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Summarizes the statement on economic development prepared in January 1977, by the Policy Development and Analysis Staff of A.I.D. A framework for organizing policy oriented social science research and analysis efforts is provided in order to guide A.I.D. programs and policies. This framework is set forth for five sets of development objectives and the strategies for meeting them. The focus of these objectives is on increasing the supply of goods and services needed to improve the well-being of lower income families while, at the same time, assuring them of access to those goods and services. A participatory strategy is stressed to ensure that these objectives are met. Policies and strategies which would increase goods and services are those which would increase agricultural production, and would improve and enlarge health, nutrition, family planning, and educational services. This paper discusses income and employment strategies with regard to wage determination and income patterns, the role of women, agricultural employment, and export potentials. It examines the flow of capital resources and other aspects of the international environment in a participatory framework which is influenced by international trade performance. Special problems of implementing policy decisions which are reviewed are: political and social processes, participation and human rights, institutional dynamics, and monitoring techniques. This study recommends three approaches which can be used to assess the progress in attaining the objectives of participatory growth: analysis of national budget and resource allocation information; analysis of large-scale sample survey data; and program and project specific assessment.

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Preface

This statement was prepared by the Policy Development and Analysis staff of the Agency for International Development to provide a framework for organizing policy oriented social science research and analysis efforts to better guide Agency programs and policy. It will be used by the Program and Policy Coordination Bureau of the Agency for two basic purposes: (a) to analyze, modify and judge proposals for research in the social sciences submitted by the Missions or outside research institutions that bear upon policy determination, (b) to facilitate interaction with appropriate research institutions in developed and developing countries. It may also be useful to others within the Agency and the development community concerned with such research. A statement of this type, of course, cannot and does not represent a statement of specific research priorities for the Agency as a whole. Rather, it provides a framework within which to view research needs and opportunities in this area and facilitate making decisions in the context of additional information on research capacities and the changing state of knowledge. The final priorities as to what research is actually undertaken in any fields and in what order is a product not only of the priority of questions facing policymakers in Washington, the Missions or elsewhere, but also of the prospects for solving a particular problem and of the specific talents and facilities available for research.

Analysis of research needs by definition stresses the need for new knowledge or adaptation of existing knowledge. Thus, while this statement builds on the base of what is already known, it also tends to understate the extent of that knowledge. We have not attempted to summarize this knowledge nor the progress made in AID programming. AID programs and policies will continue to be implemented effectively on the basis of existing knowledge. Concurrently, new research is needed to constantly challenge old assumptions in an evolving world and to refine our knowledge with respect to the specifics of new development problems, programs and policies.

The framework for policy oriented social science research is set forth in the context of a particular set of development objectives and strategies for meeting them. It is oriented toward operationally relevant problems. It emphasizes building from micro data at the family and firm level to a coordinated view of the ways to reach development objectives. It explicitly recognizes the need for research in a wide range of disciplines as well as the necessity to relate social science research to the underlying technical factors and the biological and physical science research which effects change in those factors. As a statement about policy related research it of course does not purport to set the framework for other types of social, physical and biological science research.

The development objective assumed is that of broadly participatory economic growth emphasizing satisfaction of basic human needs through increased production and trade and widespread participation in those efforts through accelerated growth in employment. There is a significant body of knowledge on the policies and programs most suited to promote the attainment of participatory growth objectives, yet experience with actual programs and policies is limited. Research should play a role in improving project design, analyzing problems encountered in current projects, and providing feedback for better future program design and implementation. In this context it is not always possible nor desirable to make a distinction between research subjects specific to local problems and projects and research concerned with broad aspects of policy guidance. The latter often must be built from studies in specific areas. It is likely that the newer and more complex an analytic concern, the fewer the situations in which it can be initially explored.

The choice of research methods for specific programs must depend on common sense exercised in the context of wide acquaintance with the available options. Some aspects of the development process may be analyzed through a rigorous application of mathematical and quantitative models, large sample statistics and simplification to a small number of variables. For other aspects of the process, operationally useful research must include analysis of situations in which the number of observations is small, the number of variables large, and consequently the quite different analytic perspectives and experience of the anthropologist, the historian and the political scientists may be useful.

Interaction with researchers in low income countries forms a vital part of this process. Output of such research in low income countries is of substantial and growing importance because of its quantity and because it is increasingly oriented to operational needs of great relevance for the implementing of a broadly participatory growth strategy. Encouragement of research capacity in low income countries relating to such a strategy is itself a major technical assistance and development objective, to which AID research efforts will also aim.

This statement was prepared by the Office of Policy Development and Analysis with assistance from many persons within as well as outside the Agency for International Development.

John W. Mellor
Chief Economist, A.I.D. and
Director, Office of Policy Development
and Analysis
Bureau for Program and Policy Coordination

Introduction

Consistent with an operational and policy orientation, the research framework presented here is organized neither along the traditional lines of academic disciplines nor along the equally familiar lines of production sectors. Rather, the research specification starts with a definition of the basic strategy and leads from that to relevant problems which are in turn expected to lead to appropriate disciplines and methodology.

The framework is divided into five broad parts, as follows:

I. Development objectives and strategy: what are the development objectives and what is the outline of broadly participatory development processes of economic growth which are in conformity with the objectives?

II. Development Policy: what are the domestic policies, programs and projects necessary to achieve the appropriate broadly participatory processes of economic growth in particular economic and social environments?

III. International trade, finance and resource transfers: in the context of participatory growth, what are the international economic policy alternatives for low and high income countries and how do they interact: what is the relative importance and effectiveness of alternative means of obtaining or providing external resources?

IV. Program implementation: how can the appropriate domestic and international policies be pursued in the existing economic and social environment, and to what extent is it essential that the environment be modified. More specifically, what are the means by which policies are made, legitimized and applied; what are the institutions and human resource requisites of effective implementation; and, what are the means by which institutions and their clients are effectively related?

V. Progress measurement: how should one measure change and what changes should be measured in order to facilitate optimal choice of program and the improvement of programs over time?

These of course are not mutually exclusive areas for analysis. In one sense the five areas provide a useful checklist for analysis of policies and programs—how do they relate to the overall objectives and strategy, are the policies correct, are the programs implementable, are the international aspects appropriately managed, and, are program effects measured in a manner helpful to program improvement? Since each of the elements interacts with the others, the convenience of the categorization must not be allowed to divert research from valuable points of interaction.

The following pages discuss these areas and their various sub-divisions to show how they fit into an overall strategy and to illustrate an orientation for research within each. The statement provides the structure within which specific studies may be developed, but not the structure of the studies themselves.

