

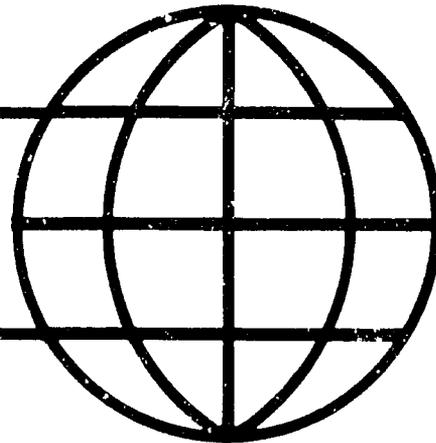
**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

MAKING PLANNING MORE EFFECTIVE IN DEVELOPING COUNTRIES:
LESSONS FROM POTOSI, BOLIVIA

HUGH EVANS

DOUGLAS SIGLIN

Rural Marketing Centers Working Group
Clark University/Institute for Development Anthropology
Cooperative Agreement (USAID)



Clark University
International Development Program
950 Main Street
Worcester, MA 01610

Institute for Development Anthropology
Suite 302, P.O. Box 818
99 Collier Street
Binghamton, NY 13902

MAKING PLANNING MORE EFFECTIVE IN DEVELOPING COUNTRIES:
LESSONS FROM POTOSI, BOLIVIA

HUGH EVANS

DOUGLAS SIGLIN

Rural Marketing Centers Working Group
Clark University/Institute for Development Anthropology
Cooperative Agreement (USAID)

1983

Can it be that strategies for integrated rural or regional development in Third World countries are simply too complicated to be useful? Since the mid-1970s, the prevailing wisdom in development planning has called for an integrated approach, whereby coordinated inter-sectoral planning in a particular area attempts to optimize investment effectiveness through mutual multiplier effects. However, a substantial body of literature on planning in less developed countries takes a hard look at integrated approaches and the complex demands they make on emergent planning systems. Such literature implies that integrated planning is simply too complex to be viable, a view reflected in the most recent policies of the several international assistance agencies that are reverting to strictly sectoral approaches.

To better understand the reality of planning in developing countries, we draw here on the experience of a particular project undertaken in the geopolitical Department of Potosi in Bolivia. This application of the U.S. Agency for International Development's umbrella "Urban Functions in Rural Development" project was carried out by CORDEPO, the regional development agency for the Department of Potosi. It was one of five UFRD project applications following and building upon related experiences in the Philippines and in Upper Volta. Contracts for the Bolivian application were signed between USAID, the Bolivian Ministry of Planning and Coordination, and an independent firm of consultants in 1979. The senior author of this paper, in his capacity as long-term technical advisor to CORDEPO, arrived in Potosi in November of that year, and early in 1980 a project team of staff from CORDEPO's planning department was set up. Several short-term consultants provided help with particular topics during the project and the senior author of the original UFRD concept paper provided advice and support throughout.

Application of the UFRD ten-step methodology was aimed at understanding the spatial structure of the department, particularly in regards to the settlement hierarchy, the location of basic services, and the linkages between the settlements and their rural hinterlands. (For a discussion of the methodology and how it was applied in the Potosi case, see Evans and Siglin 1983.) Drawing upon this knowledge, team members worked toward the elaboration of a spatially integrated development plan for the department, identifying projects and designing and evaluating program packages. These tasks culminated in the publication of a five-year development plan for the department in April of 1982 -- an uncommon example of a spatially integrated development strategy in Bolivia and elsewhere in the developing world.

In this paper, the primary concern is not with the UFRD project or its resulting five-year plan, but rather with the planning environment in which the exercise took place. We are fundamentally interested in the process by which plans are made and carried out, and whether, as suggested earlier, the integrated approach to planning is too complex to be viable in this context. Behind this lies a yet larger question: How can planning be made more effective? Conditions which are often cited as necessary to effective planning such as adequate data, trained personnel, and a political-cultural tradition conducive to planning will often not be satisfied for years, while in the meantime planning continues to guide policy making. A more relevant concern is how planning can be made most effective under the less than perfect conditions which are more often the case than not.

It seems that any discussion of how planning can be made more effective in a particular context must begin with the examination of two factors: 1) criteria used to evaluate the success of planning exercises, and 2) the role of

the planner in the planning process. These in turn depend on understanding the process of planning itself. It is for this reason that it is useful to briefly review some traditional views of the way the planning process works.

Some Views of the Planning Process

Friedman (1967) has made a useful distinction between two kinds of planning theory: deductive theories derived from the logic of rational decision making, and inductive theories inferred from empirical observations. The traditional, deductive view regards planning primarily as an exercise in logical decision making, based on objective and scientific enquiry. In this view, the emphasis is on producing a plan as an end product and little or not attention is paid to the plan's implementation. The role of the planner in this model is to be objective and non-partisan, primarily a technician or scientist, a dispassionate analyst.

Numerous formulations of this approach may be found in the literature. A typical example, provided by Alden and Morgan (1974), starts with the definition of objectives and goals, followed by data collection, exploration policy alternatives, evaluation of available alternatives, and selection of the preferred course of action, concluding with the opening steps of implementation. Occasionally, an additional stage is added covering monitoring and evaluation to provide feedback to earlier stages. Almost invariably, this cycle is presented as a sequential process in which each stage is completed before the next one begins.

