Improving
Support Services
for Rural Schools

A Management Perspective

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An adaptation of the training and visit system used in agricultural extension may be a good model for managing the delivery of technical support services to isolated rural schools.

Management is a major weakness of rural school supervision systems. Management systems for rural schools should emphasize regular school visits by trained specialists whose task is to help rural teachers with teaching skills and rural principals with routine administrative tasks.

Instead, Bank projects provide uncoordinated "components," such as transportation and one-time training efforts for field staff.

The training and visit (T&V) system used in agricultural extension provides a model for managing supervision of rural education. It must be adapted to education, though, by:

• Targeting specific rural client groups with similar educational needs and problems.

• Providing services that schools want to receive.

• Strengthening links between teacher training colleges, educational research institutions, and rural classrooms.

Keith recommends including a T&V system in ongoing and future educational projects, after careful evaluation of the pilot project.

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EXECUTIVE SUMMARY

Major Findings

1.   **Management is a major weakness of rural school supervision systems**. In a review of 24 World Bank projects which incorporated components designed to improve the supervision systems for rural schools, it was found that the projects focused on changing the type of supervision provided from bureaucratic tasks to teacher support activities. In general, however, the projects did not address the problems of organizing and managing the supervision system. The paper's analysis shows that the poor quality of the existing supervision systems is due in large part to lack of systematic management. In several projects new tasks were added to an existing rural school supervision system, already overloaded and unable to perform as expected. A management system for rural schools should emphasize regular school visits by trained specialists whose sole or major task is to help rural teachers with classroom teaching skills and school principals with routine school administration tasks. Instead, Bank projects have provided "components" e.g. transportation, one-time training efforts, supplies, etc. for fieldstaff without considering how to organize and deliver these additional resources effectively and systematically.

2.   **The Training and Visit System provides a model for managing rural education supervision systems**. The Training and Visit System used primarily in agricultural extension addresses several of the key problems facing existing as well as any newly established supervision systems which are intended to help rural schools. These problems include:
(i) difficulties in maintaining a regular schedule of visits to rural schools; (ii) the failure to provide teachers and principals with the type of assistance they both want and need; (iii) difficulties in securing minimum resources necessary to assure that extension services are delivered regularly enough to have an impact; (iv) difficulties in assuring that field staff are adequately trained and supported by central administration, teacher training and education research institutions; and (v) difficulties in providing incentives for rural teachers and school principals to adopt new teaching and administrative methods.

3.   **The Training and Visit System needs to be adapted to the rural education context**. To adapt the Training and Visit management model to rural education, three specific steps should be taken:

(i)   Specific rural client groups need to be targeted because needs of schools, teachers, and principals may vary widely. The supervision system should target a limited number of schools with the same type of students, teachers and organization (multigraded or graded).

(ii) The demand for specific educational extension services needs to be carefully identified in order to assure acceptance of rural education extension services once they are made available.

(iii) The links between teacher training, educational research
       institutions and rural education problems need to be strengthened.
       This should occur through involving teacher training and education
       research institutions in the continuous in-service training of
       extension field staff as well as other research, development and
       training activities.

4.   The Training and Visit model can be applied to any of the three
common education supervision approaches used in Bank projects. However,
certain key parameters need to be firmly established to make the system
function effectively. These include the following:

   (i) Establish a limited span of schools for each field staff which
        permits at leas: one and preferably two monthly visits to each
        school.

  (ii) Assure that field staff spend approximately 2/3 of their time
        visiting schools and 1/3 in training activities organized for
        client teachers as well as training for field staff themselves.

 (iii) Establish a system of continuous in-service training for field
        staff and their supervisors that is linked to teacher training and
        educational research institutions.

  (iv) Provide extensive retraining for existing supervisor/inspectors in
        cases where an existing supervision/inspection system is to be the
        vehicle for establishing a rural education extension service.

Recommendations

1.   Include the Training and Visit System as a central component for
an ongoing or future educational project.

        Because the Training and Visit system provides a well-defined,
tight management model that addresses a number of key problems facing rural
school supervision systems, it should be adopted as the management system
for a rural education extension service of an existing or future education
project. This should be done on a pilot basis to develop the necessary
adaptation of the Training and Visit system to the rural education sector.

2.   Carefully evaluate the pilot project for determination of the
scope for more extensive future applications of the Training and Visit
System to the education sector.

        The pilot application of T & V should be carefully evaluated with
regard to its cost-effectiveness and appropriateness to the management of
rural supervision systems, i.e. (i) helping to regularize visits and
increase their frequency, (ii) building a cadre of field staff trained to
help teachers with teaching problems and improvement of their pedagogic
skills; (iii) shifting the time spent by field staff from bureaucratic to
school-related tasks; (iv) increasing the time field staff actually spend
in the field; and (v) improving the links between rural schools and
educational research and teacher training institutions.

I. INTRODUCTION

1.   This paper is concerned with improving the quality of rural
schools. To date, many nations with assistance from the World Bank have
made substantial efforts to expand the availability of primary education in
rural areas. While access to education in rural areas has increased, the
quality of rural education remains precarious. (Coombs, 1985; Armitage, et
al 1986; Education in Sub-Saharan Africa, 1988) The Bank has pursued
multiple approaches through its projects to help upgrade educational
quality in rural as well as urban areas. One prong is the effort to
provide professional and technical support services to rural school
personnel, e.g. improved teaching techniques or classroom management
skills. The paper examines the reasons why the efforts to date have not
been particularly successful in focusing on organizational and managerial
limitations. It then examines the Training and Visiting System as one of
several alternative management systems which might be adapted to the
requirements of a rural educational context.

2.   Organized in four sections, the paper begins with a brief
examination of both institutional and school environment in rural areas.
The second section contains an analysis of the twenty-four World Bank
projects which have tried to improve rural school supervision. By
identifying three typical approaches used, lessons regarding these
experiences are drawn. In the third section, the paper examined the
Training and Visit System used primarily in agricultural extension for its
potential applicability to rural school supervision systems. Finally, the
paper presents a brief set of conclusions and recommendations for a pilot
field application of the Training and Visit system to an ongoing or future
World Bank project.

II. THE CONTEXT OF RURAL EDUCATION

The Institutional Environment

3.   Schools in rural areas find themselves in a very weak
institutional environment. The fact is that rural schools throughout the
world have tended to grow up spontaneously or by sponsorship of private
voluntary organizations. In more recent years, they have been established
in the context of integrated rural development programs. Initially, they
belonged neither to local nor central administration, and were usually
incorporated in the public school system well after they had been
established. In essence, these schools were and continue to be at the end
of the administrative chain, isolated not only geographically, but also
institutionally.

4.   Lack of Institutional Influence. Their power to influence and acquire resources from local or central bureaucracies is generally limited. At the local level, the existing administrative infrastructure is scant, and often undifferentiated by function, i.e., there is no specific body to deal with education. This type of administration tends to be dominated by the interests of local elites, whose concern with education, as well as other social sectors is minimal. (Tendler, 1982) Local administrators and politicians dealing with educational services are frequently more focused on containment than improvement, responding to elite pressures to minimize any expenditures which are not to their direct benefit. However, in cases where family farming is dominant, local policy makers may be more interested in education.

5.   Where rural schools belong to a centralized administration, they are usually benignly ignored. The concerns of provincial, regional, departmental and state authorities, like national ministries of education, are with more highly concentrated urban populations in the immediate vicinity of the educational bureaucracy. The needs and concerns of rural schools are easily overlooked. Not only are rural schools well beyond the reach of formal administration, they are also equally removed from professional institutions, e.g., training colleges, universities, and education research institutes. Neither their existence nor their specific problems tend to make a strong impact on the agendas of professional institutions within the sector.