As needs change, such an approach requires adjustment over time. However, the Agency's objectives and means to reach those objectives are sufficiently defined, the problems to be analyzed are sufficiently complex, and the research required sufficiently time consuming, that this framework will hopefully retain its relevance and not require significant revision in the short term.

I. Development Objectives and Strategy

The broad outline of development objectives and the appropriate participatory growth strategy for poor countries are emerging from new and incipient policies of many low income countries, AID's and other donor agencies' analysis, and new thrusts in scholarly thinking about development. They are also articulated in recent Congressional legislation on the foreign assistance program. The essence of the objectives is to increase the supply of goods and services needed for improved well being of the lower income majority of families and at the same time ensure that they have access to those goods and services.

While many low income countries publicly support the strategy's central objective of improving the productive capacity and well-being of their poor, leadership perceptions of the required policy and program components to implement the strategy vary.

Major inequality in ownership or control of land and other productive assets impose significant obstacles to economic development. Programs which expand production in such an environment tend to exclude many of the poor from improved participation in production and consumption. This result holds back growth, provides little or no alleviation of poverty, and aggravates economic and social inequity. Thus there must be an explicit concern for the economic and social environment and the distributive effect of production programs.

To attain the objectives of participatory growth, low income countries have to face critical choices and possible tradeoffs. A redirection of public expenditure flows or redistribution of land may be needed. Yet this may be viewed as an unacceptable short run sacrifice by powerful urban and rural elite groups. Appeals to a concern for the long run viability of the existing system may not be able to overcome or modify these views.

Furthermore, while many proponents of a participatory strategy assert that it is consistent with both growth and equity objectives, others would hold that some tradeoff is entailed. There are valid questions pertaining to the particular programs, policies and conditions which would allow a participatory strategy to attain the basic development objectives and the extent to which they may sacrifice future growth. There are also significant questions as to how international action to assist low income countries through increased quantity and quality of transfers and improved trade conditions affects the basic development objectives.

Finally, the United States is committed by the Foreign Assistance Act to the promotion of human rights in its foreign policy. Both economic human rights, such as the right to a level of living adequate for health and well being, and political-civil rights involving protection against denial of life, liberty and the security of person are internationally recognized. Yet little attention has been given to the integration of these two kinds of human rights into development strategies. Especially since it has been argued that there is a tradeoff between them, there is need to examine what the tradeoff is, if any, and how all who are involved in the development process can deal with it. More broadly, there is a need for research to increase understanding of the ways in which development assistance can support democratic social and political trends and the interaction of economic growth strategies with political strategies. As with many other areas of decision, analysis may in the short run do no more than clarify and systematize thought on these very basic policy issues.

The analytic program structured here is based on a development framework that stresses a participatory strategy. The main features in such a strategy are generally understood. However, there is a continuing need for refining, analyzing, and, where appropriate, quantifying relationships, specifying the strategy more precisely in terms of the operational functions of the Agency and the policy options of the U.S. Government.

II. Development Policy

A strategy of broadly participatory growth must explicitly include policies for: (a) identification of and increase in the supply of goods and services needed for improved well-being of the lower income majority of families, and (b) increase in access of that lower income majority to goods and services.

Broadened access to goods and services requires increasing the incomes of low income families. Particularly in the lowest per capita income countries, that increase must occur substantially through greater quantity and productivity of employment.

Experience shows, however, that development and investment strategies which succeed in raising production do not necessarily cause a commensurate increase in employment or income for low income people. e.g., foodgrain production, important in the consumption patterns of low income families in many countries, may lack potential to provide direct increase in employment even sufficient to create adequate demand for the increased grain production itself. But, conversely, substantial increase in employment and hence income of the lower income majority cannot be sustained in low income countries unless there is a commensurate gain in total food and other goods production to provide for the increased consumption accompanying higher incomes. A practical strategy which increases both production and income of low income families is complex, and likely to vary among countries with different factor endowments and levels of development.

A. Supply of Goods and Services

Improved well being of the low income families in low income countries requires more food, improved nutrition and health, better education, and appropriate policies and facilities for control of family size. Each of these requires allocation of substantial resources and raises difficult policy questions with respect to the specifics of those needs, the relative priorities to be set in meeting them, what portion of the supply should come from domestic production and what from imports, the resource requirements, the potentials for raising those resources, and the means of achieving the desired resource allocations.

1. Increasing agricultural production

Increased agricultural production is key to a successful participatory strategy in most low income countries because of the need to increase the quantity and quality of food intake and the large proportion of the population deriving its income from agricultural production. Malnutrition and undernutrition contribute to poor health, low energy levels of work, reduced capacity to utilize education, high death rates, and, with associated factors, low incentives for a small number of children per family. In many countries, the greatest part of the increments in food supplies for better nutrition would need to be produced domestically, rather than imported.

Much of past social science research effort with respect to agricultural development has emphasized production policies. The consequent accumulation of knowledge suggests the need for a shift in emphasis to analysis of the implementation problems indicated in section IV. Nevertheless, there remain a number of production policy questions and a need for further refinement of previous work to suit specific conditions.

a. Infrastructure

Knowledge of the productivity and distributional impact of rural infrastructure such as roads, other forms of communication and electrification, and how these might most efficiently be expanded and utilized is particularly deficient. Analysis of infrastructure productivity and the distributional effects of such investment are especially important in the context of a strategy of rural development, which emphasizes links between agricultural production and the development of market towns.

b. Technical characteristics of innovation

While considerable analysis has been undertaken of the technical characteristics of agricultural innovations which are important to expanded food production, a research emphasis is now needed as to the implications of innovations for employment, income distribution, nutritional status, input requirements, and agricultural research policy.

c. Priorities and sequencing of activities

The extent of complementarity amongst the various services to agriculture, such as research, extension, credit, and marketing, the bases of increasing efficiency for these services, and the extent to which priority can be attached to their provision, with consequent time phasing, are areas in which existing knowledge needs to be further refined to improve rural development program implementation. In addition, wide-spread, small research efforts are needed on the details of optimal programs in such fields as research, extension, credit and marketing. These efforts are best approached through many small studies which could merge into a well-defined project monitoring and evaluation system. To the extent possible these efforts should be undertaken by researchers in low income countries so as to help create a capacity for performing these vital and continuing research tasks in low income countries.

d. Labor intensive agriculture production

Rising real consumer incomes, particularly in rural areas, tend to increase demand for income-elastic labor-intensive agricultural commodities such as livestock products and vegetables. In this context it is becoming increasingly important to analyze the production possibilities for such commodities, diagnose the requisites of efficient production increase and the means of increasing the complementarity of such production with employment and income distribution objectives.