The importance of this planning process model lies in the fact that it is not merely confined to academics and theorists, but underlies the practice of planning agencies everywhere. In nearly all cases, planners draw up plans

according to strictly logical procedures, after which their task comes to an end. If the resulting plan cannot be implemented for reasons outside the plan-making process, the plan tends to be either completely ignored or severely distorted in the actions involved in implementation. Such cases are surely the rule rather than the exception, as it is virtually impossible to match the complex realities of implementing a logically-derived plan with the process used in its design.

Furthermore, the deductive planning model is implicit in most ex post evaluation studies of the planning process, which judge performance by comparing plans with outcomes. Time and again such studies conclude that a planning exercise was ineffective, or more bluntly a failure, because outcomes did not bear much relation to the original plans. Such conclusions imply that non-technical interventions in decision-making are extraneous disturbances which merely distort the planners' intentions, rather than representing real world interests which play a major role in the eventual outcomes of the planning process.

Many theorists have attempted to patch up the rational deductive model of planning with increasingly sophisticated interpretations. Many of them draw heavily on systems approaches and stress a more comprehensive perspective of the planning process. Some of the ambitious ones attempt to integrate the so-called "extraneous" non-technical considerations arising from cultural, political, and institutional sources into the model. All of these latter-day variants, however, still maintain rather questionable assumptions: that decisions concerning choices can be based on rational criteria, that planners dominate decision-making, and that outcomes can be molded to match rationally formulated plans.

Not surprisingly, the rational planning model has drawn heavy fire from many quarters, and alternatives based on empirical observation have often been proposed. One group of alternatives can be thought of as belonging to a skeptical or antiplanning and decision-making in practice. In their view, policy making is more often remedial, serial, fragmented, and constantly subjected to revision and correction. A yet more extreme view is articulated by Wildavsky (1966, 1971, 1973), who systematically attacks the premises of rational planning and eventually calls for the "abolition of comprehensive multisectoral planning" and greater emphasis on budgeting.

Although these approaches are more concerned with the outputs of the planning process than the rational model, they do not address the role of the planner in the process. In fact, if the process is entirely of the nature suggested, there appears to be little role for the planner at all. While it is true that plans are seldom implemented as they are put to paper, the piecemeal process that these commentators describe ignores the guidance provided by reference to an already-formulated plan. Without the broader perspective supplied by such a comprehensive plan, individual and isolated decisions may well produce chaotic outcomes lacking any focus at all.

Another school of thought, which might be called pluralistic, sees policy making as first and foremost a political process in which solutions are not so much planned as they are a result of pluralistic decision-making involving competing interests and pressure groups. In this outlook, the focus of interest is not so much the plan as it is the process of planning. The planner is viewed as an intermediary among competing factions or as a facilitator of discussion and decision-making. Rondinelli (1975), for example, sees planning as "a process of facilitating adjustment among competing interests within a

multinucleated ... structure to encourage conditions of a marginally better quality than the status quo." A similar perspective would argue that effective planning requires procedures which might aid plural politics to reach acceptable decisions.

Several serious objections to the pluralist model have been raised. First, it assumes a political process based on competing factions engaged in full and equal discussion which is at best an idealized interpretation of an often complex process. Second, it is difficult to imagine a planner remaining a neutral interlocutor among disputing interest groups in any context. In the course of analyzing problems and attempting to find the "best" solution, a planner will develop a substantial interest in furthering the particular course of action he or she sees as best and will understandably use whatever power is available to promote it. Finally, the model does not consider the substantial role the planner or the planning institution plays merely by setting the agenda for discussion of the problem at hand.

In general, none of the "pure" models of the planning experience reviewed here entirely represent the set of complex, dynamic, and adaptive processes which are lumped together into the idea of "planning" -- even in a developed country context. What is more important here is that these views, developed from observations in developed countries, do not adequately represent the process as we observed it in Bolivia. As such, they do not provide a framework for approaching the fundamental question of how to improve the planning process in the developing country context. To develop that framework, one must begin with an idea of the process such as it is. To that end, a brief discussion of the planning process in Bolivia, particularly in the Department of Potosi, follows.

National Planning in Bolivia

Bolivia was one of the first countries in Latin America to adopt national economic planning, beginning with early attempts following the revolution of 1952. The present system's machinery was set up under President Banzer during a period of political stability in the 1970s. In October 1974 laws were introduced which established the Ministry of Planning and Coordination (MPC) and the National Planning System. In February 1978 a further law was enacted formally defining the Regional Development Corporation.

The planning sequence established by President Banzer is designed to strengthen the central government's ability to steer public agencies toward defined objectives and to harness their collective resources in attacking specific problems. The planning sequence is intended to start with the Council of Ministers, whose role it is to identify national objectives for social and economic development. Once defined, it is the task of CONEPLAN, aided by its technical advisors in the Ministry of Planning and Coordination, to translate these objectives into broad goals which ostensibly provide guidelines and a reference framework for executive agencies. The ministries, regional development corporations, and other public organizations then prepare and submit medium term plans in response to these guidelines, as well as corresponding annual operating plans and budgets.

Sometime in the fall each year, these annual operating plans are submitted to the MPC, who makes sure that they are broadly compatible with larger goals and policies and do not duplicate or compete with one another. The MPC, together with the Ministry of Finance, then reviews the financial aspects of the plans in light of anticipated resources and other needs. Meanwhile, the projects division of the MPC evaluates the preliminary feasibility studies of

individual projects and makes recommendations to the National Project Committee. On the basis of these submissions, the MPC aggregates individual proposals into a single national operating plan, which is submitted finally to CONEPLAN for its ratification.

