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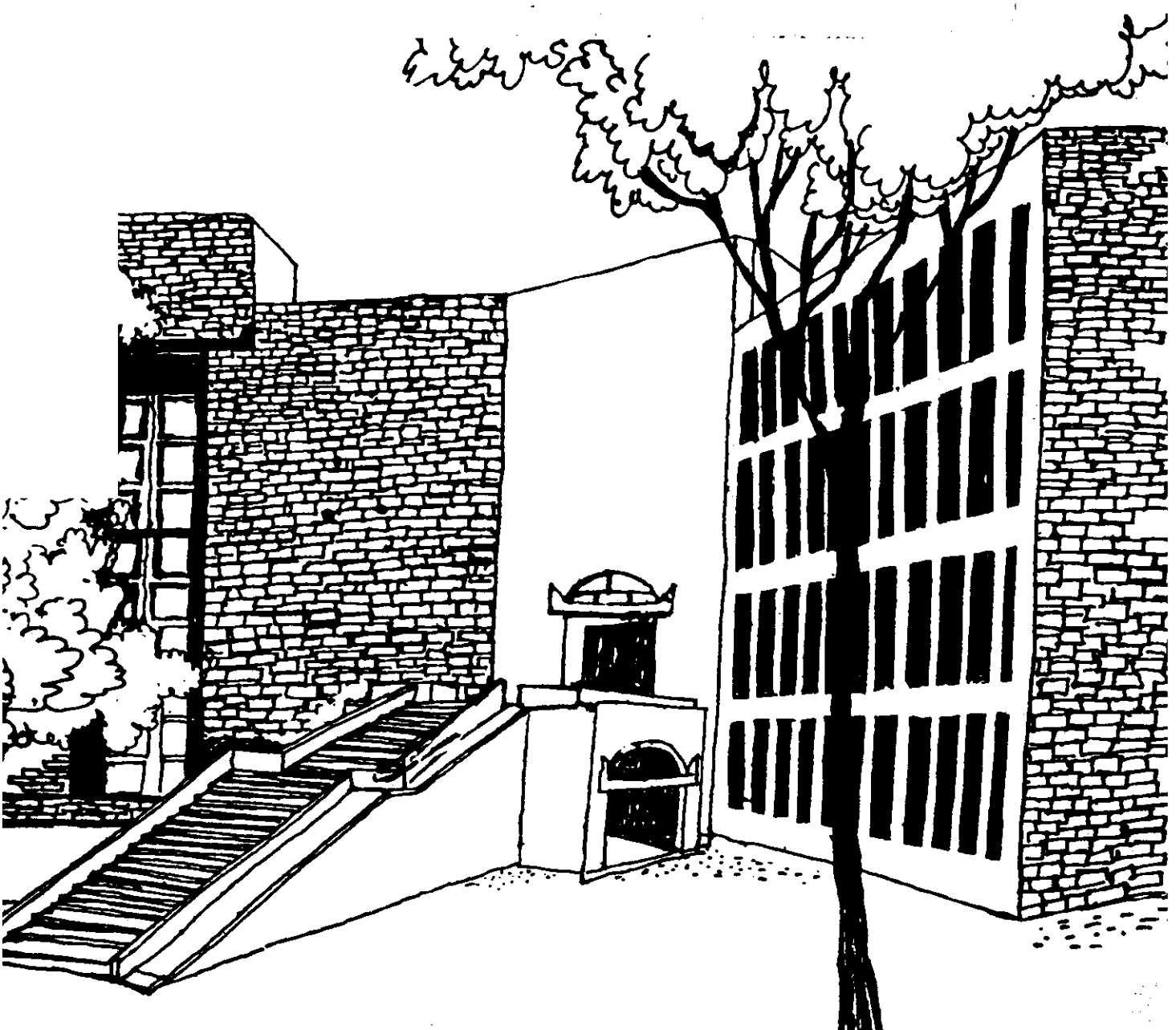

THE SMALL STEP AND THE GREAT LEAP: ISSUES IN MANAGING REPLICATION IN DEVELOPMENT PROGRAMMES

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The Small Step and the Great Leap