e. Price policy

Although vast research effort has been devoted to agricultural price policy, some questions remain about: (1) the specifics of optimal price relationships among agricultural output prices, input prices, and consumer goods prices, (2) the implication of consumer goods prices for consumption and nutrition of the poor, (3) the practical constraints which limit the design and choice of effective price policies, and how these relationships in turn relate to technological change and income distribution, and (4) optimal seasonal price and storage policy.

f. Small farmers

The rural development strategy for most countries should be focussed on small farmers, whose unit of land management and production is based on familial organization, and who may employ some additional non-familial labor or supplement their income from off-farm activity. However, within a basic small farmer strategy there will normally be a subset of farms so small as to provide incomes at or below a generally considered poverty level and likely falling outside the dominant political and social structures. Such small and marginal farmers may be large in number and comprise a significant portion of production as well as of poverty and under-employment. These farmers have special production and implementation problems and merit special attention in program and project development and hence in the analytic effort. It is important that their problems be addressed through policies

that enable them to increase their farm incomes so that they do not add to the broad employment problem by joining the ranks of the rural landless or the urban poor. Research is needed on various aspects of the small and marginal farmer problem, especially: (1) risk and uncertainty, (2) how to facilitate their participation in programs of input supply, credit and marketing, (3) the interrelationship of technology, institutions and social, cultural and economic factors as they affect this class, and (4) how these factors relate generally to broadened social and economic participation.

g. Food aid and food security

Finally, while increased food production is important to the success of a participatory strategy in many countries, food imports, including those financed by external assistance, also can play a key role. This role arises from the necessity to increase food supplies for various programs of poverty reduction, the time lag between measures to increase food production and the actual increase in production, the large fluctuations in production which arise from weather, and occasionally the intractability of the physical environment to production increasing technology. However, the links between imports and domestic production, as well as the critical elements of a consistent overall development policy which assures that imports do not result in disincentives to expanded domestic production, need further clarification. Further work in this area is essential, especially in view of current efforts to make food assistance a more effective instrument in support of low income country development policies.

2. Improving and enlarging health, nutrition, family planning and education services

Opportunity to all people "for a life fit for the dignity of man" requires special attention to a complex of services in the areas of nutrition, health, family planning and education. Improvements in all these areas are important to development generally and particularly to the well-being of lower income families. Increased levels of health,

nutrition and education can have a substantial impact on the productive capability of the labor force. Reduced population growth through smaller families and deferred family formation has a direct impact on maternal and child health and indirect effects through the release of resources for additional investment in physical and human capital. But access to adequate food is a key to increased levels of nutrition and health as well as capacity to benefit from education. And in a context of increasing well-being and expanding horizons, a family is more likely to be receptive to family planning services.

Thus, efforts to expand agricultural production and human resources-type social services are closely interrelated. In view of the ambitious objectives implied by a strategy to expand provision of basic goods and services to all low income families, their resource requirements need to be carefully investigated, proceeding from research and analysis on the questions of cost-effectiveness, complementarities and time-phasing indicated below. It should be emphasized that "services" are defined here in a very broad sense. The term does not imply any particular means or system for delivery of these services. It is used to emphasize the large size of the real resource requirements which together with appropriate policies can lead to improvements in the status of low income families. The services themselves are of course only the means to the end of increased well-being.

In addition to the inter-relationships alluded to above, another factor which complicates allocation decisions is that the most productive form and combination of these services may differ greatly among geographic regions and population groups.

Thus, analysis must emphasize comparative effects of alternative programs in a wide range of situations, underlining the importance of assisting in the development of indigenous capacity to perform such analysis.

Finally, the past thrust of development analysis has given relatively less attention to these areas than the more traditional

areas of economic analysis. Analysis must accordingly commence at a much more basic level as compared to that for agricultural production. Four broad areas of analysis are expected to form the foundation for effort in this area.

First, it is clear that complex interactions occur among food production, health, nutrition, family planning and education, particularly among low income people. These relationships need further analysis in order to provide improved guidelines as to the priority of objectives, and the time phasing, optimum effective program combination, nature of variation in programs which may be appropriate, and how that variation or adjustment may be achieved, in the context of the specific conditions and needs of low income people.

Second, since the resource requirements for the provision of even basic social services are large, we need to analyze carefully how existing resources may be used more efficiently and how additional resource requirements may be kept within affordable bounds--which may require changes in the way such services are provided. The required analysis entails identification, for a given objective, of the lowest cost means which is culturally acceptable of reaching that objective, taking into account the interactions indicated above.

Third, even with the best of efficiency, it is likely that substantial resources must still be raised for widespread coverage of basic services. The potential, means and interactions of raising resources, particularly from intended beneficiaries, for these purposes as well as for increasing agricultural production or other objectives need to be investigated thoroughly.

Fourth, health, nutrition, family planning and educational problems are also acute among the poor of urban areas and demand attention. However, since urban and rural poverty are closely intertwined, particularly through the migration of rural people to urban centers, analyses of urban poverty are more effective when they occur within a broad context encompassing the rural sector. Their focus should be on the question of appropriate allocation of resources between the urban and the rural

sectors, an allocation which may well influence the migration which exacerbates urban poverty.

In addition to the issues which cut across the broad areas of health and nutrition, family planning and education, there are many questions of detail within each which require more research. Examples of these are provided below to illustrate the pressing need for additional analysis to refine policies and programs and to illustrate the types of effort needed.

a. Health and nutrition---Premature death, malnutrition, chronic illness and unnecessary debility impair the life fulfillment and productive capacity of many people in low income countries. These impediments are usually mutually reinforcing. Malnourished people tend to be disproportionately susceptible to disease and premature death from controllable diseases. Poor people are also subjected to a complex and often formidable array of pressures and constraints, avoidable at higher income levels, which induce responses that seem rational to those affected but are nevertheless detrimental in the aggregate to their status of health, nutrition and income. Ignorance as to causes and prevention of disease as well as inability to utilize modern methods may perpetuate as seemingly rational certain customs and beliefs that exacerbate health and nutritional hazards. At the same time, poor health inhibits the desire and ability of people to train for new skills or to undertake entrepreneurial risk and thus dampens the impact of other developmental effort.

Policies and programs directed to isolated factors in this complex may dramatically improve status with respect to a specific health or nutrition component, such as, mass immunization against smallpox, specific nutritional supplements, etc. But more often they may produce only symptomatic relief without affecting causes that are multivariate, and interacting.