In slightly greater detail, the principle components of the National Planning System are:

- A. The National Economic Planning Council (CONEPLAN). Headed by the Minister of Planning and Coordination, CONEPLAN includes representatives from the Main public bodies concerned with economic production, such as the Ministries of Agriculture, Industry, and Mining and Hydrocarbons. Other Ministries participate in CONEPLAN's deliberations when appropriate, but the formal makeup of the council reflects an intentional emphasis on economic planning. The council's task is to translate the national objectives determined by the Council of Ministers into goals and strategies, and to ensure that annual operating plans and longer range development plans prepared by agencies and departmental corporations conform to these guidelines.
- B. The Ministry of Planning and Coordination (MPC). The technical arm of CONEPLAN, the MPC is primarily responsible for the preparation of plans and the coordination of activities within the government. The MPC includes three divisions -- planning, coordination, and legal and administrative affairs. The largest and most important of these is the planning division which in turn has departments for global or macro-economic planning, sectoral and spatial planning, integration, and project analysis. The staff members of these departments are responsible for reviewing the plans prepared by ministries and regional

development corporations and ensuring that proposed activities do not duplicate or conflict with one another. The department in charge of spatial planning is formally charged with the responsibility of drawing up a national strategy for regional development, providing guidelines for the regional development corporations and assessing the plans which they submit.

C. The Line Ministries. Specific sectoral planning is the responsibility of the various ministries and other semi-autonomous entities linked to them. Of most importance are those related to productive activities such as agriculture, industry, and mining -- particularly the state mining commission, COMIBOL. With few exceptions, however, most ministries are weak at planning, and instead tend to concentrate their limited resources of money and trained personnel on administering existing programs. Some thought is given to more comprehensive longer range planning, although such planning exhibits a marked tendency to follow conventional models imported from industrialized countries rather than considering more appropriate solutions to match Bolivia's specific conditions and constraints.

D. The Regional Development Corporations. The final major component is the system of regional development corporations, one for each of the country's nine departments. Most of these corporations were originally set up in the late 1960s or early 1970s as public works committees to provide infrastructure for the capital city of the department, and thus were linked to the central government through the Ministry of Housing and Urban Affairs. With the introduction in 1978 of the law for regional development corporations, their role and

functions were broadened and their responsibilities were defined more explicitly as the social and economic development of the department. To reflect their new status, they were formally incorporated into the national planning system, and are now required to submit annual operating plans and longer range regional development plans for review by the MPC.

Planning and Project Execution in Potosi

La Corporacion Regional de Desarrollo de Potosi (CORDEPO) is the regional development agency for the Department of Potosi. CORDEPO is the primary concern and source of data discussed in this case study. Like other regional development corporations, it was originally established in the early 1960s as a public works committee to provide urban infrastructure for the City of Potosi and, later, other large cities in the department. The series of laws expanding the functions of the regional development corporations of the 1970s gave the public works committee the responsibility of planning the social and economic development of the entire department, as well as coordinating the development activities of the public works sector throughout the region.

Numerous other public agencies operate in the department, most of them local offices of national ministries such as agriculture, mining, and education, but with a few public utility companies such as the water, telephone, and electric companies. However, two features sharply distinguish the regional development corporation from these other public agencies: first, the corporation is multi-sectoral and not limited to any one field of activity; and second, it is the only agency that is seriously concerned with planning. Since most of the others are subordinate offices of central organizations, their main

function is to carry out orders issued from headquarters rather than engage in planning. Even the independent local utility companies do little planning themselves, but tend to turn instead to the relevant central ministry for long-term guidance.

At the start of the period under study (1979), the internal organizational structure of the corporation and the composition of its professional staff, which dominated by civil engineers, reflected its origins as a public works agency. However, with the appointment of a new President of the Corporation in the spring of 1979, steps were taken to initiate the transition to a regional development corporation. A new head of planning was appointed who had extensive experience in economic planning. The organization was restructured. The department of planning was assigned increased responsibilities and its staff strengthened with economists and sociologists. At the same time work was begun on the preparation of a five-year development plan for the region -- the first that the corporation had undertaken.

Formal decisions at CORDEPO are made by the Board of Directors of the Corporation. Beyond the formal decision-making of the Board of Directors, innumerable decisions are made at all levels of the CORDEPO hierarchy which have tremendous impact on de facto policy. The rational model of planning as discussed earlier would suggest a direct correlation between planning decisions made by planners -- the board in this case -- and actions which finally result. Our experience, however, suggests otherwise. The final expression of board policy, having been filtered through the implementation process, often has totally different characteristics than would have been anticipated. Experience

would suggest that planning and execution at CORDEPO would be more appropriately thought of as a process in which decisions, both formal and informal,

are determined by three sets of factors: technical considerations, political concerns, and especially institutional characteristics.

Putting technical issues aside for the moment, four characteristics of the corporation itself and its position in the Bolivian planning system have been identified that are particularly important. The first of these is a political question of support. The national planning system set up under President Banzer gives little or no explicit consideration to the relationship between the planning system and the democratic institutions for larger policy making, at the national, the regional, or the local levels. This separation of CORDEPO from supporting political institutions leads to a number of far-reaching implications for the behavior of the corporation. Since it is not accountable to any elected assembly, it receives no mandate and no direct legitimation of its actions. Similarly, the corporation can turn to no elected assembly for support in fighting for its interests. To argue its case convincingly in the centers of power and influence in the government, it must rely instead on maintaining a widespread base of popular support throughout the region.

