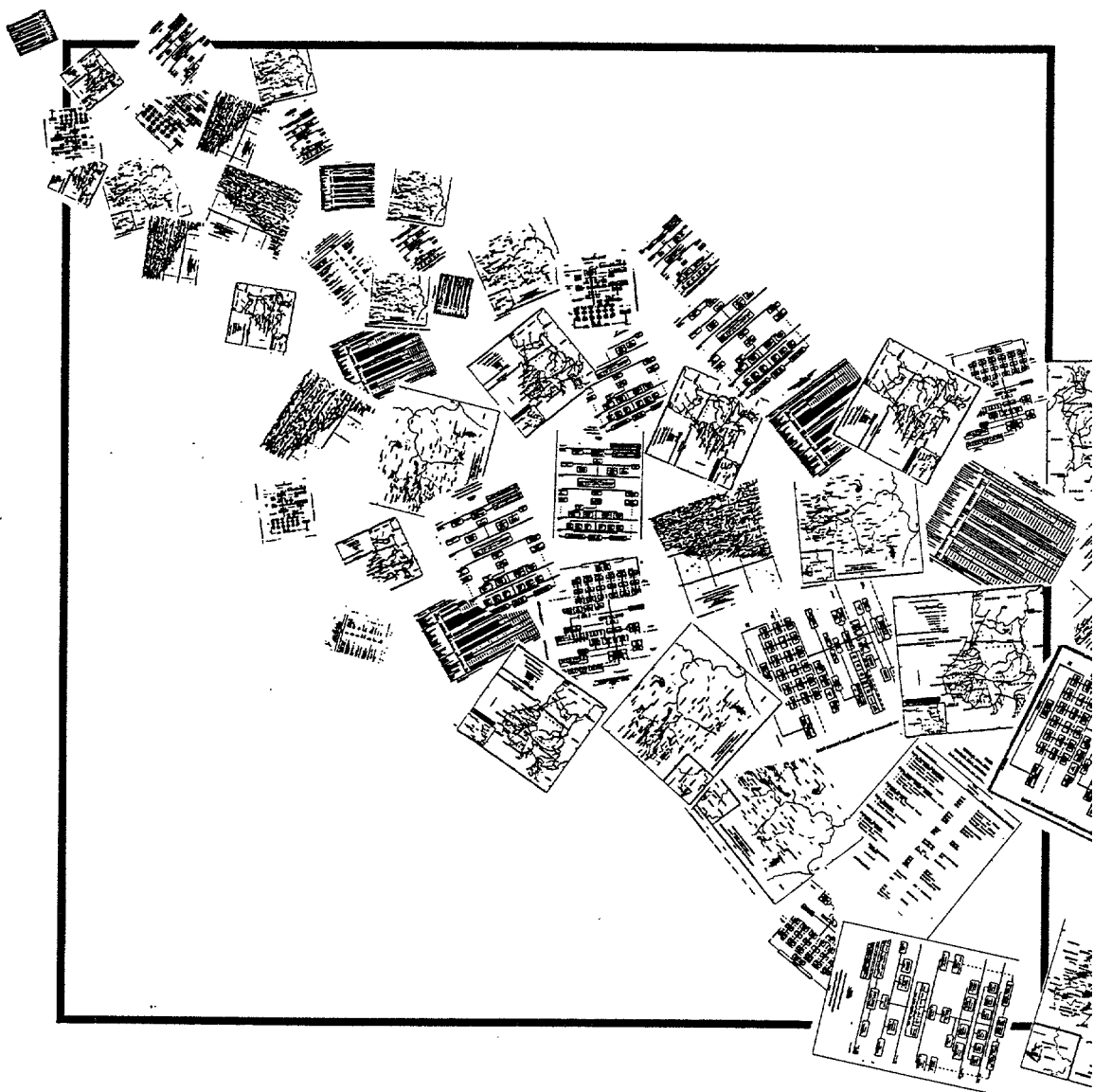


A WORLD BANK
OPERATIONS
EVALUATION
STUDY

New Lessons from Old Projects: The Workings of Rural Development in Northeast Brazil

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Executive Summary

In 1974, as part of a wider program targeted at poverty reduction in general, the Bank announced a bold new approach to reducing rural poverty and stimulating agricultural growth. Born out of dissatisfaction with the inability of past development efforts to reduce rural poverty and inequality, the "new style" rural development (RD) projects differed from, and supplemented, previous interventions in two ways. They targeted the poor directly with agricultural production services and subsidies. And they provided certain regions with a complete array of development investments, ranging from roads to agricultural credit to health—regions chosen for their agricultural potential and high concentration of small farmers. By 1986, twelve years later and after US\$19.1 billion (current) of Bank commitments to RD worldwide, of which US\$6.3 billion has been for "new style" area development projects, the new approach had fallen into disfavor. Myriad problems had plagued the implementation of the projects, and serious questions had been raised about their effectiveness at reducing poverty and increasing agricultural productivity. These concerns, outlined below, were laid out in a major review of the RD experience carried out by OED in 1987.

Though targeted rural development deserved much of the criticism it received, some of these projects—or parts of them—performed well. Though the exceptions in themselves do not justify bringing back this form of RD, they raise the question as to how some projects could have worked well with a design and in an environment now considered not conducive to good performance. More constructively, if certain projects or activities could stand the test of such adverse circumstances, they certainly must have some lessons to offer about improving the design of programs today. Though the Bank has largely abandoned the "new style" RD approach, it continues to devote major policy attention and resources to the same sectors, individually or in pairs, that were all linked together in the RD projects—agricultural research, agricultural extension, ru-

ral finance, irrigation, farm-to-market roads, drinking water, health, education.

Because past evaluations of the RD experience have been more illuminating about the causes of failure than about the causes of success—as the above-noted OED review itself pointed out—they have thrown more light on what *not* to do than on what *to* do. This study seeks to do the opposite. It identifies patterns that ran across a variety of instances of better performance in a set of 23 RD projects in Northeast Brazil—one of the Bank's most comprehensive RD programs. The study asks what lessons these patterns of good performance reveal about project design and, more generally, about the role of the public sector in rural development.¹ As the reader will see, the answers to this question do not add up to a case in favor of or against "integrated rural development," but are of relevance to a wide variety of projects and sectors in which the Bank operates today. As discussed in note 1, the Government of Brazil has been concerned that readers should not take this study as being in any way a substitute for an evaluation of the RD portfolio as a whole.

Various problems have afflicted certain types of the Bank's rural development projects worldwide, including those of the Northeast: (1) too many components and excessive complexity, (2) the lack of productivity-increasing technical packages for small farmers, (3) the absence of beneficiary participation in project design and implementation, and (4) a policy environment that penalized agriculture. The Northeast projects suffered, in addition, from (1) chronic delays in the transfer of Brazilian counterpart funds to the project units and executing agencies, and (2) the high and increasing rates of inflation (up to triple digits), and hence fiscal crisis, experienced by Brazil in the 1980s. This study asks why certain projects or agencies were sometimes free of these problems, or how they were able to perform well despite the presence of such adversity.

The Northeast Projects

Between 1975 and 1987, the Brazilian government committed US\$3.3 billion to 22 integrated rural development projects in the ten states of Northeast Brazil² and a region-wide land-tenure project—of which the Bank financed 42 percent or US\$1.4 billion. A “first generation” of these projects included roughly a dozen components—ranging from agricultural credit and extension through feeder roads and electrification to health and education, though any one project would not include all of them. The staples of each project were credit (23 percent), feeder roads (20 percent), land-related activities (16 percent), and agricultural extension (14 percent)—accounting for 72 percent of appraised costs. In an attempt to reduce the complexity of the projects and focus more exclusively on agricultural production, a second generation of projects eliminated health, education, and roads—as well as some smaller components. Credit (30 percent), extension (24 percent), and a new community-participation component (16 percent) accounted for 70 percent of expenditures projected at appraisal; associated land-related activities were unified in a separate regionwide land-tenure project (an additional 16 percent).³

Typical project organization involved the Bank and several levels of the Brazilian government—the federal government ministries, the Northeast regional development authority, semi-official banks, and the state-level project units and executing agencies. The project-coordinating units, set up in state departments of planning or agriculture, were in charge of designing the annual programs and supervising their implementation, but had neither executing responsibilities nor the formal power to grant funds or withhold them from the executing agencies—a subject treated in Chapter 2; an exception was the community-participation component (APCR)⁴ in the second-generation projects, described momentarily, in which the project units shared formal implementation responsibilities with rural labor unions, extension services, and/or some farmer cooperatives. Municipal governments, though often represented on ad hoc councils that vetted the APCR sub-projects, had no formal place in the projects as such, but sometimes ended up making important contributions that were not anticipated (Chapters 2 and 3).

The community-participation component, at US\$222 million, represented one of the most significant attempts of the Bank to make the implementation of its RD projects more participatory. The APCR fund, with the assistance of an average of 36 community agents and supervisory staff per state, makes grants of up to US\$10,000 to associations formed in communities of less than 5,000 inhabitants: (1) 65 percent for community-owned ventures like grain-milling facilities, seed banks, input-supply stores, and storage facilities, (2) 25 percent for small works projects (road repair,

community laundries, public toilets), and (3) 15 percent for institution-building in community organizations, used mainly by the rural labor federations for training.

Good Performance (Chapter 2)

Defining “success” or, more accurately, “better performance,” turned out to be more difficult than originally expected. Early in the review, the cases of better performance *seemed* to be falling into three categories: (1) whole projects (Tabuleiros Sul in Sergipe, Ibiapaba in Ceará), (2) components (roads, electrification, drinking water, health, and education *versus* agricultural credit, research, and extension), and (3) agencies (the project unit in Sergipe). Because of the widespread dissatisfaction expressed by many with agricultural credit, research, and extension, moreover, several cases of successful disseminations of improved varieties to small farmers were also identified—in order to explore why performance had been so different in these cases (Chapter 5).

The three categories of projects, components, and agencies did not hold up for long. (1) The better-performing agencies did not always stay that way (and mediocre agencies sometimes performed surprisingly well); (2) good performance was often bracketed in time by the term of office of a particularly supportive and demanding governor (for example, 1982–86 in Sergipe, and 1987–89 in Bahia, Maranhão, and Pernambuco)—a subject treated in Chapter 2; (3) the high ratings given by many to infrastructure, health, and education sometimes said more about things *other than* impact or agency performance—for example, the relative conspicuousness of the results (new roads *versus* productivity-increasing seed varieties), or the relative easiness of the task (installing rural water systems *versus* agricultural extension); or the fact that the project unit or other agencies had taken the tasks away from the infrastructure agencies because they had been performing *inadequately*—the subject of Chapter 2; and (4) though many observers rated health and education high on impact, these components got consistently low grades for agency performance in supervision reports.

To sum up, there were no projects, components, or agencies that could be said to have performed consistently well throughout the whole period under review, or consistently better than the others. People talked about *episodes* of good performance that had come and gone, as distinct from consistently “good” agencies, components, or projects. Trying to make sense of these puzzling ebbs and flows of performance led to the discovery that good performance often had less to do with the *inherent capabilities* of an agency itself than with a set of other factors—namely, (1) the ease and difficulty of tasks, (2) the presence of outside pressures, (3) built-in incentives to perform, and (4) the involvement

of keenly interested actors and organizations at the local level. When one of these variables changed significantly, performance went from good to bad, or vice versa. Since project design and supervision tend to concentrate on improving the inherent capacity of agencies, this finding might seem to make the task of institution building even more difficult. But it is often no more difficult to influence these variables than it is to improve, from the inside, the quality of what agencies do—sometimes it is even easier.

A few caveats on what this study does *not* do. As explained in note 1, the study does not discuss macro policy issues like overvaluation of exchange rates and other policies affecting agricultural exports, or subsidization of agricultural credit and other inputs. Second, it does not attempt to judge the strategy of the Brazilian government or the Bank for alleviating poverty in the Northeast. Third, it is not an evaluation of the Northeast projects, nor of integrated rural development in general.

Reinventing the Projects (Chapter 2)

The better-performing activities departed consistently from their original design in five ways. (1) They were often implemented in *less time* than that allowed for at appraisal—the installation of wells and standpipes in rural communities, campaigns to widely distribute improved varieties of seed and rootstock and, in some cases, the acquisition of land for redistribution. This happened against a general background of *delays* in execution; which had actually caused the Bank to lengthen the execution period from five years in the first-generation projects to more than eight years in the second generation. The longer execution periods, though seemingly more appropriate for such difficult tasks of institution building, actually *deprived* the projects of certain pressures and incentives that were very much present in the environment of the good performers.

(2) The better-performing projects ended up being a much *narrower* version of what was envisioned at appraisal, with one or two components elevated to center stage. Particular favorites were rural water, community participation, and land-distribution activities. This “reinvention” could take place because (a) a supportive governor would choose one of the project’s components as his “signature” activity; (b) project managers gravitated toward their *own* favorite components; (c) shortfalls and delays in the transfer of counterpart funds—though a major problem throughout implementation—scrambled budgets enough to give project managers liberty to remold the projects to their liking and reduce them to more manageable proportions.

(3) The relative *ease* (or difficulty) of the tasks that the projects assigned to agencies influenced their ability to perform well. Water agencies found rural water supply to be easier than irrigation, for example, because water was less

“analysis-intensive” and less dependent on outsiders beyond one’s control—namely, other agencies and users. This explains why the design and installation of rural-water systems typically went better than irrigation, as well as why Sergipe’s new rural water agency performed well in rural water and poorly, subsequently, in irrigation. Also, the goals and standards of the projects themselves made tasks more difficult or unsatisfying to some agencies—namely, the redirecting of public-sector services toward the poor, the desire to rely on less capital-using technologies for infrastructure and, partly a reflection of the latter, the concern about reducing unit costs and reaching larger numbers of people.

(4) When performance was good, project management had been subject to clearly identifiable outside “demand” pressures to get things done, reach significant numbers of people, reduce costs, or be accountable in other ways. These pressures came not only from beneficiaries, but from governors, other state agencies, development banks, municipal governments, nongovernment organizations, the World Bank. The arrival of such pressures on the scene helps explain why mediocre agencies sometimes produced surprising bursts of good performance; the lack or withdrawal of such pressures also helps explain why agencies already deemed strong suddenly performed poorly.