Efficient resource allocation in these circumstances requires recognition of the multiplicity of hazards, constraints, programs, pressures, incentives, beliefs and deficiencies affecting the status and practices of low income families: assessing the

interactions of these influences in depressing health and productivity; and the generation of programs that incorporate multiple objectives and integrated pursuits, as appropriate. The most cost-effective approach is likely to vary by region and country, depending upon many factors, including the relative strengths of the socio-economic factors mentioned above. The optimal approach may well be a particular combination of activities, ranging for example from an expansion of selected components of a health care "system", such as paramedicals or volunteers, to provision of improved sanitation or potable water facilities, to pricing policies which stimulate expansion of food crops. Such recognition and assessment should be based on new data from pilot projects, alterations in evaluation design, improved techniques in multivariate analysis of complex bodies of data, and studies of discrete components of integrated programs. Procedures for determining goals and impact of resource allocation also need to be refined. Where targeted changes in health or nutritional status are indeterminate within the life of selected projects—as is often the case—the probability of such improvements, or the degree of progress toward them, might be discernible through the achievement of delineated "intermediate outputs", such as, changes in family health practices, for which clear linkages to desired status changes could be established. Establishing these linkages is thus an important current research need.

While it is anticipated that approaches to health and nutrition which utilize indigenous practitioners and institutions may permit reaching larger numbers who have limited financial and skilled human resources, major efforts to reach large and/or widely dispersed populations will require a solid income-producing base for continuity. If such programs proceed faster than the development of resources for generating taxable or disposable income, they run the danger of not remaining viable.

On the other hand, development of such resources can be enhanced materially if provision for the maintenance of adequate nutrition and health proceed apace. The adoption of an underwriting mechanism,

which may be partially or wholly contributory, may help in many situations. Research leading to strategies and procedure for health systems underwriting, including local participation and determination in health projects and in integrated projects with significant health components, would materially enhance the translation of health and nutrition policy into effective implementation.

b. Family planning and population—Family planning policy involves complex family level and national level considerations. Size of family is intricately interwoven with individual family welfare. Its product, national rates of population growth, has profound effects on labor markets, distribution of income and per capita and per family real income—all of which relate back to family welfare.

The well being of the members of low income families is clearly also related to family size. For example, the health of mother and children can be adversely affected by a high number of pregnancies in close succession, especially under the deficient nutritional and environmental health conditions prevailing among low income people. Similarly, for a family with a meager and static real income, frequent pregnancies and many children can reduce the family resources available for feeding, clothing and educating each child. At the same time other powerful economic and social factors may tie family welfare directly to large numbers of births. Thus family welfare is subject to complex counter currents with respect to family size.

Existing research suggests that the increase in income, health, nutrition and education levels which low income families should experience during a successful participatory strategy of development will be reinforced by a reduction in the desired minimum family size. However, the relative importance of each of these variables and their complex interactions within and among families are not sufficiently well known although, for example, recent research indicates that the level of child health and the educational level of the mother are especially important factors.

Another important area for continued research is the interaction between the above environmental and development program and policy factors and the provision of family planning services, including information and education programs associated with family planning programs. More research is needed on the cost and impact of different types and combinations of services—not only directly on the final measures of family welfare but also on the intermediate effects on family size and fertility rates.

c. Education—Although the importance of education to development has long been recognized among low income countries, the objectives of universal primary education, a more equitable distribution of educational opportunity, and the elimination of the educated unemployed remain elusive and difficult to attain. These problems persist despite massive fiscal commitments in many low income countries. Thus, low income countries are faced with the need to find educational strategies which allow them to educate more people for their current and future development needs and maintain a productive balance between use of fiscal resources for education and other needs. Thus, educational policy needs to be both efficient and relevant to current national objectives. This requirement places a not inconsequential research burden on policymakers.

Despite a considerable body of research which establishes significant but complex associations between educational level and such variables as earnings, health and nutritional status and family size, surprisingly little is known about the causal mechanisms behind these associations.

Further elucidation of the linkages between education and development would appear to require research efforts along the following fronts.

First, research attention needs to be directed at the education-employment relationship. Such research must go beyond the simple analyses of the past which have established the positive link between education and income. Although education increases the skills of individuals, the remuneration for these skills is contingent

on the demand for these skills in the marketplace. Therefore, research models need to take into account both supply and demand characteristics. Research can be most helpful if it were to assist policymakers select an educational strategy which will provide the economy with workers who possess the necessary skills for current and future labor requirements.

Second, given the role of education in the achievement of economic and human resource objectives, and the limited fiscal resources available in most low income countries, research efforts are needed in determining the most efficient educational strategy which allows an LDC to achieve its economic and social objectives. Previous research in this area has largely ignored the link between the internal functioning of the educational system and its general social and economic context. This research will need to take into account several aspects of the educational delivery system. In order to achieve a specific objective, who should participate in the educational system? What curriculum or program content is best suited to achieve the objectives? When should the investment be made and in what order? Finally, *where* should it be made? All of these questions should be addressed in educational research models.

Third, educational research cannot ignore the distributional consequences of education. Distributional analyses questions should look at the incidence of benefits and financing arrangements: who bear the costs and who benefit from the education?

A related issue is the direct analysis of alternate educational financing arrangements while guaranteeing and ensuring the access to education for the least well-off members of the society.

B. Income and Employment

Expanding the supply of goods consumed by the poor does not assure that low income families will be able to obtain the increased real income essential to acquire the food or other essential goods and services. Indeed the more skewed is asset distribution, the less likely it is that incomes of the poor would be raised through increased production, and the more essential that explicit attention be given to increased and more productive employment. The generation of new employment opportunities and the increase in the productivity and stability of existing employment needs to be analyzed in terms of (a) the employment, resource and income patterns of low income people; and (b) the direct and indirect employment potentials associated with growth in various sectors. Further, explicit attention needs to be given to the circumstances in which concentration in land redistribution so blunts growth linkage and multiplier effects as to negate the potential for increase in employment through a rural development oriented strategy of growth.

1. Employment—wage determination and income patterns

Low income families earn income largely through use of their labor. However, it is increasingly apparent that simply increasing employment opportunity is not a sufficient solution to inadequate income for even minimal human needs. Low income families are often fully employed, particularly seasonally, albeit at low productivity and wages, emphasizing the need for concern with the level of productivity and wages as well as with the amount of employment; thus, the need for additional analysis of the patterns and determinants of employment and sources of income of low income groups as well as the impact of programs and policies which will improve their productivity through improved health, nutrition and education. From this analysis the means may be developed for increasing their incomes in a manner consonant with an objective of increased human dignity.

