

World Bank Reprint Series: Number 480

Michael M. Cernea

The Sociological Action-Research of Development-Induced Population Resettlement

Michael M. Cernea

The Sociological Action-Research of Development-Induced Population Resettlement

THE SOCIOLOGICAL ACTION-RESEARCH OF DEVELOPMENT-INDUCED POPULATION RESETTLEMENT

MICHAEL M. CERNEA

Member Correspondent of the Romanian Academy Senior Adviser for Sociology, The World Bank,
Washington, DC

The sociological study of development-caused population displacement and resettlement has considerably expanded during the last decade. The expansion of this social research area is a direct response to the controversies mounting in many countries in connection with government programs for hydropower, infrastructure, and urban growth.

When people are involuntarily displaced, the social, economic and cultural impacts they suffer are usually profoundly destructive. Increased recognition of such adverse consequences has resulted, *inter alia*, in a broader call for social science presence in the analysis, planning, mitigation and evaluation of displacement and resettlement processes.

This paper discusses the findings and impacts of a recent vast study of development-caused population resettlement. This was action-research study, carried out in 1993-1994 by a multidisciplinary research task force led by the author of this article, under the auspices of the World Bank. The study encompassed 192 development projects in 39 countries, entailing the development and resettlement of various population groups estimated to total about 2.5 million people. These projects were co-financed by the World Bank and were implemented, in part or in full, during the 1986-1993 period. Over 100 of these projects are still ongoing in 1995/1996. An additional number of resettlement operations that occurred outside Bank projects and for which data were available, were also considered by this study. The 192 projects entailed the displacement and resettlement of about 2.5 million people over 8-10 years. Altogether, the action-research covering these projects addressed: policy issues in resettlement; the socioeconomic nature of displacement; impoverishment risk through displacement; institutional capacities and operational performance in implementing resettlement, including planning, financing, and monitoring; and options for improving resettlement strategies and performance. The report on this study was completed in 1994.¹

Note: The views and interpretations expressed in this article are those of the author and should not be necessarily attributed to the institutions with which he is affiliated. Correspondence regarding this article can be sent to the author at: The World Bank, 1818 H Street, NW, Washington, DC 20433, USA.

¹ The full report on this broad action-research is entitled *Resettlement and Development. The Bankwide Review of Projects Involving Involuntary Resettlement 1986-1993*. The World Bank, Environment Department, April 8, 1994. The Task Force that coordinated the Bankwide action-research and prepared the report was led by Michael M. Cernea. The present article draws on this report. The full report can be obtained by writing to the World Bank Public Information Center, 1818 H.St., NW, Washington, DC 20433, USA, or to the author of this article.

WHY INVOLUNTARY RESETTLEMENT MAY BECOME NECESSARY

Involuntary population displacement and resettlement has a companion of development throughout history. It has been indelibly written into the evolution of industrial as well as developing countries. Installing major hydropower dams, irrigation and drinking water systems, urban construction and expansion, or extending highway networks has entailed displacements fraught with hardships and deprivation.

The beautiful master-plan of today's Paris, and particularly the urban marvel of its unique *Place de L'Etoile*, were made possible by painful population relocation in the days of Baron Haussmann. New York's impressive Cross Bronx Expressway slashed through many neighborhoods, of which some – as hindsight teaches us – could have been saved (Caro 1975). It is known that the drama of forced urban displacement in Boston's West End has generated an entire sociological literature (Gans 1959, 1968). Modern hydroelectric complexes in Romania, such as the Bicaz power plant or the dam on the Danube at Portile de Fier – have required the uprooting of many villages or the flooding of an island. This list could be extended with many other internationally known examples.

Involuntary displacements continue to occur in all countries for reasons related to the betterment of living conditions, introduction of needed environmental infrastructure, or expansion of public services. During the recent few decades, the scale of development-related population displacement has grown rapidly particularly in developing countries, due to the accelerated provision of infrastructure and growing population densities.

Developing countries invest around \$200 billion per year in new infrastructure. Such developments often involve changes in land and water use patterns, and in some instances this requires that people be displaced. The numbers of people needing resettlement can be reduced and, with more creative engineering and better social design, progress in limiting displacement has been made. But the need for resettlement cannot be eliminated. Nor should it be assumed that the volume of resettlement will be much lower in the future. Around the world more than 2 billion people still lack access to electricity and are forced to use sticks and dung for their energy needs; 1.7 billion lack sewerage systems and 1 billion lack access to clean piped water, resulting in the unnecessary death of 2–3 million infants and children each year. Food production will need to double again in the 40 years – an impossibility without additional investment in irrigation. And the world's population will grow by almost 1 billion each decade over same period. Substantial further investments in infrastructure, with their attendant population relocations, will thus be absolutely essential if poverty is to be reduced.

The action-research which I summarize in this article generated the first worldwide estimate of development-caused displacements, collecting and correcting data from a broad variety of sources. According to our research, the displacement toll of the 300 large dams that, on average, enter into construction every year, is in excess of 4 million people. In turn, we estimated that the urban development and transportation programs being started each year in developing countries entail the involuntary displacement of some additional 6 million people.

According to our research, over the past decade an estimated 80 to 90 million people have been resettled as a result of infrastructure programs for dam construction, and urban and transportation development. If we include other sectors of the economy, the aggregate number is certainly much higher, but data for other sectors are not yet accurate enough.

Within the worldwide resettlement processes, the programs financed by the World Bank account for 1-3% of the total (three percent in dam construction and one percent in urban development). Projects in the Bank's active portfolio in one year alone (1993/1994), the year of the action-research, involved the resettlement of 2 million people over an eight-year period. In these programs, the Bank has the responsibility to help borrowing countries restore, and if possible improve, the livelihoods of displaced and relocated people. Over the past fourteen years since the Bank established its path-breaking and social science-grounded resettlement policy, it has worked with governments to promote better domestic policies and legal frameworks for resettlement.