(5) Better-performing agencies routinely “took over” tasks from the agencies meant to carry them out. First, the excellent public managers who were attracted to the project-coordinating units did not want to “merely” coordinate the work of other agencies, but wanted to “carry things out” themselves. Second, managers took over tasks out of frustration with footdragging or shoddy work by the designated executing agency; “takeover” gave them the control they desired over the pace, quality, and cost of project execution, and made their work less vulnerable to uncertainty and ill will. Third, powerful and supportive governors, impatient with “the lack of results” from the established agencies, sometimes helped give project managers the excuse and the wherewithal to take over from the other agencies.

How could agencies in an institutionally “underdeveloped” environment and with no experience at a task have simply taken over from the established agencies and done a reasonable job? First, they sometimes broke project rules and contracted out the work to public agencies other than the designated ones, or to private firms or nongovernment organizations; they succeeded best at getting other agencies to perform, in other words, *not* when they were “coordinating” these agencies but when they had the power to contract or force the agencies to do what was required. Second, when a project unit or other agency lavished its attention and scarce funding on the components it could manage better, this reduced the complexity and difficulty of the projects for them. Third, the takeover agencies *liked* the

tasks that the established agencies disliked; this gave them and their staff the advantage of high motivation, which often turned out to be more important to good performance than long experience with an activity. Fourth, because public-sector professionals flowed back and forth between agencies, the takeover agencies could draw on the expertise of *all* professionals in the public sector—getting a specialist seconded to them, often from the taken-over agency itself. Indeed, creating a pool of such expertise in the public sector of the Northeast may be one of the most important contributions of the Northeast projects—not fully appreciated precisely because it is an externality and therefore not captured in the evaluation of any particular “unstable” agency.

The takeover phenomenon, and its association with better performance, throws some light on the issue of working with established agencies versus creating new ones. Learning from past experience, the Bank and the Brazilians decided to work through *established* agencies in the Northeast projects—creating from scratch only a “modest” project-coordinating unit, which had no executive functions. But the takeover stories often showed good performance coming also from agencies *not* established or specialized in a particular activity, and *not* originally meant to carry out the component—as well as from dynamic managers *not* wanting to play “modest” coordinating roles. The importance of takeover also helps explain why there was so much dissatisfaction with agricultural extension, research, and credit: these components were simply more difficult to take over than the others. Finally, takeover was not always associated with good performance, and established agencies designated at appraisal did not always perform poorly. Rather, takeover and good performance were associated with each other in enough cases to draw one’s attention and to require an explanation.

Mobilizing Additional Finance (Chapter 3)

Better-performing projects, or pieces of them, frequently elicited the mobilization of additional resources above and beyond what was expected at appraisal—by governors, agency managers, state secretaries, mayors, banks, or beneficiaries themselves. These resource-mobilizing initiatives merit close attention because they occurred at a time of extreme fiscal austerity in Brazil, when it was difficult enough to get the Brazilian government to come up with counterpart funding for the projects, let alone with unanticipated *additional* funding. Three examples of this resource mobilization follow.

(1) A state loan fund for works projects in municipalities resulted in a kind of informal municipal betterment levy in the form of land, materials, and fencing. (2) A Bank imposed ceiling on per-hectare costs for tubewell and riverine irrigation led to the unanticipated donation of land for small-scale irrigation by municipalities and by private

farmers in an innovative cost-sharing arrangement. (3) A healthy spread between the return paid by rural banks on deposits and what they earned on lending led to aggressive mobilization of deposits by rural banks *and* increased lending to small farmers. Interestingly, none of the incentives of these cases to mobilize additional resources were intentional, but there is no reason why they could not be.

A considerable part of these additional resources came through municipal governments. Yet they had no formal role in the Northeast projects because they are typically seen as bankrupt, clientelistic, and the technically inadequate, which is often true. In each category of examples, some cases involved the Northeast projects, some involved other projects intermingled with the Northeast projects, and a few did not involve these projects at all, though the design features and place of implementation were quite similar. The way in which the municipalities were drawn into resource mobilization, moreover, transformed them into a source of healthy outside pressure on *state* agencies to behave accountably, get things carried out on time, keep costs down, and use less sophisticated and capital-intensive standards. Bank staff had tried, often to no avail, to accomplish the same thing.

Bank concern about resource mobilization has concentrated almost exclusively on securing the commitment of counterpart funding *before* projects begin, and in cajoling federal and state governments to come up with the promised funding during implementation. The additional resources mobilized in these cases were *not* committed beforehand: they resulted from a structure of incentives that made it worthwhile for institutions and individuals to contribute *after* things got going—and in a way that did not add to inflation or the fiscal deficit. Bank-sponsored and other research, moreover, has demonstrated that the mobilization of rural savings is critical for the development of strong *rural financial institutions* which, in turn, are critical for agricultural development itself. But the Bank’s agricultural and rural development projects have not linked the provision of credit to the mobilization of deposits, a linking that could also help to solve the problem of excessively subsidized interest rates.

The Question of Land (Chapter 4)

Some important lessons about land emerge from putting together (1) the above-noted cases of additional resource mobilization in land, (2) some aspects of agrarian reform and settlement in Bahia, Ceará, and Maranhão, and (3) a successful experience with cooperative land purchase and settlement in Sergipe. There was some variation across these cases in the characteristics of land tenure and the availability of land for expropriation or purchase. Nevertheless, some common themes ran across these

disparate cases which pointed to an approach to land settlement that was cheaper, quicker, more decentralized, more reliant on settler participation, less adversarial than expropriation, and more economically viable.

First, land markets worked better for small farmers when local organizations (coops, labor unions, local government) and beneficiaries participated in the search for land, the decision to acquire it, and the settling of its price. Second, this more decentralized approach introduced some checks against collusion between large landowners and the state. Third, many cases of successful land transfer (and of successful agricultural development) took place at the edge of "internal frontiers" in *already settled* regions, where the market promised clear returns from the intensification of agriculture in small farmer crops—tomatoes in Ibiapaba, oranges in Sergipe, irrigated vegetables in the Irecê region of Bahia. This particular feature stands in contrast to the customary view that the increase in land values accompanying development and the intensification of land use makes land-transfer actions *less* possible. Fourth, opportunities for transfer in the more settled regions occurred in "patches" rather than the large blocks customarily envisioned by planners for settlement projects. Fifth, dedicated project managers were highly motivated to make land markets and other mechanisms work in a way that would "produce" land parcels at low cost or none at all, because (1) expropriation of parcels under 500 hectares was not allowed by the law, leaving purchase or acquisition by donation as the only option available for acquiring smaller parcels, and (2) more project funding was available for infrastructure investments and agricultural services than for land acquisition (by expropriation or purchase). Sixth, small-scale private irrigation associated with high-value agricultural production was a notable feature of several of the cases reviewed.

The lessons of these cases suggest greater possibilities for land transfer to landless farmers than those conveyed in the *World Development Report, 1990* on poverty. They also have particular relevance for that report's new focus on "rural infrastructure" as a means to bring about equity-oriented rural development. In the most successful cases described above, that is, project agencies strictly linked the provision of roads and irrigation to the process of acquiring land and transferring it to small farmers. The Ibiapaba project was an exception: the project provided roads and electrification without securing the distribution of land, contributing to the inequality of landholdings becoming worse than it was before the project.

Research, Extension, and Agricultural Development (Chapter 5)

During the episodes of successful dissemination of improved varieties, the *nature of the task and the environment*

faced by the executing agencies was strikingly different from what they were doing during other times. The chronic inability of research and extension to collaborate disappeared; or coordination between extension and research turned out *not* to be necessary for adaptation and dissemination to occur. Many of these episodes originated in "campaigns" against crop disease and pests—the boll weevil in the cotton-producing states, orange disease in Sergipe, and banana-root fungus in Paraíba—and transformed the work environment of research and extension in the following ways:

(1) Attention was riveted on a *single crop*, or a *single problem* with that crop. (2) Results were clearly *measurable*, penalties for poor performance were high, and performance was judged in terms of *outputs* (for example, reduced levels of pest incidence, number of diseased plants eradicated). (3) Powerful "demanders" were frequently on the scene, loudly clamoring for results—governors, directors of other agencies, mayors, farmer associations, and high-level officials who worried about the serious impact of possible crop loss on state tax revenues and on the region's agricultural economy. (4) The task had a *clear beginning and end*, usually within the four-year period of a governor's mandate and sometimes even within a one-year crop cycle—well within the five-to-eight year life, in other words, of the RD projects. (5) The intense public-sector effort mobilized around the crop in a particular region, and for a limited period of time, guaranteed the smooth *supply of the improved inputs* that was so problematic in more routine times; reducing input-supply uncertainties, in turn, made adoption more attractive to small farmers. (6) The *agency* itself felt energized, and instilled with a sense of mission, by having such a concrete and dramatic problem to work on, with potentially large and foreseeable results. (7) *Local boosterism* played an important role in driving many of these stories of agricultural dissemination and, more broadly, of microregional development. Though this list of traits might seem unique to disease and pest campaigns, various other episodes of good performance by extension and research turned out to have at least some of these same characteristics.

The traits named above contrast sharply with those under which extension and research customarily work. Typically, (1) performance is measured in terms of *inputs*—number of farmers visited, number of courses given, number of demonstration plots—as opposed to outputs like adoption rates of improved varieties or yield increases; (2) agencies work on a *broad* agenda of crops and activities, and for *open-ended* periods of time, with no urgency behind the introduction of any particular improved variety or practice; (3) frequently, neither the private nor the public sector is able to provide the improved inputs smoothly, in a timely way, and at reasonable cost—thus reducing the returns to be had from their adoption. The disease campaigns and

other episodes of better performance redefined the task of extension and research, in sum, in a way that made it possible to get good performance out of the same agencies that did not do well with a much broader agenda.

Conclusions and Recommendations

Projects performed better when (1) agencies had more control over the quality and pace of project execution, which they acquired partly by carrying out tasks that other agencies were supposed to—or by contracting these out and supervising them; (2) project tasks were particularly “easy,” or new agencies and units could “cut their teeth” on easy first tasks, or the project was changed in a way that made difficult tasks easier; (3) incentives were such that additional financing from government or beneficiaries was elicited during the course of implementation, and in a way that made for better-quality projects; (4) agencies were subject to pressures from the outside to be accountable, particularly pressures from “demanders”; and (5) there was an unusually complementary combination of action by state and local government—the local involvement helping to reduce costs and delay, make state agencies more accountable, and elicit the greater use of local materials and labor.

Though the importance of *demand pressures* in inducing good performance is not a new finding, the Bank and other donors customarily take a “supply-side” approach to project design—dedicating themselves mainly to building up the capacity of particular agencies. Though the realm of demand might seem beyond the reach of project officers, the experience reviewed provides numerous examples of how agencies could be subjected to these kinds of demand pressures. Two particular suggestions are:

- “Good” governors and other elected leaders could be attracted to support projects more by breaking up planning-and-execution periods into four-year cycles that coincide with the election cycle. These leaders could be allowed to pick and choose from a “menu” of possible activities that the Bank would support—which is what many governors did anyway, in backing only the components they liked best and sometimes raising additional funding for them. There should be enough flexibility for one state to choose rural water and another small-farmer credit—just as the Sergipe governor and the Pernambuco governor, respectively, did. This contrasts with current project design, in which the many components and the long execution periods cause elected leaders to lose interest, or use project resources simply to meet short-term budget needs or pay off political debts.

- Executing agencies should be subjected to demand “shocks” by channeling a part of their funding through the “users” of their services—not just beneficiary groups, but other public agencies, development banks, municipal governments. Just as the takeover managers contracted out

what they could not do themselves or get the executing agencies to do, the demanders would “contract” the supplier agencies for their services. Funding supplier agencies through users would also bring to the project environment the traits of the successful cases: narrowly specified tasks, measurable and conspicuous standards for performance, and clear penalties for not performing.

Activities should be chosen for funding and assigned to particular agencies partly in accordance with their relative *ease and difficulty*. Some examples of possible “easier” tasks—at least to start out—are campaigns to combat epidemics of crop disease and pests, installation of simple rural water systems, and some forms of land acquisition. Given the new interest in rural infrastructure, moreover, it must be recognized that established infrastructure agencies often do quite poorly at tasks assigned to them by Bank projects of this nature; other agencies, with less experience or specialized expertise, often do better. This suggests that such activities should sometimes be placed outside their traditional bureaucratic homes, perhaps only temporarily, in “inappropriate” agencies or even new units—if these units are more motivated by sympathy and outside pressures to do well.

With respect to the lessons to be drawn from the *takeover* experience in general, (1) a *single* agency should be given sole power over a project, whether the tasks are few or many, whether that agency is an established one or new, or whether it is an executing agency or a coordinating unit; and (2) that single agency should be given the political and financial wherewithal to carry out the project’s tasks itself or contract them out—to other public agencies, private firms, or nongovernment organizations. The lesson of the takeover experience, in other words, is *not* that (1) the Bank should go back to creating new and powerful parastatals; *nor* (2) that project units (as opposed to other agencies) should necessarily be given the power to carry things out themselves; *nor* (3) that the number of tasks should simply be reduced—though that wouldn’t be a bad start.

Based on the findings stated above, the operational conclusions for *research and extension* are fairly clear. (1) Projects should favor single-crop or other highly-focused interventions, with a clear beginning and end, and that tend to have results measurable in terms of *output*. Though the broad-palette type of support currently provided is more consistent with the recent emphasis on farming-*systems* research, it is also organizationally burdensome; this kind of support is more appropriate in projects dedicated to building up a *single* agency over a long period of time—like the Bank’s successful support to Brazil’s agricultural-research parastatal, EMBRAPA, over many years. (2) Projects should fund research and extension at least partly through “demanders” because they place a higher value on applied work and dissemination than research agencies do. (3) Projects

should fund research centers to more widely disseminate one or two of their favorite successes.

More generally, the Bank should (1) take more of an "urban" approach to its rural projects—as in its "intermediate-cities" projects in Brazil and elsewhere—resorting to matching funds and other incentives as a way of (a) tapping into the resources and developmental entrepreneurship available at the local level, and (b) placing certain functions at a level where they work better; (2) pay more attention to linking small-farmer lending to the mobilization of rural savings, which may require projects focused exclusively on rural financial institutions and *not* therefore embedded in agricultural-development projects; and (3) act on the myriad possibilities for mediating the transfer of land to small farmers for productive agriculture in a more decentralized way, particularly in conjunction with the provision of roads and irrigation water.

