An Information System for the Rural Area Development - Rapti Zone Project

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A field report prepared under AID contract number DSAN-C-0065

May 1980

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GLOSSARY OF ACRONYMS

AA	:	Agricultural Assistant
ACC	:	Agricultural Coordination Committee
ADB	:	Agricultural Development Bank
AIC	:	Agricultural Inputs Corporation
APROSC	:	Agricultural Projects Services Center
CCC	:	Central Coordination Committee
CDO	:	Chief District Officer
DADO	:	District Agricultural Development Officer
DAP	:	District Administration Plan
DDC	:	District Development Committee
DDO	:	District Development Officer
DDP	:	District Development Plan
DLO	:	District Line Officer
DP	:	District Panchayst
DTO	:	District Technical Office
IPDD	:	Integrated Panchayat Development Design
JT	:	Junior Technician
MOHP	:	Ministry of Home Panchayat
MOWT	:	Ministry of Works and Transport
PCO	:	Project Coordination Office
PDO	:	Panchayat Development Officer
PMEU	:	Planning, Monitoring, and Evaluation Unit (PCO)
RWCC	:	Rural Works Coordination Committee
SEU	:	Socio-Economic Unit

SFDP : Small Farmer Development Program

TATU : Technical Assistance and Training Unit (PCO)

TSMO : Technical Support and Monitoring Unit (PCO)

VP : Village Panchayat

ZCC : Zone Coordinating Committee

REPORTS SUBMITTED DURING CONSULTANCY

1.	Jan. 1980	:	An Information System for the Rural Development - Rapati Zone Project in Nepal: Phase I.
2.	Feb. 14, 1980	:	Proposed Organization and Management of the Rapti Project.
3.	March 2, 1980	:	The Project Coordinator's Office, the District Office, and Technical Assistance (with Donald R. Mickelwait).
4.	March 4, 1980	:	Comments on "The Options for Technical Assistance for the Rapti IRD Project" (with Donald R. Mickelwait).
5.	March 5, 1980	:	Planning and Information for the Rapti IRD Project (with Donald R. Mickelwait).
6.	March 12, 1980	:	Possible Barriers to the Utilization of an Information System in Rapti.
7.	March 13, 1980	:	The Proposed Reconnaissance Survey of the Five Rapti Districts.
8.	March 18, 1980	:	An Information System for Planning, Monitoring, and Evaluating Project Activities (for inclusion in the PP).
9.	March 19, 1980	:	Implementation of an Information System for Planning, Monitoring, and Evaluation (for inclusion in the PP).
10.	April 13, 1980	:	An Information System for the Rural Area Development - Rapti Zone Project (for inclusion in the APROSC Feasibility Study).
11.	April 19, 1980	:	Staffing Requirements for the Planning, Monitoring, and Evaluation Unit.
12.	April 21, 1980	:	Proposed Information Activities During First Year of Implementation.

PREFACE AND ACKNOWLEDGEMENTS

This contract with His Majesty's Government of Nepal (HMG/N) to assist the Agricultural Projects Services Center (APROSC) and the Ministry of Home Panchayat (MOHP) to design an information system for the Rural Area Development - Rapti Zone Project was divided into three phases. The first phase was to assess the role of information systems in rural development activities in two geographical areas: in Rapti itself and in Rasuwa Nuwakot where the World Bank is financing an IRD project. The second phase was to design a viable information system for the Rapti Project, and the third was to work on detailed planning and preliminary investigations of the recommended system. Because of the upcoming referendum, this third phase concentrated almost exclusively on specifying proposed information activities during the first year of implementation. This final report covers all three phases.

Many people have contributed to making my stay in Nepal both intellectually stimulating and highly enjoyable. Foremost among them are Mr. Shyam Khadka, Information Specialist from APROSC, and Mr. William Douglass, Chief of the Rural Area Development Office (RADO) in USAID/N. In addition, I would like to thank the following for their friendship and collaboration: Mr. Bihari K. Shrestha, Joint Secretary of MOHP, Dr. Ram Yadav, Executive Director of APROSC, Mr. Durgesh Man Singh, Rapti Project Design Coordinator from APROSC, Ms. Laura McPherson, Dr. Gabriel Campbell, Mr. Richard "Noosh" Nishihara, and Mr. Mohan R. Sharma -- all with USAID/Nepal. A brief, but memorable, visit from Mr. Donald R. Mickelwait, President of Development Alternatives, Inc., also helped to clarify my ideas about the information system proposed here. Finally, I would like to thank all those people in both Rapti and Rasuwa who patiently and intelligentaly answered my numerous questions.

The views expressed here do not necessarily reflect official AID policy and I gladly accept final responsibility for most of them.

This study was financed by His Majesty's Government of Nepal under USAID Budget No. 367-0133.

INTRODUCTION

The decision to include an information system in this project is based on the assumption that it will make a difference to project performance, particularly in terms of an improved planning system and the more effective implementation of development activities. An information system cannot, however, be designed in a vacuum since, in theory at least, it touches all aspects of project implementation. The following analogy suggests the interdependence of information management and project organization:

> An appropriate management information system (MIS) is like the nervous system of an animal; its function cannot be understood without also knowing the skeletal and muscular structures. For example, if a serious burn is to be avoided, there should be a short-circuit mechanism which sends a message from a fingertip directly to the muscle which can move a bone which will remove the finger from a hot stove. The message should not go all the way back to the brain for processing and then be sent back down; the brain can be informed later. To design the short-circuit, however, it is necessary to know which muscles control what motions of which bones and which way the joints allow the limbs to be moved.
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> If organizational decision processes are examined this way, we often find that, in order to move a project finger, the entire body of a ministry must be criss-crossed with messages. This indicates that the information needs of present organizational arrangements will impede performance. The first step in constructing an MIS, then, will be to bring about a more workable organization of the interactions between different levels and units.[1]

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[1] George Honadle, "Anticipating Roadblocks in Organizational Terrain: Lessons from a Case Study of How Organization Design Makes a Difference," in International Development Administration: Implementation Analysis for Development Projects, George Honadle and Rudi Klauss, eds., New York: Praeger Publishers, 1979, p. 104.

In order to better understand this interdependence, this report is divided into the following eight sections:

- The context of IRD in Nepal;
- The present information system in Rapti;
- The present information system in Rasuwa;
- The proposed organizational and administrative structure of the Rapti Project at the district level;
- The proposed information system for Rapti;
- The proposed information activities during the first year of project implementation;
- The possible roadblocks to the effective utilization of this information system; and
- Conclusions.

THE CONTEXT OF IRD IN NEPAL

Before discussing the ongoing information systems in some detail, it is important to mention a few salient facts about the environment, broadly defined, in which this project is to be implemented. First, the hill areas of Nepal, where the majority of the population lives, are very poor. The Nepalese hills must now support 22 people per hectare, roughly the man-to-land ratio of Java or Bangladesh, countries blessed with far better resources.[2] Agricultural production has been constrained by the lack of good arable land, limited availability of irrigation water, little organic fertilizer, and the high intensity of labor required to terrace fields, build irrigation channels, and transport manure composts.[3] In addition, population increase has steadily outstripped available natural resources. In the hill areas of Nepal, which contain approximately 70 percent of the region's population, land holdings average 0.50 has. per household.

The dramatic population increase from 1850 to the present resulted in a shift to more intensive farming in which most

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[2] William C. Thiesenhusen, "Hill Land Farming: An International Dimension," Land Tenure Center Reprint No. 109, University of Wisconsin, Madison, 1976, p. 13.