This induces a pattern of decision-making behavior calculated to minimize public criticism and controversy and to demonstrate the corporation's ability to get things done. First, the board must generally avoid taking a public stance on policy directions for fear of alienating particular factions or community groups. The board's aversion to public pronouncements also means that it tends to shy away from explicit decisions on broader policy issues altogether, preferring instead to deal with more limited decisions confined to special projects. For example, the board never formally adopted the five year plan, nor pronounced its official corporation policy. Without this commitment, the policies articulated in it were treated essentially as those advocated by the

planners and were not supported with the same level of conviction by members of the staff. Some were skeptical of all the time and energy spent on planning. Others preferred to concentrate on their sector rather than concern themselves with larger issues which they did not always understand and often considered irrelevant. The absence of clear policy directives in part explains the ambiguity and inconsistencies to be found in the annual operating plans, since the competing factions within the leadership are constantly vying for limited funds for their own priorities.

Another consequence of the need to maintain wide public support is the board's tendency to prefer "safe" project-oriented engineering activities rather than people-oriented social programs. For example, the board was quite willing to provide funds for the construction of buildings in which to house schools or clinics, but was much less enthusiastic about proposals to become involved in running a literacy campaign.

A second major institutional factor stems from the fact that the law creating the regional development corporations charged them with primary responsibility for coordinating development efforts within their departments, yet failed to provide them with the financial or legal means to fulfill that role. One of the most serious impediments is the lack of an independent source of income, which means that the corporation must remain totally dependent on the national treasury. Even though the corporation's annual budgets are formally approved by the national Ministries of Planning and Finance, this means little since the state of the country's economy means that disbursements consistently fall short of promised funds. Although some efforts have been made to generate local revenues, the region's capacity to generate local tax revenues apart from

those derived from minerals export is limited and are the exclusive preserve of the central government.

Since this shortfall in projected income is virtually a perennial event, the corporation adapts its behavior accordingly. Financial controllers become much more wary about releasing funds, since they know they cannot count on receiving payments from the treasury as projected in their budgets. This creates a constant struggle between project needs and available resources. When funds are insecure, priority clearly has to be given to those projects or ventures which simply cannot be postponed or avoided. Typically these include ongoing projects in which the corporation's own work crews are involved, such as building roads or systems to handle sewage or provide drinking water. Other projects requiring sustained investments over a longer time frame -- effectively most productive activities -- are mitigated against since the President and financial controller are understandably anxious to avoid commitments beyond assured foreseeable resources. Stalled or abandoned projects are bad publicity and undermine the corporation's crucial image of getting things done.

A third impediment to CORDEPO's ability to fulfill its role as chief coordinator of development activities in the department is the lack of any corresponding legal authority over the other agencies working in the region. This is no accident, since the nation ministries are clearly anxious that the regional development corporations not be given too much power for fear that their own autonomy in the region would be jeopardized.

This is not to say that the corporation works in isolation from all other public agencies in the region. On the contrary, CORDEPO has bilateral agreements and contracts with many entities, including regional offices of central

government ministries, quasi-public national institutions involved in economic development, and local utility companies. These agreements cover a wide variety of activities including resource surveys, road building, electricity generation and distribution, and extension services for farmers. It can hardly be claimed, though, that these form part of any overall plan of multi-sectoral coordination. Rather they would appear to be the outcome of piecemeal decisions made as needs and opportunities arise. Some of these agreements work quite well and others do not. Even so, the authority of CORDEPO to coordinate and control the direction of these agreements stands as a formidable impediment to its ability to assume that its plans will be carried through to implementation.

Finally, perhaps the most important factor impinging on CORDEPO's behavior stems from its origins as a public works agency for the City of Potosi and other major towns in the department. In that guise its main thrust was to provide urban infrastructure, and accordingly it was staffed primarily with civil engineers. The evolution from a public works agency to a development corporation brought about a new organizational structure. The existing staff concerned with public works was regrouped with a nascent department of agriculture as the division responsible for the execution of programs and projects. A new division of planning was introduced to survey natural resources of the region, to identify development opportunities, and to design and evaluate programs and projects. Broadly speaking, the division in charge of implementation was staffed predominately with engineers, while the new division of planning was filled with social scientists, especially economists.

The transition to a development agency with responsibility for planning for the entire department can obviously not be accomplished merely by

reorganization, but requires a fundamental reorientation of thinking which has yet to be completed. That this transition is taking so long should cause no surprise, since the reorientation of any institution is bound to be a slow process. It involves not only changes in personnel, but more importantly the gradual absorption of new consciousness of purpose. A strong leadership with a clear sense of direction, which CORDEPO lacked early in the transition, is essential to the change. However, with the appointment of the new corporation president and new director of planning, the corporation hesitantly began to replace its old public works mentality with a broader-based mind set focused on social and economic development.

Understanding why projects get implemented

One of the unfortunate facts of life in Bolivia is that actual spending for most public agencies often lags behind planned spending because promised funds are not disbursed on time, sometimes not until years later. All agencies are affected to one degree or another, as few if any receive the total amount of funds requested. Thus, it is clear that agencies sometimes find it difficult to make planned expenditures for reasons beyond their control.

