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ISSUES TO BE CONSIDERED
BY THE
EXPERT GROUP MEETING ON INDUSTRIALIZATION
IN RELATION TO INTEGRATED RURAL DEVELOPMENT*

by

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INTRODUCTION

1. The drive to industrialize has been an important part of the development strategy of most developing countries. Even the poorest countries have commonly included industrial development high on their list of priorities. Industrial development itself has come to symbolize the characteristic of being 'developed', and considerable resources have already been expended to that end.

2. A few countries have achieved notable success within the space of a single generation in rejuvenating their economies with a strong, rapidly growing industrial sector, which makes a major contribution to their gross national product and provides substantial employment opportunities for their growing labour force. For the majority of developing countries, the industrialized sector remains a modern appendage, grafted onto a traditional economy. There is therefore widespread frustration at the failure to realize the ambition of transforming these economies through industrialisation.

3. This frustration is also derived from wider conflicts and inconsistencies within developing societies. In particular, the present duality of many developing economies has produced a polarisation of interests between elite groups, who continue to monopolize power and wealth, and the majority of the population who reside and seek a means of livelihood in rural areas. For the majority poverty remains an all-pervading, self-perpetuating way of life. In addition, exaggerated urbanisation and the concentration of investment in mainly urban-oriented, capital-intensive activities have produced a precipitous imbalance within developing societies which few governments can ignore.

4. Pressures on governments to redress this imbalance have been greatly magnified by an increasing awareness among the majority of the degree of inequality confronting them and the prospects for its amelioration. A series of demands have arisen which will determine the shape, timing and to some extent the content of future development strategies—particularly the contribution to be made by industrialisation. Firstly, there must be an acceleration in the rate of development; secondly, policies and measures must prove more relevant to the needs of the majority; lastly, there must be much wider participation in the processes of decision taking, so that benefits might be more equitably shared.

5. The response of international agencies and many governments to these demands has been to initiate a swing in the application of resources away from the cities and capital-intensive activities. An increasing share of the total resources available for productive investment is to be set aside for opportunities in rural areas, in order to improve the welfare and quality of life of the majority. As yet however, this re-allocation of resources has been slow to materialise.

6. Industrialization can make a significant contribution to rural development through the utilisation of local raw materials and skills, the provision of employment opportunities and the production of basic needs, and through the establishment of linkages with other sectors of the economy. In order that this might take place, there needs to be an integration of industrial policies with those of rural development; appropriate institutions need to be established at all levels; and industrial programmes need to be developed based on clearly defined socio-economic objectives.

7. The particular constraints of rural areas will severely circumscribe the contribution to be made by industrialization, most of all in the least advanced countries. First and foremost is the scale and complexity of the problems involved, given the need for a simultaneous, multi-sectoral approach. New techniques will be required to identify the most productive opportunities, and means found for the release of local resources and multipliers. Criteria will have to be established for the difficult selection of priorities between rival claims on resources. The limited available resources (skills as well as finance) will have to be focused on key problems. Secondly, new approaches will be required to cope with the limited absorption capacity, reluctance to take risks, and resistance to change in rural societies. The profound nature of the changes involved—in values, attitudes, skills, and in the instruments of change—all of these dictate a slow and uncertain rate of progress. Therefore, if the patience of the majority is not to be exhausted, a greater effort must be made and whatever progress there is must be more visible and more equitable than what has gone before.

8. The objectives of this expert group meeting on industrialisation in relation to integrated rural development are twofold: to review relevant experience on the subject and to formulate guidelines for strategies and

programmes of industrialisation in relation to integrated rural development. To these two objectives we will now turn, first touching on the major concepts from which the issues are derived, then highlighting the substance of the issues themselves, and lastly focusing attention on some of the important questions for discussion and resolution.

SECTION I: THE CONTRIBUTION OF INDUSTRIALIZATION TO RURAL DEVELOPMENT

RURAL DEVELOPMENT

9. A re-ordering of priorities within development policies should focus attention on the needs of the majority of the population, who live outside the major cities and who have been largely passed over by the benefits of earlier strategies. This majority may well exceed 75 percent of the total population in some developing countries. This majority largely depend for their livelihood on agriculture, and have adapted their way of life to relative isolation, low incomes, little access to resources, and very little influence over their future. Their standard of living is low and often declining; their quality of life leaves them severely disadvantaged and less able to change their role without outside help. Their cultural traditions are strong and their societies are distinguished by marked divisions and distinctions.

The nature of rural poverty

10. The causes of this poverty include low agricultural yields and low productivity of labour. In addition, there is increasing population pressure on available resources, and a high rate of absolute and disguised unemployment. There are poor institutional mechanisms and extremely limited physical infrastructure and services, so that access by the majority to the available resources is severely curtailed. The result is that the circle of poverty is self-perpetuating and all-embracing. The chief challenge facing the majority is merely to survive.

11. Within developing countries, there is widespread variation in the form and incidence of poverty and in the manifestation of its many causes. Within the disadvantaged majority in any one country there is no homogeneity. There are many diverse, competing interests, varying characteristics and capabilities, and many different degrees of deprivation. Any attempt to alleviate this poverty must therefore be specific to a particular country and must recognise the diversity within that country. Furthermore, any assistance provided should not be merely a palliative; for what is required is not relief, but a means of releasing the energy and abilities of the majority and of mobilising additional resources.

12. It is evident that rural development involves a process of profound change in the society, the community, and in the role of the individual. It is a matter of increasing the opportunities available to the individual as well as his means of utilizing them. The sheer size and inertia of the problem, its nature and complexity, are such as to defy all but the most incisive and most concerted attempts to construct new means of livelihood and increase welfare. Yet the nature of poverty and the need for greater equality require that the process of change take place on a broad front, taking into account the relevant political, economic, technical, institutional and human considerations. Not only is our understanding of the nature of the problem, its interrelationships and its causes imperfect, but there are very limited resources available with which to plan and to intervene. There must therefore be renewed attempt to identify the priorities to which development resources should be applied, to seek out the multipliers which will magnify and reinforce the impact of the inputs available. The process of rural development itself must achieve sufficient momentum before it can become self-generating.

13. These multipliers which can further the progress of rural development are of two kinds. In economic terms additional investment in rural areas should increase the productivity of labour by eliminating loss or non-productive tasks and should bring about a better utilization of raw materials. It should also provide increased income opportunities which in turn affect the level of savings and consumption. The rural propensity to save can be mobilized through rural banks and co-operatives, while changes in consumption patterns can be exploited by rural industries with appropriate products. In social terms one of the most powerful multipliers is the profit motive, to which rural entrepreneurs will respond given the opportunity, leading them to invest their capital and labour, especially where it brings increased status and opportunities for their children.

TARGET GROUPS

14. Faced with the rival claims of such a large proportion of the population who make up the rural poor, any assistance provided should be focused where it can be best utilized and reach those in the greatest need. Target groups should be separated out to reduce projects to manageable proportions.

These might well include such categories as small and part-time farmers, landless labourers, artisans, as well as the under- and unemployed (especially the educated youth). Such groups might be the direct beneficiaries of particular projects; others would benefit indirectly through the farmer's increased purchasing power or through the extra productivity of their labour. It is important to note that this identification of target groups and the re-orientation of resource allocation according to their needs is not a once-only process. Each project will require a substantial, extended commitment until the target group in view becomes self-sustaining. Even with the most successful rural development projects, disadvantaged groups will remain and will continue to emerge. Priorities will again have to be changed to focus resources on new target groups.

Basic needs

15. The aim of a poverty-focused approach to rural development is the raising of incomes and the supply of basic needs (see paper No.52, page 24) necessary for a minimum acceptable standard of living. Such basic needs as improved food and nutrition, clean water, adequate clothing, shelter, minimum education and minimum health care have been identified. Each requires a radical reform of productive and delivery systems in order to make them appropriate to the requirements and limitations of the majority. However, without much greater progress towards providing the majority with an adequate means of livelihood, so that they themselves become self-supporting and generate additional resources, improvements in the welfare of the majority are not possible. The means of removing poverty for the majority depends in part upon the mobilization of their own meagre resources and skills; industrialisation has a significant part to play in bringing this about.

Conditions for rural change

16. The initiatives and conditions required to bring about this profound process of change are several. Firstly, there needs to be a clear set of limited objectives for rural development policies based on national priorities for socio-economic development, which are widely known and understood. Those established by Tanzania would be an example of such a declaration of objectives (see paper No.8, pages 2/3). Secondly, there must be a strong national commitment to rural development which extends down from the very top of

national government to the bottom layers of administration at the local community level. At this point it is opportune to ask if one of the prerequisites (and perhaps one of the limitations of the strategy therefore) for the effective implementation of rural development policies is the presence of a charismatic leadership, as was seen in the Comilla Project Bangladesh (see paper No.5) and in the establishment of Productive Activities Incorporated in Mexico (see paper No.9). Such extraordinary interventions by influential, committed individuals would seem to be the necessary catalyst to overcome inertia and opposition and to enable such rural development programmes to be put into effect. Thirdly, there must be an effective means of participation by the target group of any specific programme or project in the decision-making processes involved. The project itself must provide increased access to resources, increased economic opportunities through productive and remunerative employment, and contribute towards a more equitable distribution of income and wealth. It is evident from experience with rural development programmes in Bangladesh, Tanzania, and Mexico that only in this way can the energies and resources of the poorer groups be mobilized so as to increase their productivity and self-reliance. Lastly, steps will have to be taken to ensure that influential minorities do not appropriate the resources or the opportunities intended for the target group.