Issues in Managing Replication in Development Programmes

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Introduction:

Several large scale public programmes have been implemented by the government in the last thirty five years of the country. The design of these programmes involves some basic tasks for its managers. They are: (1) Gaining policy support from the political and bureaucratic leadership. This decision making group must consider the programme worth launching and be able to support it once initiated. (2) Developing strategies for programme formulation and implementation. Specific components of the programme have to be identified and plans drawn up. (3) Finding resources. Funds and personnel of a size and type, in line with the strategies, have to be raised and planned for. (4) Identifying or developing an organisational structure for the programme to be executed. The presence or absence of political and bureaucratic will; the adequacy or scarcity of public or private resources; the evolution or application of criteria for resource allocation; the development of new technical and managerial capabilities; the adequacy or otherwise of existing organisational forms such as the development bureaucracy - these are some of the critical considerations in planning for the tasks.

There is yet another aspect to the design. Many of the development programmes of the last thirty years have grown from pilot projects or trials and experiments either in the public (governmental) or private (non-governmental) sectors. A few Community Development Blocks were first tried out soon after independence before the decision was taken to set up block development offices throughout the country-one for every 100 villages and a

population unit of 60,000 to 70,000. The Etawah experiments in community development are well known. The Small Farmers' Development Agency was initiated in a few districts in 1971 and later expanded to 43 districts by 1973. As its name suggests, the Pilot Intensive Rural Employment Project of the early seventies was implemented with the objective of providing insights into patterns of employment. This helped in planning the Food for Work programme of 1977-78. More recently, the Integrated Rural Development Programme was formulated on the basis of the cumulative experience of anti poverty programmes and field trials in the late 1970s. In the social services, the community Health Volunteer Scheme of 1978 was adapted from the experiences of several projects of voluntary health agencies, some of which gained considerable attention in the seventies. The scheme was tried out first in selected primary health centres and then extended to others the following year. The National Adult Education Programme of 1978 explicitly stated that its first year was one of trial and experimentation, before it assumed large scale proportions in 1979 (Directorate of Adult Education, 1978, p.5). In addition, there are other public programmes (such as the Operation Flood for dairy development) which have evolved on the basis of models (such as AMUL) demonstrated in the field.

The primary rationale for replication lies in the urgency for remedying the situation in which large sections of the country's population remain either without access to public services or unable to use them (Planning Commission, 1980). At the same time, the hope for successful replication stems from the fact that some of the basic infrastructural facilities such as the block development offices, primary and secondary schools, primary health centres and panchayats are available - even if in an unsatisfactory condition in some places - across the country. Moreover, there is a limb of almost every developmental agency of the government

in a district. Therefore, the need for a quick extension and the availability of an institutional base for such extension encourage development agencies to attempt programmes of replication, thus taking a great leap forward. The objective is clear: to meet the needs of and provide services to a larger population of intended beneficiaries in as short a period of time as possible.

While questions regarding policy support, strategies, resources and organisation are significant for all large scale programmes, replication or the movement from a small scale project [1] to a large scale programme[2] raises in its wake, a critical poser regarding the transfer of learnings from one to the other and hence, the management strategies related to the transfer. The management of the transfer of experience from the project to the programme is at the core of the process of replication.

Focus of the paper:

Replication involves the extension of an initial experience. Such extension is attempted through the multiplication of the pilot project. Expanding the reach of the project in the same place where it is located is referred to as scaling up. Replication is the multiplication of the project in another place or in other places (Yaser, 1980).

Such an expansion implies a significant increase in the size or scale of the initial project in terms of the territorial or population coverage and volume of activities and hence a substantial change in the quality and quantity of finan-

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1. Referred to as "project" in the subsequent pages.

2. Referred to as "programme".

cial, organisational and human resources required. More importantly, it implies the transfer of experience from a project in a given context to a programme implemented in varying contexts. The implicit understanding is that the project has evolved a model, a prototype, whose multiplication can then be rapidly planned for across a wide geographical area.