[3] J. Gabriel Campbell, "Community Involvement in Conservation: Social and Organizational Aspects of the Proposed Resource Conservation and Utilization Project in Nepal," USAID/N, Kathmandu, 1978, p. 12.

cultivation is carried out on terraced fields. This also led to a reduction in the number of livestock per family. While those agricultural trends are ecologically beneficial, they are unfortunately offset by the increasing use of marginal lands for cultivation without sufficient fallowing. Moreover, a number of ecologically unsound practices have developed (such as over-collection of fuel and fodder, over-grazing, shifting agriculture, and regeneration of fodder grasses through annual burning) which considerably exceed the carrying capacity of the environment.[4]

The second important factor to be taken into consideration when dealing with the context of rural development in Nepal is the Nepali model for IRD, the Integrated Panchayat Development Design (IPDD), which all foreign donors must follow.[5] The keystone of all development activities in rural Nepal is the panchayat system, introduced in 1960, and rather euphemistically defined as "partyless democracy":

> It is a three-tier system composed of the village panchayat (or council), the district panchayat and the national panchayat. The village panchayat is the base level political as well as administrative unit. The area of each panchayat is based on physical terrain and population distribution. Though rigidly defined, the minimum number is no less than two thousand.[6]

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[4] Campbell, op. cit., pp. 11-13.

[5] His Majesty's Government, Integrated Panchayat Development Design, MOHP, Singha Durbar, Kathmandu, 1978.

[6] APROSC, Prefeasibility Study for Integrated Rural Development Project: Rapati Zone, Kathmandu, 1977, p. 37.

A village panchayat (VP) is divided into a maximum of nine wards, each of which elects five members to form a ward committee. These ward members all participate in the village assembly and are responsible for electing the VP executive committee which includes a chairman and a vice-chairman. The chairman is often a prominent member of the community who wields considerable power at both village and district levels. All VP chairmen and vice-chairmen are members of the district assembly which, in turn, elects a district panchayat (DP) executive committee consisting of a DP chairman, vice-chairman, and other office holders. From the district level, representatives are elected to the national panchayat, the highest legislative body of the government. At the district level, the panchayat system is both local government and development agency, particularly in the field of rural works.

Paralleling this structure -- which flows up from the village level -- is the government's administrative structure and line ministries which flow down from the center in Kathmandu. The key actor at the district level is the Chief District Officer (CDO) who has two main responsibilities: to preserve law and order and to coordinate all development activities within the district. The CDO is directly responsible to MOHP which wears two very different hats: that of coordinator of all integrated rural development in Nepal and that of Home Office. At this level are also found the District Level Officers (DLOs) of various governmental ministries and

parastatal agencies: the District Agricultural Development Officer (DADO), the manager of the Agricultural Inputs Corporation (AIC), to name perhaps the most important.

In the early years of the panchayat system, the CDO served as secretary to the DP and also had, at least in theory, some authority over the DLOs and their activities. The latter, however, saw this as an encroachment upon their sphere of influence:

> ....the bureaucratic distaste of the departments for parting with power and of the individual civil servants for being answerable to non-bureaucratic and alien institutions like panchayats also certainly played its due role.[7]

In 1971, since this approach proved unworkable, the CDO was relieved of his position as secretary of the DP and his place taken by the Panchayat Development Officer (PDO), who became the principal link between the panchayat and the government. The CDO, however, was still expected to provide the leadership for development activities in the district. But this proved to be wishful thinking, since the DLOs were still directly responsible to their superiors in Kathmandu who exercised all administrative, planning, and financial control.[8]

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[7] Bihari K. Shrestha, "A Country Paper on Local Level Planning for Integrated Rural Development in Nepal." Paper presented to the Expert Group Meeting on Local-Level Planning for Integrated Rural Development, Economic and Social Commission for Asia and the Pacific, Bangkok, 1978, p. 13.

[8] Ibid., p. 15.

In order to counteract this rather fragmented, piecemeal approach to rural development, the District Administration Plan (DAP) was introduced in 1975. It was designed to achieve the following objectives at the district level:

- To develop a unified administrative structure;
- To enhance the role of local panchayats in the administrative and development processes; and
- To ensure the formulation of development programs based on local needs.[9]

To a certain extent, the situation found in Rapti corresponds to the structure and objectives outlined above.

But this DAP, implemented to a lesser or greater extent throughout the country, has not lived up to expectations. In 1978, therefore, the Integrated Panchayat Development Design (IPDD) was introduced. It is presently being implemented in six districts, including those of Rasuwa and Nuwakot. As this document provides the model for integrated rural development throughout Nepal, including the Rapati Project, it is of importance to point out its objectives in some detail:

- The primary objective of rural development in Nepal is to strengthen local capability in planning, resource mobilization, implementation, and evaluation;
- While the transmission of innovations from above is important, need identification at the village level should be the primary basis for resource allocation at the district and central levels;

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[9] His Majesty's Government, District Administration Plan, Kathmandu: HMG Press, 1975.

- Potential beneficiaries are to participate actively in the planning, implementation, and evaluation of projects. As a result of regular monitoring and evaluation, benefits are to be distributed more widely to the poor, a process which will increase their participation in the development process;

- Since the problems of the rural poor are closely inter-related, all rural development programs are to be multi-purpose and integrated;

- In order to raise the standard of living in rural areas, an adequate organizational structure reaching down to the village is to be created. In addition, the agencies functioning at different levels of planning and implementation should be given the necessary authority to take decisions and provide the necessary policy support and resources; and

- Technicians and officials should be made accountable to the people to whom their services are addressed. Therefore, the design proposes to make officials answerable to the rural poor while at the same time providing the necessary incentives to motivate officials to carry out their responsibilities properly.[10]

While these objectives are nothing if not ambitious, they do include several of the key issues in current development thinking: participation, equity, and accountability -- to name the most important. The extent to which these objectives will be achieved through IPDD is unclear. While much can be said in favor of the panchayat system, it has not gone without criticism in certain quarters, particularly from students and the educated middle classes.[11] The upcoming referendum may well

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[10] IPDD, pp. viii - xi.

[11] For example, see Rishikesh Shaha, Nepali Politics: Retrospect and Prospect. second edition, Delhi: Oxford University Press, 1979, pp. 64 - 97, 189 - 242.

result in significant changes in the panchayat system and the whole nature of IRD. It is against this brief background of the organizational and administrative structures in rural Nepal that decisionmaking for development activities and the information utilized for making these decisions must be understood.

THE PRESENT INFORMATION SYSTEM IN RAPTI

In Rapti, there are presently two distinct systems for the planning, monitoring, and evaluation of development activities. The first system is concerned with projects which are initiated at the local level: those involving the VPs and the DP and exclusively rural works projects. The second is concerned with projects dealing with agriculture, health, education, and the like, initiated at the center and channelled through the DLOs.

Proposals for village level projects involving potable water systems, trail improvement, and minor irrigation systems are collected at the ward level for each VP, aggregated at the district level, and presented to the MOHP and the MOWT virtually intact. In the planning of such projects in the last fiscal year, there were no attempts made either to establish priorities or to ascertain the feasibility of the proposed projects. By submitting the list of proposed projects in its entirety, the DP could then hold the center responsible for any cuts made in the proposed budget. Most of the plans for these proposed projects include a resource commitment from the local population -- usually in cash and in kind. In the hopes of having their projects approved, VPs will often underestimate the cost.

For the fiscal year 1978-79, the Pyuthan DP submitted a budget request for $84,000 for rural works projects and

received approximately one-quarter of that. Once the DP knew what its budget would be, the Rural Works Coordination Committee (RWCC) was reactivated to decide which projects to implement. Since there were no guidelines and no priorities, the objective was to reach consensus so that most, if not all, the VPs were kept happy. Consequently, the slices of the budget pie were cut somewhat thinner than expected so that most VPs got a few crumbs -- though by no means the same amounts. By spreading the funds so thinly, projects may take years to complete. Whilst appearing to be a most inefficient way of allocating scarce resources, this process makes eminent sense within the context of the panchayat system -- by responding to "political imperatives."

Once the projects have been decided upon, feasibility studies are conducted and contracts signed between the respective VPs and the DP, which has control over the funds. The contract lays out the costs, inputs, timing, and resource commitments from both the DP and the VP. The funds are disbursed in installments and progress reports, prepared by the DTO engineer or his overseer, are supposed to be submitted before further disbursements are made. These progress reports are usually simplistic in the extreme, mentioning merely what percentage of the work has been completed -- usually based on how much of the budget has been spent. Often these reports are not prepared by the DTO on account of lack of available staff or absenteeism. In that case, the progress reports may

be prepared by the VP Secretary or the PDO. Five percent of the budget is retained until such time as the engineer is willing to perform a final evaluation.