2. The role of women

In low income families, women play a major and complex role in processes of modernization, production, marketing, and improved family welfare. Yet, there has been a tendency, in some countries, to ignore or preempt women in development processes, and hence a special effort is needed to redress that imbalance. The role of women and the manner in which they play that role vary greatly among cultures and social classes and is differently affected by modernization, therefore requiring differing analytical approaches. Research in this area needs to start with a minimum of preconceptions and a well-based understanding of specific situations. The analysis needs to focus on the role of women in the broad context of total family welfare and the totality of forces operating in that context. Such analysis may well need to be pursued separately as well as being broadly incorporated in the range of studies of development policy and implementation at various levels.

3. Agricultural employment

As the economies of poor countries develop, employment in agriculture tends to decline as a proportion of total employment. Yet, agriculture will continue for decades to be the largest single source of employment in low income countries. The following aspects of agricultural production are particularly in need of analysis in the context of employment expansion.

New agricultural production technology has highly complex employment effects which need to be more fully understood if effective policy is to be pursued. The employment effects of new biological technology which raises land productivity must be analyzed in terms of its potentially higher capital intensity and in relation to wage rates, labor productivity and labor supply constraints. Such analysis will show more clearly what technology may be suitable, under what circumstances increased mechanization is appropriate, what additional employment may be generated, and set the stage for complementary analysis of employment in other sectors.

The highest growth rate potentials for increased agricultural employment often lie in the labor intensive livestock and vegetable sectors. Production and employment are generally initially large and the growth in demand for these commodities has been shown to be very high in a rural based high employment strategy of growth. Detailed analysis is needed of the potentials, the means and the requisite programs and policies for efforts in these sectors in individual countries. As with basic production technology, special attention must be given to the means of overcoming the barriers of inertia and to the encouragement and support of the very small and the marginal farmer in these, commonly, labor-intensive but high risk areas.

The very success of a strategy based on modern high-yield technology agriculture may exacerbate regional income differences. This is a problem much researched in high income countries. The problem is sufficiently important to merit continued analysis particularly to discern the circumstances in which institutional, infrastructural or other change can unleash agricultural potentials in laggard regions and to explore alternatives for such regions and people when these potentials do not exist. The complex phenomena of rural-urban and rural-rural migration and relationship merit analysis within this context.

4. Growth linkages, non-agricultural employment, and the market town

A participatory strategy of growth can provide powerful growth linkages through the expenditure of higher incomes arising from efficiency increasing technological change in agriculture or other sectors. If the increased incomes are spent on goods which are labor intensive, this can provide a powerful stimulus in increasing demand, production and employment in a variety of sectors. The potentials and requisites for growth in small and medium scale manufacturing deserve major emphasis in this context. The linkage effects may be widely dispersed in various regions due to the dispersed pattern of demand and to the significant potentials for increased savings and investment from lower incomes.

These linkages and multiplier effects are of interest generally to growth, but are of special interest in light of the tendency for efficiency increasing technological change in basic food production activities to provide only modest employment growth. While there is evidence of the potential growth linkages through this mechanism in some countries, more needs to be done to empirically investigate the labor intensity of the consumption patterns of rural people in various low income countries. Also little is understood about the regional growth process, the circumstances under which it occurs, the role and requisites of the market town in those processes, the infrastructure investment required, the institutional and other means of encouraging a labor intensive regional development and the role of price, trade and other policies. Analysis of these problems may be conducted in a broad regional context in order to take into account infrastructure investment requisites and broad employment effects. Such analysis also may lead to the study of the most strategic policies and programs including infrastructure investments, which will encourage the growth of viable market towns offering off-farm employment in manufacturing and service trades to small farmers and landless laborers. Of particular importance with regard to policies is the identification of those which serve to impede and those which serve to encourage the growth of small or "informal" service or manufacturing activities in small as well as major urban areas.

5. Export potentials

Expansion of small or medium scale industries offers further employment opportunities through exports. The nature of such export potentials, how they interact with regional growth centers, and their role in addressing the overall employment question have been less studied compared to other aspects of trade and yet are of special relevance to a participatory growth strategy. It is of particular interest to Agency policy pertaining to the development of agribusiness activity with an export orientation. As will be indicated in Section III, such analysis merges into a wide range of national and international considerations in the trade area.

III. International Trade, Finance and Resource Transfer

The ability of low income countries to develop rapidly within a broadly participatory framework is strongly influenced by their international trade performance, the flow of capital resources and other elements of the international environment. Trade increases productivity through specialization which in the case of low income countries would tend to increase employment opportunities by encouraging production of labor intensive goods for domestic consumption and export and the importation of capital intensive goods. Specialization along lines of comparative advantage conserves low income countries' scarce capital resources which can be allocated to more employment oriented production, and, for the developed countries, provides expanded markets for more capital intensive goods and lower prices and greater supply of more labor intensive goods and raw materials. Thus trade policies interact with other elements of development strategy including the emphasis on agriculture, the structure of industry and the growth of employment and must be analyzed as an important factor conditioning the need for and the effectiveness of resource transfers.

Foreign resource transfers may facilitate a participatory growth strategy by allowing an increased investment rate without commensurate reduction in consumption. Similarly, foreign transfers may promote development programs which provide increased employment and higher consumption of necessities by low income people. Simultaneously, foreign transfers add to the availability of foreign exchange and thus facilitate the internal structural adjustment most developing countries have to undergo prior to fully realizing their trade potential. On the other hand, in cases where developed countries are unable to make the necessary adjustment to allow an increased amount of low income countries' imports in their markets, resource transfers, by adding to low income countries' foreign exchange availability, are often a convenient, if second best, alternative.

There are significant differences in the nature and mix of the resource transfers appropriate or possible for various low income countries. If trade and resource transfers are to influence successfully the choice and pattern of development, there must be a clear understanding of the nature of the relationships, the relative advantages of each of the trade and resource transfer instruments and the substitutability among these instruments in their various forms for achieving particular objectives in various low income countries.

A. Trade

Low income countries are increasingly emphasizing trade needs, even in greater priority than resource transfers, because trade is far more important than foreign aid as a source of foreign exchange resources and because foreign exchange obtained through trade does not bring along any of the conditions commonly associated with aid or private capital. This increases the relevance of a substantial number of trade issues for research and policy development. Most important, there are such close relations between trade and choice of development strategy that any view of aid in the context of strategic choices must also be in the context of trade relationships.

1. *Potential for export of labor-intensive manufactures*

In manufactures, the priority issues relate to industrialized countries' trade policies as they affect low income countries' efforts to expand labor-intensive exports, as well as industrialized countries' attitudes towards low income countries' policies to expand manufactured exports through a variety of subsidy instruments. Limitations on labor-intensive exports stemming from industrialized countries' producers' concerns obviously have adverse implications for low income countries' employment generation and the various elements of an employment oriented strategy of growth.