6.   Organizational Isolation. From an organizational perspective, rural schools also suffer disadvantages. First and foremost, the schools are small and isolated from each other. In general, they do not form networks of mutual support. Frequently, rural schools are small with a staff of 1-3 teachers. These schools are widely dispersed, making it difficult for teachers to interact with each other professionally, share experiences, problems, successes and failures. Professional exchange remains at a minimum, and there is very limited professional stimulation or feedback. Organizationally, rural schools remain highly dependent on central agencies to solve their problems--which these agencies rarely do--rather than working together with other schools like themselves in the same geographical area. These schools have limited and tenuous communication channels with the rest of the education sector.

7.   Characterized with a high turnover of poorly qualified staff, a paucity of appropriate teaching and learning materials, and weak school site administration, it is not surprising that rural education is plagued by limited efficiency and effectiveness. Throughout Asia, Africa and Latin America, fewer students in rural areas complete primary school than do students in urban areas. Where primary school leaving and secondary school entrance examination results are available, rural students consistently perform below the level of urban students. In addition, the net enrollment ratios (percentage of students actually enrolled relative to the school age population) in rural areas are significantly lower than in urban areas. This is, in part, attributable to the exigencies of agricultural production, where the opportunity cost of child labor is high.

The School Environment

8.   There are several salient problems which impact on the rural school environment making it especially difficult and austere. These include staffing problems, learning material shortages, and weak school site administration.

9.   <u>Low Caliber/High Staff Turnover</u>. The most salient factors affecting rural schools are the lack of trained, experienced teachers and high teacher turnover. In the majority of developing countries, less than one-half of rural teachers are trained. In many countries, the majority of rural teachers have not even completed a secondary education. Untrained, under-educated teachers are severely disadvantaged in the context of most rural schools.

10.   Despite the apparent "simplicity" of rural life, teaching conditions are often more complex than in urban areas. In Latin America, for example, where the one- or two-classroom school is still common, the teacher has to handle students of different ages and achievement levels in one classroom. The spread of learning activities a teacher should ideally provide is very wide, and the classroom management problems are more difficult than in graded classrooms. In general, teachers, even those who are formally trained, have not received specific training in how to handle these types of teaching situations.

11.   Compounding the problem of the low quality of teachers is the high rate of teacher turnover. Retention of trained teachers is a particularly acute problem in rural areas. Unfavorable living conditions combined with professional and general socio-cultural isolation make it very difficult to attract and retain qualified teachers. The rapid succession of teachers in rural schools has a strong negative impact on student learning as well as school/community relations. Much needs to be done to attract and retain trained teachers in rural areas. This is one dimension of the rural educational context where key support services can play a significant role.

12.   <u>Lack of Adequate and Appropriate Teaching /Learning Materials</u>. Aggravating the rural school staffing problem is the lack of learning materials along with the inappropriateness of existing materials to the rural environment. The cultural content of textbooks is predominantly urban. The materials are directed towards the younger students (6-12 years) and are rarely designed for multi-graded teaching situations. Teachers have not usually been trained in how to generate their own activity kits from local surroundings, e.g., manipulatives for teaching basic mathematics (stones, sticks, pods, etc.); plants and animals from the surrounding environment for science lessons, hand-made weights and measures, etc. It is not uncommon for students to be without any learning materials whatsoever. They spend much of their time copying from the chalkboard or reciting lessons. These instructional approaches have generally been shown to be ineffective.

13.   <u>Weak School Site Administration</u>. While rural schools, on the average, may be smaller than urban schools, they are still in need of on-site administration. The role of the rural school principal is, or rather

should be, multifaceted. The principal is responsible for a range of activities including routine record keeping, local fund-raising, personnel management, student discipline and often teaching as well. Ideally, the principal would also provide professional support and feedback to the teaching staff. However, school principals in rural areas are usually no more prepared for their complex jobs than teachers. While they may be drawn from the ranks of the most qualified and experienced rural teachers, rarely are they trained in school administration. They are unprepared for both the administrative and professional support roles they should perform. This is cause for particular concern given the growing body of school effectiveness research which shows that the school site management or principal's leadership is a critical factor distinguishing more from less effective schools. (Cohn & Rossmiller, 1985)

III. RURAL SCHOOL SUPPORT SERVICES: EXPERIENCE AND LESSONS

Limitations of Existing Systems

14.   Support service systems for rural schools, i.e., on site technical advice on teaching and school management, as well as on and off site in-service training for teachers and administrators during the school year and vacation periods, do not exist in most countries of the developing world. What have existed on a long-standing basis in many countries are referred to as systems of school supervision and/or school inspection. Supervision/inspection systems are found widely throughout Latin America and the Caribbean, Africa and Asia. Usually established by a colonial administration, supervision and inspection systems have constituted a fluid administrative network which frequently takes the place of a more permanent local administration for the educational system. As will be illustrated below, these supervision/inspection systems have and continue to be quite limited in what they are able to provide to rural schools. At best, these systems were established as administrative surrogates to maintain standards, i.e. mechanisms of control. While these systems vary from country to country as to the details of what and how they operate, nonetheless, they have a core of common characteristics, including:

(i) Emphasis on functions other than school support services. The typical functions of the inspection/supervisory system include (a) handling personnel matters; (b) inspecting existing schools periodically; (c) certifying new schools at their request; (d) collecting data and disseminating information for central educational authorities; and (e) trouble-shooting specific school problems on an ad-hoc basis.

(ii) Centralizing of inspectors/supervisors in urban areas. Inspectors/supervisors almost invariably reside in urban areas and are stationed at urban administrative sites. In some extreme cases the inspectorate is centralized in a country's capital city; in other instances, the inspectorate will be located at the departmental, provincial or district level. Inspectors/ supervisors, however, are not, in most instances, field staffers.

(iii) <u>Staffing for control and administration rather than support</u>. Operationally, these systems are staffed for administration and control rather than providing support services to rural schools. The cadre of inspectors/supervisors is generally too lean to be in constant contact with schools, nor is it trained to do school staff development; handle community relations; or deal with issues of curriculum and instruction.

(iv) <u>Linkage to central bureaucracy</u>. Inspection/supervision systems are organizationally and institutionally tied to central educational bureaucracies, thereby reflecting their priorities and interests rather than those of rural schools.

Remodeling Rural School Support Services: Bank Approaches

15.   Due to the expansion of rural education and its limited effectiveness, providing support services to rural schools has become an issue of growing importance in the past 20 years. By 1985, the Bank has provided assistance to improve rural school supervision in 24 projects (see Table 1 in appendix). Basically, three approaches have been used to refocus the activities of traditional supervision/inspection systems towards providing support services: the incremental approach; the parallel approach; and the decentralization approach. Each is described below along with the lessons which can be gleaned from a desk review of the projects typifying each approach.

16.   <u>Incremental Support Services Added to Existing Rural Supervision Systems</u>. The most common approach to refocusing supervision/inspection systems on school support services is simply to graft additional tasks onto those already carried out by inspectors/supervisors. This has been the predominant approach in Bank projects with more than half the projects studied using add-on tactics. While this approach is the most straightforward and appears to be the lowest cost strategy, its effectiveness is questionable. Though add-ons usually do provide some retraining for the traditional inspector/supervisor (11 of the add-on projects included in-service training) and incremental resources with which the job is to be carried out (for example, seven projects provided transportation), they do not address more fundamental problems associated with the existing focus of supervision/inspection systems. These problems inevitably impinge on any attempt to reorient existing supervision/ inspection systems towards providing rural school support services.

17.   There are three basic problems with the mandated responsibilities of existing supervision/inspection systems. First, these systems already have multiple objectives: personnel allocation and control; inspection/ certification; data collection and dissemination. It is widely recognized that in their current form, these systems are already overloaded with responsibilities that are not being performed effectively. Moreover, these activities are determined primarily by the needs and objectives of the central administration authorities rather than rural schools themselves.

18.   Second, adding educational support activities to an existing supervision/inspection system introduces conflicting roles for the supervisor/inspector. These conflicts are most readily manifest in the opposition of the inspection/certification and educational support functions. Entrusting a single supervisor with both responsibilities often makes it difficult to establish professional understanding and trust between the school staff and supervisor necessary for the educational support services to have an impact.

