflicts between different regions may arise, and, if not properly handled, may vitiate the development atmosphere. There is also a risk that iterative planning may degenerate into mere horse trading. But, ultimately a consistent plan should emerge if the planning agencies at various levels of the hierarchy adopt a flexible approach having more than one variant of their plans to start with, and respect the right to make certain decisions which necessarily have to be made at a higher or lower level. In this way, it
is possible to reconcile the apparently conflicting objectives of decentralized planning to foster maximum utilization of local resources and local talent on the one hand and central monitoring and control to ensure the overall balance between demand and supply on the other.

References


RAPPORTEUR'S REPORT—Theodora S. Hyuha

Inconsistency is among many problems in planning programmes. Other problems include balanced versus unbalanced growth, imperfect knowledge, lack of knowledge, and lack of feedback processes. We are dealing with constrained optimization with many constraints. It is hard to define a micro unit because macro and micro regions differ from place to place. Using decomposition models may be too complex and too theoretical to be of any use.