Notes

1. In commenting on a draft of this report, the Secretariat for Regional Development of the Office of the President emphasized that this report does not follow the usual approach used by the World Bank in analyzing Bank-financed projects. As explained in the text this study is, intentionally, *not* an evaluation of the Northeast projects, but has viewed them with a particular question in mind and a concern for arriving at conclusions of general utility outside RD and outside the Bank. The Secretariat would have also liked to see a fuller treatment of various issues (the economic, political, social and cultural context of the region and the country; the relationship of the take-over discussion to issues of management and of the allocation of resources

among components; the relationship of good performance to different social groups like landowners, squatters, sharecroppers, tenant farmers; the relationship of the single-crop successes to issues of market distribution, information on which project did well in terms of spending a lower percentage of project tasks on administration). We could not be more in agreement that these subjects merit a much fuller treatment, but were not able to do so because of constraints on time, financial resources, and length of the final report. We agree that these are issues of importance, and would endorse the need for further evaluation work, as the Secretariat suggests, on the joint World Bank and Government of Brazil projects in the Northeast. The Secretariat would also have liked to see an investigation of the components where interagency coordinating did *not* work well. We have not, indeed, analyzed poorly performing components in detail in this report, partly because we have done so more generally in other evaluation studies, particularly OED's 1988 report on (worldwide) experience with RD. More to the Secretariat's point, this report does describe what worked well in the context of the most frequent types of failures—for example, to deliver credit on time for planting, of extension and research to collaborate, of projects or components to be carried out on time. A number of OED audits have discussed the problems of individual projects. This work is no substitute for an evaluation of the portfolio of projects, or a study of Northeast Brazil, rather it uses the unusually large sample of related projects to provide pointers to the Bank and development economists generally on effective project design for delivery of assistance to the rural poor.

2. Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe, and Minas Gerais. See note 3 in Chapter 1 for an explanation of why the non-Northeast State of Minas Gerais was included in these "Northeast" projects.

3. The Bank's Regional Office notes that the "second generation" of projects has been reformulated. The lessons distilled in this report have been drawn from the first and second generation projects, as originally implemented. The Region has also commented that "the implementation of the 'second generation' is only, at best, at the midpoint and has been very distorted by financing problems, conclusions reached drawing on experience from that generation are largely unrelated to the project design."

4. Apoio para Pequenas Comunidades Rurais (Support to Small Rural Communities).

2. Reinventing the Projects

Projects or components that worked well often ended up being substantially different from their original design, and in consistent ways. Many of the instances of good agency performance, moreover, originated *outside* the agencies meant to carry them out, and in agencies not specialized in that particular activity. The themes that ran through these episodes of better performance—regardless of the component—are the subject of this chapter. Briefly:

- The activity was often carried out within a time period *shorter* than the five to eight years planned for at appraisal. Longer-term, ongoing tasks were often transformed, in effect, into shorter blitz-like programs.
- As carried out, the project activity frequently amounted to a much *simpler* version of what was envisioned at appraisal, or worked better only after a process of re-definition and paring down.
- *One or two project components* were elevated to center stage. A governor chose a “signature activity” from the project’s myriad activities, and supported it lavishly; or project managers themselves were drawn to a particular activity, which they saw as the “locomotive” driving the rest of the project.
- Good performance could often be attributed just as much to the relative *ease of the task* assigned an agency as to that agency’s inherent capabilities. Similarly, bad performance often reflected the difficulty of the task.¹ The process of re-defining the project’s central task, and narrowing down its reach, also made project implementation easier than it was as originally conceived.
- Project management was unusually subject to clearly identifiable *outside pressures* to get things done, reach significant numbers of people, reduce costs, or be accountable in other ways. These “demand-side” pressures came from governors, beneficiaries, other state agencies, municipal governments, nongovernment organizations, and the World Bank.

- Dynamic public managers often *took tasks away* from the agencies to which they were assigned by the project, for reasons explained below. That the “taking-over” agencies could do well at an activity with which they had no track record requires some explanation; it also raises questions about the standard approach to project design, whereby project components are assigned to the established agencies with expertise and a history in a certain sector—roads to the road agency, irrigation to the irrigation agency, and water to the water agency.

This chapter starts with the takeover phenomenon, because it was partly through the attempt to understand why takeover was happening that the other five themes emerged.

Taking Over

Dynamic and successful agency managers almost always took over tasks from other agencies meant to carry them out. The project unit in Bahia took over the rural-road component from the road-building agency; Piauí’s project unit took over rural water supply from the water agency and, in an earlier period, kept control over the land-acquisition component long after a state land agency was set up to carry it out; Paraíba took over rural road construction from that state’s road agency; in several states, project units spearheaded initiatives to provide credit to small farmers in a way that circumvented the central role assigned to the official banking system for this task—namely, the Central Bank, the Bank of Brazil, and the Bank of the Northeast.

Though the units set up to coordinate the Northeast projects were responsible for many of the takeovers, dynamic managers in already-existing agencies with executing responsibilities also took over responsibilities belonging to other agencies. In the Ibiapaba project of Ceará, the extension service took over the siting of rural

roads from the road agency; Ceará's federal land agency took away land-settlement activities belonging to the state land agency, as well as agricultural-extension tasks belonging to the extension service; Bahia's federal land agency took over land-demarkation and parceling activities from the state land agency; Sergipe's rural water agency took from the state power utility the responsibility for supplying small irrigators with the transformers, the cost estimates, and the design work for connecting them up to the power network.

When the project-coordinating units took activities away from the agencies meant to carry them out, they did not necessarily carry the tasks out themselves. Piauí's project unit contracted out the drilling of wells for drinking water to private firms, a task meant to be carried out by the state water agency. Bahia's project unit contracted out road improvements to small local contractors instead of to the state road agency. Bahia's federal land agency contracted private firms to carry out land surveying and demarcation tasks, a task traditionally done by the state land agency and the federal land agency *itself*. Sergipe, mainly at the governor's initiative, created a new agency to carry out the rural-water component, instead of working through the existing state water utility. All these arrangements were not foreseen at appraisal.

Takeover agencies that contracted out the taken-over tasks to other agents did not always use private firms. Sometimes they used nongovernment organizations—Bahia's project unit contracted out agricultural extension and irrigation to the cooperative in the Irecê region, after taking those activities away from the state agricultural extension and water agencies. Sometimes they contracted other agencies in the public sector itself—Paraíba took road construction away from the state road agency and contracted the Army instead; Bahia's project unit turned partly to municipal governments, instead of the state road agency, for contracting out road improvements to local contractors; Ceará's project unit relied on the extension service rather than the road agency to plan the siting of rural roads; and several project units turned to the state development banks, rather than the Bank of Brazil and the Bank of the Northeast, to carry out small-farmer credit components.

The kind of rule-breaking and aggressive managerial moves that takeover involved are typical of dynamic and successful agency managers around the world. That the projects could attract such good managers and give them the rein necessary to make things work well, then, should be considered a sign of success and not a problem. But the takeovers also reflected the immense time and energy these managers had to invest in going *against* the grain of project design—lobbying the Bank and the Northeast regional development authority to accept their suggested changes, as well as fighting local bureaucratic battles to shoulder aside

executing agencies that felt they had a place in the project guaranteed them by the loan agreement. In some instances, Bank staff were flexible about takeovers, recognizing their importance as "catalysts." But even in these positive cases, they worried that takeover contributed to bureaucratic redundancy, and therefore were loathe to condone the practice. This kind of redundancy, however, has often been pointed to as a source of innovation and good performance.²

Takeover did not always work well. Without expertise and experience in the taken-over activities, takeover agencies sometimes carried them out poorly. When this seemed likely to be the case, Bank staff opposed the takeovers. Sometimes, the takeover managers themselves did not always like the results of what they did, though they thought the takeover arrangements better than leaving things where the project had assigned them. Takeover, needless to say, usually created resentment and opposition to the project in the agencies from which tasks were taken away.

Most significantly, takeover seemed to undermine one of the major goals of the Northeast projects, and of rural development projects in general—namely, to build strong institutions in the public sector. In the 1970s, the Bank often created new agencies to implement its rural development programs, as a way of getting around the problems of low salaries, inefficiency, and rent-seeking behavior in existing public agencies. Though this approach had previously worked satisfactorily in the infrastructure sector—for reasons discussed below—it did not transfer well to rural development. The new project agencies came to be resented by the rest of the public sector, whose cooperation the new agencies needed, for their better salaries and working conditions. When the project ended, some of these new rural agencies simply died—in contrast to the infrastructure case, in which an initial project tended to be a *successful* first step in building a capable agency; or just the opposite occurred, with the new agencies becoming too powerful for their own good—too centralized, too extravagant, too unwilling to relinquish responsibility to others who could do things better, including beneficiaries. New agencies created for land settlement projects came under particular criticism for the latter reason, including the only land-settlement project funded by the Bank in Northeast Brazil, Alto Turf (World Bank 1985).

For all these reasons, the Bank and the Brazilians agreed not to create new agencies to carry out the Northeast projects. Instead, they would work through and strengthen existing public-sector institutions, no matter how inadequate they were. The only new entity would be a "modest" project-coordinating unit in each state,³ usually located in the agricultural planning or planning agency of the state government. The new unit had no power to carry out activities like road-building or agricultural extension, but would

simply plan, coordinate, and monitor the carrying out of these activities by the existing agencies; though it was the lead agency in the project, it had no power to tell the executing agencies how to do things, or to withhold funding from them for poor performance.

If takeover behavior had been consistently associated with poor performance, it would be looked at as simply one of the many problems that affected rural development projects, or as the result of poor supervision by the Bank. But the fact that takeover was the standard operating procedure of the best project managers suggests that the design of the rural development projects was flawed and that the strengthening of established agencies was not happening according to plan. Moreover, the very success of the projects in attracting dedicated and dynamic managers laid the groundwork for takeover: these kinds of managers weren't interested in playing "modest" facilitator roles. Understanding why the good managers were always out to take over from the established agencies provides some clues about how to improve project design.

Why and How

Good managers took over from other agencies for various reasons.

- Most important, they and their staffs *preferred* carrying things out to "merely" coordinating them; project execution conferred more power and prestige than coordination, was more satisfying, and had a transforming effect on agency morale.
- Takeover managers thought the established agency was *performing poorly*—proceeding too slowly, doing shoddy work or not being committed to the project's goals, particularly those of assisting small farmers and the poor.
- Takeover gave agency managers more *control* over the pace, quality, and cost of project execution, all of which they felt keenly responsible for; when established executing agencies themselves took over tasks from others, they saw this as necessary to making their own components work properly—as in the case of the rural water agency that took from the state power utility the responsibility for providing transformers to small irrigating farmers.
- The established agencies frequently found it difficult to meet the large *surge in demand* for their services caused by the project, even if they had been performing adequately until that moment.
- The projects, or one of their components, often attracted the strong support of a *powerful state governor*, whose pressure for "results"—often beyond those originally planned for at appraisal—could not be met by the established agencies if they continued with "business as usual."
- The taken-over task was *quite different* from what the established agency was used to doing, even though it seemed to be the same thing—small irrigation instead of large irrigation, spot road improvements instead of rural road construction, irrigation instead of rural water supply, extension services for small farmers instead of large farmers, rural water supply *with* maintenance and operation instead of just installation of the system. Also, the taken-from agency perceived this different task as being more technically or administratively difficult, or less professionally "appropriate" than what it was doing—even though a changed approach was central to achieving project objectives of reaching the poor, reducing costs, and decentralizing the planning and implementation process.

How could agencies with no experience at a certain task have simply taken over from the established agencies and done a reasonable job—especially in an environment of weak public-sector institutions? What does this say about the "new wisdom" of not creating new agencies, and of instead building capacity over the long term in particular agencies specialized in particular tasks? The takeover agencies were able to carry out tasks to which they were unaccustomed because:

- They drew on the expertise of all the agencies in the state's public sector, always bringing a good specialist or two from outside, often from the taken-over agency itself.
- They sometimes contracted out the work to private firms, nongovernment organizations, or other agencies; even though they still weren't doing the work themselves, this gave them the power to supervise closely, hesitate over contract renewal, or threaten to withhold payment—a power they did not have when they were "just" coordinating the activity through another agency.
- They tended to lavish their attention, energy, and scarce funding on one particular taken-over component, while the other components were allowed to waste away from the chronic afflictions of inadequate executing agencies, funding delays, and inflation; this gave the takeover agencies the opportunity to do a few components "right," and produced a final version of the project that was narrower than the original, with fewer agencies playing an active role.
- In some cases, the tendency to narrow the project down was reinforced by strong support from a governor, who usually pushed for one particular "signature" activity, like rural water supply, small-farmer credit, or irrigation.
- The ability to attract, retain, and protect a few high-quality professional staff seemed more central to these

successes than a long history with a particular activity; the best managers, whether involved in takeovers or not, were more concerned with quality issues regarding personnel than with staff numbers; they would work hard to get a few good professionals seconded to them from other agencies, fight for the establishment of merit criteria in hiring, and fiercely protect their prized professionals from political interference.

- The project tasks that were perceived by the established agencies as being different, more difficult, and less desirable than what they were used to doing were sometimes *easier* for the takeover agencies or more appropriate to their skills; as soon as rural water supply was defined to include organizing the community to operate and maintain its new well, for example, this took the activity onto a terrain more familiar to the project units—with their field agents trained to carry out the community-participation component.
- Many of the takeover successes were driven by an “inside” lobby of bureaucratic enthusiasts in the takeover agency; though such individuals could be found scattered throughout the public sector, including the taken-from agency, their influence had been diffuse and they usually did not have power in these other agencies; turning them into a critical mass in the takeover agency, and backing them with the strong support of a dynamic manager (and, sometimes, a governor), was crucial to the success.