The major issues for discussion which arise from this section include:

- Q1. What kind of catalyst is required in rural development projects?
- Q2. What are the multipliers available locally to magnify the impact of the limited resources available?
- Q3. Who are the target groups who take priority in rural development projects?

INTEGRATED RURAL DEVELOPMENT

17. The concept of integrated rural development is derived from the need to concert sectoral policies and programmes established by various agencies and institutions and aimed at rural development's broad problems. This involves tailoring a policy or programme not only to the particular requirements of a target group but also to take into account other simultaneous policies or programmes attempting to reach that same target group. As such 'integration' involves an awareness, and a seeking, of mutually compatible and reinforcing policies or programmes which may well run counter to the established pattern of government administration. This is usually organized on sectoral lines with specialization of function and careful division of responsibilities (see paper No.5, pages 23/33). Furthermore, this process of integration should apply within organisations, between their policy-making and operational divisions, as well as between different organisations, where there is an overlap of interests.

18. In some developing countries integration includes the aim of making society less stratified and more flexible with wider options for an increasing number of the population. As such the concept goes beyond a concerted attempt to redress the poverty of certain target groups, requiring policies aimed at narrowing the gap between urban and rural life and reducing the disparity between various income groups.

19. The mechanisms for achieving integration remain obscure. There are four levels at which integration of decisions and actions needs to be effected in order to make a major contribution to the process of rural development. These are:

- (i) the setting of the objectives for the programme or project (including the identification of the needs and resources of target groups);
- (ii) the design of the programme or project and the allocation of resources;
- (iii) the management and re-appraisal of the programme or project;
- (iv) the participation by members of the target group in the implementation of the programme or project.

20. The principle that the effectiveness of any co-ordinating agency is directly related to its political backing and its control over financial

resources would seem to be very pertinent. Similarly the type and effectiveness of the planning mechanism will also play a major role. A centralized system of planning should be better placed to bring about the organisation of multi-sectoral programmes and achieve the most economic utilization of scarce resources according to national priorities. A sectoral system of planning has the advantage of stronger linkage with implementing agencies and should therefore be more realistic as to what is feasible.

Bottom-up planning

21. One radical suggestion to solve the problem of how to achieve integrated rural development is that of reversing the normal planning hierarchy by delegating the task of establishing objectives and translating them into projects to the 'bottom level', i.e. that involving participation by the members of the target group itself (see paper No.3). This approach has certain distinctive advantages. It should bring about a much clearer identification of local needs and priorities and utilise the much greater perception of local people as to what the obstacles and constraints to rural development are within a particular locality. It should also bring about a much more effective mobilisation of local resources, and allow a much finer division and more appropriate application of funds than any centralized system of allocation and disbursement would allow.

22. Yet many questions about this approach remain unanswered. To what extent can it be crystallised by 'external' influence; what is the framework within which such decisions are to be taken and at what level (regional, provincial, district or local community); how is continuity to be provided and what are the linkage with the formal structure of government; how are the difficult questions of accountability and freedom from bias in favour of minority groups to be ensured; how are the necessary specialist skills to be applied at such a low level; how are the inevitable conflicts of interest and claims on inadequate national resources to be reconciled?

Area development

23. One important technique designed to reduce the concept of integrated rural development to manageable proportions, which is already utilised in many developing countries, for example India and Tanzania, is that of area development planning. While broad objectives and overall priorities are set at

national levels, project design and implementation is 'locale' specific. This technique has been applied at both regional and sub-regional levels; different approaches have been designed incorporating 'growth pole' or more extensive strategies in order to focus attention on a common set of problems. Experience with this technique has been mixed; it is discriminatory between one locality and the next. It depends for its impact on the effective decentralisation of decision taking to the 'area' level, including decisions on the allocation of resources.

The role of 'lead agencies'

24. One of the most important issues of integrated rural development is where does the initiative and major responsibility lie for 'intervention' at the local level. Because agriculture is the single most important means of livelihood for the majority of the poor, agricultural development is commonly the starting point for rural development strategies. Agricultural agencies and institutions take on the role of 'lead agencies'. Education and health are two other sectors which also on occasion fulfill this role. Such 'lead agencies' take on a special significance in attempts to achieve integrated rural development. It has frequently been observed in the case studies (see for example paper No.52, page 6) that sectoral programmes often exist with overlapping interests and within the same localities without any co-ordination of projects taking place. This would seem to be particularly the case of agricultural and rural industrial development programmes, where perhaps the most straightforward opportunities for an integrated approach exist.

25. Several explanations suggest themselves for this state of affairs: on the assumption that the agencies involved are concerned to pursue and develop such linkages, they may not be competent to do so; or communications between the agencies may be so inadequate as to deny them the opportunity of doing so; or the kind of criteria used to select locations for agricultural projects, and the institutional mechanisms involved, may be such as to exclude at the time of inception any probability of developing any associated industrial activity in the project area. This then raises two questions: what are the conditions essential for any industrial development in rural areas as, for example, in the Liberia and Papua New Guinea case studies (see papers No.1 and 10)? Are there differing timescales over which agricultural and industrial development actually take place?

Pilot projects

26. It has been the practice in many developing countries to experiment with new approaches and techniques of rural development through the setting up of pilot projects. With a large number of unknowns outside the control of the development agency, the location of the project tends to be carefully selected and detailed planning and preparations are put in hand. The allocation of sufficient resources (in quality as well as in volume) and conscientious project management may bring about significant progress in the pilot project, given local commitment and sufficient persistence. This was the case in the Comilla Experiment in Bangladesh (see paper No.5). Even when a pilot project has proved successful, there remains a major difficulty: how to replicate the approach in a large number of different situations over the country as a whole. It is at this stage that even some of the successful initiatives fail, as has been the case with the Rural Industries Projects Programme in India (see paper No.4, Annex I, pages 9/10).

The major issues for discussion which arise from this section are:

44. What are the mechanisms for the achievement of the integration of rural development policies and programmes?
45. What is the contribution of bottom-up planning to rural development strategies and how can its limitations be overcome?
46. What is the means of ensuring the effective participation of target groups in the development process?
47. What are the timescales over which it is reasonable to expect significant progress with rural industrialisation?
48. How can the difficulties of replicating successful pilot projects be overcome?

RURAL INDUSTRIALIZATION

27. The contribution of industrialization to rural development is a multiple one. Its prime contribution must be to increase rural production and productivity, and thus increase the value added in rural areas and the availability of goods appropriate to the majority's needs. It must also provide more employment opportunities for the majority and increase rural incomes. A variety of different types of industry are able to contribute to rural development in these ways. The scale and form of production are determined by the factor endowment and wider socio-economic environment of a particular country, as well as the orientation of production towards the sources of inputs or the markets for a specific product.

Scale of production

28. Given the more limited infrastructure and services available in rural areas and the more dispersed markets, it is likely that the scale of production in individual enterprises will tend to be smaller rather than larger, as in more urban places. The technology of the product and the production process will tend to be simpler and more self-sufficient. Hence the capital intensity of many rural enterprises is also likely to be less, in keeping with the amount of resources available. Smaller enterprises are also more likely to be suited to the managerial and organisational ability of rural areas and will be easier to incorporate within the rural economy.

29. In many developing countries, existing rural industrial units will be of the traditional artisan or handicraft type. While such individual units will be tiny, collectively such industrial activity may well be large in both output and employment.

30. Direct public sector investment in production units in rural areas has been attempted in some developing countries, largely for demonstration purposes when local entrepreneurs were in short supply or else were slow in forthcoming. The success of such enterprises is directly related to their commercial orientation.

31. Large-scale enterprises may also be viable in rural areas if they are oriented towards locally available raw materials, especially if there is a loss in weight or bulk in processing or else there is a rapid

deterioration of the produce after harvesting. Such operations tend to be more capital intensive and employ higher technologies, especially if they are export oriented. They may provide market opportunities for other smaller enterprises to supply secondary inputs, or their waste materials and by-products can in turn form the basis of other industrial activities. Perhaps the greatest significance of large-scale enterprises is the spin-off from associated improvements to infrastructure in the neighborhood of such plants.