In the case of the annual plans and budget submissions from the DLOs, there appears to be little, if any, consultation with the DP or any other body at the district or local level. For example, in the case of agriculture there is supposed to be an Agricultural Coordination Committee (ACC), which includes the DAO, the ADB Manager, and the AIC Manager. There is little indication, however, that this ACC is operational. Generally speaking, DADOs make their plans based on the previous year's figures and on targets handed down by their superiors in Nepalgunj and Kathmandu.

Information on all ongoing development projects is presented in the form of quarterly progress reports. These provide details on the amount of money expended and the extent to which targets have been met, e.g., number of farmers visited, number of buffaloes vaccinated, number of water systems completed, and so on. There is little or no attempt to measure the impact achieved by meeting these targets in terms of direct and indirect benefits, benefit distribution, and benefit continuation. In the past, the center has shown little interest in impact data. Consequently, district officials have had little reason or motivation to collect such information.

By default, district officials are often forced into using bad information or relying heavily on their own relatively informal and rather unstructured system. For example, Rukum is defined as a food deficit area when, in fact, it is not. The western part produces a surplus which is sold outside the district with the result that the eastern part, which has a food deficit, must import from elsewhere.

Last year there was a shortage of rain in Rukum and rice is being provided by the government for sale at one-third of its going market price to those defined as hungry. The problem is that no one knows how many households are really suffering. The DP chairman asked the government for 1,000 tons, on the grounds that the district received 250 tons the previous year when there was no drought, and managed to dispose of all the grains provided. In fact, some of the grain provided was unfit for human consumption and had to be auctioned off and used for the making of jar and rakshi.

This year, the government has agreed to send 900 tons. For his part, the CDO estimated that 400 tons would be sufficient and that the remaining 500 tons would be sold off to those with the cash to pay. At a third of the going market price, this could be a shrewd investment for a local entrepreneur. It would also mean that the government would be heavily subsidizing those who have least need of it. With better information, eventualities of this type could be avoided.

Bad information is all that is presently available for agricultural planning in Rapti. The principal data used are the acreage and production statistics published annually by the Agricultural Statistics Division of the Department of Food and Agricultural Marketing Services. In four of the Rapti districts, these data are generated by means of a "subjective approach," which includes utilizing district agricultural and land revenue offices and interviewing selected farmers. Reportedly, the Statistics Division itself is not satisfied with this method.

In Sallyam, JTs are responsible for producing data on acreage planted to specific crops. Each JT works with five AAs and has overall responsibility for five VPs, or approximately 3,800 households. When questioned as to how they calculated acreage for this vast number, the JTs replied that their figures were mere guesses. In Dang, the only district where the cadastral survey has been completed, the methodology for gathering data on acreage and production is, reportedly, more objective and scientific.

In Pyuthan, an interview in the land revenue office produced some impressive statistics on land tenure, including the information that there were a total of 179 tenants and 12 landless laborers in the district. These numbers had been collected a decade earlier as part of the 1971 Agricultural Census -- the results of which have been subjected to serious criticism. The

figures from the Agricultural Statistics Division are usually regarded as more accurate and the differences between the two sets of data in something as fundamental as total area cultivated are quite impressive. (See Figure 1, "Area Under Cultivation.")

FIGURE 1

AREA UNDER CULTIVATION
(in hectares)

District	1971 Census	1977 Agricultural Statistics Division
Rukum	7,592	7,455
Rolpa	16,016	7,465
Sallyan	9,448	18,635
Pyuthan	15,175	16,715
Dang	57,036	49,805
Source:	USAID/Nepal, "Cropping Areas in the Rapti Zone," RADO memo, Kathmandu, 1980, p. 2.	

THE PRESENT INFORMATION SYSTEM IN RASUWA

Compared with Rapti, there are two principal differences in information and decisionmaking in Rasuwa. First, the IPDD discussed earlier is being implemented. Second, there is a Socio-Economic Unit (SEU) attached to the project which is responsible for collecting a range of information for planning, implementation, and evaluation activities.

In practice, implementation of the IPDD means more coordination, more integration, and more participation. In Rasuwa, coordination at the district level takes the form of five coordination committees for agriculture, education, forestry, health and sanitation, and public works. In addition, there is supposed to be coordination in the form of a District Secretariat -- composed of the CDO and all the DLOs. As yet, however, it exists only on paper.

Some of these coordination committess are functional. For example, the Atricultural Coordination Committee (ACC) meets monthly for planning purposes. The key members -- the DADO, the ADB manager, and the AIC manager -- coordinate activities quite well, in the sense that credit and inputs are usually available on a timely basis and in adequate amounts -- for those who qualify. But this coordination has been hampered by the high turnover in DADOs and the "disappearance" of the previous AIC manager for several months. In fact, as

in Rapti, these three agencies give the impression of being the most effective at the district level -- particularly the ADB. In Rapti, there does appear to be some coordination between the three, even if only by default.

No evidence could be found to substantiate the existence of a RWCC. When we visited the DTO, where the engineer in charge is supposed to be a key member of this committee responsible for coordinating rural works projects, we discovered that he had not the vaguest notion about the committee's composition. As in Rapti, an overseer from the DTO is supposed to monitor ongoing projects. But, as overseers may not be available, funds may be disbursed purely on the recommendation of the VP Secretary.

Integration and participation are the key words in the formulation of the District Development Plan (DDP) which includes all sectoral components at the district level. This plan is reportedly generated by the separate coordination committees already mentioned. In the case of the ACC, for example, some attention is paid to local needs: the seven-man committee also includes the DP chairman, the manager of the District Cooperative Office (DCO), and two farmers. The DP is responsible for taking the separate components, putting them together, and producing an integrated plan. Although the DLOs provide some assistance, the finished product lists each component separately with no indication as to how they are to be "integrated" -- if at all.

In any case, this "integration" appears rather an academic exercise since, once the plan is sent to Kathmandu, it is then disaggregated and the separate components sent to their respective ministries and agencies for their approval. However, in contrast to Rapti, Rasuwa does not experience the same, across-the-board budget cuts. The targets have already been set and the budgets allocated since this project is financed by the World Bank. By cutting the budget significantly, the Ministry of Finance (MOF) automatically loses these funds.

"Coordination" and "integration" also occur at the national level in the form of the Central Coordination Committee (CCC) chaired by the Minister of Home Panchayat and including the secretaries of all involved ministries, rastriya panchayat representatives, and the presidents of ADB and AIC. This CCC is a relatively recent creation and its role is not yet clearly defined. In theory, it is responsible for coordinating the planning and implementation of all IRD projects in the country. To date, however, its main responsibilities have been two-fold: first, to achieve intersectoral coordination at the ministerial level, and second, to bring any problems that may arise to the attention of the respective ministries. The main link between the CCC and the project is the Project Coordination Office (PCO) staffed by a Nepali project coordinator with the assistance of an expatriate adviser. The PCO is responsible for the management of the project and the SEU is under its direct control.

The emphasis on participation has meant, in practice, increasing the role of the local population in the decision-making process -- as exemplified in the role of the DP and the District Assembly in "integrating" and approving the DDP. A recent study details how the DDP for Nuwakot District, the other district included in this project was formulated:

> As it happened, the formulation of the district development plan for the current year, to the extent that it was a plan, has been characterized by a duality of approaches. While most of the sectoral components in the annual plan were based on exercises done at the district level only, the rural works component dealing with water supply, irrigation, suspension bridges and track and trail was derived from the proposals of the village panchayats. Where the exercise was done at the district level, the targets were directly extracted from the provisions of the appraisal document. In the case of some components, for want of a better basis, they simply made arbitrary increases in the targets from the previous year. Some components, like Agriculture and Credit, also tried to relate their target setting with those at the national level by holding prior consultations with their Departments or Ministries in order to design their district targets in conformity with the national one.[12]

It is obvious that there is little difference between the planning process in Rasuwa Nuwakot and the "traditional" one found in Rapti.