The Taste for Execution

The preference for carrying things out explains, in part, the great enthusiasm for and attention lavished by project units on the community-participation component (APCR). Though enthusiasm for APCR ran high throughout the Northeast because of its participatory style, there is no question that its special role as the project unit's *only* executing responsibility in the majority of the states also attracted intense bureaucratic energy to it.⁴ APCR was the only component for which project units had a chance to prove their mettle as executors without takeover, the only activity for which they were not dependent on the good will and competence of other agencies, and the only activity for which they could build a constituency genuinely beholden to them. It is understandable, then, that APCR always survived the narrowing down of the Northeast projects to their most “do-able” parts.

The taste for execution also helps explain the unusual performance of the water component in meeting its projected goals on time and, in many cases, exceeding them—though performance in maintenance subsequently proved inadequate, as discussed below. APCR, that is, provided a foot in the door to project managers for their takeover of ru-

ral water supply and other activities⁵ that required a presence in rural communities. Because of the poor record on operation and maintenance of rural water systems, the Bank has recently taken the position that communities be made responsible for the operation, financing, and maintenance of their new wells—and that these arrangements should be in place *before* the well is drilled. Water agencies and engineers were not used to, or particularly interested in, doing this kind of organizational work (see below); the APCR staffs, in contrast, were quite involved in community organizing for the APCR projects, and therefore greeted the task of organizing for water with enthusiasm, seeing it as a mere extension of what they were already doing. Once the APCR staffs took over the community-organizing activity for water, it was a natural next step for the project unit to take over decisionmaking and supervision around the installation of the wells themselves. APCR staff wanted this too, because it enabled them to make sure that once the community was organized, the water would arrive in the form, at the time, and in the place it was supposed to. When that didn't happen, their credibility in the community's eyes was diminished.

Difficult and Easy

As with rural water, other cases of good performance originated outside the agencies specialized in that activity. The largest land-purchase scheme of the Northeast projects was carried out mainly by a newly created project unit in the state planning agency of Piauí, rather than by a land agency; the most promising experiments in small irrigation for landless farmers in Bahia were carried out by a combination of the project unit and the local cooperative—both neophytes in irrigation—rather than the rural water supply agency, which was one of the most experienced in the Northeast; some of the best results achieved in getting credit to tenant farmers worked through ad hoc commissions of state institutions, rather than directly through the banking systems designated at appraisal; in Pernambuco and Sergipe, field testing and adaptation of important mechanical innovations coming out of agricultural research were carried out by non-specialized, applied agencies rather than the research agency itself—the cistern for household water, and implements for animal traction, as discussed in Chapter 5.

In all these cases, as with rural water, the task was more difficult for the established agency than for the takeover agency. Doing it right required a change in an agency's previous way of doing business, which its professionals usually didn't like, and a certain loss of autonomy. The task redefinitions therefore became part of the cause for poor performance by the established agencies, as well as a reason for many of the cases of takeover. At the same time,

redefining the task put it more within the reach and the tastes of the non-specialized takeover agency. And getting specialist help was not difficult, given the ease with which state agencies could borrow professionals from other agencies—especially when they had the support to do this from powerful governors and agency managers.

Whether or not tasks were redefined, they varied greatly in their relative ease or difficulty. Rural water is a good example because of the importance of explaining its popularity and performance in the Northeast projects, its takeover by project-coordinating units, and its partial displacement of other components like agricultural extension, credit, and irrigation. Accounting for less than 2 percent of appraised costs of the second-generation projects, water had already reached 10 percent of expected costs two to three years into project implementation.⁶

The simplified stand-alone rural systems and standpipes of the Northeast projects were “easy” because they received crucial political support. This approach to water allowed governors to “deliver” to large numbers of dispersed rural populations within short periods of time. More centralized approaches to water, including individual household connections, took longer to plan, finance, and execute than the four-year term of office within which governors wanted to show “results” —as discussed below. It was precisely on these grounds that Sergipe’s governor rejected a 150-kilometer pipeline proposed by his water engineers to meet the state’s rural water problem, and opted instead for the more decentralized, stand-alone wells that could be put in place more rapidly.

Water agencies also viewed water (rural or urban) as easy in comparison to *irrigation*, as discovered by the state water agencies that moved from water to irrigation.⁷ They saw irrigation as more “analysis-intensive,” requiring more time, more skill in supervising contractors, and therefore more delay until installation could begin. Irrigation also involved more dependence on outside actors and other expertise than did drinking water—a knowledge of agricultural practices in the region, land-tenure constraints, and existing water-using customs. The water agencies switching from drinking-water supply to irrigation complained of this loss of autonomy and increased complexity. They were disappointed that their performance in irrigation was not up to the reputation they had built in water. In addition, the planning of irrigation projects often unleashed project-delaying conflicts over the use of land and water, which drinking-water projects rarely did.

Spot checks of water systems installed under the first-generation projects sometimes found only half of them to be working, a finding that is not infrequent in such programs. This suggests that the good performance in completing the rural water component cannot be viewed as an unsullied success, and that rural water is “easy” only if op-

eration and maintenance are not taken into account. Even as a construction task, however, rural water’s *exceeding* of its targets only a few years into implementation of the second-generation projects is still impressive—given that (1) expenditures for the whole program were only half of what was expected by that time, (2) there was a marked lag in progress in other *construction* components like irrigation (or roads under the first-generation projects, where expenditures were only 67 percent of appraised levels). In addition, organizing communities for finance, operation, and maintenance *before* their water is supplied—as the Bank is now insisting—may actually make rural water supply *and* maintenance more difficult. In a small survey of systems that *were* functioning well, that is, community organization around water operation was *not* the explanation (Beteta 1990c). More commonly, a private individual using the water for productive purposes had organized and financed the operation of the system, and also distributed the water equitably—suggesting that the emphasis on community responsibility for maintenance and financing of rural water may be misplaced.⁸

Insisting that communities be organized around rural water supply *before* wells are drilled also turns an easy task into a difficult and long drawn-out one. It deprives rural water of the support from elected leaders who choose programs according to how fast they can be completed, and also of the enthusiasm of technocrats committed to “delivering” something to the poor as soon as possible. This does not mean that the maintenance problem can be ignored. Rather, (1) some simple evaluation work needs to be done on the institutional design associated with the better-operating systems, given that the partial findings of this review do not point to the kind of community approach followed by the Bank; and (2) it may not be such a bad idea, in the interim, to work on the maintenance problem *after* the wells are installed, in order to preserve the “easiness” of construction. This is actually what the Bank has been doing with some success recently, refusing to disburse on new water systems until the old ones are put into working order. In not taking this stance more routinely, the Bank may be at least as responsible for “the maintenance problem” as are the communities that failed to organize. Whatever the ultimate choice, it is important to understand that organizing communities to maintain and finance the operation of water systems has considerable costs in terms of depriving rural water of its unusual “easiness.” Beteta’s findings, luckily, raise some doubts about whether community organizing around water is indeed a prerequisite for success at operation, and suggest that there may be less cumbersome ways of getting community water systems to function well.

The relative easiness of a task also depended on the nature of the executing agency, and what it was used to doing. The simplified rural water programs of the Northeast

projects would seem easier than urban water supply because they were less technically sophisticated and involved stand-alone systems, usually without individual household connections. But *urban* water agencies saw rural water as more difficult than urban: they couldn't charge as easily for water in rural systems, they were barred from the capital-intensive, central-system solutions that they liked and were accustomed to, they had little opportunity to use their sophisticated engineering skills, and the operation and maintenance of the system depended on the unpredictable behavior of users more than in urban water—at least for the way the Bank was insisting that operation and maintenance of rural water be done.

A similar distinction can be made with respect to public and private *irrigation*, or large and small. State-government agencies frequently viewed *private irrigation* projects as easier than public ones, or smaller as easier than larger. The eminent-domain proceedings and displacement of inhabitants required for public irrigation projects, coupled with the long time period over which these investments were carried out, caused conflict, resistance, and apprehension. As a result, governors and other state officials increasingly came to see public irrigation projects as politically costly. In the eyes of the established irrigation agencies, however, *private* irrigation was more difficult. Instead of being able to design self-contained and dramatic projects, starting with the *tabula rasa* of newly expropriated land along an irrigation perimeter, private irrigation projects had to work with existing patterns of landholding and water use, in a more piecemeal fashion, and with less conspicuous physical results.

For similar reasons, many considered *land purchase* easier than land expropriation. Purchase did not unleash the costly conflict and delay that expropriation did, and purchase gave more control than expropriation to the lead agency—just as drinking-water supply was more within the control of a water agency than irrigation. Purchase depended less than expropriation on the concurrence, hard work, and ethical behavior of other institutions—the court system, the legislature, other land agencies. In addition, purchase was something “any” agency could do—not just, as in the case of expropriation, an agency with formal authority over land matters. Though project-coordinating units and other non-land agencies did not have the formal authority to expropriate, let alone to execute other components, they could obtain the authority to purchase.

Spot improvements on rural roads and the use of small local contractors, though technically less sophisticated than road-building or re-construction, could be managerially more complex because they required the letting out and monitoring of many small contracts.

The examples above show that the ease or difficulty of a task did not necessarily inhere in the technology of the task itself, but also related to (1) its organizational or managerial

features; (2) what the agency had been doing previously and was specialized in; (3) whether the staff members of the relevant agency liked the task, determined in part by whether they considered it “professional”; and (4) the amount of pressure or support for that particular activity that came from outside the agency. For each agency that didn't like a particular task, moreover, there was often another one that *did*. Whereas irrigation agencies preferred large to small irrigation, as noted above, the less specialized state agricultural agencies or project units preferred *private* irrigation to public. Whereas state power utilities didn't like the complications of attending to the requests of numerous small irrigators for transformers, agricultural agencies did. Whereas road agencies didn't like carrying out analyses of traffic flows and concentrations of farm production in order to site farm-to-market roads, agricultural extension agencies did.

Among the infrastructure agencies, in sum, the most significant task redefinitions of the Northeast projects required that agencies change (1) from rural road construction to spot improvements; (2) from rural water supply to irrigation; (3) from urban water supply to rural water supply; (4) from individual household connections to community standpipes; (5) from large irrigation to small irrigation; and (6) from construction (in roads and water alike) to operation and maintenance.⁹ These changes, in turn, created problems for the agencies involved. *First*, though the redefined tasks were often less sophisticated technically, they could be administratively more difficult to the extent that they required a more decentralized style of operation. *Second*, the redefined task required more cooperation from users and sometimes from other agencies, whereas the agency had been able to work in a more self-contained way previously. *Third*, to an agency's professionals, the redefined tasks often represented a professional “comedown” in terms of standards, prestige, and past work; the new tasks were less technically sophisticated, less equipment-intensive, and more dispersed. *Fourth*, the established agencies and their professionals simply didn't like the tasks as redefined by the project, or as insisted on by the Bank during the course of execution, partly because they were not particularly interested in the distributional objectives of the program.

Many of the examples of task redefinition and its problems come from the sector of rural infrastructure and are particularly relevant because of the new emphasis on rural infrastructure in the research on agricultural development and in the Bank's thinking about poverty-reducing rural development strategies. Namely, established infrastructure agencies will often find it difficult, or not to their taste, to come up with the “right” version of rural infrastructure in the 1990s—that is, as a leading investment in a poverty-reducing, decentralized rural growth strategy.¹⁰

Getting Around Old Agencies

The takeover agencies succeeded in carrying out tasks with which they had little experience, as noted above, partly by finding competent and sympathetic professionals in the established agencies, and borrowing them. Putting the sympathetic professionals in a more empowering bureaucratic environment—even if only temporarily—sometimes gave the redefined task a better chance to be learned and adopted ultimately by the established or taken-from agency itself. Once the new approach had been tested and proven, it became more interesting to the established agency—partly because the “invasion” of its turf by an outsider agency aroused its competitive instincts. In the best of circumstances, the taken-from agencies eventually showed interest in getting back the task they had lost and doing it themselves. When the Irecê regional office of the Bahian water-supply agency (CERB) lost the small-irrigation component to the local cooperative, its main engineer went too. After working with the coop to set up the program, he went back to CERB and lobbied hard to get the component back by showing that CERB *could* do small irrigation—and “better than” the cooperative.¹¹

To be successful, takeover need not be permanent. Indeed, it may have the most lasting effect on the way public agencies do things if it is *not*—namely, if the borrowed professionals go back victorious, after the taken-over task is successfully implemented, to their original agencies. The temporary appearance of the new agencies on the scene may have been the catalyst for getting the task to be taken up, ultimately, by the established agency. If new agencies drop out of existence when a project terminates, in other words, this does not necessarily signify the failure that it is sometimes interpreted to be.

These findings also provide a different perspective on the much-commented problem of “instability” in the management of public agencies in third-world countries. Though agencies suffer from the frequent departure of good managers and staff, as chronicled in supervision reports, other agencies may at the same time gain. Though any particular agency may be “unstable,” the pool of expertise available to work on a problem may be much less so. Creating such a pool in the public sector of the Northeast may be one of the most important contributions of the Northeast projects—not fully appreciated precisely because it is an “externality,” not captured in the evaluation of any particular “unstable” agency.¹²

Under some circumstances, then, new agencies or units may not be such a bad idea—if the tasks are technically or administratively easier than most but, for some reasons, are difficult for the established agency. Shifting the scene of activity from one agency to another, though seemingly redundant, can also help a problem to get worked on properly—

as the best of the takeover stories show. The experience and track record of an agency with a particular activity, that is, may be precisely what makes it *difficult* to that agency. Sometimes there may be good reason then, *not* to place a certain component in the hands of the established agency. At the least, the new task may do better if first developed outside the established agency.

These explanations as to why new agencies or units sometimes did well parallel the reasons for which new agencies did better in infrastructure than in rural development. For infrastructure projects, it did not matter whether other agencies were jealous and resentful, because the projects were not dependent on coordinated action with other parts of the public sector. The rural development projects, in contrast, seemed to *maximize* the dependence of agencies on each other. And to the extent that the rural development agencies were successful, it was partly by virtue of their transforming their work—through takeover—in a way that made them *less* dependent on other agencies—namely, more like the new infrastructure agencies, with their self-contained “starter” projects.

This guarded affirmation of the concept of creating new units, or assigning tasks to agencies where they don't belong, does not really fit the project-coordinating units as they were set up under the Northeast projects. The mandate of these new units was just the opposite of what is being recommended here: they were supposed to *coordinate* the activities of myriad other agencies. This burdened them with the maximum degree of dependence on other agencies, together with minimum control over the quality of what happened. And to the extent that they turned out successful as “new” agencies, it was when they did what they were *not* supposed to—narrowing down the projects to a few components, and wresting control of those components away from the agencies originally responsible for them.