It is in this uncertain environment that CORDEPO must plan its investments. The corporation's income is derived almost entirely from a single source, royalties on minerals. Whether the minerals are exported as raw material or processed in the country, the revenue is passed first to the national treasury before being forwarded to CORDEPO. When the government runs short of cash, these funds tend to be diverted to other purposes considered more urgent. When times are particularly bad, the corporation may receive only

a fraction of the amount projected in its budget. In 1981, for example, revenues amounted to a mere 30 percent of what was projected.

Even so, whatever funds are received from the central government's treasury are disbursed among projects, and the relative scarcity of revenues only means that tendencies to prefer one particular type of project over others are all the more marked. Certain projects will be chosen for implementation and therefore funded while others will languish. This provides a basis on which to learn something about the characteristics of CORDEPO itself, that is, how the organization is able to cope with planning and implementing various types of projects.

The key issue in the debate about the feasibility of policies for integrated rural or regional development is the implementing agencies' ability to carry out complex programs requiring inter-agency collaboration. Policies for integrated development inevitably require the coordinated provision of program inputs, which calls for complex planning procedures and extensive inter-agency coordination. These things are especially difficult in countries where political and economic conditions are unstable and resources available for planning are restricted. It is the need for complex inter-agency coordination during the implementation stage that critics claim undermines integrated approaches and ultimately eliminates them as a viable alternative for development planning.

Often CORDEPO must cooperate with one or more other agencies in order to implement the projects which have been planned and budgeted. It would seem that if this type of inter-agency coordination were in fact too difficult, then projects requiring such cooperation would be less likely to be implemented than those not dependent on other agencies.

Based on such an argument, we would expect that projects implemented solely by the corporation would be executed more effectively than those involving other agencies because decisions would be less dependent on negotiation and compromise and therefore easier to make. Similarly, one would expect that since disbursement of funds is so erratic, those projects relying on funds from more than one source would be jeopardized while better progress would be made with projects financed from a single agency.

During the period 1979 through 1981, CORDEPO was involved in 130 programs and projects. Though two large undertakings accounted for a substantial portion of total expenditures, most of these were smaller projects aimed at increasing agricultural and mining productivity, constructing rural feeder roads, and providing drinking water, sewage systems, and other infrastructure to the cities and towns of the region. Due to perennial funding problems, there is a wide discrepancy between projected and actual spending. Total actual spending for the three year period amounted to only 34.9 percent of projected sums.

To see what kinds of projects are actually carried through to completion, one can use the discrepancy between projected and disbursed funds. Here, planned spending as indicated in annual operating budgets will be compared with actual outlays; a somewhat crude indicator, but one that at least provides an approximation of relative performance in terms of accomplishment.

To compare projects, various undertakings were classified according to their source of funding on one axis and by the implementing agency or agencies on the other. Rates of execution were then compared over the three year period 1979 to 1981 as measured by actual spending. A distinction was made between two sources of funding: those financed solely by CORDEPO, and those financed

by CORDEPO together with other local, national, or international organizations. On the coordination axis, a distinction was made between projects handled exclusively by CORDEPO and those which involved both the corporation and other agencies. (A relatively small number of simple transfers have been excluded in this table, leading to minor discrepancies between figures here and in table two. The results of this comparison are shown in table one.)

From the bottom right hand corner of the table, we can see that as mentioned before, actual spending for the three year period only amounted to 35 percent of projected investment. In the right hand totals column, one finds, as expected, that the projects funded solely by the corporation achieve the highest level of execution, about 44 percent of planned spending, while those funded jointly with other agencies follow with around 29 percent. However, as the cells comprising each of these distinctions are examined, important differences among kinds of projects appear.

a) Projects funded exclusively by CORDEPO

The vast majority of projects -- some 86 of the 115 included in this analysis -- are funded wholly by the corporation. A further breakdown into those implemented solely by the corporation and those implemented with the cooperation of other agencies indicates that there are significant differences between the two. For those implemented solely by CORDEPO as well, actual spending amounts to 37.6 percent of that which was planned. Many of these are production oriented projects, especially in the agriculture and mining sectors, and typically include crop and livestock improvement efforts, food processing plants, and mineral surveys designed to assist the small mining concern. These projects are often quite complicated, requiring sustained investments over several years, and the corporation is understandably reluctant to fully commit

TABLE ONE: PROJECTED AND ACTUAL SPENDING BY FUNDING AND IMPLEMENTING AGENCY
1979-1981 (millions of Bolivian pesos)

	IMPLEMENTED BY CORDEPO ALONE	IMPLEMENTED BY CORDEPO AND OTHER AGENCIES	TOTALS	
FUNDED BY CORDEPO ALONE	56 254 95 37.6%	30 109 62 57.0%	86 363 357 43.2%	number of projects planned spending actual spending percentage spent
FUNDED BY CORDEPO AND OTHERS	7 87 12.3 14.1%	22 273 75 27.5%	29 360 87.3 24.3%	number of projects planned spending actual spending percentage spent
TOTALS	63 341 107.3 31.46%	52 382 137 35.9%	115 723 244.3 33.8%	number of projects planned spending actual spending percentage spent

Source: CORDEPO: Planos Operativos and Cuadros de Evaluacion Financiera
for years 1979 through 1981

itself until it can be reasonably sure of sufficient additional resources to maintain them. Thus, in many cases, the corporation ends up being solely responsible for these projects not through choice, but due to lack of interested partners. Projects may appear on the books, yet never become functional for lack of sufficient support from other sources.