Rural/urban linkages

32. The pattern of location of industrial enterprises normally shows certain concentrations in response to the availability and accessibility of key inputs and services. Industrial enterprises are sensitive to the natural centering tendencies within any developing economy. Rural industries are particularly dependent on their linkages with centres of economic activity and their interrelationships with other sectors of the economy. Their development requires full and careful recognition of their locational requirements if their long-term viability is not to be impaired.

33. The location of individual enterprises is determined by a combination of factors. In the case of smaller enterprises not the least of these is often an entrepreneur's own preference for the place where he lives. Other factors are the extent of orientation of production towards supplies of raw materials, energy supplies, skills and services, and to the market.

34. The lack of external economies in rural areas arising from poor access to specialist services, repair and maintenance facilities, alternative sources of supply or outlets for finished goods may be such as to impose additional costs on production. The lack of basic services, such as a reliable power supply, adequate communications for goods and information, bank facilities, access to government officials, may well prevent production of some products in the more isolated rural areas. Since such facilities and services are the function of small market towns and provincial centres, there is a strong relationship between these small urban centres and their surrounding rural areas which must be utilised and strengthened in any rural industrialization strategy for those areas. This urban orientation of industrial production is illustrated by the pattern of traditional industrial development referred to in the Kenya case study (see paper No.6, page 39), which was closely related to the role of market centres.

Decentralization

35. The drive to decentralize industry by dispersing its development and growth away from the major cities has come about as a reaction to the excessive urban bias of development so far. There are some limited opportunities for relocating industrial enterprises from the major cities in more rural situations, although these are likely to be dependent on the need for space for expansion and the provision of compensation for a less advantageous location. Where this does occur there may be opportunities for subcontracting, or the establishment of ancillary units with the advantages of a transfer of technology and management skills which such a relationship can bring. Other opportunities may exist for redeploying processing or manufacturing activities nearer to the source of their raw materials in more rural areas. The majority of rural industries however will be new, smaller enterprises established by local entrepreneurs to exploit new market opportunities.

Long-term viability

36. If industrial enterprises are to contribute significantly to rural development, they need to be viable in the long term. By viable is meant profitable and self-generating in terms of capital, skills and technology. While it is difficult to generalise, the kind of timescales over which one would look for signs of significant progress towards long-term viability are perhaps two years, and for the approach to viability five to seven years. The kind of indicators used to measure such progress by small rural enterprises are: the rate of return on capital invested, the ability to cover variable and fixed costs, to service and repay loans, and to re-invest profits and strengthen the equity base.

37. Governments of developing countries often come under considerable pressure to subsidize production costs, either directly or indirectly, and to provide some measure of protection for 'infant' industries. In the long run such measures probably create an artificial profitability and may well detract from their real competitiveness. At the same time rural industries cannot be expected to flourish in a hostile environment and some definite encouragement will be required to nourish their development. The methods used for determining the nature and size of such measures should include social cost/benefit analysis, and the use of shadow prices for factor costs and traded goods, so that these might be seen in the wider socio-economic perspective.

38. In the face of very limited resources, skills and infrastructure, development agencies in a non-industrialized country may have to carry long-term commitments (perhaps for ten years or more) in the form of expenditure on training, physical infrastructure, industrial services, and special assistance programmes. It is probably not realistic to look for a self-sustaining rural industrial sector in less time than that, although many individual enterprises should be able to achieve viability and expand their capacity and employment within that period.

The major issues for discussion which arise from this section are:

49. Which urban centres are to be included within the rural industrial development policies and programmes?
410. What opportunities are there for direct public sector investment in production units in rural areas?
411. To what extent can industries be decentralized through relocation and redeployment of capacity?
412. Over what timescale should one look for an approach to long-term viability for rural industries?

SECTION II: STRATEGY AND POLICY OPTIONS

39. With such widespread and self-perpetuating poverty as can be found in most rural areas of developing countries, a passive role by development agencies is scarcely likely to be sufficient. It will not be adequate in the face of demands for accelerated development to establish a favourable environment for industrial activity and to await responses based solely on local abilities and resources to these conditions. Without a more active involvement, additional resources, and sufficient incentives, little industrial development is likely to take place other than initiatives originating with the more aware and capable entrepreneurs in the more favoured locations. In seeking a more dispersed pattern of development, agencies are faced with well-established and well-adjusted traditional economies in rural areas with very considerable inertia and resistance to change. This situation is also illustrated by the situations described in the Liberia and Papua New Guinea case studies (papers No.1 and 10). The problems in non-industrialized countries such as these are where and how to begin.

40. The degree and manner in which a government and its development agencies feel able to disturb and re-organise the local economy is determined very largely by the political philosophy of the government in power. 'Direct assistance to single projects or groups of clients means state intervention in the market game. Yet direct assistance is probably the only way to promote industrial development in rural areas and assistance may have to be long lasting and intensive in nature in order to contribute to the establishment of a physical and economic environment in which an industrial tradition could gradually develop.' (Paper No.6, page 35). State intervention in the market is however no simple strategy, requiring either a carefully-planned system of detailed controls or a flexibility and commercial inciviveness which is quite beyond most bureaucratic organizations. Many governments in developing countries are reluctant to get involved in the complexities of price controls, allocation of raw materials, licensing of capacities, etc. The solution to this problem is outside the scope of this expert group meeting, but the manner in which the problem is dealt with in practice helps to determine the kind of policies required for the development of rural industries.

National objectives

41. Once a commitment to intervene actively to promote the development of rural industries exists, the major shape of the strategy will be determined by the objectives set at the national level. Pressures of unemployment and underemployment, migration from rural areas into the major cities, shortages of foreign exchange, etc. will fix the order of priorities regarding the creation of the maximum number of job opportunities, the maximum utilization of local raw materials or the protection of existing traditional industries. These broad objectives will require translating into terms which are readily understood and are applicable at the project level. There is a temptation to pile all the general aspirations for development as a whole on to rural development projects (see paper No.4, Annex I, page 10). Such vagueness itself is an obstacle to the identification of manageable problems and their solution, as well as the measurement of any progress.

42. The task of nursing an emergent industrial tradition from the grassroot level in rural areas is a delicate one; the basic policy framework should be sufficiently flexible to allow individual projects to be tailored to suit the requirements of particular localities. In this way it should be possible to take into account the kind of environment to which the enterprises will have to adapt and to improve such conditions as far, and as quickly, as possible.

Policy constraints

43. A series of constraints on policies towards rural industrialization exists at the national level. Some are amenable to gradual change, but all help to determine the shape and content of current policies. Not the least of these are the political pressures of special interest groups, such as traders or large-scale industrialists, which can severely limit the commitment given to rural development policies by the administration. The period of office of the administration can itself influence the planning process and the allocation of resources while the political significance of rural development strategies will tend to shorten the timescale for the measurement of progress.

44. The organisation of administration, allocation of responsibilities, and distribution of power between departments, and the skills available within official agencies will clearly influence the outcome of any attempt to achieve an integration of policies and programmes. The relationship between the ability to co-ordinate policies and the control of financial resources is illustrated in the Mexico case study (see paper No.9, page 30). The system of local government and the level of decentralization of decision taking, as in the Markaz system of Pakistan (see paper No.4, Annex III, page 4), will be crucial to the form of participation by members of target groups.

45. Industrial policies will also have to take into account the regulations, procedures and controls imposed by various government departments which may bear much more heavily on smaller, rural enterprises than on the larger, long-established enterprises for which they were originally designed. Broader economic conditions will also serve to either protect or obstruct the development of rural industries. Tariff levels and barriers to trade will clearly determine the feasibility of an import substitution strategy. Minimum wage legislation and local taxes may also affect competitiveness if there are regional variations or differences between towns and the surrounding rural areas. The cost of capital, especially foreign exchange, and its availability can also discriminate against rural enterprises. Few of these factors will be amenable to rapid or radical change should their impact be adverse, but they may well frustrate attempts to initiate the development of rural industries, as is probably the case in Papua New Guinea (see paper No.10 and also paper No.52, page 33).

46. In considering the availability of resources in rural areas, not only should a rural development strategy increase the share of the total available to the nation, but steps should be taken to ensure that resources are recycled in rural areas rather than there be a net transfer away from rural areas. The tendency to re-invest profits from rural activities elsewhere is illustrated in the Mexico case study (see paper No.9, page 26).

47. In addition, account will also have to be taken of the implications of policies towards different sectors of the economy and other institutional frameworks. Mention has already been made of the priority which is commonly given to agricultural development. Thus the manner in which these additional resources are organized and utilized will have implications for rural

industries. The same is of course also true of rural initiatives by education and health authorities which are much more likely to function as 'lead agencies' than industrial development agencies. If such programmes are taken as part of the basis for rural industrialization, one of the necessary conditions for integrated rural development will have been met.