19.   A third limitation of this approach is that most attention falls on what is to be done, and only gives secondary attention to how to accomplish it. This has resulted in what could be called a piecemeal effort in providing educational support services by Bank projects adopting the add-on style. Instead of analyzing, and redesigning the management of supervision/inspection systems which is a necessary aspect of reorienting their focus towards the provision of educational support services, add-on components tend to supply isolated inputs in hopes of improving both efficiency and effectiver 's (see table 2). In sum, these projects identify and emphasize the need to provide educational support services, focusing on what should be done. However, they rarely go far enough in analyzing and designing how these services should be provided. Instead, they rely on the assumption that input limitations like transportation and training are the binding constraints. This is only partially true. The lack of inputs are overshadowed by the institutional and managerial constraints affecting existing supervision/inspection systems and their potential for reorientation.

20.   Parallel Support Service Systems. Another approach to establishing educational support services is to create a network of fieldworkers parallel or subordinate to existing supervisors/inspectors. This has been experimented with in several countries including Haiti, Pakistan, Bangladesh, and Nepal within and beyond the context of World Bank projects. The characteristics of the parallel networks vary in detail, but have certain commonalities including:

(a)   The creation of a separate cadre of education fieldworkers and in some cases their supervisors. In Haiti, for instance, pedagogic advisors under the aegis of the National Pedagogic Institute were set up as a separate cadre parallel to the Inspectorate, part of the Ministry of Education (see Case Sketch of Haiti in appendix);

(b)   Responsibilities limited to the provision of educational support services. For example, in Bangladesh assistant education officers who supervise primary schools were introduced with the following responsibilities: (i) improving school-community relations; (ii) providing technical assistance to teachers and headmasters; and (iii) organizing in-service training with the help of the Primary Teacher Training Institute staff;

(c) The provision of custom-designed training for fieldworkers. In Nepal, field-coorunator training which focuses on how to increase the effective use of teaching materials in the classroom, as well as increasing classroom teachers' knowledge and skills in key academic subjects, is included in the Primary Education project.

21.   The parallel approach has revealed certain key achievements in the few countries where it has been implemented in Bank projects. An interim evaluation of the Pakistan project found that teacher and pupil attendance improved; that community involvement in the school increased, evidenced by community contributions; and that the learning coordinators (fieldworkers in Pakistan are referred to as learning coordinators) had begun to represent their schools' interests at the district level, negotiating for the school with contractors and landlords, and pitching in, for example, to help restore access to schools following a flood. They "emerged as a sort of educational analogue to the agricultural extension agent" (see Evaluation in World Bank Education Projects: Lessons from Three Case Studies, Searle ed., 1985). This is indeed a contrast to the role of the traditional inspector/supervisor. In Haiti, the pedagogic advisors were the principal agents for introducing the curriculum and teaching practices envisaged by the Haitian Educational Reform Act of 1978.

22.   The strengths of the parallel approach are:

(i) The clear delineation of fieldstaff responsibilities which eliminates multiple and sometimes conflicting objectives;

(ii) The reduction of the fieldstaff school/teacher load. In Bangladesh, an average ratio of one fieldstaff to 67 teachers was established; in Pakistan, the ratios varied but were as low as one fieldworker to six schools in some provinces; in Haiti, the ratio was considerably higher, one pedagogic advisor to an average of 127 teachers. The point here, however, is that in each instance the fieldworker was able to maintain constant contact (one to two times monthly) with the schools and teachers in their circuit;

(iii) The fieldstaff are often supported by training programs and/or research and development institutions on both a pre-service and continuous in-service basis; and

(iv) There is evidence that the fieldstaff became, over time, more client-oriented and responsive than traditional inspectors/ supervisors. This presumably is a function of both their increased contact with the schools and the specificity of their activities.

23.   The parallel approach is not, however, without drawbacks. There is the potential for conflict with the existing supervision/inspection system. This has been identified in both Haiti and Pakistan where the systems have been operant for the longest time. In the case of Haiti, the conflict was so strong that eventually the separate cadre of pedagogic advisors was merged with the Ministry of Education's inspectorate system.

24.   The other limitation is the cost-effectiveness of parallel
systems. The evaluation of the Pakistan experiment points out the need to
study carefully the costs of this approach at the school site level vis-a-
vis the results. Furthermore, there is some indication that once external
support for specialized, parallel networks is no longer available, this
approach might exceed the fiscal capacity of many countries.

25.   Decentralizing Educational Support Services. A third approach to
the problem of building up educational support services for rural schools
is to decentralize technical and administrative responsibility for these
services. The school nuclearization movement first introduced in Latin
America by UNESCO in the late 1950s represents the most extensive
decentralization efforts along these lines.

26.   From an organizational perspective, nuclearization efforts have
attempted to build a local network of satellite schools around a central
school offering the full first cycle of primary education. The central
school is the nucleus of the "nucleo" and has important administrative
characteristics as well as the role of providing educational support
services to other schools. Nuclearization has been tried in most countries
throughout Latin America and supported in a range of World Bank projects in
El Salvador, Peru, Paraguay, Colombia and the Dominican Republic. Variants ·
of nuclearization are being experimented with in Nepal, in a Bank-supported
primary education project, and in Ethiopia, through the Awaraja Pedagogic
Centers as part of a general educational decentralization process under
way in that country.

27.   Characteristics of the decentralization approach in establishing
rural school support services are:

    (a) The establishment or designation of a permanent center for support
         services at the local level. The center is usually lodged, as
         mentioned above, in the most central, best-endowed school of a
         given geographic area;

    (b) The designation of at least one staff member attached to the
         central facility with the responsibility for providing educational
         support services such as in-service teacher training; facilitating
         library access, information; helping to mobilize community support
         for the schools and organizing adult education opportunities
         around the central and sub-central schools; and

    (c) The creation of a loose local-level administrative network among
         the central and its satellite schools.

28.   The decentralization approach has both strengths and weaknesses as
implemented in a wide variety of countries. The principal strengths
include: (i) bringing support services very close to the schools which
enhances their responsiveness to the specific needs; (ii) the ability to

mobilize active community participation in some aspects of the schooling process and school decision-making; and (iii) the capability to promote resource sharing and professional exchange among schools within the orbit of the central school/facility.

29.   These strengths are, however, tempered by weakness which have been observed among the many attempts to use the decentralized approach. The major weaknesses of this approach are: (i) the lack of preparation among the central school staff responsible for providing support services; (ii) the potential for conflict with existing systems of supervision/inspection; (iii) the non-professional staffing practices sometimes used with regard to the appointment of nucleo directors and assistants; (iv) the incremental costs associated with this approach vis-a-vis the capacity of local communities or central governments to absorb these costs; and (v) the difficulty of institutionalizing a decentralized system on a very weak local base in terms of both financial and human resources.

Lessons

30.   Several lessons emerge from experience with the three approaches used to introduce support services for rural schools. It is important to remember that none of these approaches has been systematically evaluated in the field. This would be an important step for making policy as well as operational recommendations. Based on extensive desk review backed by interviews with Bank project officers and the author's experience, the following lessons emerge.

31.   The Need for Institutional Arrangements. There is not enough attention given to the institutional arrangements and pre-requisites for introducing school support services, regardless of the approach employed. Projects do not usually take into account the importance of selecting the appropriate institutional framework for introducing or expanding educational support services. This is a weakness of the add-on approach which does not come to grips with the fundamentally center-periphery institutional arrangements that characterize existing systems of inspection and supervision. Because these systems are organized, financed and controlled by central educational authorities, they are also primarily responsive to the central authorities rather than to the needs of rural client schools. So long as the inspector/supervisor remains firmly attached and integrated with the central administration, the potential for modifying their role vis-a-vis rural schools towards educational support services is limited.

32.   This institutional factor is less problematic in both the parallel and decentralization approaches. Here, the major institutional issue becomes the conflict over roles and power between the traditional supervisor/inspector and the newly established educational support field workers. These conflicts may be inevitable. Nevertheless, they can be anticipated and dealt with in the project design as well as the project implementation phase.