Improving resettlement is difficult for developing country governments, particularly in low income countries with land scarcity, which face competing needs, resource limitations, and constraints on institutional capacity. Often implementation performance in resettlement is lower than expected. The social costs of inadequate resettlement and its adverse effects can be very high, resulting in increased poverty for many people. This is especially serious since many of those affected are already very poor. This heightens the moral imperative of ensuring sound policies and effective implementation. However, if done right, resettlement programs can become an element of a nation's strategy to reduce poverty. This requires not only sound policies and adequate resources, but also a change in mindset - towards recognizing resettlers' entitlements to share in the benefits of the projects which cause their displacement. Improving resettlement processes is thus an urgent priority, and also a task that calls on the skills of sociologists and other applied researchers.

CONCEPTUAL ISSUES

Social scientists doing research on development processes are empirically informed about how development projects can make some people worse off. But social scientists all too often speak to themselves: historically they have been much better at recording development's tragedies than helping prevent them. I have often argued (Cernea 1985, 1993) that public policy responses to difficult development issues could be improved through increased action-research. But it is important to state that social scientists themselves have to do much more to equip governments and private organizations with adequate policy, strategy and practical advice.

During the 1970s and first half of the 1980s, development research has given relatively little analytic attention to *involuntary* displacement and resettlement, despite a vast literature on the sociology of *voluntary* settlement. This situation has considerably changed in the latter half of the 1980s and the first half of the 1990s, as demonstrated clearly by an annotated reference bibliography for development research on resettlement which includes over 700 selected titles (Guggenheim

1994). The debate within social sciences has been joined, and in fact has been exponentially broadened, by the much larger debate in the international media by public interest groups, and by NGO activists, a debate in which India's Narmada Sardar Sarovar project became a high-visibility peak point, but is not the only focus. The national and international debates around involuntary resettlement have been much amplified by the growing political resistance and active opposition developed in several countries by the key actors of this process – the populations to be forcibly displaced.

Processes of involuntary population displacement and resettlement are frequent enough, big enough, complex and consequential enough, to merit the mobilization of the social science conceptual and operational tools available to analyze them. Social scientists can and should assist specifically in (a) identifying the disruptions caused by displacement; and (b) recommending policies and practical approaches to *prevent* avoidable displacements from happening and to *mitigate* the harmful effects of the unavoidable ones.

My argument in this paper is that social scientists, working either in academia or in governmental and development agencies, must expand their horizons to *focus on public policy issues*, not only on discreet project interventions. Policy development is the introduction of constitutive rules about how to direct a major social process by formulating basic goals and mobilizing compatible means. Policies provide guidelines for *allocating development resources in general*, as well as for *structuring individual projects*. Turning social science knowledge about resettlement into *prescribed "dos" and "don'ts"* – the substance of policy – projects financed by governments and international agencies is as important as explaining resettlement's causes and outcomes.

The way in which development oriented social science treats involuntary population displacement is in fact a good test for its ambitious claim: that sociological/anthropological knowledge *can improve* the formulation of development policies and operational approaches, so as to substantially enhance the benefits of induced development. Internationally, applied and development-oriented social researchers recognize the need – but not always the potential – for transforming social science knowledge into the *building blocks for public policy making*. This matter is of great concern to social scientist in many countries.

The social science definition of resettlement. What is usually described as "involuntary resettlement" consists of *two* distinct, yet closely related social processes: (a) *displacement* of people and (b) *reconstruction* of their livelihood; this reconstruction is sometimes called *rehabilitation*. Each has its own demands, risks, costs, logistics, and sociocultural and economic effects.

Displacement concerns how land and other major assets are expropriated and people are removed, to allow a project intendent for the overall social good to proceed. In real life, this is not just an "expropriation", a simple transfer of property in exchange for compensation. In sociological terms, it is a process of unraveling the existing patterns of social organization and functioning of ongoing production systems and settlement units. Forced population displacement always creates a social crisis, and sometimes a political one as well. The disruptions it triggers are rarely equaled in the "normal" processes of development; I will return to this further below.

Rehabilitation or reestablishment, in turn, refers to the fate of the displaced people after relocation and to the reconstruction of their socioeconomic organization.

In theory, the two processes – expropriation and reestablishment – are segments of a single continuum; in practice, the first does not automatically bring about second. When people are displaced by projects for "right of way", they lose either their land – in full or in part – or their dwelling, or both. As a consequence, the outcomes of resettlement may vary considerably from people's previous standards of living. Indeed, whether on not involuntary resettlement results in reestablishing people's incomes and livelihood depends largely on how displacement is planned and carried out. It also depends on whether resettlers are *assisted* to rebuild their livelihood.

When people are displaced, production systems are dismantled, kinship groups are scattered, and long-established residential settlements are disorganized. People's lives are affected in very painful ways. Many jobs and assets are lost. Health levels tend to deteriorate. Links between producers and their customers often are severed, and local labor markets are disrupted. Informal social networks that are part of daily sustenance systems – providing mutual help in child care, food security, revenue transfers, short-term credit, labor exchanges, and other basic sources of socioeconomic support – are dissolved. Local organizations and formal and informal associations disappear because of the dispersion of their members. Traditional community and authority systems can lose their leaders. Symbolic markers, such as ancestral shrines and graves, are abandoned, breaking links with the past and with peoples' cultural identity.

The cumulative effect can tear apart the social fabric and local economy, and is profoundly disruptive to large numbers of people. The main risk is impoverishment – through landlessness, joblessness, food insecurity, deteriorating health, or the loss of access to community assets. That is why carrying out resettlement adequately is an impoverishment prevention and poverty reduction task.

Displacing people involuntarily confronts government organizations with complex legal issues. The potential for violating people's individual and group rights makes compulsory relocation unlike any other development activity. The fact that the execution of some development project is delayed by courts, and that compensation levels are often raised significantly on appeal, reflects the recognition in legal systems that people cannot be arbitrarily displaced without just compensation, regardless of national need. When resettlement processes are carried out in a lawful manner that fully respect people's rights, opposition to projects by adversely affected people is reduced (although not eliminated) and overall project implementation is likely to unfold more effectively. Resettlement that reflects the needs and rights of affected persons is not just compliance with the law, but also constitutes sound development practice.