Finally, explaining agency performance in terms of the relative difficulty of the task helps decipher the strange cyclic behavior of agencies. Those with years of good performance often experienced sudden and prolonged falls from grace; and those that received consistently poor grades on performance for years often showed sudden and dramatic improvements—an issue discussed later in Chapter 5. Though evaluators usually attribute these abrupt changes to the loss or arrival of a good manager or to “politics,” the factors discussed above are equally important. The sudden fall from grace of Sergipe's rural water agency, for example, relates in part to its being made to switch from simplified rural water systems to irrigation. These kinds of explanations, at the least, are more systematic—and more within the control of project designers—than “leadership” and “politics” are.¹³

Taking Control and Narrowing Down

Inflation and chronic delays in the transfers of budgeted counterpart funds from the central government to the executing agencies made planning and implementation in the Northeast projects extremely difficult. A complex approvals structure for funding transfers and for authorizing changes in project design required the approval of the Northeast regional development authority (SUDENE), the Bank and, in some cases, the respective ministry at the federal level.¹⁴ To obtain the transfers due them, agency managers had to invest considerable time in lobbying the appropriate authorities, including state and national legislators. Added to these problems was the environment of increasing fiscal austerity in Brazil, with repeated cuts in agency staffs, or threats of them, and the demoralizing effect of constant fear of these cuts on staff performance. Though Bank reports have identified and analyzed these problems extensively, and the Bank and the Brazilians have worked hard to reduce them, they still persist. Project managers coped with these problems in three ways: (1) they narrowed down the projects to one or two components, (2) they contracted other agencies and private firms for services, and (3) they escaped some of the inflexibility around their budgeting, and made up for budget shortfalls, by investing their agencies' cash balances in the money market.

The Brighter Side of Inflation

The acuteness of the problems cited above, and the way they consumed the attention of the Bank and the Brazilians, have somewhat obscured a more positive dynamic behind them. The havoc wrought on budgets by inflation and funding delays gave project managers some liberty to "re-invent" the projects more to their liking. Narrowing things down to a few favored components represents one of these reinventions. If funds were less than planned for, and if one agency didn't come through the way it was supposed to, this created a kind of chaos in which managers could stray from project norms unobserved—all in the name of "making do" with a smaller amount of funds than had been budgeted. Those who might object—the Bank, SUDENE, or the central-government ministries—were themselves distracted with the task of dealing with the same problems of inflation and delays in the transfers of counterpart funding to the project agencies.

Also contributing to this chaos-driven "flexibility" was the central government's response to high inflation, in the form of an indexed and highly liquid financial instrument, the "overnight" market. Created in the 1970s, these money-market-type accounts allowed individuals, firms, and public agencies to keep their operating funds in accounts that kept up with inflation and yielded at least a small real re-

turn.¹⁵ Even when the return to project agencies from keeping their cash balances in the overnight did no more than preserve their value against inflation, the return was nevertheless "off the budget"; it was not subject to the same regulations and scrutiny by SUDENE, the central government, or the World Bank, so that project managers did not have to obtain permission from these entities to finance activities or use procedures not sanctioned in the project agreement or annual operating plan. Project managers liked the overnight earnings, in sum, because they could be tapped whenever needed, and provided more flexibility and control over their budget than was the case with the transfers of Bank funds and central-government counterpart.¹⁶

In certain ways, then, the larger economic and institutional problems in which the Northeast projects were embedded opened up opportunities for dynamic project managers to do things more as they saw fit, and to break out of the constraints of project design—amounting to a kind of *de facto* fiscal decentralization that could not be achieved formally. This is not to say that inflation, shortfalls, and delays and the increased costs they cause are good things.¹⁷ The lesson of this "brighter side" of chaos, rather, is that good managers wanted and performed better with extra flexibility. The returns to be had from the "overnight" represented one way to gain this flexibility.

Contracting Out

The takeover managers contracted out tasks because of the different kind of relationship with the executing agent that was thereby made possible. This was the case whether these managers contracted a private firm or a public agency (or a non-profit private organization). Though the takeover managers sometimes viewed the private firms they contracted as more costly and less desirable than the appropriate public agency, they nevertheless preferred the firm because of the different kind of bargain they could strike with it—proposing that it carry out a specific task, at a specific price, and within a specified time period.¹⁸ This greater specificity was possible, in turn, partly because the contracting out happened only after the project had started, and project managers knew more than they did at appraisal. Problems had been identified, the more difficult tasks had separated themselves out from the easier, the weaknesses or unwillingnesses of certain agencies had become apparent. In contracting out certain tasks, then, project managers were also sloughing off other ones that now seemed to promise only headaches and little progress.

In contrast to these contracted arrangements, the project agreements guaranteed a place in the project for the executing agencies regardless of their performance. The project unit did not have the kind of sovereign control that it had

when it directly contracted an agent to carry out a particular task. Under the contracted arrangements, moreover, the "bilateral" negotiation between the two parties to the contract made for a more "accountable" environment of implementation. This contrasted with the numerous agents participating in a typical project agreement—the World Bank, the Northeast regional development agency, the executing agencies, the central-government ministries, and the project-coordinating unit.

Project units and other agencies contracted out, in sum, because it gave them more control than the project did over the quality, pace, and cost of execution of the project, and more power to hold executing agents accountable—whether that agent was private, public, or nonprofit. The lesson to be drawn from this experience is that inter-agency obligations in a project should follow the narrower and more highly-specified form they took in the takeover cases. This contrasts to the more loosely defined and equal relationships characteristic of the Northeast project agreements, where no single agency had the responsibility *and* the power to deliver.

The second generation of Northeast projects made a valiant attempt to narrow down the number of components. Health, education, roads, electrification, and drinking water¹⁹ were excluded, leaving "only" those components directly related to agricultural production—credit, extension, research, irrigation, land tenure, seed production and dissemination, input distribution, and APCR. Though an important step in the right direction, this improvement still left too many bureaucratic actors on the scene—the agricultural extension service, the agricultural research centers, the land agencies, the banks, and the project-coordinating units—to name only the most important.

Having a single agency in charge would not preclude that agency from being responsible for more than one activity—as the stories of successful takeover illustrate—so long as the agency has the power to do things itself, contract them out, or force other agencies to collaborate. But this would require that the Bank pay more attention to implementation in relation to appraisal.²⁰ During the first months of implementation, the early experience would be assessed and hard decisions would have to be taken about the institutional direction the project would take. The appraisal process itself would involve less the mapping of a standard rural development project onto a particular state than it would a search for a single agency that had the power, the interest, and the commitment to mobilize what it needed from the public and private sectors. The result of such an appraisal process would be closer to the stripped-down versions of the current Northeast projects, which have surfaced two or three years into their implementation. But the process of getting there would be more efficient: it

would go with the inclinations of the dynamic managers, rather than against them.

If this approach had been used to design the Northeast projects, they would not have looked so similar to each other in their appraised form. After having gone through a process of selection and winnowing from a "menu" of financeable activities suggested by the Bank, each project would have represented a unique fit to the institutional, political, and agronomic environment of its state. The Bank would have accepted, moreover, that the fit might no longer be good a few years later, and the project might have to be changed to reflect changed circumstances and new learning—as happened when the Bank allowed rural water supply to take on a larger role in the second-generation projects a few years into implementation. The Bank now believes that allowing water into the PAPP projects was a good thing to do, partly because it was able to have a constructive influence on improving the way rural water supply was carried out: the strong political pressure for water, together with the technocratic enthusiasm of project staffs for it, forced project managers to face the problems of faulty maintenance and inadequate financing for operations—as the Bank insisted—rather than to retreat in disinterest to the safety of an easier component. The lesson of the water story, then, is not just that it was a good fit, but also that this could not necessarily have been determined at appraisal. By being demanding during implementation about operation and maintenance and its financing, the Bank was shifting its energies from the appraisal to the implementation period, in effect, and having a significant impact in the sector.

The Problem with Agricultural Extension and Credit

Though takeover initiatives ran the gamut of project components, it was easier for project units to take over in water, irrigation, roads, and activities associated with land distribution—as distinct from agricultural extension, research, and credit. The more "takable" activities could be contracted out to private or other agents, while this was more difficult with credit, extension, and research.

The "takable" activities were also investment-intensive, in contrast to the staff-intensive nature of activities like extension, research, and credit. Investment activities could be more easily stopped and started at will, in accordance with the delays and shortfalls in funds received from the federal government, a chronic problem of the Northeast projects and of development projects in general; to cope with this problem, project managers simply delayed the letting of contracts, or put payments to contractors on hold. Staff-intensive services like agricultural extension could not adjust so easily to these ups and downs; they had to pay their staffs regularly, and could not lay staff off or on in accordance with the ebb and flow of funds. Political pressure,

moreover, dictated that salaries and preservation of staff always get priority—not only over investment, but over payment of non-salary operating costs like fuel for vehicles and travel allowances. This meant that the expenditures complementary to good staff performance got sacrificed when funding was delayed or fell short. In Ceará, for example, the Secretary of Agriculture reported that 85 percent of extension's costs were going for salaries, leaving only 15 percent available for non-salary operating costs.²¹

Investment programs were able to fall back on another source of funding if funds arrived late—namely, the private contractors themselves. By accepting late payment, private contractors absorbed the costs of public-sector funding delays themselves and, in effect, “advanced” to the public sector the funds for their payment; or, they simply stopped their work in mid-stream, to resume when funds started flowing again. The labor-intensive public activities like extension, in contrast, had no such mechanism for insulating project activity from the ups and downs of funding delays.

For all these reasons, project managers had less room to maneuver and to seek solutions more to their liking in the labor-intensive activities. When the performance of the extension service left something to be desired, they could not simply leave extension in the lurch, turn to another agent, or spend the money on another component—given that the projects typically financed a third of the salary costs of the extension service. But they *could* do so with water, irrigation, and roads—not only for the reasons cited above, but because capacity also existed in the private sector, and because the infrastructure agencies were not dependent on project funding to pay a significant percentage of staff salaries.

The Bank justified the funding of extension salaries in the Northeast projects and elsewhere on the reasonable grounds that this was the only way to gain leverage over extension activities.²² The result, however, was in some ways just the *opposite*: the larger the percentage of an agency's salaries that were funded by a project, the *less* leverage the Bank or project unit had. This was because of the politically disastrous consequences of withholding an agency's funding for poor performance, or transferring those funds to another agent. Similarly, and ironically, project units ended up protecting the agency they were most dissatisfied with—agricultural extension—and sacrificing the infrastructure components, which they often liked more. All this helps explain why expenditures for the popular road component were only 67 percent of those expected, while those for extension were 110 percent of expected (Table 2.1). Indeed, extension was the only major component of the first-generation projects for which actual expenditures were *greater* than appraised—and despite the fact that total expenditures were significantly *less* than expected for all the projects, only 59 percent.²³ In addition, the number of new extension staff hired under the projects was 21 percent

higher than that expected at appraisal, increasing in all but one of the six projects for which such data were available (Table 1.8). Finally, extension's share of total appraised costs was increased from 14 percent in the first-generation projects to 24 percent in the second (Table 1.7).

Though credit was also a staff-intensive service, its share of costs *fell* from 27 percent appraised to 18 percent actual, and it had the *lowest* level of disbursement among all the components—50 percent of appraised. Credit's staff intensity did not lead to higher disbursements, in contrast to extension, because the payroll of the participating banks, as well as their capital, was in no way dependent on project financing the way agricultural extension was. Credit's problems remained unresolved, however, because it was more difficult to take over than other components. The institutions handling credit under the Bank projects were more centralized than those carrying out the other components—mainly, the Central Bank, the Bank of Brazil, and the Bank of the Northeast—and operated according to standardized regulations. In contrast to the state agencies carrying out other components, these institutions were not subject to the will of state government. They could not be ordered around, and the activity could not be contracted out to others—though valiant attempts were made to do so throughout the program.

Analyzing project activities in terms of their “takable” qualities throws a different light on “the extension problem” (and the credit problem). The difficulty project managers experienced in gaining control over extension and credit, that is, partly explains the frequently poor performance of these components. Similarly, the greater ability of project managers to take over infrastructure, and the greater adaptability of these activities to stops and starts in project funding, help explain why project managers often threw up their hands in frustration over extension and credit, and narrowed down their attention to more takable components like water or land. The critics of agricultural extension, however, question the value of the activity in itself, and the quality of the service: they ask whether extension has anything to bring to a farmer that well-functioning markets cannot, and whether young extensionists with minimal agricultural training can teach anything to an experienced peasant farmer.²⁴ Though these doubts are important ones, this analysis focuses instead on some difficulties inherent in trying to elicit good performance from extension services, and their greater vulnerability to the fiscal environment.