The issue is how to address high income countries' producer concerns in ways that take into account low income countries' interests. The objective is to strive for overall economic efficiency by encouraging low income countries to adopt outward looking growth strategies which are usually supportive of participatory development. The problem was of less urgency for the high income countries when only a few small low income countries chose an export oriented growth strategy. Now that more low income countries are embarking on such a strategy it is important that the full implications be analyzed.

Developed countries have recently adopted or are planning to implement a number of trade policy measures to increase their trade with low income countries. Most high income countries have a generalized system of trade preferences. In the multilateral trade negotiations special attention is being paid to tropical products of interest to low income countries. High income countries have also made political commitments to ensure that tariff cutting formulas and other negotiating schemes to reduce non-tariff barriers should cover products of interest to low income countries. It is important to analyze the trade impact of such policies and determine the extent to which these measures would be effective in promoting low income countries' exports of labor intensive manufactures, especially since many low income countries' exports are produced through capital intensive processes.

A basic instrument in low income country export promotion policy is subsidization of export industries. There is evidence that indiscriminate use of export subsidization tends to be an inefficient development instrument. On the other hand, indiscriminate opposition by developed countries overlooks the legitimate needs for subsidies, for example to offset initial costs of entry into foreign markets, particularly in the context of diversifying exports. The issue is how to devise international guidelines which would tend to discourage economically wasteful subsidization and encourage policies promoting labor intensive low income country exports.

2. Fluctuation in export earnings and purchasing power

An employment oriented strategy of growth has potential for steady expansion in total production and exports so long as labor supply is elastic. However, since such a strategy implies under most circumstances substantial increases in imports as well, low income countries may become more vulnerable to fluctuations in export earnings in reaction to cyclical fluctuations in high income countries or to other factors especially since their exports tend to be concentrated either by commodity or by market or both. Fluctuations in high income country demand tend to be reflected in large changes in export commodity prices and instability of net foreign exchange earnings. In the cases of more developed low income countries, instability is also reflected in changes in demand, volume, and earnings from manufactured exports.

The impact of export earnings instability on low income country economic growth and employment has often been explored in the past. Yet there is little detailed understanding of the means whereby export or import price instability or significant shifts in a country's terms of trade are transmitted internally within low income countries and how they affect aggregate employment, employment in specific sectors, and growth and diversification efforts. These questions are of special importance in circumstances where low income countries adopt policies to increase employment and improve income distribution through concerted rural development efforts. Heavy dependence upon commodity export earnings and major fluctuations in commodity prices may have major long-run impact on the ability of the country to mount and pursue a participatory strategy.

The recent period of strong fluctuations both in prices of low income country exports and crucial raw material and food imports such as fertilizer and grains has dramatized the importance of commodity market fluctuations on low income country development objectives. Rising food and fertilizer prices and scarcity have reduced food availabilities especially in countries dependent on food aid. Rising fertilizer prices have adversely affected food production incentives and posed complex problems of food pricing for low income country producers and consumers.

Analytical work in this area would need to focus on (a) the internal adjustment mechanisms and low income country policies, including policies on reserve holdings of food and commodities or financial assets, that can be effective in cushioning the effect of external shocks on internal growth and employment objectives; (b) international actions such as buffer stocks or other arrangements designed to promote stability in trade in commodities and foodstuffs while being supportive of appropriate low income country policies to diversify production and adjust to abrupt changes in external demand and supply conditions; (c) domestic and international efforts to increase demand for low income countries' commodity exports, through appropriate institutional and promotional arrangements; (d) examination of existing market structures from the producing level to marketing outlets as a means of determining how their performance can be improved; (e) the implication of the exploitation of the resources of the sea on internationally traded commodities of interest to low income countries.

3. Supply access and other commodity issues

In addition, in the area of commodity trade there is a variety of high income country policy concerns receiving increased attention which need further analysis in terms of their implications for low income countries. These deal mostly with access to low cost supply, the impact of commodity prices' instability on domestic consumers, and the usefulness of commodity arrangements in this context. Various proposed international investment schemes also can have an important impact on supply, price, and aggregate export earnings. High income country policy with respect to these problems will have an impact on low income country prospects in the commodity field through their effect on export earnings and on the rate and method of resource exploitation.

B. Resource Transfers

Emphasis on participatory strategies of growth is becoming increasingly more widely accepted. However, the requisite changes in policy often involve political decisions which may be taken more rapidly if some of the economic costs are absorbed by foreign resource transfers. Similarly, resource transfers may accelerate the achievement of a self-sustaining system of participatory growth by providing important incremental investment resources to specific sectors or activities which permit the development of crucial elements of the participatory strategy or assist in meeting basic human needs while development of domestic capabilities are increasing. Analysis is needed of (1) how much assistance may be appropriate to the objectives, and (2) the most suitable form and terms for such assistance.

1. The quantity of resource transfers

It could be argued that foreign assistance extended in support of a participatory development strategy should improve the long-term basis for raising domestic resources in the recipient country, encourage improved resource allocation, foster increased employment and incomes to the lower income majority, and help expand the provision of basic services to improve human well-being. Previous analyses of the quantity of resource transfers needed to attain low income country objectives focused on the aggregate approach of the two-gap models. The use of these models has increased recently in the context of forecasting short and medium term low income country external financing requirements in light of the energy crisis. These models suffer from serious deficiencies when used to forecast long-term low income countries' needs to obtain resource transfer to achieve the multiple objectives of self-sustaining participatory growth.

An alternative approach to the two-gap analysis which would focus more attention on the distributive aspects of growth is needed. Such an approach would need to take into account (a) the investment needs of participatory strategies, (b) the savings potential given the distribution of income, (c) the constraints on national savings of providing the posited level of consumption by the low income majority and (d) the external sector prospects under alternative international monetary and trade policy regimes. The development from this core of the proper methodology could then allow the undertaking of the important task of quantifying long-term resource needs on the basis of an improved analytical framework.

2. The form of resource transfers

The form of resource transfers most appropriate to the development objectives involves complex interaction in several areas. The source of the transfers, their use, and the terms and conditions of the flow all have a bearing on their effectiveness. They have implications for employment growth and the country's long term balance of payments position, and can directly influence the ability of the country

to pursue its development strategy.

Given the substantial resources available to the private sector, a number of questions arise as to how private firms and the private capital market may contribute to the development process including their impact on overall growth, employment, balance of payments and income distribution, how they may be tapped for development resources and the relation of such sources of finance to the stage and strategy of development. Thus, analysis is needed both of the institutional and policy questions of access to private equity or bank capital as well as the operations of the overall international environment and monetary system which have a bearing on private capital supply to low income countries. In addition, the use of the resources of the sea is also likely to result in some resource transfers and is likely to have implications for long term investment flows and prices for several raw materials of importance to specific low income countries.