Public programmes in development may be launched directly on the basis of the model project implemented by private, non-governmental agencies or the public system itself. Sometimes, a two-step process, by which the lessons learnt from the project of a non-governmental agency are first tried out in the public system before going in for a large scale replication, is also attempted.

The duplication of a prototype is a familiar process in the field of engineering. Many manufacturers make the part or equipment on the basis of a model. Similarly, in agriculture, one is familiar with the process by which a new variety of seed or type of fertiliser is experimented with in the laboratory, tried out in the field and later extended to farms all over the country. While these efforts at extending physical or material technology, resource or infrastructure do require experimentation and adaptation, it is the programmes attempting to extend social and economic services that will have to pay much greater attention to the complexities of replication. This is because, local social institutions, conditions and processes greatly influence the use of the programme services and these usually vary considerably from area to area and region to region. Similarly, implementing structures and personnel in the programme are likely to differ considerably from those in the project. Thus the fact of a project being successful does not ensure the success of a programme. It might therefore be useful to take a closer look at the process of replication so as to aid its management.

This paper is an exploratory search for the key elements in the management of replication. It is hoped that it will serve as a basis for researchers and managers of development programmes to reflect on and add to the knowledge and practice of managing this process.

The movement from a project to a programme has not attracted much attention from researchers. While the literature on project evaluation refers to it (Rossi and Williams, 1972; Mullen and others, 1972; Riecken and Boruch, 1974) there has been, as far as we know, limited analysis of the process of replication in the context of programme management, as a means of helping the formulation of strategy. Yaser (1980), in her review of the problem of replication and scaling up in the design of projects, with focus on those funded by external aid agencies, notes that ex post evaluations have pointed to the need for better ex ante appraisals. Criteria of replicability can then be explicitly included as an item of study in the appraisal. She lists a number of hypotheses why "foreign assistance projects" are not replicated and suggests a set of tests to study them. Pyle (1981), in his discussion of problems of expanding projects into programmes on the basis of experiences in the health sector in India, emphasises the significance of processes underlying a strategy's potential for effectiveness. He calls for an analysis of 'organisational and political structures within which the expanded effort will be implemented' to review the compatibility between strategy and structure. Paul's review (1982) of six public development programmes suggests the importance of local adaptations of the project given the variety of situations in a programme and the need for formalisation of certain informal processes that mark the project. The stress on social processes which build people's capabilities leads Matthai to distinguish between replicability and extensibility - the former being the notion of a change agent creating circumstances in a planned way as insocial engineering, and the latter exemplifying "people-helping-people values" by which each

one who benefits from the service extends his knowledge and skill to the other. Matthai stresses the need for the "extensible" processes in development.

Constraining Features of Projects

The central concerns that emerge seem to relate to (1) the context of replication and (2) its content. Before we discuss these central concerns, it might be useful to briefly review the specific features in a project which do not easily lend themselves to replication through a programme. Firstly, the project may not have been intended to be a model. It may have come about in response to particular needs and problems and it may be the case that it did not start with replication in mind. Thus it may not have been originally conceived of as a model, but posterity may have thrust upon it such greatness. For instance, in the case of Amul, the development of dairy co-operatives was a response to the problem of milk producers in Kaira district. However, once its potentiality became evident, a national programme, Operation Flood I, was launched to replicate its effort (Paul, 1982).

Secondly, the size of operations in a project may not pose threats to social, economic or political interests. A programme may involve such threats and challanges. For instance, the grass roots village health worker was accepted as a breakthrough when voluntary agencies demonstrated her effectiveness. When the Community Health Volunteer became a part of the health programme, the earlier tolerant or muted interest of the medical professionals turned into snowballing criticism (Pyle, 1981). Some of the states did not accept the scheme partly due to pressure from professionals. In other words, what is supported or overlooked at a micro level may not be so acceptable to various interest groups when extended to the larger system (Sethi, 1978).

Thirdly, the project is likely to provide the necessary flexibility for changes if the local environment or beneficiary needs demand such changes over time. A programme, especially if undertaken by the government is apt to attempt standardisation of policies, procedures and processes, thus considerably affecting the flexibility of the managers at the local level in the programme.