48. Outside of the framework and capabilities of government agencies, but of considerable influence in constraining the nature and speed of progress with rural industrialization is the cultural background of the rural population. The extent to which the local people are willing to experiment and take risks, their willingness to make long-term investments of capital or in skill acquisition, the existence of established craft skills such as the working of wood or of metal, will greatly facilitate or hinder industrial development as in the Papua New Guinea case study (see paper No. 10). An awareness in the population of what potentially lies within their own reach, given the necessary resources and organization, is a powerful agent for changing the old order in itself. Expectations and ambitions can and will need to be raised as part of integrated rural development projects in order to make effective participation possible. For this reason education should probably be one of the earliest inputs into a project area in an appropriate form.

Priority industries

49. At the policy-making level there must be a clearly defined view as to the kind of product categories which are to be given priority within rural industrialization programmes, so that public resources for long-term investment and assistance to rural industries can be channelled accordingly. These priorities need to be established on the basis of resource endowment, availability of raw materials, energy supplies and skills, and the identification of market opportunities. Such priorities can only be properly established in the context of considerable depth of understanding of the local market and the nature of existing demand. The following of both forward and backward linkages within the economy to identify a product mix for which there is a demand will identify the main areas for specialization. Once national priorities have been established they will form a framework for the organization of specialized institutional assistance and serve as the basis for the process of integration between policies towards different sectors.

50. The range of product possibilities for rural industrialisation programmes can be summarized as follows:

- A. the production of agricultural inputs
- B. the processing of agricultural produce
- C. the processing of minerals
- D. the production of building materials
- E. the production of consumption goods and basic needs items
- F. traditional handicrafts
- G. the provision of repair and maintenance facilities (including the production of spare parts)
- H. the provision of inputs and services for other local industries (subcontracting and perhaps ancillary units).

51. There is a tendency--possibly inherited from more industrialized countries--to overemphasize diversification within developing economies as a whole regardless of the comparative advantages of production. This may well apply to production within different regions of a country as well as within different countries. Import substitution has so far been and will probably continue to be the starting point for most industrial development programmes. There are limits, however, as to how valid this strategy is for rural industrialization programmes, although in the case of low unit value goods for basic needs these are less of a constraint than for the production of consumption goods.

52. It is extremely difficult to generalise about the kind of industrial opportunities which may exist in a particular rural locality. Some industrial activity, such as the production of building materials, traditional handicrafts and the processing of agricultural produce, may already exist in primitive forms and await rejuvenation through new investment, the introduction of new technologies and access to wider markets. Government can favour basic needs through their indirect taxation policies and can discriminate against imports of consumer goods to promote indigenous industries, but in rural areas these industries are normally constrained by low purchasing power and a lack of effective demand.

53. In view of the overwhelming reliance on agriculture as a means of livelihood, many governments regard forward linkage industries such as the production of agricultural inputs as one of their earliest priority areas for investment. What is important is that those activities requiring little capital with an ease of entry are taken up as soon as possible to provide

a base on which more specialized and more capital-intensive activities can be constructed.

54. Opportunities for producing industrial inputs and subcontracting to other larger, more sophisticated enterprises will largely depend on proximity to such plants. However, some limited opportunities may exist for the production of producer goods, particularly if there is a well-established metal-working tradition. Such activity in the engineering sector often begins with repair and maintenance and the manufacture of spare parts.

Choice of technology

55. In practice the choice of technology is often a very limited one, being largely determined by what is immediately or most readily available 'off the shelf'. The option of developing new or adapting old technologies is only a long-term, high-risk and high-cost one, although it is one to which many developing countries are increasingly attracted. For the shorter term it is more likely that a much greater return would be likely if priority were given to increasing awareness and the availability of existing appropriate technologies. Provision could then be made for the import and adaptation of fresh technologies from other regions or countries as well as the encouragement of innovation, particularly among smaller enterprises, over the long term.

Traditional industries

56. One of the apparent options in developing rural industries is to select between the development and diversification of existing industries and the promotion and creation of new capacity. Most established industry in rural areas will be of the traditional artisan type, although some simpler manufacturing and processing activities may have developed as an adjunct to retail or trading concerns. Traditional artisan type enterprises rely on simple technologies and manual skills. There is often surplus capacity in relation to demand and the enterprises are commonly family based and subsistence oriented. Production tends to be disorganized, but their advantage lies in their closeness to the market, their low overheads and their effective adaptation to the rural environment (see paper No.8, page 33). The question whether it is possible to upgrade these traditional units into more formal enterprises utilizing more productive technologies is a most important one. There is conflicting evidence from the case studies.

The Tanzania case study serves to emphasise the present contribution of the traditional blacksmiths to the functioning of the rural economy and points to the disruption and unemployment which would result from their continued decline. The Kenya case study (see paper No.6) on the other hand highlights the resistance by such enterprises to change and intensive assistance, effectively posing a nice dilemma for the expert group meeting.

57. Any consideration of this issue has to take into account the large numbers employed in these industries. In India the numbers employed in handicraft and traditional 'artisan type' industries have been such as to enforce their protection from competition to which they are vulnerable at least in the short term (see paper No.13). If therefore they are to survive, their skills, their production methods, and their competitiveness must be transformed.

58. The obstacles to upgrading these units are considerable. Not the least is their geographic dispersal which makes their identification difficult and any kind of intensive field assistance extremely costly, as in the Kenya Rural Industrial Development Programme (see paper No.6, page 19). The units lack significant resources, are often very small, and commonly function as combined workshop/retail units. They produce custom-built items, often tailored to the customer's requirements with considerable manual skills. They frequently lack any kind of machinery, either powered or hand-operated. The quality of their goods varies wildly, often as a result of their raw materials and tools. Their businesses are not organised in any formal sense, they lack education and technical knowledge, they keep rudimentary accounts, and their industrial activity closely reflects their culture and their way of life. Where they trade their goods they are commonly exploited by middlemen.

59. There are a number of possibilities for providing such traditional units with assistance to upgrade their production. Improved tools can be provided, and some division of labour introduced to improve methods of production; better quality raw materials and other inputs can be provided, including credit where appropriate; their products can be improved and instruction in quality control can be provided; basic bookkeeping and management techniques can be taught. The Tanzania and Kenya case studies challenge the value of some of these suggestions, and the question remains

as to whether the majority of artisans will be willing and able to change the working habits of a lifetime to sufficient extent to allow them to become competitive.

New enterprises

60. The establishment of new enterprises in rural areas is, however, no easy alternative. The most common problem facing most developing countries is the lack of entrepreneurs. Even presuming the difficult question of product selection can be satisfactorily answered, the lack of resources and skills to establish production is widespread. There is very limited access to relevant technology and the risks involved in identifying and supplying new market opportunities are considerable. The provision of official assistance to new rural enterprises requires the establishment of special institutions. The difficulties faced by these institutions include those of assessing the feasibility of project proposals, a lack of equity capital, a lack of acceptable securities for loans, and of selected potential entrepreneurs deserving of support. It remains true that the only reliable indicator of entrepreneurial ability is a successful record as an entrepreneur.

61. It would seem from experience in those developing countries such as India with an established small-scale industrial sector that only a minority of small enterprises realize their growth potential either in terms of output or employment. Furthermore, industrial growth rarely seems to be an evolutionary process of gradual expansion; rather it is akin to a process of rejuvenation, with sudden leaps in output through increased productivity and innovation, as an enterprises' greater competitiveness increases its market share.

Policy-making institutions

62. The extent to which effective policies can be devised to cope with such diverse and complex issues will largely depend on the efficacy of the national policy-making institutions. The importance of far-sightedness in establishing well-defined objectives for rural industrialization has already been emphasized. There should also be a clear designation of responsibilities for implementation, and a well-developed system of communications down the administrative chain.

63. Responsibility for rural industrialisation should probably rest with a special agency for rural development. This rural development agency should be separate from established government departments, but it might well draw on their substantial skills through secondment of staff to build up its competence in rural industrialization. Even where this industrial component already exists in rural development agencies it is rarely fully developed and widely applied to rural development projects. Integration of policies is probably most effectively preceded by that of institutions and personnel. The rural development agency will require direct access to the prime minister/president and may even be part of his cabinet office; this agency will require its own budget to enable it to catalyze expenditure by mainstream departments through the commitment of its own resources.

64. The apex agency should be supported by a heavily decentralized organisation whose function it is to contribute to policy making, and undertake programme planning and implementation. The extent to which the national planning mechanism is decentralized will vary between countries. Most developing countries will tend to have a more centralized system. Rural development requires the greatest possible decentralization to secure adaptation of strategies to local conditions. The level at which this can be achieved must always be a compromise according to the sophistication of the country's infrastructure, the nature of local government, and the availability of personnel with the necessary training and expertise.

65. At the national level the kind of working relationships which exist between the rural development agency and the mainstream government departments will influence the extent to which rural development policies are put into effect and are integrated. It is not anticipated that a rural development agency will take over direct responsibility for the functions of other departments with which its interests overlap. Rather that it should, through a superior flow of information concerning rural development programmes and projects, perhaps the management of some projects, and a limited budget for catalytic investments, increase the effectiveness of those departments' schemes in rural areas.