The extent of assistance in the form of loans and grants, the relation of present assistance to the servicing of past debt, and the relation of these to the stage of development of the recipient are areas of rapidly changing context which also require current analysis, as part of ongoing Agency concerns.

The effect of present assistance practices with respect to tying procurement, commodity or generalized sector loans on broad low income country development objectives is another area of investigation. Of special importance would be to identify the distortions of development objectives that may be introduced by specific assistance practices and to explore means of reducing or eliminating such distortions.

3. *International monetary issues*

There are a number of important issues in the area of international monetary affairs which bear directly on the outcome of low income country development efforts including the ability to pursue alternative development strategies. Recent international events provide many examples of the need to understand better the transmission of external shocks to the domestic development program or international monetary factors affecting the ability of the developing economy to withstand shocks in the short run and adjust to them in the longer run. Partly in recognition of the importance of short term problems the IMF's role in providing financing through a variety of facilities to low income countries has increased. The implications of these new institutionalized arrangements for long term low income country strategy are quite unclear and need further investigation. In addition, the impact of exchange rate policy and particularly the system of flexible exchange rates on low income country output and employment objectives as well as reserve requirements is little understood and deserves further exploration.

C. Technology Transfers

More than anything else, economic growth is a function of increased efficiency in resource use arising from improvement in technology. High income countries have a well developed capacity to generate technological change. That capacity is one of the most coveted elements that these countries have to offer the low income countries. Substantial analysis is needed of (a) the appropriate technology to be transferred, (b) the special opportunities with respect to the most sophisticated technology, and (c) the role of education and training in technology transfer. All of these elements will affect the nature and level of employment generation through technology transfer and the competitiveness of domestic production employing imported technology.

1. *The general case of technology transfer*

Analysis of the technology transfer issue involves a variety of aspects impinging both upon low and high income country policy. The adoption of appropriate technology designed to enhance productivity in various economic sectors in low income countries depends both on economic policy factors and on institutional development. A critical element in economic policy is the existence of pricing policies that tend to reflect relative factor scarcities; in the absence of such policies the transfer of appropriate technology tends to be impeded. In addition, low income country policies towards foreign private investment are instrumental in determining (a) the volume of such investment (b) the realization of the potential in technology transfer that such investment may have. A great deal of work has already been done in this area; yet more work may well be needed to address specific questions, especially with respect to the role of foreign private investment in areas such as promoting participatory low income country growth, the transfer of appropriate technology and the interaction of economic, social and political processes with technology transfer.

Institutional development designed to assist the transfer, adaptation and extension of technology must complement appropriate government policy action. In the absence of institutional development, technological transfers would tend to be isolated and have no lasting effects in raising overall productivity. How to promote such development is an important issue concerning policy makers at present.

On the developed country side, the main issues relate to questions of public transfers and private foreign investment. In public transfers the problems that need to be addressed are (a) how to establish the international institutional mechanisms most conducive to technology transfer and (b) how to design economic assistance programs which tend to directly assist in the transfer of appropriate technology and to embody technology which is compatible with low income country factor endowments. With respect to foreign private investment the main issue that needs further analysis is how, if at all, can developed country governments promote foreign private investment efforts which are compatible with overall development objectives, especially with respect to the transfer of appropriate technology.

2. Special case of high technology

In general the emphasis in employment oriented strategies of growth is upon adaptations of technology which are efficient in the context of relatively low labor costs. Nevertheless there are situations in which the highest levels of modern technology are of major value in the context of the overall strategy and the U.S. concentration within that strategy. The U.S. as a major source of such technology should properly encourage analysis of its appropriate use in the overall strategy of development.

3. The role of education and training in technology transfer

One of the primary effects of overseas education and training is to facilitate technology transfer. Such programs may make significant contributions to raising technological capabilities in low income countries. However, they can also be unwitting agents for transfer of technology inappropriate to low income countries. Analysis is needed for the changing role of such training and how it most effectively relates to the new strategy of development.

IV. Program Implementation

There is at best a fine line between analysis of what policies, programs and projects to pursue and analysis of how to implement those decisions. In any case each is dependent upon and interacts with the other. Problems of implementation deserve special analytic emphasis because they have been underemphasized in the past and are particularly poorly understood in the context of widely diffused, participatory approaches to development, taking place under highly heterogeneous conditions.

Problems of implementation arise both in poor countries and in developed ones. Policies or programs which may be optimally designed to obtain desired objectives may not be feasible because of socio-political constraints operating within or upon the governments of developed countries or international institutions endeavoring to assist the poor countries. Analysis of these problems is important in determining what is the policy and program mix feasible to address developing countries' problems.

In both developed and poor countries alike, the process of implementation of policies and programs aimed at efficient use of resources interacts with policies and programs designed to increase resources. This is true, for example, with respect to financial resources. In the context of rural development of poor countries it is even more important with respect to personnel and institutional resources. It is the need both to conserve and to expand the supply of these latter resources that urges inquiry into a multiplicity of forms of implementation, including traditional institutions and private organizations, with all interactions of objectives and means.

Analysis of implementation must employ the methodology and perspectives not only of economics but those of other disciplines as well. It may appropriately be pursued in research projects simultaneously integrating several disciplines and aspects of the problem, or it may be divided into parts, with policy advisors integrating those parts into a basis for coherent action. Research along such lines, although

now especially relevant and necessary, is relatively uncharted. However, because it is so necessary to sound policy and operations, the charting must be done in the context of policy and operational questions and problems. In such effort there must be explicit concern not only with how to use resources effectively in meeting given objectives but also on how to raise effectively the supply of resources for specific purposes.

While problems of implementation of developed countries' policies are of no less importance, this paper focuses its attention on two major implementation problems in poor countries: (a) the political and social processes which influence the matter of who participates in development processes and how they do so; and (b) the processes which determine how institutions function, perform, and grow. Each of these processes develops from a particular cultural and historic framework which requires careful adaptation of programs and analysis. The difficulty of generalization is of course analogous to that with respect to economic research on agricultural production policy which also takes place in highly heterogeneous physical as well as social and economic environments with consequent difficulty of generalization.

A. Political and Social Processes

Analysis of political processes should explore a wide range of means by which bureaucratic and other institutions are related to their clientele. These may include elected legislators at the local and national level, traditional leaders, and members of the bureaucracy itself performing in that or other contexts. Such analysis could fruitfully focus on the competition of various groups and interests and its implications for participation of low income people in development processes. Analysis is also desirable as to the political determinants of success of particular policy or program interventions under varying country circumstances. Throughout it must be recognized that the purpose of such analysis would not be just to provide insights as to how to channel goods, services and income to the lower income groups but also to explore the communication and

feedback mechanisms which are essential to effective development and operation of the relevant institutions.