Understanding takeover, in sum, helps explain the root of “the extension problem,” as well as others. The conclusion to be drawn from the preference project managers sometimes reveal for infrastructure (and other components) over extension and credit is not necessarily that one activity has higher priority, or yields greater impacts, than

Table 2.1: Northeast Brazil Rural Development Projects: Appraised and Actual Expenditures by Component for Eight POLONORDESTE Projects
(US\$ current millions)

Project Component ^a	Appraised		Actual		Actual as Percentage of Appraised Component
	Total Value	Component as Percentage of Project	Total Value	Component as Percentage of Project	
Rural Credit	144.87	26.8	71.90	18.0	49.6
Feeder & Access Roads ^b	111.48	20.6	75.10	18.8	67.4
Rural Extension ^c	73.60	13.6	80.94	20.2	110.0
Land Related Activities ^d	57.59	10.7	28.04	7.0	48.7
Project Administration ^e	32.78	6.1	50.48	12.6	154.0
Water Resources/Supply ^f	29.19	5.4	21.68	5.4	74.3
Education and Training	29.14	5.4	23.02	5.7	79.0
Health and Other ^g	20.60	3.8	11.73	2.9	57.0
Other Ag. Services ^h	18.90	3.5	12.48	3.1	66.0
Marketing Activities ⁱ	13.20	2.4	15.82	4.0	119.8
Agricultural Research	9.07	1.7	9.21	2.3	101.5
Total Baseline Costs^j	540.4	100.0	400.4	100.0	74.1

Sources: For appraised data, same as Table 1.1. For actual data, Project Completion Reports, Projects Dept., Latin America and Caribbean Regional Office, World Bank: WB (6/30/86; 6/2/87; 6/24/88; 6/26/89; 11/21/89).

a. Includes Rio Grande do Norte, Ceará/Ibiapaba, Paraíba/Brejo, Bahia/Paraguaçu, Sergipe/Tabuleiros Sul, Pernambuco/Agreste Setentrional, Piauí, and Ceará II. As of August, 1990, Project Completion Reports and actual expenditure data were not yet available for Maranhão and Bahia II. Because the component categories and sub-categories vary somewhat in the POLONORDESTE projects, some categories have been recombined to facilitate comparison across projects. Components are listed in descending order of importance of appraised value.

b. Includes rural electrification in the Ceará project only, amounting to 53 percent of appraised costs and 58 percent of actual costs of road category in Ceará.

c. Includes agricultural extension, social extension, and farmer training.

d. Includes land titling (Rio Grande do Norte, Paraíba, Bahia, Sergipe, Ceará II) and land purchase (Sergipe, Piauí).

e. Includes project monitoring, evaluation, administration, and preparation.

f. Includes water resources/supply and conservation (Pernambuco, Piauí); irrigation (Bahia, Piauí, Ceará II); multipurpose dams (Bahia); and inland fisheries (Rio Grande do Norte, Piauí).

g. Includes health and sanitation in Bahia, Rio Grande do Norte, Ceará, Paraíba, Sergipe, Pernambuco, and Ceará II.

h. Includes field experimentation (Ceará, Ceará II), mechanization services (Ceará, Bahia), seed production (Rio Grande, Pernambuco), farm development (Paraíba), non-farm enterprises (Pernambuco), and small scale enterprises (Paraíba, Ceará II).

i. Includes storage (Bahia), cooperative support (Ceará, Bahia, Pernambuco, Ceará II), marketing and cooperative support (Rio Grande, Sergipe), marketing (Sergipe, Pernambuco, Piauí, Ceará II), and support for small communities (Piauí).

j. Total Baseline Costs exclude: miscellaneous unallocated funds, physical contingencies, and price contingencies. See Table 1.7 for these costs.

the other. Rather, managers preferred certain activities because they offered the opportunity for greater control. This perspective helps to reconcile two seemingly contradictory impressions on extension that often emerge from reviews like this—a generalized exasperation with the extension service alongside glowing reports of particular extension successes in certain regions at certain times. The question, then, is how to increase the incidence of these successes and subject extension to more performance-inducing pressures. The successes are examined, and the question taken up, in Chapter 5.

Coordination

During the implementation of the first-generation Northeast projects, supervision reports routinely complained of how the "lack of coordination" between agencies

impeded project execution—a common problem in multi-agency projects throughout the world. In designing the second generation of projects, as a result, the Bank tried to place responsibility for particular components more squarely within particular agencies.²⁵ Coordination between at least two agencies, nevertheless, continued to be crucial to the carrying out of some components—even though this involved fewer agencies than in the previous set of projects; and the project unit continued to have the same "coordinating" role it had in the previous generation of projects, together with the same lack of power to enforce or withhold funding if performance were not satisfactory. Coordination problems continued to plague the Northeast projects, therefore, though reducing the number of agencies involved definitely helped.

Despite the repeated failures of coordination, the Northeast experience shows some striking instances of success at

coordination—often involving the very agencies that had routinely received poor grades on coordination during the life of the projects. Some of these instances of coordination occurred around the carrying out of the most favored single activities referred to above. Narrowing down the projects to a favored component or two, however, did not always mean the exclusion of the others. Sometimes, one component became the center around which the others were organized—the “locomotive” (*carro chefe*), as several project managers said, that “pulled” the others. In *Bahia*, after 1985, the project unit mobilized credit, extension, road-building, and input-supply around the “locomotive” of that moment—the agrarian-reform settlements—even though this was not foreseen at appraisal. In *Pernambuco*, the project unit organized agricultural extension, research, and credit around a special program focused on identifying and breaking bottlenecks in certain crops in certain micro-regions—also not foreseen in the appraised project (see below). In the semiarid *Irecê* region of *Bahia*, where agrarian reform was minimal, the project unit introduced collective irrigation by tubewell for the first time in the region; this became the centerpiece around which agricultural extension, credit, potable water, and APCR projects were organized. The Project Completion Report for the first *Piauí* project, in fact, pointed to that project’s land-transfer component as just such an “organizing theme” —concluding that coordination was more likely to occur when multi-component projects were organized around such “leading” themes (World Bank 6/26/89, paras. 8, 7.04). Organizing the appraised project around a single theme actually set *Piauí* apart from all the other projects, including *Piauí*’s second-generation project itself.

When coordination between agencies *did* take place, the coordination was often informal, ad hoc, and episodic—not the result of a sustained pattern of coordinated work, as envisioned in project design. These episodes frequently involved narrower, shorter-term, more concrete and results-oriented objectives. In *Pernambuco*, for example, the project unit organized small teams to carry out “lightning” canvasses of a municipio or two within two weeks; the team identified bottlenecks in the production or marketing of small-farmer crops that might be broken within a one-year crop season, with short-term credit often playing a role.

The PROMOVALE project in *Ceará*—an “alternative” to the Bank-funded projects in the eyes of the *Ceará* governor of the early 1980s—also represented a major narrowing down of the concept of an integrated rural development project, yet without necessarily focusing activity in one agency.²⁶ Though the governor focused the project on small-scale private irrigation, this did not imply narrowing it down to an irrigation *agency*. Because of the decentralized and “low-tech” approach taken by the state in this case—

quite modest in comparison to most irrigation investments in Northeast Brazil—little input from an irrigation agency was required, since the equipment could be bought by individuals on the private market with credit provided through the project.

A project like PROMOVALE most needed an agile response from the state electric utility to demands for power hookups from the new irrigators—as well as ready accessibility for the new irrigators to credit for purchase of the pumps. The governor and his lieutenants made sure that the power utility and the banks did not drag their feet. This contrasts strikingly with the Bank-financed Ibiapaba project in the same state and at the same time. Even though Ibiapaba was the only project to include an electrification component, the production benefits to be gained from newly irrigated farming were not fully realized *precisely* because of the difficulty farmers had in obtaining power connections for irrigation. Many went ahead and irrigated anyway—using the more expensive diesel rather than electricity, and even when the power lines passed overhead. Ibiapaba could not get satisfaction from the electric utility, in sum, because it did not have the same single-minded attention from the state’s governor that PROMOVALE did.

Studies of coordination between public agencies in various countries have found that they usually do not have much to gain from it.²⁷ In fact, they often have a lot to lose—namely, autonomy, control over the pace and quality of what they do, and the power that results from doing good work. On the few occasions when coordination has worked well, the studies found, it was perceived by all the agencies involved as urgent, and as the *only* way to solve a problem that was afflicting more than one agency. In the Northeast projects, the frequency of takeover in itself shows that coordination was *not* the only possible way to solve a problem. In most cases, moreover, only one or a few agencies saw high-quality and timely project execution as “urgent.” The project unit, for example, had much more at stake than the executing agencies in seeing that the project was carried out successfully, because the project was its main activity, or the *only* one.

The successful episodes of coordination cited above in the Northeast projects had a different underlying structure than the failures. This explains why these episodes could involve the same agencies that were named unsuccessful at coordinating in the chronic laments of the supervision reports. Not only were these better moments episodic and ad hoc, as noted above, but they had the two ingredients of successful coordination found in the studies cited above. First, all participating agencies felt a strong sense of urgency because of (1) disaster-type circumstances that threatened the economy of the state and its social fabric—drought, epidemics of crop disease—or (2) an “order” to coordinate at a particular moment from a strong authority,

usually the governor, who held power over *all* the agencies, including the project unit itself. Second, coordination was the *only* way to carry out a particular task; effectively combating disease in the orange groves of Sergipe, as discussed in Chapter 5, could be done *only* with a combination of subsidized credit and extension. In order for projects to capture coordination of this variety in their design, they would have to focus on narrower tasks that were considered more urgent, and/or concentrate the power over a project within a single agency. I return to these themes in Chapter 5.

Good Governors and Hard Deadlines

Many of the stories of successful project implementation revealed a strong and highly supportive governor in the wings. The demanding governors (or state secretaries) provided protections that were crucial to successful project implementation: (1) protection from the pressure to hire mediocre staff, or to fire excellent staff on political grounds; (2) protection from pressure to make technically undesirable choices; and (3) protection from shortfalls or delays in the funding transferred to the projects from central governments—delays that governors and their appointees lobbied forcefully to prevent. Poorly performing agencies and projects were chronically deficient in these protections, as revealed again and again in supervision reports.

Though the kind of political support provided by the governors obviously helped, it is important to understand how it changed project design. To ambitious governors, the Northeast projects represented less an integrated package than a menu from which they could choose one or two components of their liking. They rarely saw the complete projects as vehicles for making a political mark, because they considered them too complex, too inflexible, too long in planning and execution. The projects did not, as the governors said, produce "results." A supportive governor, therefore, did not simply "buy" the project in its entirety. He also re-molded it to his liking. If he was prevented from doing so by the Bank, the project agencies or SUDENE, he lost interest or fashioned his own more modest project outside "the Bank project." Or, as noted above, the backing off was sometimes associated with support by the governor for a "signature activity" within the project, which helped to make a *piece* of it work well:

In *Sergipe*, the governor fashioned the project around rural water supply—140 simple systems, 2,500 cisterns to catch rainwater from roofs, and 600 small communal ponds. (He also financed roughly *three* times that number of cisterns out of funds raised independently of the project.) In *Piauí*, the governor "bought" the land-purchase component of the project in particular, because it produced quick results that could be celebrated in dramatic, highly publi-

cized ceremonies where landless peasants received their titles. In *Pernambuco*, the governor chose small-farmer credit fashioned around actions to break certain bottlenecks in the production of certain crops; the state government supplied the majority of credit funds from *outside* the project (see Chapter 3), moreover, and at a time when project credit was not even working well. In *Ceará*, the governor wanted to bring private, small-scale riverine irrigation to a particular valley; when the project unit didn't allow him to refashion the Bank-funded project in this way, he raised his own additional resources in Brasília, and was forced by their paucity to be modest in his approach. The result was the PROMOV-ALE project mentioned above, completed within his term and considered by the staff of the project unit to be "better" than any of the three Bank-funded projects in the state.

On some occasions, the Bank and/or the Brazilian coordinating agencies resisted the governors' attempts to remold the projects. They worried that the projects would be diverted from their course, often to serve narrow "political" ends. This concern was well-grounded in experience, though "diversion" or "meddling" could be associated with good results as well as bad—as illustrated below. On other occasions, the Bank tried to accommodate the "menu approach," recognizing the advantages to be gained from strong support of the projects by governors. Some Bank staff and Brazilian agency managers felt that SUDENE, rather than the Bank, was the "culprit" in terms of inflexibility, often not allowing even constructive re-inventions of the projects to take place. But the prevailing impression among the Brazilian governors, and agency managers and staff, was that the projects were difficult to change. Even when the Bank or SUDENE were receptive, they said, obtaining permission for such changes placed burdensome demands on their scarce time and political capital, and resulted in the loss of precious implementation time. Sometimes, however, agency managers or technicians themselves turned down gubernatorial requests to which they did not want to accede, by pointing to the Bank or SUDENE as an excuse. Though their reasons for denying the governors' requests may have been justified, the habit of pointing to the Bank and SUDENE as the "culprit" simply added to the governors' impressions that the projects were not easy arenas for acting out their development visions. Even though the Brazilians and the Bank had successfully "sold" the second-generation projects to the region's governors in the mid-1980s, then, their enthusiasm and commitment waned considerably within a few years.

The demands made by the "good" governors on their technocrats often led to better results than those produced even by the most serious technocrats, when left to their own devices. The governors did not necessarily have better approaches in mind than the technocrats. Rather, the constraints and pressures under which governors operated

caused them, at their best, to demand performance from the agencies under their control in a way that the institutional environment of the projects did not. The "good meddling" merits attention, furthermore, because the governors mobilized additional resources if they could refashion a project to their liking—an unforeseen and highly desirable outcome, particularly in the present era of continued fiscal crisis in Brazil. The rest of this section discusses how and why the support of governors changed project design. The following two chapters treat the mobilization of additional resources.

When supportive and demanding governors were in the wings of project success, their desire to change the project took four forms: (1) they wanted to shorten the time the projects took to be implemented, and hence the nature of its tasks, so that it could "produce results" within their four-year mandates; (2) they wanted to "massify" the project—to broaden its reach in terms of numbers of beneficiaries, and (3) to narrow down its actions to a single activity, a single organizing logic, or a narrower or different geographic area; and (4) they gravitated to project activities that addressed problems perceived as urgent by a large number of public officials and constituents—drought emergencies, clamors by the rural population for drinking water, widespread concern about epidemics of crop disease that threatened to decimate an important crop; if the project as designed didn't focus exclusively on such a widely felt need, they tried to refashion it so that it would.

Four Years vs. More

The first generation of Northeast projects was meant to be carried out over a period of five years, but took up to nine years to be completed and still had unexpended balances of 41 percent of appraised expenditures at project completion (Table 1.9). As a result, the Bank lengthened the implementation period for the second generation of projects to eight-and-a-half years, with a justification that seemed eminently reasonable: the very difficulties of the institutional and economic context made it unrealistic to expect more timely execution, and the broader "institution-building" goals of the rural development projects required more patience.²⁸ Given this experience, one would think that the shortened four-year horizons of the governors would result in more problems. But shortening the time period removed one of the major obstacles to getting projects executed on time—the lack of political support and enthusiasm. This shortening could also improve the project's quality and—by reducing the delays that are chronic to the implementation of such projects—keep costs down.

Short is not always better than long, of course, and can displace a "more sensible" longer-maturing approach. Political pressures to get things done rapidly and conspicu-

ously may cause waste and foolish corner-cutting, undermining more "serious" long-term efforts. But in the cases presented below, a shorter-term solution was substituted for a longer-term approach *and* turned out to be better. By tailoring the project cycle to the political cycle, and offering technically valid short-maturing alternatives, projects can increase the incidence of the "good" kind of political support. This is exactly what the "loyal" technocrats did in the better-performing cases, when forced and enticed to do so with "tough love" from their governors.