The fourth feature is the informal and personalised process that is more likely to characterise the project due to its size. Informal communication among its staff, rather than elaborate and formal systems of information, may be used for monitoring and problem solving. The rigidities of a programme may not easily permit such processes and it may well be necessary to think of innovative structures or appropriate means of performing the same functions.

Over and above these four attributes, there may be others unique to a project experience. It is often felt that in the micro project:

(1) Resources used are out of proportion to be activities. External donor agencies or even the government may pump in more money than will be available for the programme. The justification, however, may be that a variety of experimental strategies have to be tried out in a project so that the "best" ones can be discovered. Korton (1980) refers to this as the process of learning to be effective.

(2) Commitment of a high order is present. Either a noble cause or a charismatic leader invokes commitment for a project from its personnel. This is often a feature of voluntary agency efforts, referred to as the halo-and-hero image of voluntary agencies (Subramanian, 1982).

The project may be further constrained by an externality such as inadequate or inordinate degree of attention. In the public system, there may be inadequate attention given to the project since there may be a great pressure to hasten the project phase so as to take on a massive programme. This happened in the case of the Community Health Volunteer Scheme. While the role had been tried out with success tried out with success by voluntary agencies, there was not much time for testing this out and preparing the ground within the public system. Pilot projects were initiated within the public health service structure, but the expansion of the scheme did not wait for their review. On the other hand, "floodlighting" due to the interest of political or bureaucratic leadership or of international agencies may lead to high visibility, abnormal attention and consequent exemplary performance.

Content and Context

Awareness of the features in a project can equip the programme manager with knowledge of the factors likely to hinder the process of replication. The two questions that he would have to ask are: (1) What are the lessons of the project and hence what is it that is being replicated? This would refer to the content of replication and (2) How is it to be replicated? This would consider the context in which the programme is to be planned and implemented.

The model project would have demonstrated a range of elements that has proven effective for a given problem. This can include objectives, strategies, mode of organisation, technology, methods and organisational processes. In the case of the Community Health Volunteer Scheme, the voluntary agency efforts in the early seventies had shown that such a role would provide a critical link between the health system and its beneficiaries and decentralise a certain type of health care to the village level.

Appropriate processes of selection, training and monitoring and a structure of back-up services were demonstrated. The national scheme or the large scale programme of the government started with this learning. A decision was necessary as to the objective of the scheme in order to determine the content of replication. Multiple objectives characterised this programme, as indeed they affect many public programmes in general. As a consequence, not all the elements of the project could be faithfully retained. This underlines the criticism of governmental attempts at replication: that the absence of key elements of the project in the programme leads to a mechanistic extension of the learning. The necessary structural changes in the administrative organisation such as the development bureaucracy or in the larger society may neither be made nor be feasible, thereby limiting the effectiveness of the transfer.

It has been observed that the objective of replication is to extend the useful experiences of a project to as large a population as possible. It is a major assumption whether, in fact, this happens when an attempt is made to "quickly cover" as many districts and blocks in as short a time as possible. Development can then easily wind up being a distribution of some "benefit" or the other, reflected by an array of statistics of "coverage" (MIDS, 1980). As a consequence, those aspects of a project that are easy to duplicate and involve the transfer of physical inputs to the people-medicine, buffaloes and the like-are likely to be pushed in order to demonstrate quantitative achievements. The efforts of enabling people to strengthen themselves and influence development processes, efforts that may be a part of the smaller project, may get left out in the cold. In the case of the National Adult Education Programme (NAEP), despite the fact that literacy, functionality and social awareness were equally important objectives, the latter two limped along behind the former's sprint during implementation (Ministry of Education, 1980) projects that provided the inspiration for

the "larger" objectives of the NAEP must have been able to integrate all the objectives.

This discussion points to the need for raising questions regarding objectives of replication while planning and implementing the programme. It is quite likely that the project, due to the features outlined earlier, may stress outcome and impact related measures of assessing performance. The movement to a programme might shift the focus to inputs. Thus, the project might have kept the objective of a rise in income or reduction of mortality well in front while the programme may speak exclusively of bank credit and fertiliser distributed or number of patients in the clinic and quantity of medicines given.