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[12] Bihari K. Shrestha, "Local-Level Planning in Nepal: A Study of the Planning Process in the Rasuwa Nuwakot Rural Development Project," Kathmandu, 1979, ms., p. 44.

Information for project monitoring and evaluation is generated from two sources:

> Under the present organizational structure of the project, progress monitoring is undertaken at two levels, namely the sectoral level and that of the office of the Project Coordinator. While the former is done along sectoral lines for aggregating the progress and reviewing it in the macro-level in terms of the target set at the national level, the latter is undertaken primarily for submission to the donor agency. Project-specific review of each sectoral performance is an infrequent phenomenon.[13]

Investigation in Rasuwa substantiated the first criticism that sectoral progress reports have little, if any, effect at the local level. The second criticism, that monitoring is undertaken primarily for the World Bank, is probably true as far as it goes. However, this is a problem that is bound to arise -- to a lesser or greater extent -- with any large donor-funded project. But this problem is not insurmountable:

> ...the difficulties in making the project deliver benefits to the target population should be separated from the problems of proving to a foreign donor that the benefits have been delivered. The evaluation methodology should be good enough to positively affect the former while satisfying the latter.[14]

The PCO would like to see the SEU as a management tool for planning, implementation, monitoring and evaluation. The SEU has three main functions:

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[13] Ibid., pp. 48-40.

[14] Donald R. Mickelwait, "Information Strategies for Implementing Rural Development," in Honadle and Klauss, op. cit., p. 200.

- Short-term physical and financial reporting on all the project components and the publication of a quarterly progress report;
- Project impact analysis, particularly of crop production; and
- Analysis of problems experienced in different components of the project. (There are 15 of these components, ranging from agriculture and cottage industries to cooperatives and panchayat development.)[15]

The quarterly progress report consists of all the quarterly progress reports from the respective DLOs bound together in one volume. The SEU is well aware of the limitations of this report, particularly its length and the fact that some of the information included is no use or interest to anyone. It has recently produced a more simplified format.

The project impact reports are based on data generated by questionnaires administered to a sample of farmers. However, calculating yield has proved to be a problem because of the complex shapes and sizes of the plots cultivated. Respondents are categorized according to type of land, whether their land is irrigated, and whether they use improved seed and fertilizer. The sample was originally drawn from a household baseline survey -- the SEU's main activity during its first year. However, a stratified random sampling technique is now used based on the findings of another survey which classified VPs as

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[15] The Socio-Economic Unit, "Progress Monitoring and Evaluation," Rural Development Project, Rasuwa Nuwākot, Kathmandu, 1979. pp. 6-7.

either food surplus or food deficit areas. In Rasuwa, several DLOs were critical of these studies since they regarded the production data as rather suspect.

The objective of the SEU's third function is to provide information for planning and implementing certain specific activities. This has included two distinct types of information gathering: problem identification for crop-specific activities and what are termed "inventory surveys" -- a stock-taking of resources in the project area. In the opinion of the SEU:

> Inventory surveys are more comprehensive, easier to undertake and, above all, more helpful to line departments for planning, programming and budgeting. ...An Inventory Survey covers the whole project area and relies very little on sample surveys. Whereas project impact analysis studies rely on sample surveys but the data obtained would not be very useful for formulating plans, programmes and budgets. They are more concerned with the identification of problems. Inventory surveys provide, on the whole, only baseline information.[16]

To date, the SEU has conducted two inventory surveys, one on milk production and the other on marketing. This latter report covered all 61 VPs included in the project area.[17] Data

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[16] Ibid., pp. 8-9.

[17] The Socio Economic Unit, "Market Survey of Farm Produce, Livestock, Cloth and Storage Needs in Rasuwa Nuwakot Districts," Project Coordinator's Office, Kathmandu, 1979.

were collected by administering a questionnaire to shopkeepers, vendors, and local leaders at the ward and village levels. The survey took 12 weeks to complete, each interviewer spending an average of five days in any one VP. A number of VPs were revisited in order to check the data obtained. The unit of analysis was the VP with an average population of 4,026 living in 633 households.

The survey includes data on many important aspects of the VP, including several which are notoriously difficult to research using this particular methodology. For example, under household income, the survey provides two sets of data: one which records the actual amount of hard cash received from the sale of farm produce, livestock and cloth and a second which includes "shadow income" in the form of value inputed to own produce consumed, wage labor, and the like. In this latter category, average annual household income ranges from $5.67 to $615.17 -- a difference of over a hundredfold.[18] These data are presented with little comment. Yet anyone with much experience in this work knows how difficult and frustrating it is to obtain this sort of information:

> If the critical indicators are those which are stamped upon the memories of the rural population and for which there is no incentive for false reporting (which often cripples attempts to obtain income data by interview),

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[18] Ibid., p. 109.

marginal changes in the before and after stages can be obtained and used for project evaluation.

This is not to denigrate the idea of inventory surveys. If they are well done by qualified personnel they can not only be relatively inexpensive, quick, and timely, but can also provide useful information.

Two of the reasons generally given for creating an information system are:

- To provide a two-way information flow between project personnel and project beneficiaries; and
- To generate useful information that can be used for planning, implementing, monitoring, and evaluating project activities.

As the vast majority of reports are printed only in English, there is little opportunity for project beneficiaries to read them. Questions were asked of the DLOs in Rasuwa concerning the extent to which they were acquainted with the SEU reports and found them useful in their work. Although most had seen some of the studies, there was no indication that they were used at the district level for any purpose whatsoever. DLOs were critical of the reports -- on three grounds. First, they regarded the information as inaccurate. Second, the enumerators were young and inexperienced. Third, there was little supervision of the enumerators while actually gathering data

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[19] Mickelwait, op. cit., p. 200.

in the field. Subsequent interviews in Kathmandu indicated that the main purpose of these reports -- at least until very recently -- was to provide relevant information to the PCO which it could then use to goad concerned ministries into action.

THE PROPOSED ORGANIZATIONAL AND ADMINISTRATIVE STRUCTURE OF THE RAPTI PROJECT AT THE DISTRICT LEVEL

The present government policies concerning rural development, particularly those embodied in the IPDD, place a premium on both "integration" and "coordination." These two terms are used with uninhibited exuberance in many IRD projects -- not only in Nepal but elsewhere -- and are sometimes used to hide a lack of understanding of the practical issues involved. For example, Robert Chambers has observed that:

> ...by using "integrated" and "coordinated" more or less synonymously and in alternate sentences, long sections of prose can be given an appearance of saying something while in fact saying very little indeed.... These two words have done grave disservice by allowing vague thinking and by discouraging indentification in detail of certain important and potential benefits.[20]

It is important, then, to distinguish between these two concepts. The principal difference between an integrated (as opposed to a functional) organization is indicated by the level where authority over the full range of organizational activities converges. In a functional organization, it occurs near the top -- as presently occurs with sectoral activities at the district level. This has also been true, to a certain extent,

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[20] Robert Chambers, Managing Rural Development: Ideas and Experience from East Africa, Uppsala: Scandinavian Institute of African Studies, 1974, p. 25.

of the World Bank IRD project in Rasuwa Nuwakot with its responsibilities to the Central Coordination Committee. In an integrated organization, on the other hand, convergence occurs closer to the bottom of the organizational hierarchy. In an integrated area development project, for instance, engineers, agriculturalists and medical personnel may all be accountable to a single project manager in a sub-district area. Thus, integration denotes structure and implies comprehensiveness (a multi-sectoral focus) and control (direct lines of authority).

Coordination, on the other hand, describes the type of managerial behavior required to produce the results visualized in the project design. The word itself provides a clue to the behavior it describes -- "co" suggests joint or shared activities while "-ordination" implies the ranking of those activities. This ranking refers to the timing, type, quality and magnitude of resources applied and goods or services produced. It also includes the distribution of implementation responsibility. The joint effort refers to sharing resources and information to guarantee the needed mix of goods and services.[21] In brief:

> Integration ... mean(s) that action which brings previously separated and independent functions and

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[21] George Honadle, et al, Integrated Rural Development: Making It Work? A Preliminary Review of the State of the Art, Prepared for AID/Washington, Development Alternatives, Inc., Washington, D. C. 1980, pp. 26-31.