The international debate on resettlement. Because of its complexity and adverse effects, involuntary resettlement has become the focus of a wide international debate, engaging and polarizing governments and nongovernmental organizations, public opinion groups, parliamentarians, development agencies, and

the media. Recent criticism of involuntary resettlement has often evolved into rejection of the goals and legitimacy of the program causing the resettlement, and sometimes of development itself. Two arguments are advanced. One denies, in principle, the acceptability of any involuntary resettlement. The second criticizes the low quality of specific resettlement operations.

The social controversy around population displacement is understandable, yet the undifferentiated rejection of all resettlement is not a realistic position. In many development situations involuntary resettlement is unavoidable, and simply denying its necessity is myopically short sighted. Instead, it is more effective to ask crucial practical questions: first, how to minimize displacement's magnitude; and second, how to respond effectively to the needs of the people being resettled. Our research team has explicitly stated that it shares the views of those critics, including World Bank critics, who deplore in an objectively documented manner the bad quality of resettlement operations. In fact, through its very decision to adopt a formal policy on resettlement issues, a policy that is based on sociological/anthropological research findings and that promotes equitable principles and approaches, the Bank has delivered the sharpest criticism of bad displacement practices that cause the impoverishment of those displaced.

The World Bank's Resettlement Policy. Indeed, the Bank was the first international development agency to respond to the complexity and difficulty of development-caused displacements by adopting an explicit policy and institutional procedures to address displacement processes and resettlers' needs (World Bank 1980, Cernea 1988). Significantly, the very formulation of this policy is one of the instances in which research and policy proposals made by sociologists inside the World Bank have resulted in the formal adoption by the institution of policy measures with wide international impact (I described these social science contributions in detail in other studies – see Cernea 1995b and 1995c). Through such sociological work, the theoretical conclusions and empirical findings of prior social science research on displacement/resettlement were translated into *prescriptions* that were adopted as policy. In summary, the basic elements of the World Bank's resettlement policy are:

- *Avoid or Minimize.* Involuntary displacement should be avoided or minimized whenever feasible, because of its disruptive and impoverishing effects.

- *Improve or Restore Livelihoods.* Where displacement is unavoidable, the *objective* of Bank policy is to assist displaced persons in their efforts to improve, or at least restore, former living standards and earning capacity. The *means* to achieve this objective consist of the preparation and execution by the borrowing country of resettlement plans as development programs. These resettlement plans should be integral parts of project designs.

- *Allocate Resources and Share Benefits.* Displaced persons should be: (i) compensated for their losses at replacement cost, (ii) given opportunities to share in the benefits from the project that displaces them, and (iii) assisted in the physical transfer and during the adjustment period at the relocation site.

● *Move People in Groups.* Minimizing the distance between departure and relocation sites and moving people in groups can cushion disruptions and facilitate the resettlers' adaptation to the new sociocultural and natural environments. The tradeoffs between distance and economic opportunities must be balanced carefully.

● *Promote Participation.* Resettlers' and hosts' participation in planning resettlement should be promoted. The existing social and cultural institutions of resettlers and their hosts should be relied upon in conducting the transfer and reestablishment process.

● *Rebuild Communities.* New communities of resettlers should be designed as viable settlement systems equipped with infrastructure and services, able to integrate in the regional socioeconomic context.

● *Consider Hosts' Needs.* Host communities that receive resettlers should be assisted to overcome possible adverse social and environmental effects from increased population density.

● *Protect Indigenous People.* Tribal and ethnic minorities, pastoralists, and other groups that may have informal customary rights to the land or other resources taken for the project, must be provided with adequate land, infrastructure, and other compensation. The absence of legal title to land should not be grounds for denying such groups compensation and rehabilitation.

The fundamental goal of the Bank's policy is to restore the living standards and earning capacities of displaced persons – and when possible to improve them. Its provisions protect and enlarge the entitlements of displaced people and promote a safety net approach for restoring their livelihoods. By adopting this policy, the Bank rejected the argument that impoverishing resettlers was an unavoidable, if lamentable, facet of development. The Bank's policy calls for transforming people's involuntary resettlement into an opportunity for development and for enhancing their prior living standards by enabling resettlers to share in the benefits of the development project that causes their displacement.

Restoring previous standards of living is a formidable task in practice. The nature and the dimensions of the tasks at hand in implementing this policy must be well understood.

As social scientists have argued, in many developing countries the absence of effectively functioning land and labor markets, the substantive and procedural inadequacies of compensation system for property appropriated by the state, and the lack of adequate social safety nets represents major factors limiting the opportunities for adequate socioeconomic resettlement. These are the three main reasons why the simple compensation in cash of property losses (as provided generally by eminent domain laws) cannot realistically be expected at this time to result in satisfactory outcomes for project-affected people in developing countries. Preventing the impoverishment that displacement is likely to cause requires changes in the policies, legal frameworks, institutional capacities, and current practices of many developing countries, as well as of the countries in transition from planned to market based economies. This challenge is faced anew in every single development project that entails displacement.

For nations as for the World Bank, policy goals must be translated into systematic implementation. While implementation in Bank-financed projects has not consistently been at the level required by the policy, it has been improving. It also is a significant fact that treatment of affected populations under projects that apply Bank policy is, in general, considerably better than under programs not financed by the Bank – and the latter account for up to 97–98 percent of total involuntary resettlement in the developing world. Hence in countries where the Bank is financing projects which involve resettlement, the Bank also assists governments in establishing or improving domestic national policies that would apply to all relevant domestic programs, the majority of which take place without Bank-financed assistance.