66. These then are some of the issues which arise in the distillation of policies designed to facilitate and encourage the establishment and development of industrial enterprises in rural areas. The kind of

assistance which can be provided and the mechanisms for doing so are dealt with in the following section.

The major issues for discussion which arise from this section are:

- q13. What is the degree to which it is necessary to intervene in the local economy to encourage rural industry?
- q14. What are the prerequisites for rural industrialization?
- q15. What are the political/administrative constraints on rural industrial development?
- q16. What are the most likely product groups for early investment in rural areas?
- q17. What is the balance to be between the promotion of new enterprises and the development of old industries in rural areas?
- q18. How are national objectives for rural industrialization to be set?
- q19. How are the interests of rural industries to be represented at the apex of government?

SECTION III: THE CONTENT AND ORGANIZATION OF RURAL INDUSTRIALIZATION PROGRAMMES

67. Once national objectives and priorities have been laid down a policy framework can be constructed. Specific programmes can be designed according to the objectives in view and the resources available within the development agencies. A wide range of measures are available according to the needs of particular target groups and the degree of intervention proposed.

68. It is likely that specific programmes will be focused on particular problems or deficiencies in the rural economy and at the operational level will be organized to meet the needs of a particular locality or group of localities. The first step at the operational level will therefore be the identification of a core of priority products for production in that locality, within the broader product categories laid down at national level. The various measures of assistance and specialist skills required can then be organized with these in view.

PRODUCT PRIORITIES

69. The single most important group of decisions involved in the development of rural industries are those associated with the selection of products by rural enterprises. These decisions are among the most difficult for development agencies to influence and to relate to. One reason for this is that development agencies are properly concerned with the viability of the basic unit of production--the individual firm or enterprise. The decisions concerning product selection bear upon processes within the enterprise which agencies are less able to influence directly. A great deal of confusion and oversimplification of industrial problems results. Development agencies tend to identify problems and orient their programmes of assistance towards 'industries' (which are in reality rather diverse collections of separate enterprises); while the root cause of the difficulties may be a matter of the organization of production within some individual enterprises or more commonly arise from the suitability of a particular product for its specific market. It goes without saying that much more specialised knowledge and skills are required to deal with product-specific problems, and understandably development agencies are often ill equipped to deal

effectively with them. Much development assistance is inappropriate to 'industrial' problems as a result.

70. The importance of this product orientation may be seen with reference to the problem of identifying industrial markets. The establishment of a set of product priorities and the subsequent orientation of development assistance towards enterprises which make those products is a fundamental part of the policy-making process. If such enterprises are to be viable such decisions must be taken in response to demand in the marketplace. The basis of this approach is the analysis of the present market in the country concerned for various categories of industrial products or goods and the analysis of the needs expressed by consumers, i.e. peasants, farmers, artisans, industrialists, household, etc. The prime responsibility for such assessments must rest with the individual entrepreneur, but considerable insight and detailed knowledge will be required by the development agency for the long-term investment of public resources in both direct and indirect assistance to rural industries.

71. This collection and organization of market intelligence is quite outside the scope of most smaller and rural enterprises, beyond their immediate neighbourhood. At the same time it is not the kind of task ordinarily suited to government agencies. There is insufficient awareness among development agencies of the importance of this activity, arising in part from their lack of product orientation. Even where this awareness exists there is a great deal of uncertainty as to how to organize such activity, especially in a non-industrialized country where the lack of reliable statistics and market intelligence data may be almost total. This is a most important issue deserving of careful consideration at the expert group meeting.

72. At the operational level the important task of providing opportunities for participation by members of target groups in the planning and implementation of individual projects raises the issue of the type of basic unit of production to be encouraged. The choice of private enterprise or more co-operative forms of production units is more apparent than real and will be derived from the politico-cultural tradition of the country or region concerned. Clearly the predominant type of production unit and its

size and sophistication will help to determine the kind of assistance provided and the method by which it is delivered.

73. The case studies in Mexico, Bangladesh and Poland reveal just how effective such collective action can be. But outside a centrally planned economy, this strategy raises issues of exclusivity, on which the project may depend for its very success, which are amply illustrated by the Comilla Experiment in Bangladesh. To what extent is it possible to establish broad-based collective/co-operative organizations in parallel to the established system of local government? What are the conditions for admission to such organizations, how is the problem of discrimination to be dealt with, and can official support and assistance be provided outside the framework of government?

74. Perhaps the key to this question lies in the managerial or decision-taking mechanisms and capacities within such organizations. Certainly on the face of it the task of determining a specific course of action, in the face of conflicting interests and perhaps very limited skills and knowledge, is a major obstacle which such organizations must overcome. In the case of the Comilla Experiment in Bangladesh it is possible to see outstanding leadership at the local level at work. Unfortunately little evidence is supplied by the Polish and Mexican case studies on this issue. In part it must determine the answer to the question left by the Mexico paper as to how flexible such collective organizations will prove in adapting to a rather different environment.

75. There can be no denying the force and egalitarian progress of co-operative institutions and the commitment and motivation which stems from the common ownership of assets. The closer the decision-making process on investment opportunities to the participants, the more informed and aware it is likely to be (see for example page 28 of paper No.9). The effective mobilization of local savings and resources in such a way facilitates the more equal application of the total resources available for investment. Yet if technical or organizational skills are lacking, what is the mechanism through which these are to be provided. Furthermore if such local co-operative initiatives in communities are not self-evident, can they be inculcated from outside by a development agency? It is extremely doubtful if they can be imposed.

Some major issues for discussion which arise in this section are:

- 420. How are the priority products for rural industrialization to be identified?

- 421. To what extent should the approach of development agencies be tailored to the requirements of different types of production units, e.g. public, private or co-operative?

- 422. What kind of catalyst is required to bring about a co-operative form of organisation?

MEASURES OF ASSISTANCE TO RURAL ENTERPRISES

76. The various types of assistance which can be provided within rural industrial development programmes can be conveniently grouped into four main categories: those concerned with the provision of infrastructure, the identification and generation of skills, the provision of industrial services, and the creation of a favourable business environment. While some assistance under each of these headings is almost certain to be required, the balance and distribution of the available resources between them will vary between localities. The case studies to be presented to the expert group meeting do not provide much clear guidance on this issue of emphasis; they do however serve to emphasize the interrelationships between the different kinds of programmes.

THE PROVISION OF INFRASTRUCTURE

77. In developing countries and particularly in their rural areas, one of the basic limitations of rural economies is the lack of physical infrastructure. Several case studies, for example Kenya and India (see papers No.6 and 2), have concluded that such basic investment should take a high priority. Two difficulties with this emphasis present themselves: the high cost involved, and the risk of inappropriate investment. In addition there is a paradox associated with this early development of infrastructure: while it increases economic activity and thus autonomy of the region concerned, it also serves to strengthen dependence on nearby predominating urban centres. Improved road communications may for example increase the rate of migration from rural to urban areas. In this context it is appropriate to refer to the priority given in China to the provision of electricity supplies to rural areas rather than the improvement of roads. Infrastructural improvements are not necessarily discriminatory in the benefits they confer.

78. Nonetheless the provision of cheap and reliable transport for goods and people remains a basic requirement for rural industries. The more remote and isolated a location, the more difficult is the supply of raw materials, the more limited the market horizon, and the greater the difficulty of obtaining other necessary inputs.

79. The provision of utilities, such as power supplies, is also a basic requirement without which it is extremely difficult to improve productivity. The availability of such utilities is not, however, simply a question of their presence; questions of the freedom from interruption of supplies and the lead times for installation or expansion of supplies are equally important. Effective means of communication of ideas and information by mail and telephone are important, not least for the effective organization and administration of any programme of assistance. Their only substitute is travel by the individuals concerned and face to face exchanges, which are themselves very time consuming. Given a dispersed population of enterprises in rural areas, much more effective and less 'key personnel intensive' means of communication must be devised so that more difficulties can be resolved on the work sites by the entrepreneurs themselves. Relatively little advance has been made so far in the application of simple self-help manuals, diagrams, and guides. These must be in the local language and be specially prepared for the target group.

Industrial land and premises

80. One of the most common priorities in industrial strategies is the provision of land for industrial use. This has come about largely with the spread of land use planning and controls; it has been reinforced by the current concern for the effect on the environment of industrial development. In prosperous agricultural areas it may also be stimulated by the shortage of land and its high cost for industrial use. The large scale investment involved, especially if proper provision is made for long-term expansion, is an obstacle in itself. Urban redevelopment programmes and the relocation of existing concentrations of enterprises also precipitate this type of involvement. All too often insufficient attention is paid to the requirements of individual enterprises, especially more traditional artisan workshops. The combined workshop and retail outlets of shoemakers and tailors are cases in point. Relocation of existing enterprises often imposes additional overheads in the form of higher rents or building costs.