33.   Both these institutional considerations raise the question: Which
is the appropriate institutional sponsor for an educational support
service, the Ministry of Education, a research and development institution,
a teacher training institution, or decentralized educational authorities
when and where they exist? Each of these alternatives has its merits and
limitations which must be studied carefully. Experience suggests that the
institutional sponsor which is appropriate to launch the service system may
not be able to provide a long-term institutional base. Nonetheless,
achieving institutionalization is the most pressing issue. This question
needs more careful study. It would be useful to compare the Haitian,
Bangladesh and Pakistani experiences with several other cases such as
Paraguay, the Dominican Republic or Nepal where decentralization has been
attempted.

34.   Another institutional factor limiting the add-on approach is the
position of the inspectorate or supervisory system in the overall
bureaucratic structure. In some countries, the system may be
disarticulated from the existing power structure in the Ministry of
Education, as the author observed in Ghana in mid-1985. In other
countries, it may be located squarely on the administrative side of the
Ministry which decreases its potential as a provider of educational support
services, e.g. Colombia. Placement of a rural school support system will
inevitably have a powerful impact on what it does and how it functions.
Supervision/inspection systems which are institutionally marginalize
cannot hope to command the resources to carry out either existing or
incremental activities. Those which are squarely on the administrative
side of the system cannot easily transform into agents of educational
support services.

35.   Attention to Organizational Pre-requisites. In addition to
institutional constraints, not enough emphasis has been given to analyzing
the organizational pre-requisites needed to make support services work,
given the difficulty of rural conditions. Experience from the projects
reviewed suggests that more attention should be given to developing the
organizational pre-requisites needed to make educational support service
work in the rural setting. More emphasis could be placed on how to provide
services in a consistent, systematic fashion so that there is a cumulative
impact generated. Evidence from the three approaches is insufficient to
evaluate the relative strengths of each from this perspective. However,
the decentralization cases reviewed paid substantially more attention to
organizational problems than either the graft-on or parallel approaches.

36.   Organizational factors requiring careful attention include: (i)
the specification of support services personnel at various levels: field,
the sub-central and central along with their respective roles and
responsibilities vis-a-vis the program and rural clients; (ii) how to set
up a program for continuous training and support of fieldstaff personnel;
(iii) methods used for planning, executing and reviewing work programs of

fieldstaff; and (iv) how to establish clear channels of communication up and down the system, i.e. from the grassroots rural schools to the central level and back. It is not obvious from any of the cases reviewed that sufficient attention has been given to these issues.

37.   Concern with Cost-Effectiveness. There needs to be more emphasis on the relative cost-effectiveness of the alternative approaches. Here we refer to the number, qualifications, and placement of field personnel providing services to schools as well as the organizational support personnel mentioned above. The span of a field worker's responsibility should be based on the optimal number of contacts per school year needed to achieve specific objectives, usually not less than one visit per month and preferably two visits. The cost implications of this level of support must be studied carefully along with the benefits derived in different rural settings.

38.   A general review of experience from the three approaches suggests that the add-on approach is the least costly alternative, but not the most effective or beneficial to rural clients because educational support services are greatly diluted among the multiple tasks already carried out by existing inspection/supervision systems. Clearly, both the decentralization approach, establishing a permanent administrative structure at the local level, and the creation of a parallel cadre of support-oriented supervisors are expensive options. The effectiveness of decentralization efforts in the medium term needs more careful assessment.

39.   The lessons and issues arising from a review of Bank experience strongly suggest the need for in-depth studies of several empirical cases on the one hand. One potentially fruitful case study, Haiti, is described in the case sketch appended. On the other hand, an examination of experience with service delivery systems of other sectors, giving special attention to problems of institutionalization, organization and cost-effectiveness, would be extremely helpful. Therefore, this review concludes with an examination of how the training and visit system applied widely in the agricultural sector and more recently in the population, health and nutrition projects might provide a useful management approach for improving support services to rural schools.

IV. IMPROVING SUPPORT SERVICES FOR RURAL SCHOOLS

40.   While there are a number of services that could benefit rural schools, it is essential to establish priorities with regard to which support services should take precedence. Considering the low level of preparation and high turnover among rural school staff, the priority is to provide support to teachers and principals in the areas of teaching and school site administration. Given the limitations and austere conditions under which rural schools operate, the primary needs of teachers and administrators are often related to the mundane day-to-day tasks of

teaching and school administration. Support services should be aimed at helping school personnel carry out their routine jobs better: bringing them simple approaches to classroom organization, student motivation, techniques of teaching; and developing supplementary teaching materials from within the immediate rural environment. In other words, the emphasis should be on teaching techniques for school staff. Support services for school administrators should be oriented towards helping the administrator provide instructional leadership.

How to Deliver Rural School Services

41.   How to organize the delivery of support services to rural schools is a critical management task. The most difficult aspect of providing a support service to a rural school is assuring consistency and frequency. The lack of consistency and frequency in most rural support services-and education is no exception-is commonly cited as a resource problem. Resources, however, are only part of the problem. In particular, school support services for rural areas have never been fully institutionalized in most LDCs. Unlike systems of agricultural extension, most systems of school supervision/inspection arose primarily out of the need to link the growing number of rural schools organizationally and bureaucratically to central administrative structures, usually--though not exclusively--the Ministry of Education or its delegate at the state, departmental or provincial level. At best, these systems were established as administrative surrogates to maintain standards, i.e. mechanisms of control (see para. 14 above).

42.   Improving support services for rural schools will depend upon measures taken to deal with the institutional, organizational and cost issues discussed in section (iii) above. The principal weaknesses of traditional supervision/inspection systems and the upgraded approaches implemented through Bank projects are the organizational and managerial aspects. Bank projects, as well as other government and internationally sponsored programs, have attempted to address some of the institutional and resource issues. They have been quite clear as to a reordering of priorities away from control, data collection, and personnel towards improving classroom teaching practices among rural teachers. What has been less well specified is how to achieve this reorientation beyond making broad institutional level changes, e.g. creating a parallel cadre of pedagogic advisors or moving to decentralize the entire administrative structure, and providing incremental resources.

43.   Most frequently, these programs try to modify classroom teaching behaviors by using either pre-service/in-service teaching programs or, in some cases, through media and/or correspondence distance learning courses. While these approaches have proven to be effective in upgrading teachers' knowledge of subject matter, neither has been especially effective in getting teachers to change their classroom teaching practices. An evaluation of the USAID-sponsored radio teacher training in Nepal (1983) stated the problem in exactly those terms. Similar criticisms have been

levied with regard to the widespread LOGOS II correspondence courses for rural teachers in Brazil, and of a variety of training efforts discussed at length by Dove in her article "The Development and Training of Teachers for Remote Rural Schools in Less-Developed Countries" (1982). The limitations of these most commonly used methods for modifying teaching behaviors in the education sector leads us to look for models and experience in other sectors which might be applicable. One promising and well-developed method for delivering change messages to widely dispersed, relatively unsophisticated clients is the Training and Visit System used in the agricultural sector to change farming practices of small-scale producers and more recently applied to family planning, health and nutrition programs in rural communities.

The Training and Visit System

44.   The Training and Visit (T&V) system has been widely described and discussed (Benor and Baxter, 1984; Cernea, Coulter and Russell, 1983; Feder and Slade, 1983; Heaver, 1984; Feder, Slade and Sundaram, 1985, to cite a few World Bank publications). Basically, it is characterized as a delivery or extension system which focuses on bringing services to rural clients at the grassroots level on a face-to-face basis in the client's own environment. The following section sets forth the major characteristics of the Training and Visit system.