KEY FINDINGS OF THE ACTION-RESEARCH

The remainder of this article is devoted to summarizing the findings of our vast study on displacement causing development programs. Our action-research was carried out primarily in the field, jointly with many local sociologists and country officials, and included also secondary analysis of pre-existing data. About 150 small field teams that comprised at least one social specialist (usually a sociologist or anthropologist) were sent by the World Bank to analyze resettlement in the field in over 100 projects in all countries under analysis. Given the applied character of our research, the types of questions we asked were primarily oriented towards assessing performance in the application of the social policy on displacement and resettlement. The study focused also on understanding the anatomy of some key socioeconomic processes occurring during forced displacement, such as impoverishment. But it also addressed the work of governments in developing countries, and the World Bank itself and its own staff, in preparing, appraising, implementing and supervising the resettlement programs. In this respect, this action-research generated a number of critical findings, which were reported in detail and candidly, and which triggered the adoption of important policy measures either by various governments or by the Bank, as well as *improvements* in our institution's working procedures. In this respect, the study demonstrated how useful applied sociological research can be to governmental agencies and policies.

Quantified assessments. To begin with, the study carried out a “search and count” of projects that entail involuntary population relocation from among the “universe” of about 2000 ongoing Bank-financed projects. It was found that in the 1986–1993 period involuntary resettlement was a part of 192 projects, displacing a total of 2.5 million people over the life of those projects. Forty-six projects started in or after 1986 had closed by 1993, having resettled over half a million people. Under the 146 projects still active in 1993, nearly two million people are in various stages of resettlement. These projects represent eight percent of all the Bank's currently ongoing projects, and account for US\$23 billion or 15 percent of overall Bank lending. The large majority of the Bank-funded projects (60 percent) are located in East Asia and South Asia, due to the rapid development of these

countries and their high population densities. According to preliminary estimates, new projects proposed by member countries for Bank financing during 1994–1997 were expected to displace and resettle about 600,000 people.

The scale of resettlement on a project basis varies from less than 500 to more than 200,000 people. However, the bulk of resettlement is concentrated in a handful of projects in India, China, Indonesia, and Brazil: eleven large projects situated in these countries account for over half – 1.1 million – of all the people being resettled. Projects in the South Asia and East Asia regions account for 80 percent of the population to be resettled. Latin America's share in the resettlement project portfolio is 9 percent and Africa's is 23 percent. However, the number of countries with multiple resettlement operations is expanding: the growing economies in Pakistan, Bangladesh, Vietnam, and Indonesia expect significant increases in the number of Bank-supported projects with resettlement.

The most significant sectoral shift among the various groups of projects entailing resettlement is the rapid rise of resettlement in transport, water and urban infrastructure projects. This group now represents the largest sector in terms of number of projects, accounting for 75 of the 146 ongoing projects involving resettlement. However, these resettlement operations are smaller than the average in hydropower or agriculture projects. Dams for irrigation, hydropower and drinking water are the single largest cause of displacement (63 percent of displaced people), and transportation corridors are the second largest cause (23 percent). In sectoral terms, agricultural projects continue to account for the largest segment of resettlers (52 percent).

Qualitative findings. Beyond quantifying the extent and magnitude of resettlement operations, the study's most important findings resulted from the analysis of resettlement impacts and of the relationship between policy prescriptions and actual operations.

The single most important finding of the study is that good resettlement can prevent impoverishment and even reduce poverty by rebuilding sustainable livelihoods. Conversely, if resettlement is not done adequately, resettlers end up worse off than before. Socially responsible resettlement is also economically beneficial because the heavy costs of poorly handled displacement extend well beyond the immediately affected population – to the regional economy, and to the host population in relocation areas. Inadequate resettlement induces local resistance, increases political tensions, entails extensive project delays, and postpones project benefits for all concerned; the benefits lost because of such avoidable project delays sometimes far exceed the marginal cost of a good resettlement package. Therefore, ensuring that involuntary resettlement is minimized – and when unavoidable, is carried out without impoverishing the people displaced – is fully justified on both economic and ethical grounds.

The largest resettlement operations move tens of thousands of people – often very poor people – long distances in a very short time, and reestablishing and improving their standard of living is a hard task. The inherent difficulty in reestablishing livelihoods and community services is compounded by the limited technical and institutional capacity of most developing countries, and by weak political commitment from some governments or executing agencies.

In essence, the field research and the various secondary analyses carried out during the 15 month of our study found that:

a) The programs that follow Bank policy have demonstrably better resettlement results than projects that bypass these guidelines, and are superior to resettlement carried out outside Bank-financed programs.

b) Resettlement performance is directly associated with the presence or absence of a domestic policy and organizational frameworks for resettlement. Countries, states, or sectors with an adequate resettlement policy generally achieve better outcomes in preventing impoverishment and restoring livelihoods than do countries or sector which lack such policies.

c) The Bank's portfolio of resettlement operations is in much better health than in 1986, the year the previous resettlement review was completed – and radically different from the state of the 1980 portfolio – when the resettlement policy was issued. However, in a number of projects actual resettlement operations and outcomes are not consistent with the standards defined and demanded by the Bank's policy.

d) The planning processes and criteria established through the Bank's policy have significantly improved the practices of some developing countries, other international donors, technical agencies implementing large projects, and the Bank itself. However, progress in this respect has been insufficient and uneven. Much more needs to be done to ensure consistency of planning, outcomes, and impact monitoring with policy goals.

The in-depth study of resettlement experiences has generated important knowledge for both the World Bank and its member countries about ways to carry out effective resettlement, and has identified many ways of correcting weak performance that are described in the full report. Despite the vast differences among countries and populations involved, much more has been understood about the *major common factors* that explain – by their presence or absence – why resettlement worked in some cases and failed elsewhere. The social dimensions of civil works construction projects require much greater attention by member country governments, as well as by the Bank (see also World Bank Operations Evaluation Department, 1993). Hence, beyond project-by-project activities, institutional development for addressing resettlement issues needs to be pursued as a valuable development objective in its own right.