Contrary to what one might suspect, a somewhat higher rate of execution is achieved in the group managed jointly by the corporation and other agencies. This group of projects consists mainly of public works programs carried out by CORDEPO in collaboration with municipal authorities of the largest towns of the region, or on behalf of smaller towns or other agencies such as the health and education units which lack funds, staff, or equipment for capital construction. Typical projects are street paving, water and sewer systems, and buildings for schools and health clinics.

b) Projects funded by CORDEPO and other agencies

Among the projects funded jointly by CORDEPO and other agencies, only a very few are planned to be implemented by the corporation alone. These are projects in which additional funding sources have been secured, often through international agencies, but needed assistance in implementation has not yet been found. The vagaries of international politics also play a role here, as when the Carter Administration froze previously promised American assistance after the Garcia Meza coup in 1980. For these few projects, the execution rate falls to 14.1 percent.

The largest group of jointly funded projects are also jointly managed. In terms of overall execution, this group comes close to the average of all projects with 27.5 percent. This group includes infrastructure projects such as highway building in conjunction with the National Road Service and market

building done with the National Urban Development Service. Projects for surveying and exploiting natural resources still at an early stage of development are also included.

It becomes immediately obvious that our initial premises about inter-agency coordination do not hold true in this instance. If it were accurate that the amount of inter-agency coordination required determined the likelihood of a project being completed, then the highest execution rate should be in the top left cell and the lowest in the bottom right. Rather than the extremes, however, these cells contain the two median figures. The highest execution rate, 57 percent, is found where CORDEPO is wholly responsible for funding and shares responsibility for implementation, while the lowest rate, 14.1 percent is located among projects funded in cooperation and implemented solely by CORDEPO. Clearly, other factors assume more importance.

A second table provides some clues as to the factors controlling the execution rate for various kinds of projects. In table two, we list twelve sectors for which investments were planned in the 1979-1981 period, and compare planned with actual spending. Again because of the common lag in disbursements, in only one of these sectors did actual spending reach as much as half of what had been projected.

When the twelve sectors are grouped into larger categories -- roughly, productive enterprises, public infrastructure, and social infrastructure -- there is a wide disparity between the two measures of planned versus actual spending. What is particularly surprising is the fact that in the productive sector, which was scheduled to receive the largest amount of investment and upon which a strong emphasis had been placed, less than 19 percent of projected spending was actually executed. This compares to 49 percent and 40 percent for

**TABLE TWO: PLANNED AND ACTUAL SPENDING BY SECTOR
1979-1981 (millions of Bolivian pesos)**

SECTOR	PLANNED SPENDING	ACTUAL SPENDING	PERCENTAGE
Agriculture	130,880	23,811	18.2%
Industry	80,816	23,681	29.3%
Tourism	45,870	5,124	11.2%
Mining	39,980	5,021	12.6%
Commerce	6,670	0	00.0%
Subtotal	304,216	57,664	18.9%
Energy	33,721	10,784	32.0%
Transportation	199,732	108,471	54.3%
Communications	24,450	6,687	27.4%
Subtotal	257,902	125,943	48.8%
Urban Works	58,412	24,101	41.3%
Water and Sewage	124,673	57,813	46.4%
Education	15,278	5,684	37.2%
Health	8,865	2,931	33.1%
Others	41,665	9,011	21.6%
Subtotal	248,892	99,537	40.0%
TOTAL	811,010	283,145	34.9%

Source: CORDEPO: Planos Operativos and Cuadros de Evaluacion Financiera
for years 1979 through 1981

the other categories. The question raised is why a sector clearly critical to the development of the region and having been targeted for large investments has such a low rate of completion. We cannot find a satisfactory answer in terms of the coordination involved in funding or implementation. However, there are some clues.

In the first instance, there is a qualitative difference between the activities of the first group and those of the second and third groups. In the latter case, CORDEPO is not involved in the ongoing administration or provision of any services such as electrical energy, education, or drinking water. CORDEPO is involved in the construction of buildings and the physical infrastructure which is then handed over to the relevant local authority responsible for day to day operations. Projects in these sectors, therefore, tend to be one time actions. This is not the case, however, with the first group of productive activities. The corporation is involved not only in setting up these projects, which may take several years, but also in many instances in running them. In theory, it is the corporation's intention, wherever possible, to hand these projects over to the private sector once they are a going concern. In practice, few ever seem to reach that point.

This qualitative difference, which may be characterized as the difference between public works construction jobs and ongoing management programs, would seem to go a long way toward explaining the wide difference in levels of execution. Again this relates to the corporation's evolution from a public works committee to a region-wide development agency. As a public works organization, CORDEPO has acquired considerable experience over the years in the design and implementation of projects for drinking water, sewage systems, local feeder roads, and other urban infrastructure. Many of the steps involved in these

operations are repetitive, and to a large extent procedures can be standardized. Furthermore, it is evident that with constant practice over the years CORDEPO has evolved effective working arrangements with regional counterpart agencies which effectively complement its expertise.