45.   Characteristics of the T&V System.[1] The T&V system as applied to agricultural extension, emphasizes the timely and regular delivery of simple technical know-how to farmers by Village Extension Workers (VEW). The VEWs and all other extension personnel are assigned to work on extension full-time, and are relieved of other responsibilities not directly related to extension work. On a fixed day, generally once every two weeks, "contact farmers," and other interested farmers in the village receive a visit from their VEW in the farmers' fields. The VEW tries to find answers to problems identified during visits to farmers. Supervising and supporting the VEWs in their field work are the Agricultural Extension Officers (AEOs). The VEWs learn about recommendations which should be stressed to farmers during the coming weeks in fortnightly training sessions with Subject Matter Specialists (SMSs). In these regular meetings, the two-way flow of information is important because SMSs must ensure that they keep in touch with the most current progress and problems in the field. The SMSs, in turn, maintain regular contact with research and also visit farmers' fields regularly in order to transmit new innovations from research to the field and to bring in farmers' problems for which the SMSs themselves cannot supply solutions. The frequent contact between farmers and VEWs, VEWs and AEOs/SMSs, and extension and research is designed to prompt a continuous, timely flow of information back and forth between research and the field.

1/ This description is taken directly from a Bank note, "Institutional Development Technical Note, No. 3."

46.   **T&V Management Principles**. The following are some key T&V
management principles behind the T&V system:

(a)   **Tightening Management**. Because of the tendencies toward looseness
and geographical dispersion in people-oriented sectors, T&V has
compensated where possible by tightening management. The first
way is through closer supervision, with frequent and systematic
interaction at each level of the hierarchy, as described above,
and through setting clear performance targets for individual field
workers. Each worker and supervisor knows exactly how many visits
the worker is going to make, where, and when, and what messages
the worker should be transmitting at each point in time. This
close supervision is critical for VEWs, because of problems
encountered in other programs where low-skilled field staff were
left alone thus tended to work in an undisciplined manner. Close
and frequent supervision means that supervisors must be mobile and
spend a large proportion of time in the field, which is often a
substantial change from previous practices. The second way to
tighten management has been to streamline the information system.
Each extension staffperson maintains a regular diary of visits
made, advice given, and questions asked by farmers which must be
referred back to SMSs. These diaries are checked regularly by the
supervisors, thus eliminating the need for prepared reports and
reducing paperwork. The diary method is effective because it
generates only data essential for close and timely management and
helps avoid excessive office work which has encumbered "field"
services in the past.

(b)   **Critical impact points**. Just because the managerial structure
needs tightening in social sectors, it does not mean that the
program content should be rigid. On the contrary, T&V has
stressed the importance of fitting the program to local needs and
conditions. It begins with measures which are high priority to the
beneficiary and are likely to be high in visibility and impact,
but relatively simple and low in risk and cost. Establishing
initial credibility of the program has been key; once this happens
and the first steps succeed, it is easier to win public confidence
for further measures of less obvious benefits.

(c)   **Manageability**. The social sectors are often caught in a dilemma,
suffering from government neglect or interference and inadequate
resources, but being expected to shoulder a heavy burden of
responsibilities. The T&V system insists on having the minimum
resources and commitment necessary to implement the program; if
not, the program is delayed until these are forthcoming. There
are several examples of T&V programs held up until the government
could be convinced to provide minimum support. By the same token,
T&V has kept the scope of extension more manageable in two ways.
First, the system has been introduced with objectives modest
enough that management could maintain close control and did not

intimidate anyone with large sweeping changes. This has often meant concentrating on a few top priority crops and techniques. Second, T&V relieves extension workers of non-extension responsibilities such as credit, marketing or rural development work, and unifies extension services. In the past, there were often too many extension branches and too many kinds of services, which complicated extension coordination and confused the recipients of the services.

(d) <u>Linkages between research and field services</u>. The most effective method of reaching extensive populations in the social sectors involves deployment of a large cadre of field workers which is not highly skilled, but is closely backed up by experts who supply requisite professional support. But, this assumes close cooperation between the experts and field services something which has chronically been lacking. In T&V, the subject matter specialists (SMSs) fulfill this linkage through three functions: ongoing training of extension staff; "advocacy" in communication between research and field staff; and specialized support in helping VEWs and other extension staff solve many of the problems which are too difficult for them. The continuing linkage between field workers, SMSs and research has been critical in T&V for keeping both sides in touch with current field realities. A key factor of the extension between set-up has been the clear distinction between "line" functions of the supervisory level in the extension service and "Staff"--provided by professional SMSs in different levels. This clear separation between "line" and "staff" (SMSs) is one of the characteristics of the T&V system, which recognizes the need for stronger professional support to field operators than can be provided through the normal supervision channels.

(e) <u>Positive reinforcement for staff</u>. One main incentive is that supervision is designed to provide a collegial, supportive relationship. Supervisors meet with their staff on a continuous basis and share accountability for good or bad results of field work. Another incentive concerns the credibility of field staff, which has been boosted by the frequent interchange with research, which produces more relevant and accurate advice. Field staff credibility has also been boosted because they are required to spend most of their time in the field, unlike much past experience where the workers stayed primarily in their offices. The importance of the job satisfaction which this credibility brings to field staff should not be underestimated; even when the possibilities of improving their salaries and career benefits are severely constrained, their enhanced status has been an important motivating factor.

47. Even though each of these principles is not new to the social sectors, their systematic application as a package is distinctive. Indeed, there is a synergy which comes from applying them as a package; for

instance, how viable would the principle of tight management be if neglect of the other principles meant that field workers were providing irrelevant or inaccurate advice? The T&V approach encompassing all these principles does not purport to be an easy solution. Following through on some of them can entail some very tough choices, such as reorganizing an area of field services or research, or delaying a program until government support is ensured. This is why successful programs have generally started slowly, in parts of a country rather than on a countrywide basis.

The Relevance of the Training and Visit System to Rural Education

48.   The relevance of the Training and Visit system to the problems of rural schools is multiple. T&V provides a framework for organizing and managing support services where these services either have not existed previously or have not functioned well for reasons already discussed in detail (see para 14 above). It also provides a complement to other techniques used in the education sector (pre-service and in-service training; and media/distance learning) which have not proven effective in modifying classroom teaching practices. Additionally, while T&V is a "tight" management system, it can be adapted to the different institutional arrangements used in Bank projects for building up school support services, i.e. the add-on, parallel and decentralization approaches already discussed.

49.   There are several considerations to be addressed in adapting T&V methods to a rural education sector project. These include identifying and targeting the client group of the support service system to which T&V methods are to be applied; generating and satisfying the clients' specific demands; finding ways of building linkages between rural support services and educational research institutions which are notoriously weak in most instances, and maximizing cost-effectiveness of the support service system.

50.   Targeting Client Groups. The targeting issue arises primarily from practical limitations. Given the limited institutional as well as resource capacity of the education sector to deliver support services to rural areas, there are very good reasons for restricting the provision of support services to select clients, especially in the early stages of any program. Who to target becomes the question. Clearly, the education sector has advantages over both agriculture and health because its generic target group, rural teachers, is on the average better educated and should theoretically be more receptive to change. However, as has been pointed out, the teaching situations of rural teachers as well as the characteristics of their students may be widely varied. Programs would do well to begin with rather specific target groups, for example, teachers working in multigraded-classrooms of primary schools; teachers working with a particular linguistic or ethnic group; or schools with a relatively homogenous teaching staff in terms of its educational and professional characteristics. This will make it much simpler to narrow objectives of

the services to be provided and facilitate the formulation of achievable goals within a specific time horizon. It will also help to develop definable areas of collaboration between field services and research institutions (an issue to be discussed subsequently).