> organizations (or personnel, or resources, or clientele) into a new, unitary structure; whereas coordination ... describe(s) various efforts to alter or smooth the relationships of continuing, independent elements such as organizations, staff and resources.

According to both the DAP and the IPDD, there are supposed to be five coordination committees for specific sectoral components at the district level, one district secreatariat through which the DLOs coordinate their activities, with the DP secretariat responsible for coordinating the inputs from these committees and producing an integrated development plan for the district. Fieldwork in Rapti revealed that the only coordination committees that met, albeit rather sporadically, were those for agriculture (ACC) and Rural works (RWCC). No evidence was found for the existence of a district secretariat. In Rasuwa, where the IPPD is presently being implemented, the DP does have the responsibility for producing the integrated plan though, as we have seen, this plan is "integrated" in name only.

Creating a district-level capacity for integrated development planning will take time. This will be one of the major responsibilities of the PCO. In an exercise of this type, there should be some sort of trade-off between the DLOs (the service

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[22] Robert Morriss and Ilans Hirsch Lescohier, "Service Integration: Real Versus Illusory Solutions to Welfare Dilemmas," in The Management of Human Services, Rosemary Sarri and Yeheskel Hasenfield, eds., New York: Columbia University Press, 1978, p. 23.

providers) and the DP (the clients). The indications are that this planning capacity will not be achieved by creating a plethora of coordinating committees. It is strongly recommended, therefore, that the ACC and the RWCC, and only these two at present, be reorganized and strengthened: first, because the agricultural component of this project is of crucial importance and, second, because rural works projects are of crucial importance to the local population. In addition, it is only with rural works projects that the local population has had much practical experience with planning, participation, and implementation. Only when planning capabilities improve and further needs are identified should additional coordination committees be established.

Under the IPDD, the DP has the responsibility for consolidating, integrating, and finalizing the district development plan. In view of what was said earlier, it is proposed that a more representative body be given this responsibility -- a District Development Committee (DCC) -- chaired by the DP chairman and including all DLOs and all 11 members of the DP secretariat.

While the CDO has overall responsibility for coordinating rural development, he has little authority with which to make this responsibility a practical reality. Since he has never been vested with this authority, there has been little motivation for him to involve himself directly in coordinating such

activities. Official government policy, however, does give the CDO some financial control over all sectoral activities at the district level. According to the District Administrative Plan:

> The ministries and departments will have to transfer the amount allocated for approved district level projects to the concerned district office. This amount would be operated by the Chief District Officer through the Panchayat and Development Officer.[23]

In practice, however, this has only happened in the case of funding for rural works projects.

In the case of this project, we are dealing with integration and coordination at four different levels: at the district, at the PCO, at the zone, and at the center. But, as mentioned earlier, the main focus will be at the district level. The proposals made in the IPDD go some way towards making this integration and coordination possible, particularly in terms of decentralization of the planning process:

> Within the month of Bhadra (August-September) each year the District Panchayats will be informed of the amount of budgetary resources to be made available for them for different components in the District Development Plan to enable them to develop necessary annual programmes within the framework of the previously approved Five Year Plan.[24]

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[23] DAP, p. 5.

[24] IPDD, p. 24.

It is in this realm of planning against a known budget that the DDC will have the authority to play an important role. It will be responsible for seeing that:

- DLOs plan within their budget allocation;
- Plans reflect local needs and potentials rather than targets arbitrarily defined by the center;
- Sectoral plans are complementary; and
- These plans are flexible, i.e., if they prove impractical, they should be changed.

Should the DLOs prove reluctant to follow these guidelines, then the CDO will have the final authority to veto their plans. These annual plans must have his signature before they can be appraised and approved at higher levels, i.e., at the PCO level, the Zonal Coordination Committee (ZCC) level, and the center.

In order to make this planning and budgeting process more effective, the District Office will have to become more actively involved in development activities. In order to achieve this, it is proposed that a new position be created -- that of District Development Officer (DDO). Appointed either by the MOHP or the PCO, he will be directly responsible to the CDO and serve as member-secretary of the DDC. In essence, this DDO will strengthen the rural development capabilities of the District Office. Briefly, his responsibilities will be the following:

- To assist the DLOs and the DP in planning and implementation;

- To assist the DLOs and the DP in gathering relevant information for monitoring and evaluating their activities;
- To assist the DLOs and the DP in the preparation of timely, relevant, quarterly reports; and
- To monitor and evaluate the activities of the service centers and the Small Farmer Development Program.

It is not intended that this DDO should replace the PDO who, in theory at least, is supposed to be the rural development specialist at the district level. In practice, the effectiveness of the PDO is limited to a certain extent by his lower rank vis-a-vis the DLOs and also by his heavy involvement in panchayat affairs. Under the present system, panchayat activities, with the notable exception of rural works, tend to be somewhat divorced from those of the other development offices. In addition, panchayat activities do not appear to reach much below the VP. If this project is to have any measurable effect on the local population at the grassroots level, then steps must be taken to strengthen the ward committees or some similar type of local organization. It will be the responsibility of the DDO to incorporate the panchayat system more fully into the development process at the district level. This will give the PDO more time to concentrate on development activities at ward and village levels.

THE PROPOSED INFORMATION SYSTEM FOR RAPTI

The proposed information system to be implemented by the Planning, Monitoring, and Evaluation Unit (PMEU) attached to the PCO, will have the following responsibilities:

- To identify information requirements;
- To provide relevant, timely information to the districts which they can utilize in their annual planning cycle;
- To monitor project activities;
- To evaluate project activities; and
- To conduct special studies.

Identifying Information Requirements

To develop an effective information system, the information requirements of each group of decisionmakers involved in the project will have to be identified. These groups, and their potential information needs, are described below.

Individual Households will want some basis for evaluating the new technologies recommended so that they can decide for themselves if they are worth the risk involved. The information required would include data on potential advantages and disadvantages, yields, labor requirements, and availability and cost of inputs.

Ward Committees and VPs will require the same type of information if the project decides to disseminate technological

innovations through organizations rather than individuals. In addition, such groups will also require information before submitting their proposals for rural works projects: information on project priorities, budget allocation, technical feasibility, and availability and cost of inputs.

District Officials will need information from the local, PCO, Zonal and Central levels so that they can plan intelligently, recommend changes, and ascertain why certain activities progress while others just mark time. This would include information on government policy, budget allocations, activities of other district offices, and progress reports on local level activities.

The PCO will require information in order to monitor and evaluate project activities. This information will be fed back into the annual district planning cycle, and then be consolidated and sent to the higher tiers of the project, together with any recommended changes.

The Higher Tiers (Zonal Coordination Committee, Coordination Division of MOHP, Central Coordination Committee, National Planning Commission, Line Ministries, and USAID) will require information on the overall progress and impact of the project. This will allow them to change or modify their policies as well as to resolve any problems that cannot be resolved at the PCO level or lower.

Providing Relevant, Timely Information for Planning

Planning and information are opposite sides of the same coin. Planning takes the existing knowledge base of technical possibility and identifies it with priorities -- increasingly identified at the local level in this project -- against a budget constraint. This fusion of technical knowledge with decisions on priorities against a known budget will generate a project list. When combined with the implementation capacity of the district offices, together with other mutually reinforcing activities, this list will become a plan for the coming year. Starting with the plan, the information system should:

- Track the difficulties encountered in implementing the plan;
- Determine the extent to which input targets are met;
- Measure their impact; and
- Collect information on other development problems which have not yet been addressed.

When the second planning cycle arrives, better information should be available on:

- The identification of problems for development intervention;
- The possible technical solutions (costs and benefits); and
- The implementation capacity of the district offices.