PERFORMANCE IN RESETTLEMENT

Evaluating the performance of the World Bank with respect to resettlement, the study concluded that the Bank made significant progress during 1986–1993 in three major areas:

- Influencing the resettlement policies of a number of developing countries.
- Assisting agencies from developing countries in avoiding unnecessary resettlement operations or in reducing the scale of unavoidable displacements.
- Providing assistance for improving the circumstances of resettling groups and their ability to restore their income.

At the same time, it was found that in programs implemented in a manner not consistent with policy and procedural guidelines, many people compelled to resettle ended up worse off.

Influencing policies. Having been the first international development agency to adopt a resettlement policy, the Bank has promoted this policy with the developing countries whose projects include population displacement. One main result of the Bank's catalytic impact is that several countries enacted or improved domestic policies and legal frameworks for resettlement.

Resettlement works when governments want it to work. The responsibility of governments is to create adequate institutional capacity, that we defined as the *synergy between policy, organizations, and resources*. Where borrowing agencies do not genuinely concur with the Bank's resettlement policy objectives, resettlement is generally not carried out well, regardless of the number of covenants, follow-up supervision missions, or the frequency of Bank threats to suspend disbursements. Similarly, when the Bank itself does not consistently adhere to its policy principles or procedures, project performance is weakened.

The 1986 to 1993 period has been marked by some notable policy successes. For instance, with support from a Bank-financed sector project in 1990, Brazil's Electrobras Power Company developed satisfactory policy guidelines for resettlement in the country's power sector. Colombia adopted similar sectoral guidelines in 1992. China, with Bank involvement, improved its policy guidelines in the water resources sector. In 1993, India's National Thermal Power Corporation adopted a sectoral rehabilitation policy for all its operation, following detailed negotiations with the Bank as part of preparations for a sector loan. We concluded that the Bank has been far more effective overall – and immediate operations have benefited more – when it succeeded in reaching agreement with borrowing on the broad domestic or sectoral policy framework relevant to Bank-assisted operations, than when its efforts were only confined to legal agreements for individual projects. In turn, the obligation laid down in individual loan legal agreements and the agreed upon "project policy" have sometimes formed the basis for discussing and improving more general domestic policy and legal frameworks.

Major multilateral and bilateral donors also have recently issued resettlement guidelines similar to the World Bank's – for instance, the Inter-American Development Bank in 1990 – and the Asian Development Bank is now considering formally adopting similar guidelines. At the OECD's request, the Bank provided support in preparing resettlement guidelines, congruent with the Bank's guidelines, and in 1991 the development ministers of all OECD countries sanctioned similar unified guidelines for their countries' aid agencies (OECD 1992).

Avoiding or reducing displacement. The potential for reducing or eliminating resettlement exists in many project proposals submitted to the Bank for financing. The engineering redesign of the Saguling high dam in Indonesia, for instance, lowered dam height by five meters, thus avoiding the displacement of 35,000 people. In the Cote d'Ivoire forestry project, the Bank proposed revision that reduced the Borrower's proposal to displace up to 200,000 people by 80 percent, to 40,000, and set substantially higher standards for those to be relocated. In Thailand,

resiting the Pak Mun dam and lowering its height has reduced displacement from 20,000 to 5,000 people. In Ecuador's Guayas flood-control project, the redesign of canal layouts completely eliminated the need to displace anyone.

Restoring incomes. The ultimate test of consistency between resettlement operations and policy is income restoration and improvement. Resettling people productively on land and in jobs tends to restore income more effectively than only handing out compensations in cash without giving people institutional assistance. Incomes were successfully restored particularly when resettlers were enabled to share in the immediate benefits created by the very project that displaced them. Examples include helping resettlers develop aquaculture and fisheries in the new reservoirs (Indonesia), moving them into the newly irrigated command areas (China, and some projects in India) or favoring them to cash in on the commercial opportunities created around the newly constructed infrastructure (Argentina, China, Turkey). In many projects, living standards for urban resettlers improved through more durable housing, more floor space per capita, and better access to sanitary services – even though this came at the cost of a longer commute.

The performance of resettlement operations in restoring pre-move income levels is technically measurable, but few projects have included sufficient measures or methods to assess whether income restoration is being achieved. Though fragmentary, the weight of available evidence points to unsatisfactory income restoration more frequently than to satisfactory outcomes. Performance in income restoration is of particular concern in some countries (e.g., India and Indonesia), which have numerous projects entailing displacement but do not have a country-wide policy or legal framework prescribing the restoration of resettlers' incomes. We found that the key explanatory variable for success in restoring livelihoods on a productive basis is the government's commitment to help resettlers, reflected in sectoral or national policy.

THE RISK OF IMPOVERISHMENT

Because the main social and economic risks arising from forced displacement is the impoverishment of the affected people, I will discuss this central issue in more detail below.

Much of the research reported prior to our study in the sociological and social anthropological literature (Fahim 1983; Suarez and Cohen 1985; Fernandes and Thukral 1989) as well as studies by World Bank researchers (Shihata 1991; Cernea 1988, 1991; Guggenheim 1989; Butcher 1990; Partridge 1990; etc.), have documented many adverse impacts of displacement on people's welfare, community life, and social identity. In a study devoted to impoverishment effects (Cernea 1990) I have proposed a "risk model" consisting of eight convergent subprocesses which result in lasting impoverishment, if the risks are not addressed from the outset through the very planning of the development program that causes displacement.

The 1993-94 study examined the empirical evidence available from many resettlement operations in light of this impoverishment model. Indeed, to augment

the body of empirical data for analysis, our study collected information from both Bank-assisted and non Bank-assisted projects, including projects financed either from domestic sources alone or with assistance from other donor agencies, with or without policy guidelines.

How impoverishment happens: a risk model. When displacement and relocation leave people worse off, the empirical evidence reveals a set of eight recurrent characteristics. While each is irreducible to the others, they have a common denominator: they contribute to a process of impoverishment. These characteristics make up a risk model (Cernea 1990). The model points to the "risks to be avoided" in displacement. These major risks reflect social and economic processes that occur with higher frequency, that others, despite the enormous variability of individuals situations. These are:

- a) Landlessness;
- b) Joblessness;
- c) Homelessness;
- d) Marginalization;
- e) Higher Morbidity;
- f) Food insecurity;
- g) Loss of access to common property assets; and
- h) Social disarticulation.