51.   Generating Demand. All along we have been assuming that there is a demand among rural teachers for support services that parallels the objective needs identified. Needs and demands, however, may not always overlap--perfectly or even imperfectly. While needs are readily identified from the outside, what teachers want and are willing to do may be something quite different. As has been pointed out elsewhere, there are relatively weak incentives for teachers to change their classroom teaching practices by comparison with farmers changing the production practices (Schmidt, 1983). Motivation to change is more likely to come when the change is linked to the provision of something teachers want in order to make their work situation better. This, in many cases, will be additional educational materials and equipment which are scant in rural areas; or a more relevant curriculum than currently exists. While we know that merely providing materials or new curriculum is not enough to provoke changes in teaching practices, the conjoint provision of materials and new teaching techniques has been found to be a much stronger inducement to change. Another mechanism for demand generation is to link the introduction of new "teaching technologies" to professionalization and career advancement criteria. Generally speaking, teachers' career paths are predicted on the attainment of higher levels of schools, but not upon the demonstration of classroom teaching competencies. Linking the mastery of certain teaching practices to professional advancement could be a powerful stimulus to adopting new techniques and could also stimulate the demand for rural support services.

52.   Building Links between Rural School Support Services and Research and Training Institutions in the Education Sector. There are several problems with respect to linkages between rural schools and research and training institutions. One is the general disarticulation between the interests and experience of research and training institutions and the rural education subsector. Another is the difficulty of formulating relatively simple, behaviorally specific techniques to be translated into messages that are carried to the rural school teachers.

53.   Just as the linkage between central administrative authorities and rural schools is tenuous, the connection between rural schools and research and training (R&T) institutions within the education sector is even more tenuous. R&T institutions in many LDCs are not accustomed to visit their clients in the field for both practical and prestige reasons. The interests of research institutions are sometimes shaped and influenced by research interests prevalent in developed countries rather than being oriented to the more pressing and pragmatic concerns such as rural education. Nonetheless, there are good examples of an applied orientation to research in some countries, where the institution has a contract or permanent funding arrangement with the government or an outside agency. An

example is the National Pedagogic Institute in Haiti which developed a
curriculum in Creole for the 1978 Education Reform. The curriculum was
tested and implemented by a World Bank project which supported a cadre of
special pedagogic advisors. To build linkages among research, training and
support services requires a long-term effort. At present, many R&T
institutions may not be capable of generating usable techniques and
materials for rural teachers. Sufficient lead time for identifying needs
and generating demands of the rural schools to be served by R&T
institutions should be built into any effort along these lines. This may
take a minimum of several years to stimulate. It is nonetheless a
worthwhile endeavor.

54.   Because there is a definite need in rural education for Subject
Matter Specialists (SMSs) as in agriculture, the importance of forging the
links cannot be ignored if the system is to succeed. SMSs could be more
easily generated by R&T institutions in many cases than by educational
bureaucracies. In any event, they would certainly need to receive
continuous training from R&T institutions within the sector to be able to
meet the training needs of the education field officers in direct contact
with teachers.

55.   Cost-Effectiveness. A final issue in the adaptation of a Training
and Visit (T&V) process to rural education extension services is the
question of cost-effectiveness. We know that on a strictly cost basis the
T&V approach cannot be as cheap as either the pre-service/in-service or
media/distance learning models generally applied within the education
sector. It is also more expensive than a traditional supervision/
inspection system because of the required number of field extension workers
and frequency of field visits. Though the cost may be higher, it has the
potential for greater effectiveness. Evaluations of the other standard
methods have demonstrated that they are not effective in either modifying
teaching practices or in reducing teacher turnover in rural areas (see
Dove, 1982). While a T&V approach may be expensive to introduce on a
nationwide sweep, it can be cost-effective for specially targeted client
groups and geographic areas. Moreover, introducing a T&V system does not
preclude combining it with other methods, especially distance learning
techniques for upgrading rural teachers' general educational levels and
knowledge of subject matter they must teach. In fact, the combined
approach may help to focus the extension worker's contact with teachers on
very specific and achievable teaching objectives because other broader
educational goals are being met by a lower cost, relatively effective
distance learning program.

Adapting T&V to Existing Institutional Approaches for Rural
Education Extension Services

56.   As previously mentioned, the predominant approaches for rural
education extension services have given relatively little emphasis to
managing these services and relatively more emphasis to supporting new
institutional arrangements (Pakistan, Bangladesh and Nepal and providing
specific inputs identified as critical for the functioning of the services
(Haiti, Senegal, Ethiopia, to mention only a few examples). Adapting a
Training and Visit system to any of the three predominant approaches (add-

on, parallel or decentralization) used commonly in World Bank projects can provide the added emphasis needed vis-a-vis managerial and institutional factors. Some of the considerations in applying T&V to existing Bank approaches are discussed below.

57. **The Add-on Approach**. Grafting-on educational extension services to existing supervision/inspection systems has many potential pitfalls if certain basic management principles are not established as part of the process. Perhaps the most significant for the add-on approach is to define specific objectives for personnel working with the extension services limiting their activities primarily--or even better, exclusively--to extension-related activities, rather than performing multiple responsibilities as they do in most existing supervision/inspection systems. This could be achieved by specialization among existing supervisor/inspectors: a certain group of supervisors would become solely responsible for extension services. Inevitably, this will raise the issue of providing adequate personnel to do the job. Existing supervisor/inspectors are generally too few and too high level to be retrained as extension field workers although they can be used as fieldstaff supervisors. A new position under the inspector/supervisor post may need to be defined with the attributes of the rural education extension officer. This has actually occurred in several countries: Pakistan and Bangladesh both introduced extension field workers (referred to as learning coordinators and assistant education officers respectively). These new extension workers, along with their supervisors, would need pre-service as well as continuous in-service training.

58. Inevitably, introducing new personnel raises the question of how many field extension workers are needed. Add-on approaches are in danger of understaffing because they prefer to attach new functions to existing personnel. Experience suggests that the ratio of extension field workers to school and teachers should be a function of the geographic dispersion of schools, the difficulty of transport and the number of teachers per school. A rule of thumb is to start with the time required for each school site contact. This should be a minimum of one hour per teacher for each teacher in a school. This type of one-to-one contact should occur at least once each month. At the same time, teachers would meet once each month with the extension worker in groups drawn from adjacent schools for out-of-school workshops on weekends or in the evenings.

59. Supervisor/inspectors of the existing system will need intensive re-training to be able to supervise the work of extension field workers. Their job is to make visits with each of the field workers under their supervision (spending about 2/3 of their time doing field supervision, and dividing 1/3 of their time between conducting/participating in training workshops and office work). Such a regime of activities will inevitably push supervisors towards more involvement with the immediate needs of rural teachers.

60.   Because supervisor/inspectors are not necessarily subject area specialists, links with research will have to be forged with research and training institutions to share the responsibility of continuous message development and in-service training for extension workers. Without this type of collaboration, it may be quite difficult to generate useful inputs for extension workers to carry to the schools.

61.   . The Parallel Approach. The parallel approach should, theoretically, be more amenable than the add-on approach to T&V adaptations because it requires no re-orientation of an existing system. It is essential that any initiation of a specialized parallel cadre of education extension workers--as was created in Haiti with the pedagogic advisors--be supported and supervised by a well-specified management system. T&V can provide a clear model for managing an extension system which parallels the existing inspection/supervision system. Because of the costs and intricacies involved in setting up a new system of this kind, a pilot approach spanning a limited geographic area is highly desirable. It will give the opportunity to gain experience with targeting a client group, generating demand, and developing effective supervision of the service before attempting to generalize the system to a wider audience

62.   The Decentralization Approach. Decentralization of educational administration has an explicit objective, to increase support services to rural schools. The nuclearization efforts in many Latin American (as well as some other) countries have tried to create decentralized structures and build services into these units. Due to lack of detail, we generally do not have the information at hand to know exactly how the decentralization of support services has worked. Because nuclearization has been closely linked with school mapping efforts, and moreover, because it has not been associated with a specific managerial plan or process, it is reasonable to hypothesize that one factor (though certainly not the only factor) affecting its general lack of immediate success in Latin America is a weak or non-existent management method. Decentralized approaches provide ideal conditions, in principle, for setting up an effective rural education extension service. The director of the nucleo's central school is the analogue to the education field staff with responsibilities of visiting the schools in the nucleo on a systematic basis and conducting monthly in-service workshops for teachers in the nucleo. The nucleo approach has the advantage of being very localized and therefore, the potential of being able to clearly identify needs as well as generate demand for extension services. However, the nucleo director will need to be supported and supervised by district and/or regional officers as well as subject matter specialists. The T&V model provides a firm approach to managing decentralization through nuclearization. It assures a basic, client-oriented system for the nucleo and supervision of nucleo activities from district and regional authorities. It can help prevent these infant structures from unproductive trial and error management efforts in their attempt to implement extension services.