This leads us to questions of the context in which the programme is designed and implemented. The context or environment can be both external and internal. The former denotes (a) the macro socio plitical environment of the programme as a whole and also (b) its local environment created by the ecology, the social and economic institutions and the historical setting of the communities to be served. The latter, or the internal environment, refers to the organisational setting - structures, systems, processes and the pattern of human interactions within the programme organisation. The external and internal environments can help and hinder a programme and a critical assessment is therefore vital.

That the external environment of the programme will vary from that of the project is evident from the diversity of settings in which efforts are made to implement a national or even a regional programme. The income levels, literacy, physical endowments and several demographic and ecological attributes differ considerably from region to region and also within a region. The NAEP of 1978 may serve as an illustration. Recognising the vital

variations in social and economic contexts, the NAEP planned for the creation of State Level Resource Centres which were to facilitate the development of teaching material in accordance with the needs of local settings (Directorate of Adult Education, 1978 p.34-35). This factor of local variation is, however, more often neglected in the haste to push a programme and achieve arithmetical targets. The notion of "family coverage" in rural development programmes may be recalled. The magnitude of coverage for a given period of time is expected to be the same for every block, no matter how the ecological, social and economic conditions vary, from block to block. Thus, the Integrated Rural Development Programme is to cover 600 families every year in each block (Planning Commission, 1980; pp.171-72).

The interests and responses of various groups relevant to the programme will also constitute its external environment. Thus, as already referred to earlier, the response of the medical profession to the Community Health Volunteer contributed to a constraining environment for its design and implementation at an overall programme level. In this context, reference may be made to a study of an earlier period, where the factors creating the environment for the shift from a professional to a populist health model are identified as the ruling elite's attitude, the decline in the dominance of professionals in the ministry, the personal support of the Prime Minister, the pressures of a redistributive ideology, change in the international professional community's view and growing challange to the Indian Medical Association's dominant ideology (Maru, 1982).

As for the internal environment arising out of the organisation structure, the range and quality of the personnel and the work culture within the development bureaucracy would vary considerably from area to area. If the programme is to be

implemented through this structure, then there are some obvious limitations it imposes on it. Thus, for instance, the Food for work programme showed considerable variation in performance in the various states that opted for it, despite a uniform set of policy and desired strategies. Although voluntary agencies in health had worked with illiterate women for the delivery of a certain level of health care service in the village, the national volunteer scheme decided to go in for a middle school graduates as the village level worker. The concerted training and follow up over years in the case of the voluntary agencies enabled the health workers to function effectively. However, such an intensive effort was apparently not considered feasible by national programme planners due to the limitations of the district and primary health centre organisation structure. Hence, perhaps, their choice of a uniform, but a more realistic norm of a relatively more literate volunteer. On the other hand, the history of the organisation structure of the health services points to serious constraints of internal environment. Prior to the national scheme a major structural change in the form of the change of the role of unipurpose into multipurpose health workers had been initiated and was yet to be fully implemented. Amidst this, yet another role of the community health volunteer was introduced. The readiness of the organisation to absorb new roles in such quick succession would have required careful assessment.

Managing Replication: Key Elements

The management of replication seems to involve the following key elements (1) Analysing the programme environment at the macro and micro level (2) Assessing roles and strategies (3) Ensuring local adaptability and flexibility and (4) Institutionalising significant processes of a project. The following passages will briefly explain these elements.

(1) Analysing the programme environment:

This analysis will point to the compatability between the demands of the programme objective and the attributes of (i) the external environment and consequent requirements of organisational flexibility and adaptability and (ii) the internal environment in terms of capabilities and the culture of work of the implementing organisation.

A wise reading of the environment will impress upon the programme management the need to look for alternative approaches for accomplishing the desired objectives. For instance, the critical objective in a programme may be the prevention of a disease or infection. Reaching this objective may depend on the function of mobilisation and participation of the concerned sections of the community. However, the internal environmental analysis of the organisation of the public health services may indicate that it is unlikely to carry out such a function. Alternatives may then be thought of for the replication effort.