81. The provision of industrial premises is commonly one of the major plans of development strategy, as for example in Kenya (see paper No.6). In a developing economy, and especially in rural areas, little or no

suitable accommodation is available. The difficulty arises in the kind of standards imposed for new industrial premises. These are commonly too high and inappropriate either to the location or to the state of development of the local economy. Building standards and designs are often imported with insufficient adaptation to local conditions. As such they can impose excessive capital costs and overheads on rural enterprises. Some significant economies can be made out of the use of local raw materials and appropriate construction techniques, but all too often the aim is to provide a 'gukka' factory building in one step.

82. Questions of access, site, availability of utilities, and uncomplicated procedures for their allocation are probably more important than building standards. The application of a 'site and service' approach, common in urban housing projects, to industrial premises would allow greater scope for compromise in the short term; supply of services and construction to foundation level, with temporary, own-built superstructures might be another possibility; an appropriate modular system of construction is another. Certainly some compromise is required to allow the standards of accommodation and working conditions to be upgraded gradually from very simple, low-cost beginnings, as the rural enterprise develops and can carry the increased overheads involved. Such economies for new or relocated traditional enterprises would contribute significantly to their viability, not detract from it as is often the case with the higher cost alternatives.

Industrial estates

83. This principle of attempting to reduce capital and overhead costs to an absolute minimum for rural enterprises would also apply to the development of industrial estates. While the threshold of 'centrality' justifying the cost involved in organising and constructing an industrial estate is much higher than is commonly perceived by many agencies in developing countries, industrial estates remain attractive to politicians, agencies and entrepreneurs. For the politicians industrial estates provide a valuable demonstration of 'development' within a specific locality. For the planners and development agencies industrial estates are one means of 'showing results', focusing their resources on a few selected locations, and of organising a package of incentives to would-be entrepreneurs. For

the entrepreneur, estates are a method of simplifying the lengthy and complicated process of establishing a new enterprise, acquiring or constructing premises, and starting production.

84. The difficulties involved with the construction of a successful industrial estates programme are considerable and the cost is high. The conditions for the establishment and development of a viable industrial estate are such as to require careful feasibility studies and thorough planning to achieve integration with the local economy; the difficult choice of location is often overruled by political pressures; the enterprises attracted to an industrial estate tend to be more capital intensive than might otherwise be desired; there is often a shortage of suitable entrepreneurial skills; lastly an industrial estate is not a flexible instrument of development policy. Once constructed it cannot be easily withdrawn if it fails; success in rural areas may take a long time (perhaps up to ten years) and failure is equally visible, indeed it has a demonstration effect of its own.

85. Experience in India with industrial estates over two decades has served to point out their limitations in rural areas. They are insufficient catalysts of development of their own; rural industrial estates should be supported by a framework of other forms of assistance within a comprehensive policy designed to encourage industrial development. They are more suited to the task of accelerating the development of rural industries than initiating it. In India nursery estates have encountered the difficulty of a lack of mobility among occupants; the advantages of workshop clusters for artisans remain uncertain unless there is significant simultaneous progress in the entrepreneurial and organizational ability of the artisan.

86. Increasing sophistication of infrastructure and thus the accessibility of markets allows increasing specialisation of industrial production. In rural areas the smaller scale and limited skills and technologies of most enterprises will benefit from a gradual improvement in infrastructure once the essential services are available. If improvements happen too quickly, rural enterprises may well be overwhelmed by competition from larger, more modern centres of industrial production.

Some major issues for discussion which arise in this section are:

- Q23. What priority is to be given to the construction of physical infrastructure and utilities?

- Q24. What compromises can be made in the initial standards for industrial premises?

- Q25. What is the role for industrial estates in rural areas?

THE IDENTIFICATION AND GENERATION OF SKILLS

87. In traditional rural economies, one of the basic requirements for the development of industry is the imparting of new skills, both to those who will manage and supervise production and to those who will practice industrial crafts. One lesson of the Indian Government's programmes of assistance to small-scale industries is that insufficient attention was given at first to the identification and development of entrepreneurship. The qualities of risk-taking and the ability to mobilize resources are derived from cultural attitudes, the local environment and family background; to some extent they can be created through more formalised training. The sources of entrepreneurship may well be trading communities, professional classes, landowners, artisan classes, experienced supervisors and workers in industry, and technical graduates of higher education (given some work experience). Such groups of people may be the target groups of many rural industrialization programmes.

88. The selection of a potential entrepreneur is a high-risk activity, but not more than that of identifying an artisan capable of being transformed or evolving into an owner/manager of a more organized enterprise. High mortality rates are almost inevitable, particularly among smaller enterprises, and have to be accepted as a development cost. Given the necessary patient commitment of the development agencies and certain inputs designed to stimulate and motivate a response from the target group, the evidence from district-intensive campaigns in India is that a response even in rural areas will be forthcoming; the difficulty is to identify and nourish it to maturity.

89. The availability of expert technical advice and practical guidance on how to overcome the initial obstacles to establishing or expanding an industrial enterprise is one of the essential catalytic inputs. The exposure to fresh technologies and methods of production and the timely availability of financial assistance are also essential. In rural areas the availability of packages of single process, turn key operations is probably crucial to the emergency of the first few enterprises.

90. Once major investment decisions have been taken in principle, then an effective extension service should be able to provide help with start-up problems and support production with various fairly specialised industrial services. The lead time from inception to production in new or expanding enterprises is often as much as two years. One of the essential qualifications for success as an entrepreneur is the determination and commitment to adapt to and overcome these tortuous processes in the run up to establishing new industrial capacity.

91. Entrepreneurial development and training programmes, some incorporating attempts at achievement motivation, have been designed and introduced in some developing countries. In India these seem to do little more than help with the mechanics of starting a new enterprise, at best teaching the most basic principles and techniques of management, and hopefully creating an awareness of more advanced methods. Any further interest is then met by more specialised courses according to the demand. Other approaches such as 'action learning' designed to educate entrepreneurs to recognise business problems in their particular situation have been devised. Insufficient attention has been paid to simplifying and presenting management skills in a form which can be more readily utilised and absorbed by rural entrepreneurs. One of the greatest difficulties with training entrepreneurs is that once they are immersed in the day-to-day problems of managing an enterprise, they cannot afford much time to devote to sharpening their skills.

Craft training

92. Within rural areas where there is widespread unemployment, both disguised and real, the paradox of abundant labour but a shortage of skills is common. The rural labour force is likely to lack the industrial crafts and skills required in more organized forms of production, involving fresh technologies and greater division of labour. The content and vocational orientation of basic education, if any, can provide the foundations for later specific training programmes, providing the necessary integration of objectives has been achieved. The approach here should probably be through non-formal education for adults and 'on-the-job' training. The results obtained from institutionalised training in India are inferior to those

produced via the 'on-the-job' route. Reasons for this are the reluctance by agencies to pay sufficiently attractive stipends to course participants, the reluctance of employers to release workers for concentrated periods of training outside the enterprise, and their reluctance to pay higher wages to which 'trainees' would seem to be entitled upon 'qualifying'.

93. This situation also applies to workers employed by traditional artisans, who tend to be more closely bound by obligations of one kind and another to their employer. Training in such situations is entirely 'on-the-job' by word of mouth and by example. The training hierarchy may extend as in Nigeria through prolonged periods of 'helping', extended apprenticeships (for which privilege the apprentice will have to pay), a period as journeyman, and perhaps as supervisor before eventual separation as an independent 'master'.

94. It is interesting to note that this traditional system of apprenticeships and subsequent growth through hiving off and imitation in production is commonly reflected in the pattern of growth of small enterprises in modern trades. Employees, when thoroughly trained and acquainted with a particular line of business, will branch out onto their own in direct competition with their former employer, sometimes even enjoying his acquiescence and indirect assistance. A successful small enterprise in India will rapidly attract a number of imitators in close proximity, almost regardless of the level of demand.

95. The provision of training in the industrial skills likely to be required should be carried out as far as is possible in advance of the creation of job opportunities. The key production skills will be those of supervisors or foremen, particularly where the chief contribution of the entrepreneur is his organisational/commercial ability rather than his mastery of the production processes involved. In most smaller rural enterprises these foremen will carry the responsibility for 'production management' as well as the training of the work force and may well be the key to increasing productivity.

Some major issues for discussion which arise in this section are:

- Q26. What are the sources of entrepreneurship in rural areas?
- Q27. What mortality rates are acceptable among new enterprises in rural areas?
- Q28. How far in advance of the creation of job opportunities should training be provided?
- Q29. What kind of training is most appropriate a) in management;
b) in 'shop floor' skills?

THE PROVISION OF INDUSTRIAL SERVICES

96. The operation of an effective industrial extension service is probably the single most important form of assistance supplied by an agency to rural industries. It should have limited and very specific functions, viz. a role of supporting production. There is a common tendency, illustrated in the Kenyan Rural Industrial Development Project (see paper No.6), to impose all the general objectives for industrial development on the extension service. It is evident from consideration of the Kenya case study and from experience in other developing countries that the industrial extension service occupies a central role in relation to the development of industrial capabilities. It is however a role which is almost impossible to define precisely, and will vary considerably between countries. It is however possible to point to some of its central characteristics. It is service oriented and is essentially technical, i.e. it is concerned with management techniques and the organization of production as well as the technologies of both product and production processes. The basic techniques include in-plant counselling and demonstrations of improved techniques, work methods and equipment. Extension personnel must be appropriately trained and supported by fully qualified and experienced staff, but all extension staff need not be highly qualified.