B. Institutional Dynamics

Analysis of institutional dynamics shall address both the question of efficient use of resources and the raising of additional resources—financial, physical, human and institutional. A range of questions relating to the interaction between formal technical knowledge and informal, local, intuitive knowledge need to be examined. Broad questions of decentralization, devolution, degree of autonomy from central government structure, and the role of traditional and commercial structures must also be examined. The needs are well illustrated in the field of health. The types of resources and services required to prevent most of the disease and malnutrition now afflicting low income populations are well established. By contrast, our knowledge is limited of the logistical systems, supervisory routines, demand and market pressures, economic forces, behavioral mechanisms, cultural patterns and other factors influencing effective absorption of scientific knowledge by populations at risk. For example, how should a health system respond to commercial persuasion and social imagery that encourages premature weaning and subsequent infant malnutrition? Or to economic development policies and practices that encourage the propagation of parasitic disease? Pursuing answers to questions of this sort necessarily goes beyond medical expertise, into law, economics, behavioral science, and other disciplines.

C. Monitoring Techniques

The more research relates to operational problems generally and implementation aspects specifically, the more it merges into the very processes of project development and evolution and the more blurred the distinction between research, monitoring and evaluation. However, because these processes are now in such an early stage of development, there is scope for research designed to provide, if not generalization, then at least a sense of the variation among countries and cultures.

This would provide a useful basis for more flexible approaches to projects and help improve project identification, development, implementation and monitoring techniques.

One promising approach to analyzing institutional aspects of project implementation and evaluation is to develop better ways of structuring and utilizing participant observer micro research. Because such research focuses in depth on the social organization of resource allocation and production—on the institutional contexts in which producers actually make economic and demographic decisions—it can be a useful source of ongoing feedback information to project management.

The major challenges in the more effective pursuit of this kind of micro research are: 1) to develop more efficient ways of establishing the representativeness of particular communities and situations; 2) to develop better ways of using micro research to identify reliable indirect indicators that projects are or are not achieving their sector goals; and 3) to develop more standardized methodologies to facilitate comparison and generalization from selected in-depth case studies.

D. Participation and Human Rights

Finally, in the context of program implementation, there must be specific concern with participation in decision making and in the execution of development activities in a manner which protects human rights and dignity. These questions become more difficult to understand in the context of rapid change, sophisticated development strategies and technologies which widen the gaps of understanding and prestige between administrators and experts on the one hand and the rural and urban poor on the other, and time pressures imposed by government plans and external donor needs. Specific analysis of the problem in various contexts is required.

V. Progress Assessment

As understanding has grown that development processes are diverse in objectives and forms as well as complex and difficult to predict, increased attention has been given to measuring the commitment of various developing countries to different approaches, and the achievements under those approaches for the purpose of providing the bases for improvement of policies, programs, and projects. Progress assessment should of course be an integral part of all programs and projects. There is now need, however, to develop improved means and even measurement prototypes which are relevant to assessing progress in attaining the objectives of broadly participatory growth.

Three broad approaches need to be used: (a) analysis of national budget and resource allocation information, (b) analysis of large-scale sample survey data, and (c) program and project specific assessment. Other approaches may also need to be investigated.

A. National Budget and Resource Allocations

One of the purposes of progress measurement is to judge the degree of national commitment to a particular strategy of growth with its implicit differential weight on economic and social sectors and the extent of reallocation of national budgetary resources requisite to the pursuit of a participatory growth strategy. An important element in such analysis is the sectoral and functional distribution of sector revenues and expenditures. An equally important element is the critical examination of a country's fiscal and monetary policies to determine the extent to which they support and are consistent with a participatory strategy. Such an exercise is difficult and technical. To be useful it must be comparative, since there are few relevant absolute criteria; and to be effective such comparative analysis must take into account differences in budgeting procedures and practices as well as differences in the context within which resources are allocated.

Consistent and effective assessment will often require consolidation of public finance data at both the central government level and at times, depending on relative importance, at lower levels of government. A preliminary effort along these lines will require evaluation of current sources of information, recommendation for improving information flows, and broad standards for judging performance. Experimentation is needed with comparative analyses to see if they can be helpful in judging the commitment to particular strategies and perhaps for learning the size of resource commitments implicit in particular approaches.

Similarly, comparative analysis may also be developed in a broadly participatory strategy and the resource commitment to those efforts.

B. Large-scale Sample Surveys

An end-product of a participatory pattern of growth is widespread improvement in nutritional status and health, decreased infant mortality, increased life expectancy, improved education and, as a product of these and other influences, reduced size of family. It is useful, not only for measurement of progress but also as an aid to diagnosis of needs, to understand the status of various societal groups with respect to these variables and various intermediate factors which may presage change in these variables.

Large sample surveys which provide information on a consistent basis for several socio-economic variables are an especially useful source of data. In cases where such a data base exists there is a need for intensive analysis, particularly of changes in status over time. Where the existing data base and institutional capacity to enlarge it is more limited, there is a need to develop measures and indicators appropriate to the type of analytic capability available so as to assure consistent information over time. There is also need to plan for the appropriate division of data collection efforts between statistical and more action oriented agencies.

C. Program and Project Specific Analyses

Study is needed of the extent to which procedures can be improved for providing data to support policy making and analysis and improvement of project and program effectiveness. At a minimum, assessment is required of: (a) the data requirements for a recursive approach to project design and implementation in the context of a strategy of broadly participatory growth, (b) the content and size of appropriate special surveys to measure program and projects' effects, and the causes of those effects and means of improvement, (c) the Agency's various efforts to improve its information bases with an emphasis on practical survey methodologies, and (d) recommendations for further action.

It would also be useful to review in this analytic framework aspects of the project development and implementation process which act as constraints to a more relevant and flexible project approach. As in many aspects of analysis, there may be higher returns to an aggressive effort to utilize existing materials effectively than to new research.

The program of research implicit in the preceding is large. It must be seen in the context of the ongoing stream of research in many institutions, the continuously improving base for policy and the constant flow of policy determination. It is the molding of ongoing research as well as the institution of new research that will improve the basis for policy and programs. From the large research agenda the precise policy issues must be drawn in operational terms, priorities must be established for the sequencing of the research effort, and allocational decisions must be made not only with respect to research resources but also with respect to the capability for guiding and integrating the research effort into the appropriate policy context. Finally, the papers to guide policy must be initiated, in a form appropriate to absorbing a flow of relevant research results.