(2) Assessing roles and strategies:

On the basis of the above analysis, the programme management may decide on the role it will play in the replication process. For instance, it may decide that, rather than implementing projects directly, the programme's role would be catalytic. That is, it will help other agencies, both public and private, and develop projects along the lines of "the model". Its objective will then be the successful implementation of the project not directly, but through other channels. Identifying and developing individuals and institutions that can satisfactorily replicate the project will be the significant strategy.

The analysis can also suggest other approaches for the programme management. The external analysis may highlight the obstacles likely to be posed by interest groups that may have tolerated or overlooked the project, but will not support the programme. An approach of moving from a project phase to a transitional phase, where the project is tried out before launching the programme, may then be chosen. Thus one might speak of an interim phase of a "pilot programme" after the pilot project.

Such a pilot programme may even be tried out in locations which do not have very hostile environments. In other words, the programme management may opt for a strategy by which efforts are not diffused in multiple settings. There may not be adequate strength within or support without to see the programme through. Consequently, the project may be replicated in those settings which provide a conducive environment. Such an experience can strengthen the programme management's understanding of the problems in replication.

The interim phase also seems relevant for attempts of the public system at replicating voluntary agency projects. The possibilities and limitations of the governmental system will then be understood before a large scale operation is initiated. Between the small step and the great leap may then lie a useful hop.

(3) Ensuring local adaptability and flexibility:

As mentioned earlier, the variety of contexts can demand a variety of local managerial responses in a programme. The organisational structure will have to facilitate such responses. While this calls for autonomy at the local level, there may also be a concern about safeguarding institutional norms and objectives. The task of the management will then be the evolution of appropriate monitoring and control measures. Moreover, the responsi-

bility that autonomy calls for at the local level will require a certain level of capabilities at that level. This will require efforts at developing managerial capabilities down the line, with emphasis on sensitivity to local contexts and creation of alternative measures. Resource and organisational support will then follow. Training and human resource development will thus form a significant component of the replication process.

(4) Institutionalising significant processes of a project:

The project is likely to have worked with a number of informal processes that are significant for its effectiveness. For instance, field visits by managers and supervisors may have facilitated informal on-site training and monitoring. Joint planning through frequent face-to-face communication may have resulted in a motivated team. The programme management will be faced with the task of setting up policies and systems that will substitute, and in some measure, facilitate the informal processes. Policies can stress the value of the desired processes. For instance, the NAEP stresses that the role of the supervisor, who is to oversee the work of the village level instructors, as not that of a traditional inspector, but one of a supportive resource person (Directorate of Adult Education, 1978, pp.5-23). Similarly, while talking of local autonomy for a unit, NAEP draws attention to the undesirable attitude and behaviour of conventional public programme authorities in making "surprise checks". The process of selection may be given a great deal of attention in the programme since the right person is more likely to initiate the appropriate processes. New roles such as that of a social worker, with an orientation to organisational and community processes may be called for.

Considerable organicational learning may be involved

in responding to the third and fourth elements lised above. Iterative exercises of action, review and change will have to form the basis for decisions regarding alternative or modified structures and processes.

Conclusion

Many development programmes are evolved on the basis of pilot projects and experiments. Managing replication then becomes a significant function in the programme. This involves the transfer of the experience of a project, in part or in its entirety, to diverse contexts as part of a large scale programme.

Planning for resources and logistics is an important function of the programme management. At the same time, it has also to respond to the organisational and socio-political processes constituting the programme environment. Thus replication is more than a linear extension of the model project and calls for innovative and sensitive managerial responses.

This paper makes a preliminary attempt to identify the elements of managing the process of replication. Starting with the objectives of this process and its rationale, the paper enumerates the features of the small scale project that are likely to constrain the design and implementation of the large scale programme. It highlights the notions of content and context of the programme and presents the related hurdles of moving from the project to a programme. The review ends with a tentative identification of key elements in the management of replication.

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