97. There is an inevitable overlap with the training function, since an extension service has the responsibility of upgrading skills. However, it may be desirable that these functions should be kept separate though they should be integrated closely. It is very doubtful if extension functions should be allowed to go as far as production, even for demonstration purposes. Such diversions arise from a confusion of objectives, and lead to ineffectiveness as a result.

98. The prime role of extension services should be to upgrade the utilization of resources and productivity of enterprises in the shorter term. To this end their activities should be product oriented, focusing on the production process to improve efficiency, quality control and product design through simplification, improved materials, etc. Such a process is a continuing one and requires a close relationship with individual enterprises. The suggestion in the Kenya case study (see paper No.6) that the improvement

of existing products is not a rewarding task is in conflict with this strategy and the issue requires careful consideration by the expert group meeting.

99. The necessary support services for industrial production may include a consultancy service to deal with specific production difficulties, repair and maintenance facilities for machinery and equipment, tooling facilities providing high precision engineering capabilities, and specialised process and treatment facilities. Although in the latter case, if demand is sufficient, there may be a case for hiring off that facility to a local enterprise on a commercial basis. Such services as these are of course expensive to provide and must be tailored according to demand. It would be desirable that enterprises should bear an increasing proportion of their true cost as time passes, but a significant proportion of the cost will have to be carried by the extension service for some considerable time.

100. Technical assistance provided by an extension service will only be constructive if the expertise of its staff keeps pace with that of its clients. This will require a constant process of renewal of skills and knowledge which will only be possible if some specialization takes place between various extension centres. This is particularly the case in the context of development work undertaken at the product or process level. The writer believes this work at the local level is the most effective means of developing appropriate technologies for small-scale and rural industries. Few rural enterprises are likely to be able to afford the task of such development work, although some will have considerable innovative capacity. Assistance will be required to put these innovations into production, and it is doubtful if this can be supplied from afar by a national research establishment. The task of research associations will be more fundamental research on new technologies. 'The challenge of product development lies in the combination of the technical processes with the study of the relevant market segment in consultation with local producers.' (See paper No.6, page 12.) The evidence from this case study suggests that new projects will show an increase in capital intensity over the old; whether or not this is inevitable remains unclear; the degree of capital intensity would however seem to be amenable to some control.

101. There are two related aspects of the work of the industrial extension service, that of industrial technology and management techniques. In view of the limited resources available to most rural industries, the efficacy of

management in utilizing its financial resources, particularly its working capital, will probably determine the success or failure of the enterprise. The availability of assistance with the identification of business problems will be a valuable input into the viability of rural enterprises. The example of the P.F.P. 'bicycle accountants' in Kenya (see paper No.2, page 12) is a valuable one for it illustrates that fairly low calibre, but properly trained, extension staff can provide assistance appropriate to the entrepreneur's absorption capacity.

102. The issue raised by the Kenya case study (see paper No.6) is what kind of approach should be adopted by an extension service. An industrial extension service in a rural area has the responsibility of reaching out to help integrate existing and new enterprises into the modern economy. This carries a cost penalty which can be reduced by limiting the use of highly paid expatriates in a field role.

103. The option of abandoning the principal of 'in-plant counselling' implicit in outreach-type field assistance and concentrating on the enterprises within the vicinity of an extension centre highlights the conflict between the attempt to disperse industry and the natural centering tendencies of the economy. It also poses the question of the effective selection of clients because of the very limited numbers of clients to be serviced. The Standard Work Plan employed by the Machakos Extension Centre raises the question of the extent to which such approaches can be standardized, particularly to traditional artisan-type units. The attempt to draw a distinction between industrial training and extension activities suggested earlier may be one contribution towards solving these problems.

104. Two other kinds of service activity are important to the functioning of rural enterprises: the availability of credit facilities and the operation of the distribution service for the supply of raw materials and the disposal of finished goods.

Credit services

105. It is doubtful if sufficient credit facilities will be available within rural areas for the needs of expanding rural industries. Traditional artisan-type enterprises and new smaller enterprises both tend to be undercapitalized. Existing lines of credit through money-lenders or commercial banks will not be adequate. The problem of finance for industrial investment

has two different aspects: the need for risk capital to supplement the equity capital available through members of the family or friends, and the need for working capital. The real issue however is common to both, i.e. availability of or access to capital--not its cost.

106. Special facilities are likely to be required to provide risk capital and long-term loan capital. Special funds will be required backed by suitable guarantees to cover the risk of failure. A flexible approach in terms of the securities demanded for loans will be necessary to identify deserving entrepreneurs who provide the best prospects of securing both a return on the loan capital and the repayment of the principal. The availability of a hire-purchase facility for fixed assets would seem appropriate to rural areas. The process of selection of such clients is one which calls for effective co-ordination of decisions and integration of policies between the various agencies involved to avoid delay and unnecessarily complicated procedures.

107. Responsibility for vetting the feasibility of proposals can only really rest with the finance agency concerned. In India attempts to utilise the services of the extension service for a technical assessment have deflected the service from its specific responsibilities. Finance agencies will therefore require the necessary skills and expertise to take both a financial and commercial view. Responsibility for promoting investment opportunities in rural areas should probably also rest with the finance agency, at least in part. The agency will have to be effectively represented locally, but will benefit from the depth of understanding of the local market which this familiarity and local representation will involve. Needless to say there will need to be decentralization of decision taking over the approval of loans to avoid delay.

108. The Mexico case study provides an illustration of a multiple approach to the provision of credit for rural development. There is certainly no reason why such services should not be divided between regionally based institutions or even those aimed at particular types of clients. In a sized economy there may well be advantages in such specialisation, although it increases the difficulty of ensuring effective co-ordination of such services.

109. The supply of working capital can best be handled by the banking system and the necessary guarantees will be required to encourage a more liberal approach. The change in bank attitudes towards credit for rural industries will require a major re-training and re-orientation programme in order to equip them for an administrative-intensive task. Procedures and safeguards, such as the control of stocks of raw materials and finished goods, can be devised, but the kind of relationship established by the banks will do much to determine the effective use to which the loans are put. Clearly a lack of local branches is an almost insurmountable obstacle to the development of rural industries. Proximity and frequent contact with the customer are prerequisites for successful recovery of loans. There is much that the banks can do to encourage simple accounting procedures and the effective monitoring of an enterprise's progress, although the Kenya case study challenges the need for this. New techniques and approaches need to be devised for the smallest enterprise, and the high additional servicing costs involved may have to be shared by the development agencies.

Distribution system

110. The lack of an effective distribution system is another major obstacle for rural industries. In part it is a function of the infrastructure available. It also represents one of the sources of opposition to the growth of new rural industries, since the trading communities may well be serving the market from other sources of supply such as imports.

111. Government intervention and investment in distribution, wholesale or retail activities is hazard prone, although it is common to find price controls on certain materials. In some cases, as in the example of Tanzania, the entire system has been taken over. The chief difficulty with such intervention is that it is itself centralized and controlled from outside the rural area. The need is for a great deal of flexibility and autonomy in order to perform the trading function efficiently in for example the price-fixing mechanism (see paper No.8, page 10). Attempts in India to achieve complete control of such raw materials as iron and steel or cotton yarn have proved extraordinarily difficult to administer and organize with any degree of equality of allocations. Variations in product specifications and quality, break of bulk, transportation, represent formidable logistical problems (with severe cost penalties for errors) which are beyond most bureaucratic institutions.

112. There are of course two ways in which the distribution system is particularly important for the development of rural industries. The supply of raw materials is one aspect, and one which may be a significant bottleneck for more traditional 'artisan-type' enterprises; the distribution of finished products is the other. In this regard perhaps insufficient attention has been given to the potential contribution of consumer co-operatives which may have an important role to play in the supply of basic needs. Consumer co-operatives can offer considerable advantages in bulk purchasing, quality control and in the apportionment of orders to local rural suppliers—questions of price and delivery permitting. The degree of direct government involvement in the distribution system is best limited as far as is possible. However because of exploitation by middlemen, for example in the supply of raw materials to traditional artisans or because of shortages, pressures for some intervention may well be irresistible. In such circumstances price control mechanisms or trading activities by autonomous, commercially-oriented, public corporations would seem to be the most likely options.

113. Government itself can provide some direct market assistance to rural enterprises through its procurement agencies. Government bulk orders for supplies of goods and services can be broken down and directed towards rural enterprises to some extent if the organization of procurement is decentralized and local offices are allowed to make direct purchases. There are however limitations, both administrative and financial, as to how far this strategy can be applied. In addition there is the question of the extent to which smaller rural enterprises can supply goods to a given quality over large volume orders.