On the other hand, it is only in the past few years that the corporation has become involved in more complex agricultural and manufacturing projects which require quite different skills and knowledge. Generally speaking, each project requires a unique approach, demanding special studies tailored to the characteristics of the project. These procedures cannot easily be standardized since the activity concerned is never quite the same and needs different data and technical expertise. Furthermore, agricultural and manufacturing projects rarely involve the same set of participants twice. This means new agreements have to be established each time with a different set of actors, some of whom may not know one another, and new channels for communication and project administration have to constantly be set up.

In short, the need for learning is not just at the level of individuals, but at the level of the institution as a whole. CORDEPO has learned well how to deliver public works programs, but is still learning how to manage projects related to agricultural and industrial production. Understandably, it takes time for an institution to acquire and develop the necessary expertise.

Conclusion: Implications for Practitioners

Let us return to the question with which this enquiry began: are integrated approaches to rural and regional development simply too complicated? It is quite obvious from the story in Potosi that such policies calling for complex inter-agency coordination for the programmed implementation of inputs are

unlikely to be realized in the neat and orderly way envisioned. Not only are the external conditions in the larger planning environment far too volatile and unstable to permit such orderly behavior, it is also evident that internal factors arising from institutional behavior of the organizations involved are prone to exert a strong influence in diverting initial plans from their intended course.

Despite the substantial obstacles confronting such an integrated approach, we do not conclude that it is impractical, inappropriate, or useless. If one reconsiders the suggestion that planning decisions are influenced to a very large extent by institutional factors, then the relevant question is one of how to move the institution in the desired direction. Given that this is the case, what suggestions can one give to planners which would help them -- to assure that investments can be planned and implemented in the manner envisioned?

We have three suggestions:

I. Since planning is a process influenced by innumerable decisions within the institution, the planner must become a strategist.

If planning were purely a technical process, then practitioners would be justified in focusing their efforts on technical analyses and the preparation of blueprints for action. The fate of carefully crafted investment plans in Potosi, however, is just one more example of so many other similar experiences: planning simply doesn't stop with the completion of a set of plans. This is a rather old lesson, yet still there is widespread evidence that the lesson has not yet been learned.

If, on the other hand, planning is predominantly a political process, then it would be worthwhile for practitioners to focus their efforts on building a consensus among the factions most intimately involved in the issues at hand.

However, there are difficulties with this interpretation. As is amply illustrated in Potosi, deciding policy is only a small part of the issue and is no guarantor of what actually gets implemented. Thus, the implications of this view for practitioners would seem to be only partially relevant.

We have suggested that it is more appropriate to think of planning as a process in which decisions are determined by three sets of factors: technical considerations, political concerns, and especially institutional characteristics. Planning decisions, both formal and informal, occur at all stages of the planning process, the cumulative impact of which determines the final outcome of the project. Although a particular decision may appear to concern relatively minor details in the day to day administration and management of specific projects, the aggregation of these decisions over many small projects ultimately becomes a major determinant of de facto policy.

Unlike the picture suggested by the rational deductive model of decision making, or implied in many accounts of the planning process, this inevitably means there is a wide gap between formal decisions and the actions which finally result. The assumption that formal decisions necessarily lead to corresponding actions is simply not valid. As is all too clear in Potosi, a host of "extraneous" factors intervene in the course of translating policy into action.

If this view of planning as a decision-making process is correct, then in order to maximize their impact on those decisions, planners must become strategists. They must address their attention to the manner in which decisions are made, and should seek to identify the points of maximum leverage in this process, which may not always be in the most obvious places. At CORDEPO, it can be argued, for example, that the meetings of the Board of Directors were of

secondary importance to the preliminary business of preparing the agenda for their discussions. Certainly the five year plan proved to be of far less significance than the annual operating budgets, and even these ultimately had little impact on the final investment decisions. As we saw, the cumulative impact of subordinate decisions in selecting small projects for rural roads and other urban infrastructure ultimately makes or breaks the larger strategy of articulating the spatial structure of the region.

II. If outcomes are molded primarily by institutional factors, then the planner must become an educator.

Perhaps the most striking factor accounting for much of the corporation's behavior, and especially the divergence between intent and action as represented by the annual operating budgets and actual spending, lies with its origins as a public works agency. As was pointed out, CORDEPO has long experience as a provider of urban infrastructure, has learned well how to design and implement such projects, and has established effective ongoing operational procedures with other public organizations for this purpose. However, the corporation has evidently not yet learned how to be equally effective in carrying out projects and programs in the agricultural and manufacturing sectors. This is clearly not merely a question of appointing the necessary technical staff, but also a matter of institutional learning.

Thus, the planner needs to be an educator in two senses. First, it is necessary to disseminate as widely as possible the concepts and ideas involved in any new approach to development policy. This education includes both department chiefs, who may be reluctant to be subject to such a "lesson," as well as the middle and junior level staff involved in both planning and implementation.

Second, the planner needs to teach the institution, which means figuring out ways of doing the things implied by the new policies. For example, in Potosi, a big effort was made to introduce the concept of spatial integration of sectoral activities. An elaborate method of matrix planning was evolved to facilitate the preparation of the budgets for the five years of the plan. Yet, this was not followed through all the way. The annual operating plans continued to be produced exactly as before, with no recognition given to the criteria of spatial allocation of resources. Then again, while a big effort was made to explain the ideas of spatially integrated development to the members of the planning division, explanation to members of the implementation division was not pursued with the same vigor. Thus, those in charge of implementation -- particularly those in charge of selecting the small projects of rural feeder roads, water projects, and so on -- were not well enough versed in the concepts involved to appreciate the implications for their own work.