These characteristics of impoverishment not only capture the lessons of many displacements, also provide a warning model. Abstracting the particular (local) details beyond the tale of case-by-case anthropological studies, government accounts, or media stories, and recognizing patterns beyond the accidental, is necessary for acting to contain such processes. These adverse processes must be brought under control with a *strategy*, rather than just through case by case responses.

However, these processes are not unavoidable. They must be seen as a set of risks that either become real, or can be avoided if known and counteracted. Like every risk forecast derived from past experience, this risk-predicative model is apt to serve as a "self-destroying prophecy" (Merton 1957). It alerts policy makers and planners to the kind of targeted actions needed.

The evidence that substantiates these trends is abundant; to explain them, I will cite several examples for each:

● **Landlessness.** Land expropriation takes away the foundation upon which social and economic production systems are constructed. Unless that foundation is reconstructed elsewhere, or replaced with steady income-generating employment, landlessness sets in, social and economic productivity cannot be re-established, and the affected families are impoverished. In the Kiambere Hydropower project in Kenya, a local study (Mburugu 1988) found that farmers' average land holdings after resettlement dropped from 13 to 6 hectares; their livestock was reduced by more than a third; yields per hectare decreased by 68 percent for maize and 75 percent for beans. Family income dropped from Ksh. 10,968 to Ksh.1,976, a loss of 82 percent. In Indonesia, the Institute of Ecology of Padjadjaran University carried out a social survey several years after reservoir families who were given in early

1980s, cash compensation; it was found that their land ownership was 47 percent lower and their income was halved. Impact studies for the Cirata dam, also in Indonesia, found that while 59 percent of the poor households improved their incomes after relocation, about 21 percent were worse off primarily because of loss of land, with a 25 percent loss from their previous income levels (Institute of Ecology 1989). Similar evidence is available from Brazil (Mougeot 1988). Sociological and anthropological field studies found that for farm families loss of farm land has generally far more severe consequences than the loss of their house.

● **Joblessness** affects both urban and rural resettlers. For several categories of people whose existence depends on jobs – including landless laborers in reservoir areas; employees of community based services; and shopkeepers, shop-workers, and small businessmen – displacement effects are stronger through the loss of job than the loss of home. The employed landless, rural or urban, lose in three ways: they lose access to land owned by others and leased or share-cropped; job opportunities, primarily in urban areas; and foregone assets under common property regimes. In the Madagascar Tana Plain project, private small enterprises being displaced in 1993 – workshops, food-stalls, artisan units – are entitled to no compensation, and lose their place of trade and their customers. A 1988 study of people resettled in the first phase (early 1980s) of the Argentina-Paraguay Yacyreta project found a 17 percent unemployment rate in the resettled communities, much higher than the rates in the population as a whole (Hamilton 1992). Vocational re-training, offered to some resettlers can provide skills but not necessarily jobs. Creating new jobs as a mitigation measure, particularly in urban settings, is one of the costlier and least certain strategies, and is infrequently used. Similar findings come from developed countries: in the Churchill-Nelson Hydro project in Manitoba, Canada, the economic activities of resettled indigenous people – fisheries, waterfowl capture, fur processing – were curtailed; field studies found a significant increase in non-productive time in the community. Evidence compiled from several non-Bank financed and some Bank-financed dam projects,² shows that the employment boom created by the new construction temporarily absorbs some resettlers but severely drops toward the end of the project, compounding the incidence of permanent or temporary joblessness among the displaced population.

● **Homelessness.** Loss of shelter is temporary for most of those displaced, but for some families it may remain a chronic condition. If resettlement policies do not explicitly provide improvement in housing conditions, or if compensation for demolished shelters is paid at assessed market value rather than replacement value, the risk of homelessness is increased. A 1990 Bank report on the Cameroon-Douala Urban resettlement completed in 1989 found that over 2,000 displaced families were hindered in their efforts to set up new permanent houses; less than 5 percent received loans to help pay for assigned houseplots. From the Danjiangkou reservoir, not Bank-financed, China has reported that about 20 percent of the relocatees became homeless and destitute; this and the disastrous results of Sanmenxia project displacement, although not Bank-financed, led to the adoption of new resettlement policies in China. Violent destruction of houses of people

² The China-Gezhouba dam, Brazil-Tucuruí dam, and Turkey-Ataturk dam, all of which were not Bank-financed; or Togo-Benin Nangbeto Hydropower dams, and Korea-Chungju dam as Bank-financed projects.

labeled as squatters is a procedure still used in some places to speed up evictions. The "emergency housing center" or "relocation camps" used as fall-back solutions in poorly planned resettlement tend to make homelessness chronic rather than temporary. When resettlers cannot meet the time and labor costs involved in rebuilding a house, they are compelled to move into "temporary" shelters, which then tend to become long-term shelters. At the Fom-Gleita irrigation project, Mauritania, only 200 out of the 881 displaced families reconstructed their housing, the rest living precariously for two years or longer in tents or under tarpaulins (Ngaide 1986). A Bank field review of a large scale resettlement found that prolonged lack of support made the temporary shelters into permanent residences, in which resettlers shared common sleeping spaces with their animals.

- **Marginalization.** Marginalization occurs when families cannot fully restore lost economic strength. Middle-income farm households do not become landless, but become smallholders. Families previously in precarious balance above the poverty line may fall below it and never recover, even without becoming landless. For farm families, partial but significant loss of farming land to roads or canals may make some farms economically nonviable. High productivity farmers on fertile valley-bottom land are marginalized when moved uphill to marginal, unfertile soils, even though they may be given the same area of land. In the Nepal Kulekhani Hydroelectric project, an independent study found the majority of displaced people worse off socially and economically, due to lower productivity of new land, and less diversified production. Marginalization also occurs through the loss of off-farm income sources; in Sri Lanka's Kotmale project, financed by a Scandinavian donor, a field study assessed that marginalization occurred because opportunities for non-farm income generation were lost or limited through displacement, increasing the economic differentiation between evacuees and hosts (Soeftestad 1990). Marginalization of resettlers is implicitly accepted in all cases when local agencies consider it a matter of course that those displaced cannot be provided reestablishment at their prior standard of living.