Some major issues for discussion which arise in this section are:

430. What are the objectives for an industrial extension service?
431. Should the tasks of supporting production and training be separated?
432. How should appropriate products and production technologies for rural areas be developed?

433. How should basic management practices in rural enterprises be improved?
434. To what extent should an industrial extension service itself be decentralised? Should the principle of outreach through field assistance be abandoned?
435. To what extent should each extension centre specialise in a limited number of products and production technologies?
436. How can risk capital facilities be provided to rural enterprises?
437. How large should the normal minimum equity base for small rural enterprises be?
438. How can the maximum utilisation of working capital be achieved?
439. To what extent should there be government intervention in the marketing and distribution system?

THE CREATION OF A FAVOURABLE 'BUSINESS' ENVIRONMENT

114. The presence of a hostile 'business' environment is an undoubted deterrent to industrial investment decisions. The identification and amelioration of the aspects of broader policies which have adverse effects on rural industries is an important task for a development agency. For example, environmental controls covering noise, pollution, waste disposal, and safety and building regulations may impose cost penalties on emergent rural industries which detract from their viability. Controls over land use often adversely affect location decisions, while those regulations affecting the ownership and control of productive assets and wealth are major determinants of investment decisions. Similarly fiscal policies, the regulation of business practices and trading activities can be obstacles to investment in industrial enterprises.

115. Many developing countries raise the threshold at which these controls apply in order to exempt smaller enterprises. Once a special privileged category of industry is created, the question of definition immediately arises. These tend to vary according to the purpose in view. However the coincidence of ceilings produced by arbitrary criteria determining eligibility to special incentives or other benefits should be avoided so as to prevent the emergence of barriers to growth or expansion of individual enterprises, which might cause the loss of benefits. It is doubtful if there should be any distinction between the treatment of enterprises in the small/medium size range. There may well be a stronger case for recognition of the different problems of very small enterprises, i.e. essentially 'one-man businesses'.

116. Attempts to discriminate between enterprises in terms of location are similarly fraught with difficulties. Given that the problems of definition can be solved, blanket exemptions or special privileges are not sufficiently discriminating, while the alternative is a very administrative-intensive, time-consuming task, which multiplies the opportunities for corruption. The drive to disperse the development of and relocate industrial capacity has led to the introduction of regional or subregional capital subsidies or other incentives in some countries. It is unclear what the impact of these measures is on the smaller rural enterprises. It is probably marginal. Larger, more capital-intensive operations are clearly attracted by such benefits, which are regarded as compensation for the increased costs

inherent in poor locations in more remote or backward special development areas. The effectiveness of such measures is probably related to the extent to which benefits are focused on limited areas, i.e. discriminating between or within rural areas. They should therefore be of limited duration, perhaps lasting for a period of about five years, until sufficient momentum for development has been generated. The impact of such measures is to some extent indirect, in that they may well contribute to the build-up of confidence in the future prospects for development in a locality being evidence of the government's commitment. This increased confidence may lead to the establishment of new enterprises.

117. The largest category of environmental measures which influence industrial development are those designed to nourish enterprises through the period after investment in new capacity before they reach break-even point. Accelerated depreciation allowances, capital subsidies, deferred interest charges are some of the many options available. In the case of rural enterprises with a very limited equity base and heavily bolstered with loan capital, there may be a case for subsidising the cost of capital in the early years. Without this, profitability in the early years may be insufficient to enable them to survive normal fluctuations in the level of demand, especially since their effective working capital is likely to be sharply reduced in times of credit squeeze. The temptation with subsidising the cost of capital is that it will be applied indiscriminately and for an indefinite period and distort the true factor cost in a country, with adverse implications for the labour intensity of output.

118. Some countries with more extensively planned economies go so far as to attempt to license and control all industrial capacity. Restrictions are imposed on larger scale enterprises, and product groups are reserved for smaller and perhaps more traditional enterprises. The economic basis for such demarcations and allocations of industrial sectors to certain categories of enterprises remains unclear. The justification is essentially political. Where large numbers are already employed in traditional industrial activities, especially in cottage and handicraft industries, they are vulnerable to competition from imports or mass-produced alternatives and may require some protection. Presumably such protection implies attempts to improve the competitiveness of the traditional sectors, otherwise the cost to the economy as a whole will be too high in the long term.

119. The improvement of the quality of the business environment for industrial enterprises is the least tangible of the categories of assistance. Its importance in the attempt to establish new industrial capacity in rural areas is perhaps limited, particularly for smaller or more traditional enterprises. Once the basic services and facilities have been provided in rural areas and obvious constraints to growth and expansion have been removed, smaller enterprises seem to prefer a freedom from regulation and control while they concentrate on meeting the needs of the marketplace. As rural enterprises become more organized and sophisticated, they become more sensitive to the subtleties of fiscal and commercial policies. The right balance between nourishment with practical assistance and excessive interference in the market game is therefore a most difficult one to achieve.

Some major issues for discussion which arise in this section are:

- ¶40. Which are the broader policies which have adverse effects on the development of rural industries?
- ¶41. What should be the basis of discrimination between different sizes of enterprise?
- ¶42. To what extent should special incentives for investment, etc. be geographically concentrated?
- ¶43. How much protection should be given to infant industries and for how long?
- ¶44. Should special industrial sectors be reserved for traditional industries?

THE INSTITUTIONAL REQUISITES

120. The complexity of the task facing the developing countries in initiating and encouraging the emergence of an industrial tradition in rural areas is a daunting one. The magnitude of the challenge has been estimated in India at providing 30 percent of the rural labour force with off-farm employment (paper No.12, page 5). The timescale over which such a radical transformation must take place has been compressed by the rate of population growth and the pressure on agricultural land. Yet the successful integration of industrial development policies for rural areas with those of other sectors runs counter to the established pattern of government in most developing countries. There is therefore a considerable premium to be placed upon an effective institutional framework.

121. The provincial (subregional or supradistrict) level is the one which should be closely examined for its potential as a base for integrating planning and implementation. The efficacy of the linkage between this level and the apex institution will be crucial, and intermediary levels should be avoided if at all possible. The Markas system in Pakistan (see paper No.4, Annex III, page 4) is worthy of most careful consideration in this regard since it seems to strike an effective balance between national priorities and the interests of local communities.

122. The provision of specialist support to such a provincial institution could be organised nationally with appropriate high-level research and technically-oriented institutions providing inputs as their advisory services were required. The success of any such agency will however depend to a great extent on its working relationships with the mainstream departments and the system of local government. The construction of such an institutional framework is an exercise in the near balancing of power, but not so as to dampen out initiatives or confuse responsibilities.

123. A key function is that of monitoring progress and providing information on the progress of projects at grass roots level so that the necessary policy adjustments can be made. The establishment of a set of criteria for evaluation of progress must take into account the wider social costs and benefits derived from individual projects, yet a close watch has to be kept on the progress of individual enterprises towards long-term viability. In the evaluation of a programme such as the Kenyan extension service (see

paper No.6), criteria for measuring effectiveness are extremely difficult. Great care is necessary to adjust the timescale over which results are expected, to take into account the high inertia and low absorption capacity of many participants in such a program.

124. The institutional framework required for the provision of inputs for rural enterprises will need to be tailored to the size and variety of a particular locality's requirements. Such activities as the provision of loan capital, marketing and extension services, controlled raw materials are best delegated to specialist organizations, perhaps autonomous but publicly-owned corporations, which operate on a commercial basis. Such organizations will require effective local representation in rural areas, as well as co-ordination of their administrative procedures. It is highly desirable that such services are kept separate from the project design and implementation tasks of the development agency. The task of promoting the establishment of new enterprises and transforming established artisan-type units should be primarily carried at the provincial level and the institutions providing risk capital.

125. The important task of providing opportunities for participation by members of target groups in the planning and implementation of individual projects raises the issue of the role and effectiveness of local government. In the long term the effectiveness of local government machinery must rise to meet the aspirations of the majority. In the shorter term it must be recognized that it frequently represents an obstacle to rural development. It often is dominated by minority interests, perhaps the land-owning classes. In such circumstances it may be necessary to construct new low-level institutions with the specific task of furthering the interests of a target group.

126. The effectiveness of the institutional framework for aiding the development of rural industries will be directly related to the quantity and quality of the expertise of the personnel. The development of committed and experienced cadre is a basic prerequisite for progress. Not least is the availability of staff with industrial and managerial experience who will be more sensitive to rural industries' difficulties. This is an extremely difficult skill to generate but it is the one likely to contribute most.

Some major issues for discussion which arise in this section are:

- 45. What is the mechanism for the design and construction of projects and their evaluation? What provision can be made for local participation?
- 46. How far should the provision of inputs and specialist services be hived off to separate agencies?
- 47. How is a rural industrial development cadre to be established?



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