A shorter time period, in sum, elicited the support and the innovative problem-solving energy that longer, more "understanding" time periods did not. Though projects with lots of time seemed to make good sense because of the sheer difficulties of getting things done and learning in an environment like Northeast Brazil, the longer time periods brought a different set of problems.

Fear of Failure

Dynamic agency managers themselves felt pressed to produce rapidly, whether or not their governors were urging them to do so, simply out of a strong dedication to their work. They commonly believed that their own tenure would be shorter than the life of the project, that political *and* professional interest in what they were doing was fickle, and that their project could therefore not afford to be painted with the brush of delays, murkiness, and insignificance. Within the second-generation program, the state of Bahia's agrarian-reform and settlement activities provide a telling illustration.

Two kinds of deadlines hung over the heads of the managers of project agencies carrying out agrarian reform. First, the agricultural calendar dictated that if the project missed the beginning of the planting season in providing land, infrastructure, credit, or inputs, a whole *year* would be lost. Second, these managers felt that the political climate around agrarian reform, which had suddenly turned sympathetic, would not last that way for very long. "We figured we had only a year or two," they said, "before the axe would fall." These fears had just as energizing and transforming an effect on the way the projects were implemented as did the four-year horizons of the governors discussed above.

Not meeting the deadline of the planting season would mean that the newly settled land beneficiaries would have no food to eat, let alone income from selling their produce. This would require spending scarce agrarian-reform funding on transfer payments for the newly-settled farmers, mainly in the form of food subsidies. Subsidizing the new settlers this way, in turn, would sully the reputation of the reform as a "welfare" measure rather than a "productive" one—adding to the ammunition of those who argued

against such programs.²⁹ More generally, the temporarily sympathetic climate for agrarian reform kept agency managers on a short tether in terms of expropriating and parceling the land, and getting the beneficiaries settled into shelter and producing. This resulted not only from the sense of impending termination of the opportunity for reform, but from the difficulty of enforcing the law in a place like rural Northeast Brazil, even during politically sympathetic times. Legally-expropriated landowners, as well as large land-grabbers, harassed and intimidated the new claimants to the land, often with the backing of local authorities and even when the law was clearly on the side of the new settlers.³⁰ If the new owners were conspicuously settled on demarcated plots, living in houses they had built, and already planting, these extra-legal challenges from powerful operators were less likely to occur or be successful.

In the course of trying to act quickly, agency managers ended up reducing the "standards" of settlement professionals and, at the same time, improving significantly the effectiveness of these projects. Instead of putting everything into place, as is the typical practice, before the new owners are settled—roads, schools, health centers, houses—the Bahians gave first priority to "getting production going." This meant leaving education and health to a later stage, and not providing the house itself but, rather, only credit and sometimes materials for "self-help houses" to be built by the settler once he was on the land and often *after* he planted a first season's crops. Many of the new settlers therefore lived in tents for several months after moving to their new plots. The fear of the deadlines also meant postponing the time-consuming permanent demarcation of the lots until later, relying initially on a rustic and temporary demarcation using rope and stakes, to which the land recipients agreed, and in which they participated. The deadlines also caused agency managers to hold off their staffs from trying to organize settlers to farm part of their lands collectively—a common and time-consuming approach of agricultural professionals to small farmers throughout Latin America.

To those familiar with the criticisms of prevailing approaches to land settlement, these changes would seem to be obviously desirable and cost-reducing.³¹ Settlement has gained a reputation for being unacceptably costly, and difficult to carry out because of the heavy burden placed on state agencies to come up with a set of highly coordinated and timely actions. But the professionals carrying out land-settlement programs have often resisted the more modest and less centralized approaches illustrated by the Bahian story—just as road engineers have resisted reducing construction standards for low-volume rural roads.

The penalties of the agricultural and "political" deadlines, in sum, pushed the highly committed agency manag-

ers to move fast. These deadlines were just as effective as the fixed terms of the governors in eliciting more expeditious project execution and better approaches to designing projects and carrying them out. The deadlines, rather than a pre-existing project design, also dictated the order in which things should be done—what should come first and what should be given second priority or even eliminated. The results, in certain ways, were even more consistent with the goals of the program than the appraised projects themselves—to the extent that the "pressured" result reduced the financial and administrative burden on the state, and was more likely to be carried through to an income-producing conclusion for the settler than was the existing approach. These kinds of relentless pacing devices arising from outside the project were a common theme in other stories of good performance.

Massification

The desire of "the good governors" to do things in shorter time periods and narrow them down acted together with their equally strong desire to reach large numbers of constituents—to "deliver," through the projects, to a large constituency. In technocratic terms, this political message got translated into the term "massify"—to do a project in a way that would reach large numbers of people. It also could be seen as another way of talking about cost-effective delivery of public services, since broader coverage could only be achieved by reducing unit costs. "Massify" was a word particularly heard in Pernambuco around the attempts to open up credit access to small farmers, and in Sergipe around the governor's emphasis on rural water.

The new interest of state governors in "massifiable results," no doubt, was influenced by the Brazilian move toward democratization in the 1980s. It was also a function of the steady decline of the power of landed elites, whose near-feudal relations with their tenants enabled politicians to rely on them (the landed) to deliver large blocks of votes. With democratization, candidates for state and local office increasingly had to convince large numbers of constituents, rather than only a handful of rural elites, to vote for them.³² The desire of politicians to deliver to large numbers of their constituents would, at first glance, seem perfectly compatible with the goal of the Northeast projects to reduce poverty and increase the productivity of small farmers in cost-effective ways. But "reaching large numbers of people" went across the grain of the projects in two ways—(1) their *area* concentration and (2) the professionalism of the managers and staff.

The Northeast projects were grounded in the concept of area development, inspired by the growth-pole view of regional planning in the 1960s. Area development required the selection of a certain *part* of a state that seemed to have

more potential for growth than others, as well as a concentration of small and landless farmers. The agricultural-production focus of the projects, moreover, meant concentrating attention mainly on those who managed farms and were capable of improving their productivity. This excluded those who owned no land, representing a majority of the rural population in many Northeast states.³³ The second generation of projects was less inclusive of the poorest than the first because it eliminated (1) credit for operating capital (as opposed to longer-term investment credit), which tenant farmers *had* been able to obtain under the first-generation projects, (2) social services (health and education), and (3) public goods (roads, electrification)—all of which reached a larger population than just those managing farms. This greater exclusivity is reflected in the much smaller role of indirect beneficiaries as a percentage of direct beneficiaries in the second-generation projects—20 percent as compared to 92 percent in the first-generation projects.³⁴ Most Bank staff did not view the PAPP projects as less targeted on the poor, pointing to certain new components of the program as designed specifically to reach landless and near-landless farmers—namely, the community-participation component and the regionwide land-tenure project.

From the production-oriented point of view, the exclusions of the second-generation projects made sense. From a political point of view, however, they made for reduced political appeal. Even in the more inclusive first-generation projects, the appraised number of direct beneficiaries represented only 5 percent of the rural population of the states, and 3 percent of their total population (Table 2.2). Doubling those percentages to include indirect beneficiaries makes them 10 percent and 6 percent, respectively, still not high from a political point of view.³⁵ The second generation, in contrast, promised to reach a larger percentage of the state's population than the first—more than doubling the coverage of a state's physical area from an average of 23 percent under the first-generation to 56 percent under the second (Table 2.2), and more than doubling the average number of direct-beneficiary families from 23,000 to 58,000 (Table 1.1). But that still was not "massified" from a political point of view: appraised direct beneficiaries of the PAPP projects still represented only 16 percent of a state's rural population and 8 percent of its total population.³⁶ Even if all of the rural population of the project areas were included among their beneficiaries—given the public-goodness of some of the investments—this would have increased the "political constituency" of the projects to only 28 percent of a state's rural population under the first-generation projects and, more significantly, 53 percent under the second (Table 2.2). Under the second generation, however, the public-goodness of the projects declined significantly because of the exclusion of infrastructure, health, and education.

From an exclusively political perspective, then, area development limited the number of people reached by a project in three ways: (1) the limitation to the inhabitants of a particular area of the state, (2) the limitation to those within the project area who had secure and collateralizable access to land or, another way of saying the same thing, (3) the concentration on private-good-like services—credit, extension, irrigation, input supplies, land-title regularization—as opposed to public-good-like activities like health, education, drinking water, roads, electrification. Though all of these limitations were justifiable on developmental grounds, they also reduced the projects' potential for "massifiability."

This perspective helps explain the popularity of rural water in the second generation of Northeast projects, among technocrats as well as governors (see above). In principle, rural water supply could benefit everyone—landed or not—in contrast to the agricultural production services around which the second-generation projects were built. As evidence of this greater political inclusiveness, rural water was the component that most commonly spilled outside the project area into other parts of the state—driven by a combination of a governor's support and willingness to find additional funding to extend the program.

A similar explanation can be given for the popularity of the short-term credit programs for landless farmers—CAP/CEP.³⁷ Though this component amounted to a small percentage of the total financing of the Northeast projects (and the Bank would not fund it), it was among the most popular with beneficiaries and project managers and staff, who worked hard to raise more funds for it. Though credit was a private good, unlike water, the short-termness of the CAP/CEP credits and the institutional setup of the program outside the formal banking system made it possible for poorer farmers without collateral to have access. This promised to broaden the "political" reach of the project substantially, and extended it further down in the income distribution.

Finally, the concern for "massifiability" and the distinction between private and public goods help explain the preference expressed by many Brazilian commentators on the first-generation projects for the health, education, roads, rural-electrification and drinking water components which, they said, "worked better."³⁸ The consistency of such judgments was surprising given that (1) these components, like the CAP/CEP credits, represented insignificant shares of total project funding, except for roads—for health, 4 percent appraised and 3 percent actual (which also included some expenditures for drinking water systems), and for education 5 percent appraised and 6 percent actual (Table 2.1); (2) supervision reports consistently portrayed the health and education components as riddled with trouble; (3) drinking water was not even an "official" component of

the first-generation projects, minor expenditures on it being embedded in health and other components;³⁹ and (4) rural roads, though significant in the first-generation projects (20 percent appraised and 19 percent actual), were excluded from the second generation for the reasons outlined in Chapter 1.

Though there were various reasons why the results of health, education, roads, and electrification stood out over the agricultural-production components, it was clear that participants and other observers were impressed with the reaching of *whole* communities by these investments. Even though the gains made in health and education were usually not sustained by the state agencies, as chronically attested to in supervision reports, this did not seem to sully the image of strong community-wide impacts. Though health, education, and road investments might not be sustained or maintained, in short, they represented a vision worth fighting for—to politicians and technocrats alike.

Even if an area development project limited the number of constituents reached directly, why would that necessarily reduce a governor's interest in supporting it? After all, securing a large well-funded project from the World Bank was a political coup in Northeast Brazil, and certainly better than no project at all—even if it wasn't designed to garner as many votes as one would like. Standing behind a project of this nature, however, was not without cost to a governor. He had to turn down the angry demands of mayors just outside the project-area boundaries to be included in the project area—a politically costly denial, especially when it involved mayors who had loyally supported one's election. (Because of this difficulty, the "technically" defined project-area boundaries often grew quite a bit during the appraisal period and even during implementation.) He had to turn down the requests of his loyal cronies to employ their unqualified friends and relatives in the project unit. (As one state secretary said, "the Bank project was my biggest headache, because the higher salaries of the project unit attracted job requests like flies. If I didn't tell the project unit to hire them, I lost their votes; if I did, I undermined the project.") He had to turn down the requests of politically important landowners to have dedicated staff fired or transferred because they were "upsetting the power structure" in a region. He had to turn away the requests of contractor friends for special privileges in bidding. The managers and staff of the better-performing projects always spoke reverentially of those governors and state secretaries who protected them from these kinds of interventions. Though supporting a World Bank project could be politically costly to a governor, it was worth it if the political returns were also high—as they promised to be with "massifiable" actions. When governors "bought" the projects, then, they often did so only if they could massify them.

Governors who could not massify their projects, or were not interested in using them to achieve broad impacts, often used them for other purposes. A common one was to use project financing to fund the ongoing activities of state agencies, particularly the extension service. In this less constructive scenario, governors saw the projects as relieving their fiscal problems—regardless of what the projects actually did. When governors viewed the projects in this less entrepreneurial way, the projects tended to lapse more and more from their developmental purpose. The governor, happy to at least have his fiscal worries reduced, was not interested in riding herd on the project agencies to perform well. It was this riding herd that helped spur good performance in many of the better-performing cases reviewed here.

"Massifiability," finally, should not be confused with a *large number* of components—which this review and previous ones argue against. The projects for which the term was most used, after all, were those that focused most on a *single* component—water in Sergipe and credit in Pernambuco. Nor is area development necessarily undesirable because it is not massifiable. Rather, in order to draw the support of "good" governors, projects will have to appeal to these leaders as vehicles for realizing their *political* goals. Massifiability of a single component across a large political constituency is only one way of doing this; concentration on public-good-like investments, rather than private goods like agricultural production services, is another; and choosing a region for "area development" that contains a significant percentage of a politician's political constituency—or an important segment of that constituency—is yet another.

Doing the Right Thing

There was a second, and more indirect way, in which the area development projects were incompatible with the political desire to reach the largest number of constituents possible. "Reaching large numbers," or developing a service-delivery model that promises to do so, would seem to be an obvious goal of area development projects like the Northeast ones. But the professionalism of even the most serious and dedicated technicians produced a style of operating that often conflicted directly with that goal.