- **Morbidity.** People forced to relocate are exposed in a higher degree to illness, and to comparatively more severe illness, than those who are not. Adverse health effects of displacement, particularly when projects do not incorporate preventative epidemiological measures, are well documented. The direct and secondary effects of involuntary dislocation without preventative health measures range from diseases of poor hygiene, such as diarrhea and dysentery, to outbreaks of parasitic and vector-borne diseases such as malaria and schistosomiasis caused by unsafe, insufficient water supplies and inadequate sanitary waste systems. At Akosombo, an early 1960s reservoir resettlement in Ghana, the prevalence of schistosomiasis around the reservoir rose from 1.8 percent prior to resettlement to 75 percent among adult lake-side dwellers and close to 100 percent among their children, within a few years after impoundment. In the Fom-Gleita irrigation project, Mauritania, the predicted increase of schistosomiasis was exceeded, reaching 70 percent among school children; farmers' health worsened from contaminated drinking water and agrochemical intoxication. An outbreak of

gastro-enteritis occurred along the Victoria dam reservoir in Sri Lanka, not Bank-financed (Rew and Driver 1986). At Nam Pong, a dam in Thailand (not Bank-financed), monitoring confirmed that local rates of morbidity – from liver fluke and hookworm infection – were higher than provincial levels, the result of deteriorated living conditions and poor practices of waste-disposal. Increased mortality rates are also reported, as a result of epidemic outbreaks of malaria in displaced populations around new bodies of water and to accidents associated with new reservoirs. Lack of proper precautionary measures resulted in 106 deaths by drowning at Saguling Lake during the first 14 months of operation; at Cirata reservoir (Indonesia) ten people drowned in the first ten months after impounding.

● **Food insecurity.** Undernourishment is both a symptom and result of inadequate resettlement. Forced uprooting increases the risk that people will fall into chronic food insecurity, defined by the Bank as calorie-protein intake levels below the minimum necessary for normal growth. Sudden drops in food production and loss of harvests during the transfer from old to new sites are predictable; in addition, rebuilding food production capacity at the relocation site may take years. At the Fom-Gleita irrigation project, Mauritania, when multiple cropping and husbandry was replaced with paddy-rice monocropping, diet and cash-crop income deteriorated. In 1986 at the Victoria dam project, financed by a European donor, some 55 percent of resettled families were still receiving food stamps after a long period, compared to a much lower rate in the country as a whole. Because the area of cultivated land per capita in the Baillambe reservoir in China (not Bank financed) decreased from 1.3 mu to only 0.4 mu after relocation, local food production became insufficient and 75,000 tons of food relief annually had to be provided for several years.

● **Loss of access to common property.** For poor and marginal people, particularly for the landless and otherwise assetless, loss of common property belonging to communities that are displaced represents a cause of income stream deterioration that is systematically overlooked. Fruit and other edible forest products, firewood and deadwood for use and sale, common grazing areas, and use of public quarries, account for a significant share of poor household's income. Our study found that only the Lesotho Highlands Water project includes explicit provisions for compensating this loss, but the project's management unit is lagging behind in implementing these provisions. Losing access to common property under traditional or controlled circumstances, displaced people tend to encroach on reserved forests or increase the pressure on common property resources of the host area population, a source of social tension and increased environmental deterioration. Secondary adverse effects of resettlement on the environment occur also when oustees who do not receive cultivatable land move uphill in the reservoir wasteland, intensify deforestation and cultivation of poor soils, and accelerate reservoir siltation.

● **Social disarticulation.** The disintegration of social support networks has far reaching consequences. It compounds individual losses with a loss of social capital: dismantled patterns of social organization, able to mobilize people for actions of

common interests and for meeting pressing immediate needs are hard to rebuild. Such loss is higher in projects that relocate people in a dispersed manner rather than in groups and social units. Field studies have documented that such "elusive" disarticulation processes undermine livelihoods in ways uncounted and unrecognized by planners, and are part of the complex causes of impoverishment. In the Rengali dam project in India, not Bank-financed, a sociological study found various manifestations of social disarticulation, such as growing alienation and anomie, the loosening of intimate bonds, the weakening of control on interpersonal behavior, and lower cohesion in family structures. Marriages were deferred because dowry, feasts and gifts became unaffordable. Resettlers' obligations and relationships towards non-displaced kinsmen were eroded and interaction between individual families was reduced. As a result, participation in group action decreased; leaders became conspicuously absent from settlements; post-harvest communal feasts and pilgrimages were discontinued; daily informal social interaction was severely curtailed; and common burial grounds became shapeless and disordered (Nayak 1986).

Taken together, these eight characteristics of impoverishment provide a warning model that crystallizes lessons of many real processes and clearly points to what must be avoided. The model's predictive capacity informs about what can be expected in population dislocation and helps adopt counteracting or compensating measures for risk management.

It is crucial to emphasize *that impoverishment through displacement is not inevitable* in resettlement. The advantage of identifying and anticipating trends and risks is that it offers the possibility to take policy and project actions that could counter the risks. Conversely, failure to recognize the risks inherent along these lines allows such social risks to unfold unimpeded, causing impoverishment. *Improved approaches to planning, financing and implementing resettlement are apt to transform the impoverishment risk model into a self-destroying prophecy.*

Not all risks affect various resettler groups equally, and some vulnerable groups and people (such as indigenous and tribal groups, or women headed households) have more exposure to the risks of economic and habitat displacement. Understanding the risks specific to different social groups helps tailor mitigating approaches effective for each group.