This information feeds into the planning process: new targets are set, new project possibilities are "integrated," and lists with attendant implementation requirements are drawn up. In this way, second generation planning at the district level builds and improves upon the first. Each year, the planning begins with the existing knowledge base and schedules ahead. Each year, the knowledge base directly applicable to development assistance expands, establishing a framework for an improved planning cycle.

Monitoring Project Activities

The information system will monitor the initial results of project activities, e.g., number of service centers established, SFDP groups created, personnel gained, technologies developed and tested, trails improved, potable water systems installed, and so on. Information for monitoring purposes will be provided primarily by the quarterly reports presently prepared by the respective district officers. Discussions at the center and district will, hopefully, lead to the use of a simplified, more comprehensible format for these reports.

Furthermore, the present monitoring system will be modified to indicate whether, in fact, resources are being allocated and used as planned -- particularly at the local level. One way to achieve this will be through the creation of a record system at the service center level -- to monitor the flow of

resources and technical assistance to adjointing VPs. Finally, monitoring acitivites should be able to identify upcoming bottlenecks and potential problems so that corrective action may be quickly taken.

Evaluating Project Activities

The information system will be responsible for evaluating project activities. This will be the most demanding of the PMEU's responsibilities and also the one which it will have to undertake largely on its own -- at least until it has convinced district officers that such acitivities can have a positive effect on planning, implementation, and performance. The evaluation activities will be of two types: measurement of target performance and measurement of development impact.

Target Performance: The extent to which the project has achieved its objectives.

Development Impact will have four categories

- Direct benefits -- including production, nutrition, and institution building;
- Benefit distribution -- a measure of who the beneficiaries have been;
- Benefit continuation -- a measure of the probability that benefits will continue once USAID financing is withdrawn; and
- Indirect benefits -- a measure of the potential of the project to generate spread effects not envisaged in the original design.

Some of this information will be gathered each year to be fed into the districts' annual planning cycle. A major evaluation of project activities will be conducted at the end of the third year by a team of outside evaluators -- working closely with the PCO. There will be a final evaluation at the end of the project.

Conducting Special Studies

The responsibilities of the PMEU will also extend to problems which cannot be resolved by monitoring implementation, evaluating impact, and tracking ciritical constraints to development. Some problems call for special studies, e.g., a credit study for livestock, a marketing study for ginger, a study of the potential for women extension agents, and study of how to strengthen the rights of the disadvantaged. Such studies will be the responsibility of the PMEU, working in close collaboration with the other units in the PCO and with the support of short-term technical assistance, when required. It is also envisaged that APROSC, once its proposed Project Monitoring and Evaluation Unit is functioning successfully, will also play a role in such studies as well as in monitoring and evaluating project activities.

PROPOSED INFORMATION ACTIVITIES DURING THE FIRST YEAR OF IMPLEMENTATION

During the first year the PMEU will concentrate on improving the information from which better planning can flow in succeeding years. The initial PMEU activities would include the following:

1. The consolidation of the existing knowledge base on Rapti;
2. The codification of improved agricultural technologies that might be applicable to Rapti - under the direction of the Technical Assistance and Training Unit (TATU);
3. The conducting of a well-focussed reconnaissance survey of the districts in the zone;
4. The monitoring and evaluation of adaptive trials by farmers of technological possibilities which have not yet been introduced into the zone - under the direction of the TATU and in direct support of the DADOs;
5. The improvement of the present district reporting procedures; and
6. The improvement of the present annual district planning process.

The purpose of the remainder of this section is to briefly describe how these steps might be operationalized.

The Consolidation of the Existing Knowledge Base on Rapti

The design of this project has consumed approximately three years during which time a considerable amount of information has been generated, some worthwhile and relevant,

but some of more questionable value. This information is scattered throughout various studies, reports, and documents. The PMEU would assemble copies of this material in one place and, time permitting, produce an annotated bibliography. It is important that the project develop an "institutional memory" so that the wheel is not reinvented yet again. In addition, it would be well worthwhile to build up a small library of books on Nepal. These are readily available in Kathmandu and cover such topics as history, land tenure, rural development, planning, and various aspects of rural society and culture.

The Codification of Improved Agricultural Technologies

Most of the improved agricultural technologies introduced in Rapti to date have involved the use of fertilizers and improved seed, primarily wheat and, to a lesser extent, corn and rice. Few improved technologies have been made available for rain-fed hill agriculture. However, various types of improved technologies do exist in Nepal -- both within Rapti and scattered throughout the country, located either in research stations or in individual agricultural development projects.

As one of the primary goals of this project is to increase agricultural productivity, it is important that the project have some relevant information about potentially applicable technologies to disseminate. It is proposed, therefore, that the PMEU take the initiative in consolidating this

information. The PMEU would work with the TATU to contract a two person team (a Nepali agriculturalist and an expatriate consultant) to visit the various research stations and ongoing agricultural projects in Nepal and gather information on technologies which may be applicable to Rapti.

Technical requirements and input costs will be obtained -- together with information on ecological constraints. In addition, the team would also collect information on the different techniques of field adaption and extension used as well as information on improved farm management practices, e.g., sowing, seed rate and quality, method of seeding, weed control, crop rotation, soil features, amount, quality, and frequency of compost application, disposal of crop residues, and so on. This information will provide some potentially useful ideas for technological innovation in the project area. This would be the only "special study" envisaged in the first year of the project.

The Conducting of a Well-Focused Reconnaissance Survey

Reconnaissance surveys are not new to Nepal. APROSC has already produced "inventory surveys" for some of the Rapti districts but, unfortunately, these have concentrated almost exclusively on rural works projects -- those presently underway and those proposed for the Sixth Five Year Plan. Such surveys were also conducted in the Rasuwa Nuwakot IRD Project once

implementation was underway. Given the rather spotty information base the project is presently working with, a well-focused reconnaissance survey could complement and strengthen this base. Such a survey, conducted in all or just selected districts, would -- in conjunction with the results of the Household Baseline Survey -- provide some additional baseline information against which to evaluate project activities in later years.

The survey would have the following objectives:

To Improve (Where Necessary Initiate) the Dialogue Between the PCO, District Officials, and Villagers

The PCO is a relatively new concept in rural development in Nepal. In the beginning it is highly likely that district officials, from the CDO on down, will regard it with a certain degree of suspicion, if not outright hostility. In order to quell these fears, it is important that the PCO, through the PMEU, visit the districts as soon as it practically possible, to explain the project objectives and proposed ways of achieving them. District officials, in their turn, should have the opportunity to present their views on these objectives and methods for achieving them. The dialogue should proceed from there, with concentration on the following areas of mutual interest:

- The specific objectives of the PMEU:
- The data requirements necessary for collection;

- The research methodologies to be used, including data sources, collectors, and appropriate analytical techniques; and
- The most appropriate approaches to information dissemination.

At that point in time the PCO should have a more precise idea of what the project's information needs are: the odds are that district officials will not -- for the simple reason that they already have "information systems" -- both formal and informal -- which may be quite adequate for their needs. The PMEU will have to make some practical suggestions as to how these "systems" might be improved. The same procedure will have to be repeated at panchayat and village levels. Without the close collaboration of both groups (technicians and beneficiaries), it will be impossible to introduce an improved information system into Rapti.