CONCLUSIONS AND RECOMMENDATIONS

63.   Rural schools are desperately in need of technical and managerial support services. The three approaches: add-on; parallel and decentralization, examined in this analysis have met with varying degrees of success in providing these services. To build a successful support service network requires specific attention and resources for its organization, management and implementation. We must focus on how to make the service work, as well as upon what exactly it is to do.

64.   In general, the education sector is not noted for managerial effectiveness. (Partially because the scope of its activities is so broad). This however, leads us to several recommendations when considering the needs of rural schools and the support they need from outside agencies. First, we need to look for alternative approaches and experiences must be adapted to the specific conditions, configurations, and problems of rural schools. Next, the organization and management of the emergent system need to be well supported institutionally as well as financially. And finally, the network should be carefully monitored and evaluated in the early years of implementation for adjustment and refinements. Each of these recommendations is discussed more fully below.

65.   Experience from other sectors. The education sector does have experience with mobile supervision systems in many countries across the world. As the analysis has pointed out, these systems have not been established nor do they function with the primary intent of providing support services. Rather, they have had the role of an extended administrative apparatus focusing on control and central administrative concerns. Other sectors, especially agricultural and more recently population, health and nutrition, have accumulated experience with extension networks that deliver technical support to rural clients. The training and visit system applied widely in the agricultural sector is one prominent example of a delivery system with promising application for rural education. The potential application of T&V to a rural school support network lies in the organization and management approaches designed to assure consistent and relevant assistance to a widely disbursed clientele.

66.   Adaptation. Any applications of T&V to rural education needs to be carefully adapted to the rural school context. Our analysis suggests that adaptation should concentrate on three elements:

   (i)   targeting specific rural client groups because the needs of teachers and principals may vary widely. The delivery system should target a limited number of schools with the same type of students, teachers and school organization, e.g. multigraded or graded;

(ii)   identifying the demand for specific educational services in order to assure that the services provided meet the most pressing and immediate needs of rural school personnel;

(iii) establishing links between teacher training, educational research institutions and rural schools so that more can be done for the specific problems of education in rural settings. This could involve teacher training and research institutions in the continuous in-service training of field staff as well as other training, development and research activities.

67.   Financial and Institutional Support. While the Training and Visit model can be applied to any of the three common education supervision approaches used in Bank projects, certain key parameters need to be firmly established to make the system function effectively. Resources need to be allocated in order to assure that the span of schools under the supervision of a field officer permit at least one and preferably two monthly visits to each school. Furthermore, staff time should be carefully divided between time spent in the field and on other activities. Approximately two-thirds of the field staff time should be spent visiting schools with the remaining one-third devoted to training activities including group training for client teachers as well as their own in-service training programs. This in-service training should be provided by teacher training and research institutions. To achieve these conditions requires financial resources. Projects which treat support networks as tag-on or incidental components with only a small fraction of total resources doom their potential success from the outset.

68.   Building institutional support is also crucial. Institutional links with training and research centers help to filter the needs of rural schools up the educational chain as well as bring information and techniques down to the grassroots level. If an existing cadre of supervisors are to be used as the core group of field staff or field staff supervisors, extensive retraining will be required. This should be built into any program which contemplates adapting T&V to an existing supervision system.

69.   Monitoring and Evaluation. Because establishing a support network is directed to the implementation of a process rather than producing, purchasing or delivering a product, many adjustments will have to be made during the start-up years. This requires careful monitoring, in-progress evaluation, adjustments and trouble shooting. Initial emphasis should be placed on monitoring use of time - establishing a program of ongoing training and support for the fieldworkers themselves, and sharpening their abilities to assess needs of client schools. Time spent on bureaucratic activities must be reduced to the bare minimum in favor of school related tasks. Any obstacles to frequent scheduled school visits should be diagnosed and given top priority for resolution. Strengthening the links

between rural schools and training and research institutions via the field network will also require careful monitoring. Incentives for training and research institutions will need to be built into the program if a strong relationship is to flower.

70.   In conclusion, improving the quality of rural schooling will depend largely on the capacity of the country's educational system to provide support for teachers and administrators in rural areas. Because local level administration is poorly developed in many countries and will continue as such in the foreseeable future, the role of school support systems is key. Upgrading the organization and management of these systems can contribute greatly to their effectiveness in rural settings. To do this, a tight management approach such as the one embodied in the Training and Visit system is highly desirable. Without well-run networks that provide continuous technical and administrative support, rural schools will be hard pressed to improve educational quality even when provided with sorely needed material resources such as books, equipment, furniture and new facilities.

TABLE 1: WORLD BANK EDUCATION PROJECTS WITH COMPONENTS SUPPORTING
IMPROVED SUPERVISION/SUPPORT SERVICES FOR RURAL SCHOOLS

Region	Project	Problems	Components
East Africa	Second Education Project, Madagascar, 1976	(1) inspectorate lacks support	(1) in-service training of inspectors as teacher-trainers; (2) transport for inspectors; (3) training inspectors in textbook utilization.
East Africa	Third Education Project, Malawi, 1977	(1) multiple role of inspectorate; (2) too few supervisors, 29/2,000 primary schools; (3) no means of transport; (4) lack of in-service training for supervisors.	(1) in-service training institute: school teachers, supervisors, district education officers, headmasters; (2) central/district supervisor transport.
West Africa	Sierra Leone I, 1969	(1) no secondary school inspectorate.	none
West Africa	Gambia Education Project, 1977	(1) supervision centralized in capital of country; (2) lack of supervisor transport.	none
West Africa	Liberia IV, 1982	not identified	(1) in-service training of supervisors; (2) construction of regional education centres;
West Africa	Togo Education Project, 1985	not identified	(1) pre-service and in-service training for primary school inspectors and pedagogic advisors; (2) training secondary school inspectors; (3) training regional/district and school maintenance inspectors.
Europe & the Middle East	Ethiopia II, 1971	(1) not enough primary school supervisors; (2) lack of supervisor training.	(1) in-service training f : supervisors.
South Asia	Pakistan, 1975	(1) not enough female assistant education officers (field supervisors); (2) too few in-service training supervisors: 1/500 teachers; 1/250 schools; (3) supervisors cover both primary and secondary .schools; (4) lack of supervisor transport.	(1) create new level of supervisor at sub-district level.

Region	Project	Problems	Components
South Asia	Bangladesh IV, 1980	(1) belief that primary school management requires little specific training; (2) supervisor's span of control too great, 1/400 teachers; (3) no regular system of training and up-grading for supervisors.	(1) create new post below district level supervisor to increase contact with schools.
South Asia	Nepal Education Project, 1984	(1) supervisors lack teaching experience and training to help teachers; (2) too large span of control, 1/40 supervisor/schools-supervisors walk to schools; (3) district education officers are not professional educators.	(1) creation of field coordinator position between district/local levels; (2) training supervisors; (3) creation of primary supervision and training unit.
South Asia	Bangladesh II, 1985	(1) system of supervision under-utilized.	(1) in-service training for supervisors in teacher supervision, school management, personnel and program assessment; (2) improve communication among levels of administration/supervision and community.
Latin America & the Caribbean	Jamaica I, 1966	(1) supervisory system has administrative overload; (2) supervisors have too large span of control.	none
Latin America & the Caribbean	Trinidad/Tobago I, 1968	(1) inspectors overloaded with administrative responsibilities; (2) no secondary school inspectorate;	none
Latin America & the Caribbean	Guyana I, 1968	(1) primary school inspectorate over-burdened with administrative tasks; (2) no secondary school inspectorate.	none
Latin America & the Caribbean	Trinidad/Tobago II, 1972	not identified	(1) expansion of supervisory staff at government initiative to maintain one visit per school/per year at secondary level.
Latin America & the Caribbean	Paraguay III, 1976	(1) too large span of control, 1/125 supervisor/schools; (2) lack of transport and per diems for supervisors; (3) centralization of supervisors in department capitals.	(1) creation of director/supervisor in rural community learning centers; (2) provision of transport; (3) development of national norms for supervision.