The professionals, understandably, wanted to do things "right." Road engineers wanted to build roads wider than expected traffic volumes warranted, because that's how roads were "supposed" to be built and because you wanted to have "sufficient" capacity in place if and when the larger volume of traffic materialized. Irrigation engineers wanted to do large irrigation projects rather than small ones which, in comparison, seemed piecemeal and insignificant. This kind of "misplaced" or uneconomic professionalism is usually attributed to engineers, or to those without distribu-

Table 2.2: Northeast Brazil Rural Development Projects: Significance of Project Area in the State

Project	Direct Beneficiaries ^a (Individuals) as Percentage of:				Project Area as % of State ^b	
	Project Area Rural Pop.	Project Area Total Pop.	State Rural Pop.	State Total Pop.	Rural Pop.	Total pop.
POLONORDESTE						
Rio Grande do Norte	28.0	18.1	9.2	4.8	32.9	26.8
Ceará/Ibiapaba	20.5	16.5	1.1	0.7	5.5	4.0
Paraíba/Brejo	25.6	19.8	2.4	1.4	6.0	6.9
Bahia/Paraguacu	12.4	8.6	1.9	1.1	15.6	13.1
Sergipe/Tab.Sul.	27.7	18.4	8.3	4.2	29.9	23.0
Pernambuco/Agr.Set.	15.3	9.5	3.3	1.5	21.6	15.9
Ceará II ^c	9.3	5.1	9.2	5.1	100.0	100.0
Piauí	15.0	7.3	4.7	2.8	31.6	38.7
Maranhão	21.0	16.2	6.9	4.8	33.1	29.5
Bahia II	28.8	20.3	4.6	2.3	0.7	11.5
Subtotal						
Simple Average	20.4	14.0	5.2	2.9	27.7	26.9
PAPP						
Sergipe		14.0	16.8	7.7		48.1
Rio Grande do Norte	17.5	20.4	8.3	8.3	47.8	40.6
Bahia	41.4	10.4	26.2	13.4	63.3	36.1
Piauí	25.6	11.0	15.5	5.9	97.0	73.5
Pernambuco		11.5	24.8	11.6		49.3
Ceará		14.1	14.3	6.8		90.7
Paraíba	30.9	16.1	4.4	1.4	14.2	48.2
Minas Gerais	29.6	20.1	13.3	9.1	45.0	8.2
Maranhão		17.9	16.1	8.2		39.0
Alagoas						40.3
Subtotal						
Simple Average	29.0	15.4	15.5	7.7	53.4	47.4

Sources: For project area population, same as Table 1.1.

For state population, FIBGE (various years). The base year for population figures varies from state to state, depending upon the year in which the Staff Appraisal Report was written. Population figures for POLONORDESTE projects are based on the following years:

Rio Grande do Norte, Ceará/Ibiapaba, Bahia/Paraguacu, Pernambuco/Agreste Set. = 1970;
Piauí = 1975;

Paraíba/Brejo, Sergipe/Tabuleiros Sul = 1976;

Ceará II, Maranhão, Bahia II = 1980.

For PAPP projects, the base years are: Sergipe, Rio Grande do Norte, Pernambuco = 1985; for the remaining projects, 1980.

a. Appraised rather than actual figures were used so as to capture the political significance of the project at its inception. Individual beneficiaries are calculated as the number of direct beneficiary families (see Table 1.1, note b) multiplied by 5.

b. Project area rural population (pop.) total pop., area as % of state rural pop., total pop., area.

c. Ceará II: unlike the rest of the projects, this project covered the entire state.

tional concerns. But it is found broadly among professionals of various fields and various political stripes. Project units working on land settlement, for example, insisted on doing settlement the "right" way—which was, as discussed above, too costly, too demanding of the state, and subject to long delays. Field staff working on community water projects in Piauí wanted to stay with a community for three years before moving onto the next one—in order to make sure that the water-using association was so good that maintenance and operation would be guaranteed. Likewise, the extension service wanted to work in a few villages intensively, rather than many, to make sure it could show some impact on yields.

Whereas the technocrats were "right" in not wanting to dilute their model over too many farmers or communities, there was nothing about their professionalism that forced them to *change* the model—namely, to search for an approach that could reach large numbers and *still* have an impact within a reasonable period of time. Doing things "right" professionally meant *not* worrying about these issues, or leaving them to a second plane. Though the technocrats might have had the knowledge and the dedication to do things differently—and though economists watched over the birth of the Northeast projects like hawks—this did not translate into an environment of pressures to "economize" or "maximize within constraints" the way the governors' pressures did.

Governors and other elected leaders are often portrayed as making projects more costly than they should be and undermining their quality—as not allowing the technocrats, in other words, to "do the right thing." But it turns out that "the right thing," from an economic point of view, does not always come naturally in the technocratic world—even when some of the technocrats are economists—because there's no strong push to do it. Though it might seem difficult to design projects in a way that would elicit the support and protections of "good" governors, the discussion so far provides a few simple and obvious suggestions: (1) design projects, or project phases, to coincide with the four-year time span of a governorship, (2) satisfy the desire of supportive governors to obtain visible "results" in that time period, and (3) facilitate the desire of powerful political supporters to organize projects around a single "signature" activity.

Notes

1. Relating the performance of organizations to the relative ease or difficulty of their tasks has a long tradition in the literature. Lawrence and Lorsch (1969), and Thompson (1967) were seminal contributions. Some applications to development projects are Hirschman (1967) with respect to large World Bank projects, Tendler (1968) with respect to electric-power generation and distribution by public-sector enterprises, Lamb and Muller (1982) with respect to the Kenya Tea Development Authority, and Tendler (1982) and Israel (1987) with respect particularly to the comparison between projects in the infrastructure and social sectors.

2. The seminal contribution to this literature is Landau (1969).
3. In a few cases, a state land agency was also created by the project, but only if there was none. The new project units were usually formed within a preexisting institution—most commonly, the state agricultural planning agencies. The Sergipe project unit, one of the best-performing, was an agency unto itself.

4. The project units did not necessarily take over all the APCR functions, and often relied on field staff of the extension service to do at least some of the work. But in that the APCR component funded some project-unit field staff in several states (Table 1.8), this gave the unit an executing presence that made the component different from all the others.

5. The Pernambuco program's innovative interventions in agriculture are another example. Funding and field staff for these activities, not foreseen at appraisal, came partially out of the APCR component.

6. When the second-generation projects were being appraised, the Bank expected that a separate Northeast water and sanitation project would be designed and approved within two or three years. Rural water supply was therefore allowed into the second-generation program, but only provisionally for the first two years, and accounting for only 1.6 percent of total appraised costs (Table A.4). The failure of the separate water project to materialize partly accounts for the unanticipated increase in the role of the water supply component. For drinking water-supply expenditures in the second-generation projects, see note 39 in Chapter 2.

7. These distinctions between irrigation and water were pointed out to me by Hugo Eduardo Beteta, as were those between urban and rural water described momentarily.

8. Beteta attributes the difficulty that water planners have in acting on what he found to the tradition of separating "social" uses and justifications for rural water from productive ones.

9. The Bank never insisted on maintenance of already-constructed roads as a condition for disbursement on new ones, the way it did in water—partly because roads were dropped from the second generation of Northeast projects and partly because maintenance failures are not as conspicuous in roads as they are in water. See Cook (1985) for issues regarding maintenance of roads built under the POLONORDESTE projects.

10. See the end of Chapter 4 for other lessons about rural infrastructure related to land tenure and the size distribution of landholdings.

11. The theme of "healthy" competition between public agencies has been around for some time. Landau (1969) explored its favorable effects on innovation in the public and private sectors; Bunker (1985) pointed to its role in keeping down corruption in a comparison of two agencies providing services to colonization projects in the Amazon. Marshall (1982) discussed its importance in the U.S. Model Cities programs of the 1960s, which explicitly promoted interagency competition by channeling funding to "alternative" local organizations as well as to city and state governments. These local governments, responding competitively to the more innovative performance of the alternative organizations, eventually adopted the alternative models themselves. At the Bank, Lamb (1982) called such competition in the public sector a "market surrogate" for the healthy competition occurring between private firms, and Israel (1987) devoted a whole chapter to these "competition surrogates."

12. Schmitz (1990: 17) and Bell et al (1982: 132 and 1984, as cited in Schmitz) point to the same kind of positive externality associated with the "drift" of professionals between firms in the private sector—Bell with respect to infant-industry protection in general and Schmitz with respect to the Brazilian computer industry.

13. Operational suggestions following from this discussion of the relative ease and difficulty of tasks are presented in Chapter 5, after presenting further examples concerning agricultural research and extension.

14. See Batt (1989) for a detailed description of this situation and the history of attempts to improve it.

15. Central Bank regulations have long prohibited public agencies from investing in the overnight, but the practice is widespread throughout the country. Rates on these overnight investments could vary considerably from one month to the next, and between one depositor and another, because the rates were negotiated individually between the bank and the depositor on large deposits like these.

16. A few project managers included these overnight earnings in the "counterpart" they reported to the Bank, and against which the Bank disbursed its own share of project financing. Though certainly a "novel" interpretation of central-government counterpart, this did not violate the spirit of

the counterpart agreement—since returns on overnight accounts were paid to investors out of the Central Bank.

17. The "creative" investment of project cash balances should not be attributed solely to the peculiarities of the Brazil's economic situation and macro policies. In a large Bank-funded urban development project in India—a country with almost the opposite picture in terms of inflation and macro policy—project managers also attributed great importance to their cash balances (Sanyal and Tewari 1990: 26). Competition by banks for the large cash balances that flowed into such donor-funded projects allowed project management to exact a *quid pro quo* from the bank where it chose to place its deposits—in this particular case, the opening of a small-enterprise credit fund consistent with the objectives of the project. In a similar fashion, the relatively large amount of outside donor funds available to the Grameen Bank in Bangladesh have given that institution considerable bargaining power vis-a-vis the banks competing for those deposits (Sanyal, personal communication).

18. Sometimes, the agent that ultimately replaced the original executing agency itself "lobbied" for the takeover. The Irecê cooperative in Bahia, to which the project unit handed over the irrigation and agricultural extension components, "lobbied" the project unit and state legislators to get the component away from the state agencies.

19. After the first two years, as explained in note 6 in Chapter 2.

20. Several Brazilian agency managers and staff expressed a desire for more of a presence of Bank supervisory staff during implementation, contrasting this with the "extravagant" Bank presence during appraisal.

21. Staff appraisal reports for five PAPP projects projected salary costs at an average 48 percent of total agricultural extension costs (Bahia 45 percent, Piauí 51 percent, Pernambuco 30 percent, Paraíba 82 percent, Maranhão 30 percent).

22. Though this justification was used in the first-generation projects, a somewhat different one was used in the second, where the Bank funded salaries and other recurrent costs on a declining basis as a *quid pro quo* for the federal government's commitment to abolish other competing rural programs. That the federal government found it difficult to keep that commitment had to do partly with the salary-intensive nature of these similar programs, and partly with the fact that they offered additional opportunities for political leaders at the national and regional level to have their "own" development programs.

23. Table 1.9. Extension expenditures went up in every state but Bahia.

24. See, for example, World Bank (3/30/89, para. 32).

25. In some cases, Bank staff sensed that even if it were desirable to assign formal responsibility to only one agency they deemed strong, it would nevertheless be politically difficult. They therefore deliberately blurred the issue in the multi-year legal documents constituting the project agreement. In other cases, when Bank staff thought that an agency might be weak, they designated responsibility to more than one agency as a way of building a system of checks around a weak agency. This diffusion of responsibility also provided some formal basis for subsequent takeover, if that proved necessary, by an agency deemed more reliable at appraisal—usually the project unit.

26. PROMOVALE was actually the initiative and pet project of the vice-governor, who was from the region of the project. He was strongly backed in this endeavor by the governor and the State Secretary of Agriculture.

27. See Weiss (1987) and the studies cited therein.

28. See, for example, World Bank (6/14/85).

29. Schmitz (1990: 18) points to an equally unsympathetic outside environment in explaining the high standards of the Brazilian informatics agency—the Special Secretariat for Informatics (SEI). He attributes the unusual lack of corruption in that agency—remarkable for an agency with such "rent-seeking" opportunities—to the unpopularity in Brazil of informatics policy, and the resulting feeling by SEI officials that they were constantly on trial and could ill afford to be seen as corrupt.

30. This happened even with the Bank-funded Alto Turí colonization project in western Maranhão, when large squatters, with the backing of the state, would not recognize the federal government's title to the land—a problem that plagued that project for many years.

31. Most of them are recommended in the Bank's 1985 review of land settlement projects (World Bank 5/1/85).

32. Melo and Moura (1990) describe how this same transformation affected the design of the Bank-funded urban development project in the state capital of Pernambuco, Recife. The mayors of the municipalities constituting the greater Recife region pressured project management to change the project in a way that would respond first to the demands of the most organized and vocal squatter groups. The increasing participation of legislative bodies (municipal and state) in approving large projects like this one also channeled more constituency-based concerns into project design.

33. For example, 65 percent of rural producers owned no land in Paraíba, 60 percent in Ceará, and 83 percent in Maranhão, where the percentage was highest (World Bank 5/26/87d, 9/26/86b, and 5/26/87c, respectively).

34. Appraised direct beneficiaries seemed to include mainly farmers receiving agricultural extension and credit. The figures on indirect beneficiaries do not appear in the tables because of considerable problems of inconsistency in their reporting in the appraisal results, double-counting of indirect and direct, and uncertainty about how. They were estimates. They are referred to here only as a rough indication of the expected impact of the projects from a politician's point of view.

35. For purposes of this calculation, the number of beneficiary families was multiplied by five to get an estimate comparable to state population figures. The number of actual direct beneficiaries in the first-generation projects was slightly more than that projected (104 percent of appraised, Table A.3) but appraised figures were used here in order to make comparisons to the second-generation projects, for which actual data are not yet available. Appraisal figures are also more indicative of the "political" significance of a project at its inception.

36. Indirect beneficiaries, estimated at 20 percent of direct beneficiaries, would increase the percentages in the text to 19 percent and 10 percent respectively—still not particularly high.

37. *Compra Antecipada da Produção* (Advance Production Purchase) and *Compra dos Excedentes da Produção* (Purchase of Production Surpluses).

38. Though the Bank financed rural electrification in only one project, Ibipaba in Ceará, some states obtained funding from other sources for rural electrification during the period of project implementation.

39. It was not possible to separate out drinking water supply expenditures from the other expenditures of the "water resources" (5 percent) and "health" (5 percent) components of POLONORDESTE, as noted in Table 1.7. Drinking water supply was included in "water-resources," in Pernambuco, Bahia I, Bahia II—and in "health" in Maranhão, Ceará, Rio Grande do Norte, Paraíba, Sergipe. For a breakdown of appraised expenditures within the "water resources" component of the second-generation projects, see Table A.4.