To Produce a Well-Focused Inventory of the Districts Which Will Allow an Understanding of the Local Capacity to Support Development Programs

This is the operational guts of the reconnaissance survey. Some of this information is already available from the Household Baseline Survey conducted by APROSC. However, it does require some "fleshing out" in order to establish a district profile against which project activities can be evaluated at a later date. Accordingly, it is proposed that information be gathered on the following tentative topics:

Critical Questions	Potential Data Requirements
1. District Environment	
a. Development History: What factors over the past 25 years have contributed to or detracted from the development of the district?	Political unrest; previous development programs; migration (in or out); clearance of land; land reform; advent of roads; activities of CDO; etc.
b. Ecological Factors: What are the characteristics of the major ecological zones in the district as related to development potential?	Climate; soil type; rainfall, altitude and terrain; soil depletion and erosion; irrigation; frequency of natural catastrophes.
c. Demographic Factors: What major demographic characteristics influence rural development?	Magnitude and distribution of population; population growth rate; man/land ratio; types and volume of irrigation; labor supply; role of women in production activities.
2. Farming Systems	
a. Farming Systems by Ecological Zone and Differences in Technology: To what extent do differences exist in farming systems and technologies used by the more productive and less productive farmers in the area? Which of these differences can be extended from the more to the less productive?	Farm outputs by land utilization and by numbers of livestock; use of farm production; sequence of farming operations; system of land tenure and utilization; range of technology used by crop and by type of livestock.
3. Agricultural Support System	
a. Research and Extension: To what extent have new technologies been developed and tested on farmers' land and a two-way communication system developed to help in the introduction and acceptance of new technologies? What has the pattern of diffusion been in the district?	Technology available at research stations; technology tested on farmers' land; approaches to testing, and farmers' acceptance; number of extension agents and the extent, type, and quality of interaction between extension workers and farmers; recently adopted practices and their process of adoption.
b. Agricultural Supplies: Are agricultural supplies being provided on a correct and timely basis?	Input sources; adequacy of supply; timeliness of availability; extent to which subsidized.

Critical Questions	Potential Data Requirements
c. Marketing and Pricing: Is there a market system that operates effectively in purchasing agricultural products and providing basic consumer items? Is there a responsive pricing system that encourages increased economic activity in the area?	Types of market mechanisms by geographic coverage; capacity of market system by primary agricultural product and consumer item.
d. Credit: Are there credit needs for the development of the district that are not being effectively met?	Sources of credit - both public and private; restrictions on credit availability; investment requirements in relation to the availability of cash resources of farmers and local entrepreneurs.
4. Nonagricultural Economic Activities: What alternative economic activities can be initiated or expanded? What research has been or is being undertaken related to new enterprises?	For existing enterprises, management arrangements, production by type, level of output, capacity, and profitability. Potential for expanding existing or creating new enterprises with particular emphasis on how these could benefit the disadvantaged: women, occupational castes, and the landless.
5. Economic Support Infrastructure: Is any part of the economic support infrastructure - including the transport system, communications network, education/training facilities, power resources, physical infrastructure (storage facilities, maintenance facilities, etc.) and soil-and-water conservation activities - acting as a constraint to potential project activities?	Availability and adequacy, by type, of transport system, communications network, education/training facilities, power resources, and physical infrastructure. Type, coverage, and adequacy of soil-and-water conservation activities.
6. Social Support Infrastructure: Is the social infrastructure - including health and nutrition services, water supply, and community services infrastructure - acting as a constraint to any of the project activities?	Availability and adequacy of health care services as they relate to local health problems; deficiencies in nutrition and potential for improvement, e.g., how projected agricultural production would or would not affect the level of nutrition; mechanisms to promote improved nutrition practices; sources and adequacy of clean water supplies.

Critical Questions	Potential Data Requirements
7. Patterns of Local Organizations: What are the actual and potential contributions to development that are being, or could be, made by the local population - organized both formally and informally?	Local organizations (DPs, VPs, ward committees, functionally specific groups) by type, function, size, geographical coverage, process of decision-making, level of managerial and technical skills, and systems of accountability. Actual and potential contributions to development by organizational type.
8. Equity: Are there obstacles to receiving benefits by various elements of the rural population, and how can they be overcome?	Major disparities in landholdings and reasons for them; disadvantaged groups - either by caste, occupation, sex, or geographical location. Mechanisms that might be used to reduce these disparities.[25]

Admittedly, we already have information on some of these topics and this information may hold across several districts. To the extent that we do not, then I propose that conducting a reconnaissance survey is justified.

To Train Project Staff and District Officials in Rapid Reconnaissance Techniques

In order to obtain answers to these questions, it will be advisable to talk to as wide a spectrum of informed respondents as possible at the district, VP, and ward levels. The reconnaissance teams will use a reiterative survey approach, asking questions until answers become consistent, dropping questions that do not apply or become confirmed in all five districts.

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[25] Based on Charles F. Sweet and Peter F. Weisel, "Process Versus Blueprint Models for Designing Rural Development Projects," in Honadle and Klauss, op cit., pp. 135-136.

Since data generated in this manner are usually informal, they are often highly biased. Most informants will have ulterior motives, or hidden agendas, and will selectively present and interpret the information they possess. In order to crosscheck the data gathered, to the extent that this is possible, five basic approaches will be utilized.[26]

Consultation of Written Records. Such records include annual plans, quarterly reports, feasibility studies, evaluations, minutes of meetings, administrative reports, field trip reports, and the like. All may provide potentially useful data.

Group Interview. This is conducted with a group of informed persons in order to weasel out variations in the interpretation of events, policies, or objectives. If the interview begins with a hypothetical situation, it can usually be transformed into an examination of real cases that reveal actual past behavior. Moreover, the interview may reveal much about the interactions among those who participate in it.

Confidential Interviews with Key Informants. One informant identifies someone who is deemed to be particularly knowledgeable on a certain subject and that person is contacted and interviewed. In many societies there is a resident gadfly -- someone who disagrees with all decisions and promotes trouble.

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[26] These approaches are discussed in more detail in George Hondale, "Rapid Reconnaissance Approaches to Organizational Analysis for Development Administration," Organization and Administration of Integrated Rural Development Project, Working Paper No. 1, Development Alternatives, Inc., Washington, D.C. 1979, pp. 37-43.

Confidential interviews with such people can provide valuable crosschecks and reveal useful insights that do not emerge from other approaches.

Direct Observation of Behavior. Although this seems to be one of the most natural ways to collect data, observational skills must be developed and refined. Untrained observers often impute false meanings to people's actions, whereas trained researchers describe only what people do. Skilled observations can expose behavior that the actors themselves are unaware of exhibiting.

Informal Conversation. The nights are long and dark in Rapti and one of the most enjoyable and potentially most profitable ways to pass them is to indulge in informal conversation with local residents. In such situations, many of the barriers created by a more structured approach come down and interviewers and informants can be somewhat more frank and open with each other. Such an occasion also gives local residents a better opportunity to ply the interviewers with questions.

The Monitoring and Evaluation of Adaptive Trials

With the completion of the reconnaissance survey and the codification of technological possibilities, the project will have the following information:

- Improved technologies proven successful in Rapti and elsewhere in Nepal;

- Techniques for adapting and extending these technologies; and
- Those groups or areas in Rapti with the potential and interest to adapt, adopt, and use these improved technologies.

Under the direction of the TATU and with the support of selected DADOs, technologies and groups or areas can be matched and the process of field adaptation begun. The PMEU will provide guidelines and assistance in the monitoring and evaluation of these pilot projects. If these monitoring and evaluation activities are simple, comprehensible, and involve both participants and technicians, they may go a long way towards convincing both groups of the utility of the PMEU.

The Improvement of the Present District Reporting Procedures

As mentioned earlier, the present reporting system at the district level is mainly the measurement of "target performance." For example, investigations in Rapti indicated that if a proposal for a rural works project predicts that 120 households will benefit then, rain or shine, 120 will benefit. In fact, technicians will quite openly state, with a twinkle in their eyes, that targets are always met -- since this is what the present reporting system encourages and expects.

Nevertheless, sufficient data are already gathered at the district level which, were they consolidated and cross-checked, would go some way towards improving the measurement of target

performance and development impact. For example, there are data available from the DADO on the number of farmers who have been exposed to some improved technology in a particular season. From the ADB, the names of those farmers who applied for credit are available and, from the AIC, the names of those who obtained inputs -- either for cash or on credit. By cross-checking these various sources, it should be possible to select a small sample of farmers using improved technology and interview them to ascertain what impact the improved technology has had.

In addition, it should be possible to persuade those technicians involved in agricultural activities to collect some additional data when farmers are receiving assistance of some sort, e.g., extension cultivated using improved technology, amount of inputs applies, changes in extension and application, changes in yields, disposal of harvest, and so on. Introduced in the correct way, the gathering of these data could become routine, thereby making few extra demands on the personnel involved. The PMEU would be responsible for processing, analyzing, and disseminating the results.