Region	Project	Problems	Components
Latin America & the Caribbean	El Salvador II, 1974	not identified	(1) in-service training for rural supervisors; (2) training for non-formal rural instructors/supervisors; (3) vehicles for rural, non-formal program supervisors; (4) television support to rural teachers and supervisors; (5) guidance manuals for teachers.
Latin America & the Caribbean	Colombia III, 1973	not identified	(1) organization of vocational education supervisory service; (2) provision of transport for supervisors.
Latin America & the Caribbean	Guatemala II, 1976	not identified	(1) training of supervisors, administrators, and school directors.
Latin America & the Caribbean	El Salvador IV, 1979	(1) administrative procedures in rural areas not well defined.	(1) establishment of 51 school nuclei, including facilities for central schools; (2) T.A. in school supervision and school administration; (3) transport for central and zone supervisors.
Latin America & the Caribbean	Brazil IV, 1980	(1) too few supervisors; (2) most needy rural schools do not get supervised.	(1) upgrading courses for supervisors; (2) training of 1-3 supervisors per project municipality.
Latin America & the Caribbean	Colombia IV, 1982	(1) too large span of supervisory control: 1/70 schools; (2) inspection rather than pedagogic supervisory orientation; (3) lack of regular supervision due to lack of local administration.	(1) establishment of school nuclei through school mapping, creation of districts and zones; establish supervisory system at district level, strengthen pedagogic assistance to schools.
Latin America & the Caribbean	Haiti III, 1982	(1) overlapping levels of supervision; (2) pedagogic supervisors with administrative overload; (3) lack of supervisor transport.	(1) integrate inspection and supervision functions; (2) training of inspectors in pedagogic supervision; (3) transport, travel expenses and operating expenses for supervision.
Latin America & the Caribbean	Peru II, 1984	not identified	(1) training of 1,000 regional and local supervisors; (2) printing supervisors' manuals.

Table 2: COMPONENTS TO ASSIST SUPERVISION IN BANK PROJECTS

Type of Component	Frequency
In-service training for supervisors	11
Provision of transportation	7
Creation of new category of supervisor	6
Establish/Strengthen local administrative capacity to assist with supervision	6
Publish, distribute supervision guidance manuals	2
Provision of office facilities for district supervisors	1
Establishment of supervision norms	1
Change supervisory staff functions	1
Television support to supervisors	1

Total projects review = 24

<u>CASE SKETCH</u>

<u>Haiti's Pedagogic Support System</u>

<u>Background</u>

In 1982 Haiti decided to create a system of advisors to provide pedagogic support services to primary school teachers. This system was established in conjunction with implementation of a major education reform. Among several of the reform objectives was the improvement of pedagogic support services for primary schools.

Support services were initially delivered by a cadre of approximately 100 "pedagogical" advisors attached to 19 regional centers throughout the country. The regional centers were linked to the National Pedagogic Institute (IPN), a major educational research and development center in Haiti. The advisors, all certified teachers with several years teaching experience, received a 10-month course designed to develop pedagogic supervision skills. This helps to create a trained and well-motivated corp of professionals.

In addition to the network of pedagogic advisors, a traditional inspectorate attached to the Ministry of Education existed. The role of the inspectorate was to focus principally on administrative matters in the schools and collect statistical data needed by the Ministry. Organizationally, the inspectorate was decentralized into nine departments, subdivided into 24 zones which were further subdivided into 59 districts. This permitted a ratio of approximately one inspector to every 154 teachers.

<u>Characteristics of the Haitian Case</u>

The evolution of the system to deliver pedagogic support services to primary school teachers has several characteristics.

A <u>Separate Cadre of Pedagogic Advisers</u>. The need and/or desirability of separating the delivery of pedagogic advice from other more traditional administrative functions carried out by school inspectors was recognized and implemented. Initially, this helped to avoid certain inherent difficulties in retraining existing inspectors and adding more functions to their existing workload, particularly functions which might conflict with those which inspectors were already performing.

<u>Research and Development Related</u>. The pedagogic advisory function was directly attached to the major educational research and development institution in Haiti, the National Pedagogic Institute (IPN). The IPN had been actively involved in curriculum development. Training teachers to apply the new curriculum was a logical extension of their R&D effort. This provided feedback from classroom teachers to the IPN with regard to the new curriculum, as well as communication from the IPN to the classroom teacher.

Specific Training for Pedagogic Supervisors. All pedagogic advisors received a common, intensive ten-month training course. This was done to "better define the role of the new corps of pedagogic advisors." Since 1982, new inspectors have also received the same ten-month training. However, there has been no regular follow-up training for inspectors other than an annual meeting, while pedagogic advisors have regular in-service training sessions during the year. These consist of small group sessions scattered over the country (three per year) as well as meeting with all the 100 pedagogic advisors together.

Decentralization of the Pedagogic Advisory Service. The pedagogic advisory, as illustrated in Table 1, was established on a decentralized regional basis. While the ratio of one advisor to 127 teachers is high, we know that advisors only work with teachers implementing the Reform. Thus, the operative ratio is lower, but an exact figure is not available. Nor is information such as the number of school visits per year, the type of assistance the advisor actually provides while at the school, and the geographic dispersion of schools important.

Sub-contracting Pedagogic Support Service

The initial system of organizing pedagogic advisors under the auspices of the Institut National de Pedagogie (National Education Institute) is an example of a sub-contracting arrangement by the Ministry of Education. Problems arose between the pedagogic advisory and inspection systems to the extent that the two corps were officially merged under the Ministry of Education. All these professionals are now called "inspectors" and report to the departmental directors. An analysis of their 1985/86 work program showed that the National Education Institute could count on being able to use approximately 15 weeks per year per inspector/advisor on tasks related to teacher training, curriculum evaluation and in-service training of the inspectors' total annual work program. It would appear, from these estimates, that pedagogic support has been subordinated to other functions as a result of the merger. However, this is a hypothesis which needs to be examined empirically.

Problems Identified

Some of the specific problems identified in the Haitian situation, vis-a-vis the separate inspection/pedagogic support system, include:

(i)   Lack of communication links between the two networks. Although both dealt with the same clientele--teachers in primary schools--they had no direct means of communicating with each other. Moreover, the inspectorate was apparently not well informed about the role and activities of the pedagogic advisors. Nor was it asked to participate in implementation of the Reform which created substantial friction between the two groups. This was exacerbated by the fact that the pedagogic advisors received transportation and office facilities, per diems and gasoline, plus extra materials all financed by the Third World Bank Project.

(ii) <u>The Pedagogic advisers were reported without authority in
their role</u>. When advisers observed irregularities in school
and classroom practices, they had no authority to insist upon
changes. Thus, empowering pedagogic adviser was cited as one
of the major reasons for their incorporation into the
inspectorate.

The merger has created its own set of problems. Neither
inspectors nor advisors were given full explanation of the merger with
regard to organization, lines of communication and authority. While the
traditional inspectors may spend more time on pedagogic support services
than previously, the advisors are spending less. The confusion following
the merger discouraged the pedagogic advisors and the National Pedagogic
Institute felt that the Ministry of Education was trying to undercut the
Reform. Moreover, the linkage to the National Pedagogic Institute has been
weakened so that the research development extension network has softened.
At this point, the National Pedagogic Institute does not have a cadre of
educational "extension" agents with which to work. It is uncertain how
strong the pedagogical field orientation remains and what type of
management system supports it.

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