In short, the practitioner needs to think through the implications of introducing new concepts of regional planning into the organization. The practitioner must not only figure out what needs to be done to educate individuals, but also to teach the institution as a whole how to perform effectively. Ultimately of course, this extends beyond the bounds of the immediate organization to other agencies whose cooperation is required for the implementation of the programs and projects proposed.

III. If policies for integrated development cannot be implemented in the orderly manner envisioned, then they should be disaggregated into more manageable pieces, and the planner should become an entrepreneur.

It is quite clear from the experience in Potosi that integrated approaches to rural or regional development that require extensive inter-agency

coordination are unlikely to be implemented in the neat and orderly manner envisaged. Given the widespread uncertainties of planning in countries like Bolivia, it is simply not feasible to count on program inputs from many different agencies falling into place at their allotted point in the schedule. There are far too many imponderables and potential difficulties along the route that may serve to deflect plans from their intended course. McLoughlin's dictum that "a plan is a course through which the system is required to pass" is indeed a delusion in such a country, if not everywhere.

We have seen that CORDEPO has become quite proficient at delivering urban infrastructure to towns and small villages throughout the region. There is a valuable lesson to learn here. These projects are for the most part small, low budget, easily replicable, and amenable to standardized procedures for design, budgeting, and implementation. They require small teams of technicians and field workers and in most cases involve collaboration with only one other agency. Once the necessary administrative machinery has been set up and the people have acquired some experience at working together as a unit, then it becomes surprisingly effective.

Does this imply, therefore, a necessary reversion to more conventional practices of sectoral planning, with each sectoral team going its own way irrespective of the activities of others? Our answer is an emphatic no. The overall perspective of an integrated approach is still valid, and indeed essential for effective regional planning. As the Potosi exercise amply demonstrated, projects that emerged, though not necessarily carried out as conceived, nevertheless did make a significant contribution to the larger perspective which is so often absent from regional development efforts.

What this lesson does suggest, however, is that once the overall picture has been constructed, then strategies for integrated development should be disaggregated into small components that can be managed in a similar manner. Where these take the form of replicable activities, special units should be formed, requiring perhaps the collaboration of just one other organization, for the purpose of delivering just this one kind of input for the larger ongoing program in integrated development being applied throughout the region.

Most agricultural projects, for example, can be broken down into the same components -- irrigation works, storage facilities, credit, technical assistance, distribution services for seeds and fertilizers, and marketing networks for produce. In Potosi, there already exist a number of organizations for some of these functions, such as the agricultural bank for farmer's credit, and IBTA for extension services. In the past CORDEPO has approached each agricultural project on a piecemeal basis and efforts at coordination with other agencies have been largely frustrated, mainly because there has not been the opportunity to learn from continuing practice. Instead, however, each of these components could feasibly be handled by special purpose units similar to those which are already operating for the provision of urban infrastructure.

If this interpretation is correct, then the planner should become an entrepreneur in seeking out opportunities to set up these special task micro-units in collaboration with whatever group possesses the necessary skills or expertise. These collaborative ventures need not -- indeed should not -- be restricted to public agencies, but should involve as wide a spectrum of organizations as possible: non-profit groups, cooperatives, and especially the private sector. Too often, public development agencies tend to take on far more than they can manage or have the expertise to handle; CORDEPO has been guilty

of this in some of its efforts to launch commercial enterprises which have yet to show a profit. The complaint is often voiced that entrepreneurs are in short supply in poorer countries, but more likely they are not given adequate support to pursue their ventures. By their very nature, strategies for integrated development include many activities that could, with the right approach, be undertaken more effectively by the private sector.

To conclude, strategies for spatially-integrated development should not be abandoned. Too often evaluations of integrated applications have concluded that they failed or were largely ineffective on the superficial evidence that outcomes showed little resemblance to original intentions. This may be the case, but such an evaluation is based on a faulty premise and an inadequate model of the planning process; one that misunderstands the nature of decision--making and the diverse way in which an organization's behavior can be changed. It is true that in the past such approaches have overstressed the need for multi-sectoral activities and inter-agency coordination, and thus have invited harsh judgements of failure when this did not occur. The failure, however, is not so much in the concept, but in the application of it. We need to revise our understanding of how specially integrated planning can be accomplished, and more importantly, we need to redirect our attentions and energies to finding ways to make it work under conditions that are far from optimal.

REFERENCES

- Alden, J., and R. Morgan. 1974. Regional planning: A comprehensive view. Glasgow: Leonard Hill.
- CORDIPEO. 1979-1981a. Cuadros de evaluacion financiera.
- _____. 1979-1981b. Planos operativos.
- Evans, H., and D. Siglin. 1983. The Urban Functions in Rural Development approach: Its application in Potosi, Bolivia. Worcester, MA: Clark University.
- Friedmann, J. 1967. A conceptual model for analysis of planning behaviour. Administrative Science Quarterly 12(2): 225-252.
- Rondinelli, D. 1975. Urban and regional planning: Policy and administration. Ithica: Cornell University Press.
- Wildavsky, A. 1966. The political economy of efficiency: Cost-benefit analysis, systems analysis, and program budgeting. Public Administration Review December: 292-310.
- _____. 1971. Does planning work? The Public Interest Summer: 95-104.
- _____. 1973. If planning is everything, maybe it's nothing. Policy Sciences 4:127-153.