Such improvements in reporting procedures cannot, however, be imposed by the PMEU. They must first be discussed with the center and then with district officials: firstly, to elicit their cooperation and, secondly, to incorporate their suggestions regarding possible improvements. By improving and streamlining the present reporting system, it should be possible over

time for the PCO to produce a consolidated quarterly report on project activities which will be both readable and comprehensible. These reports will be of considerable importance since they will constitute one of the primary sources of information on the project -- information which must be made available on a regular, timely basis to the higher levels of the project.

The Improvement of the Present Annual District Planning Process

The improvement of district and local level planning capability is one of the most important objectives of the PMEU. In the case of rural works, there is an established participatory planning process and many of the technological options are already known. Nevertheless, this process could be improved considerably if better information were made available to villagers by the Technical Support and Monitoring Unit (TSMU) -- with the assistance of the PMEU: information on project priorities, budget allocations, technical feasibility, and availability and cost of inputs.

In the case of agriculture it will take longer for the PMEU to have an impact on the planning process. Firstly, agricultural planning has traditionally been "top down" and participation by small farmers has been minimal -- particularly in terms of what they themselves perceive their needs and problems to be. In addition, there is little indication that farmers' knowledge and experience are incorporated into this planning process. Secondly, increasing agricultural productivity is a

much more complex process than installing potable water systems or improving paths and trails. As mentioned earlier, only a few improved agricultural technologies are presently available in Rapti of the many that may have potential applicability. Consequently, it will take the PMEU some time to produce relevant information that will be useful in this planning process. By concentrating on those improved technologies already in place and those introduced by the project through the TATU, the PMEU may be able to exercise some influence on this process towards the end of the first year.

POSSIBLE ROADBLOCKS TO EFFECTIVE UTILIZATION[27]

Commonsense alone would seem to dictate the vital role an information system can play in planning and implementation. However, such has not been the case with many IRD projects to date. As information systems tend to oversimplify the real world and promise much more than they can ever possibly deliver, it is important to discuss some of the barriers that will surely arise to impede the effective utilization of this particular system.

Threat to Project Management

It would be naive to ignore the fact that a viable information system can be seen as a threat by project management. Information is power and can be used for both good and bad ends. For example, this threat will be greater if the information system emphasizes the type of evaluation which "grades" the overall success of the project without, at the same time, providing explanations and recommendations for improvement. It is possible to extend the evaluation system to provide management with an assessment of how much of the change can be attributed to the project. This would include a general explanation of why the changes did or did not occur and why there were varying rates of change between different areas or among different members of

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27 This section draws upon an earlier DAI study. See Development Alternatives, Inc., Information for Decisionmaking in Rural Development. 2 vols. A Report for AID/Washington, 1978, Vol. 1, pp. 55-73.

the local population. Also included would be recommendations to help management overcome identified constraints to modify priorities and implementation procedures, and thereby improve the impact of the project.

By the same token, an important element in the effective utilization of an information system is the willingness of project management to learn from its mistakes. An information system should show not only what is going right -- but also what is going wrong. When a person passes on information to his or her superiors, there is always the possibility of recrimination if that information indicates that there are problems -- even if the person reporting them is not personally responsible. Project management must identify the limits of personal accountability so those reporting will not feel constrained about passing on information that does identify problems.

Management Inability to Anticipate Information Needs

Management and other key project personnel often find it difficult to specify in advance what information they need to monitor and evaluate project activities. For example, officials in Rapti who were acquainted with the basic objectives of this project were asked what additional information they might need to make their specific activities more effective. Few suggestions were forthcoming but one enterprising CDO did suggest that, if the project did require any additional information, he would gladly send a couple of his clerks out to collect it.

These responses highlight a fundamental difference between the center and the district: while the former believes wholeheartedly in information systems, the latter has still to be convinced.

As mentioned earlier, one way to resolve this issue would be to discuss with involved project staff and potential beneficiaries the specific objectives of the PMEU, how these objectives could help their own performance, and how they relate to the overall objectives of the project. While decisions will be made at the center regarding the overall responsibilities and functions of the PMEU, the specific details can only be worked out with concerned regional, PCO, and district staff.

Decisionmaker Involvement in Data Collection and Analysis

It is reasonable to suppose that the more decisionmakers are involved in, understand, and trust the PMEU, the more likely it is that they will make use of its results. If the information is seen as being obtained, processed, and disseminated by "outsiders" -- as has been the case with the independent Socio-Economic Unit attached to the Rasuwa Nuwakot IRD Project -- then there is a strong likelihood that the results of the analysis will have little effect on the process of development. It is for this reason that the PMEU has been designed as an integral part of the project, involving management directly and drawing upon data generated by the field staff. Because the conclusions are internal to the project, staff can learn while

they are engaged in data collection tasks. If the planning and information system is adequately designed, with close attention to all levels of decisionmaking, the project can use the PMEU to provide the impetus for improved performance and better acceptance by both the field staff and the local population.

By the same token, the involvement of the local population in data collection, analysis, and decisionmaking is also important. Not only does such involvement increase their willingness to take risks, but it also supplies the necessary feedback information for adapting improved technologies to local conditions. Another way to encourage this involvement is to organize what may politely be termed "bitch sessions" -- during which the local population has an opportunity to express its opinions of project staff. Accountability in rural Nepal, as in many other countries, works up, not down; i.e., project staff are accountable only to their superiors and not to the people they are supposedly assisting. The local population certainly does have the necessary information to evaluate their performance and it should be the responsibility of the project to insure that potential beneficiaries have the chance to use this information effectively.

CONCLUSIONS

This report has pointed out that an information system cannot be designed in isolation since it touches upon all facets of the implementation process. It can only build on what already exists and to design a completely new system would be self-defeating in the extreme. It was also pointed out that since this is an IRD project, "integration" and "coordination" are two important concepts which must be clearly distinguished. Integration is a structural dimension and implies comprehensiveness (a multi-sectional focus) and control (direct lines of authority). Coordination, on the other hand, is a behavioral dimension represented by the sharing of both information and resources.

In order to achieve a greater degree of integration and coordination than is presently the case at the district level, it was proposed that the District Secretariat be expanded include the DP Secretariat, renamed the District Development Committee (DDC), and strengthened by giving it some authority, particularly budgetary, over planning at the district level. The CDO would be given veto power over plans proposed by any sectoral agency which did not conform with the guidelines established by the DDC. In addition, the post of District Development Officer -- directly responsible to the CDO and appointed by either MOHP or the PCO -- was also proposed in order to strengthen the rural development capability of the District Office.

Within this context, the broad responsibilities of the PMEU were laid out as follows:

- To provide relevant, timely information to the districts which they can use in their annual planning cycle;
- To monitor project activities;
- To evaluate project activities; and
- To conduct special studies.

During the first year of project implementation, it was proposed that the PMEU engage in the following activities:

- The consolidation of the existing knowledge base on Rapti;
- The codification of improved agricultural technologies that might be applicable to Rapti;
- The conducting of a well-focused reconnaissance survey;
- The monitoring and evaluation of adaptive trials;
- The improvement of the present district reporting procedures; and
- The improvement of the present annual district planning process.

Finally, some of the barriers that will surely arise to impede the effective utilization of this particular information system were discussed. These included:

- Threat to project management;
- Management inability to anticipate information needs, and
- Decisionmaker involvement in data collection and analysis.

A final caveat is in order here. This report has repeatedly emphasized the PMEU's obligations and responsibilities to discuss its objectives and ways of achieving them at central, district, and local levels. Without such participation and understanding of what the PMEU is trying to achieve, the information system is doomed to failure before it ever gets off the ground. Because of the upcoming referendum, many of the proposals presented here have been hatched in Kathmandu with little discussion at central, district, or local levels. This report is, then, very much of a working paper that lays forth some ideas that may or may not prove useful once implementation commences.

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