The single most important factor for countering such risks in rural resettlement is making adequate land with clear title available to the members of displaced communities. In most situations, the "land for land" strategy leads to results far superior than cash compensation. Difficulties occur particularly where land is scarce and land markets are thin. "Land for land" also implies land of approximately equal capability. When such solutions are not available, trade-offs must be provided to open up off-farm income sources. In urban areas, resettlement difficulties revolve primarily around entitlements of owners, tenants, or transient groups, access to alternative jobs and business opportunities, and affordable

housing. Participatory approaches and involvement of local urban NGOs have been effective in finding alternative fill-in locations for urban resettlers and in mobilizing resettlers' energies for reconstructing their habitat at higher standards, with better environmental services.

As stated earlier in this article, our sociological study on resettlement operations in development projects was methodologically designed and carried out as "action-research", rather than as a conventional academic type of research. Therefore, the concern for operational aspects and practical implications was paramount. This feature is particularly visible in the effort to distill conclusions about factors that hamper operational performance, about in-house work processes that affect the quality of staff work in preparing and appraising development programs with resettlement, and, most importantly, in formulating policy, strategy and operational recommendations for formal adaption by the World Bank management. Some of these action-research findings are described below.

Our study concluded, for instance, that despite the enormous variation in country circumstances and project content, a relatively small number of common factors account for the uneven institutional performance of resettlement operations:

- Compensation provisions and property acquisition practices do not provide enough resources to allow resettlers to purchase replacement lands and other assets. Government agencies use institutional means to displace people but do not use enough of their institutional abilities to facilitate "land for land" alternatives on the ground.

- The overall financial resources earmarked for resettlement typically fall short, often by large amounts. Cost overruns for resettlement operations exceed overruns for civil works by an average of 50 percent, mainly because of initial underestimates. Budget constraints and inflexible allocation procedures limit resources still further.

- The institutions charged with managing resettlement often lack the legal framework, mandate and skills needed to help resettlers and their hosts. Rigid procedures and lack of experience with resettlement exacerbates weak commitment and poor performance.

- The displaced and host communities are not adequately participating in the planning of resettlement. Local knowledge is rarely used in finding viable solutions, and effective legal mechanisms for resolving grievances are often lacking. Top-down planning and weak institutional field presence do not mobilize project beneficiaries in host areas to act as stakeholders for resettlement success by accommodating resettlers amongst them.

Certain preconditions exist for creating the enabling environment needed to help displaced families rebuild their lost livelihoods and production systems. Knowledge is available for creating such an enabling environment, despite the enormous variability in each resettlement situation. Favorable policy and legal frameworks, sufficient financing, able institutions, and local involvement in program design and management are the foundation for successful resettlement.

PREPARATION AND APPRAISAL OF RESETTLEMENT

Analyzing performance at the project level, our study found that significant improvements were achieved in the preparation and appraisal of projects involving resettlement between 1986–1993, bringing quality markedly above the levels found by the 1986 resettlement review. Specific problems that we found to recur are: (i) failure by many government agencies to prepare satisfactory resettlement plans (quality at entry); (ii) laxness in fulfilling in-house responsibilities for review and clearance in early project stages; (iii) irregular or insufficient project supervision; and (iv) insufficient follow-up actions by Governments and the World Bank when implementation problems are identified.

For sound project preparation and execution, four elements are defined as essential for projects entailing displacement: population and income surveys; resettlement plans and redevelopment packages; resettlement timetables synchronized with civil works; and distinct resettlement budgets for financing compensation and resettlement-related investments.

Baseline surveys. Information about the population affected and its resource base is essential for assessing and planning resettlement. The use of baseline surveys for Bank-financed projects has increased substantially – from 21 percent in the 1980–1985 period to 43 percent in 1986–1993, to 72 percent in projects approved in 1992–1993 only, and 100 percent in the first ten months of 1994. However, the majority of these socioeconomic surveys for ongoing projects still do not include income data. Assessing pre-move income levels is not easy, but is feasible and necessary, because lack of income data at start deprives the design and execution of projects of defined implementation targets and monitorable benchmarks for income recovery.

The greatest initial difficulty in many instances is that borrowing agencies undercount the affected population in project preparation and provide inaccurate information to appraisal missions. The Turkey Izmir Water and Sewerage project (FY87) started with an estimate of 3,700 affected people and now has a revised assessment of 13,000 people. The Madagascar Tana Plain project (FY90), for which the Borrower's preparation estimate was 3,500 people, now has a revised estimate of 11,000 people. Incorrectly assessed displacement sizes result in project underdesign, inadequate cost estimates, resource shortfalls, institutional inability to prepare adequate solutions, and the impoverishment of resettlers.

The action-research manner in which the study was carried out, as opposed to traditional academic studies, allowed us to help improve the implementation of many resettlement operations *during* and *through* the study itself.³ As our action-research progressed and identified problems, relevant Bank units were called upon to initiate measures to address them. During and due to this 1993/1994 study, the Bank tripled its resources for supervising resettlement processes in the field. Most projects involving the resettlement of more than 1,000 people were supervised at least once, and over 40 projects, including the largest, were supervised twice. More field missions for resettlement went out during 1993 than in the previous three years taken together.

³ For more details, see in particular chapter seven of *Resettlement and Development* (1994)

Remedial actions begun during the study, as an immediate effect of its initial and mid-term findings, included: (i) reassessing the magnitude of resettlement in ongoing projects; (ii) adjusting project timetables for resettlement; (iii) increasing the participation of affected people; (iv) finding better relocation solutions or ways to reduce displacement; (v) providing additional financial resources; and (vi) supporting local agencies' efforts to expand organizational capacity. A number of "problem resettlement projects" – such as Turkey's Izmir Water and Sewerage project, Madagascar's Tana Plain project, and several projects in India – have been put on a sound path to improvement. In India, for instance, significant remedial actions have been agreed upon between the Bank and the government for improving the Maharashtra Irrigation III Project, which resettles 168,000 people, in the context of project restructuring. In the Upper Krishna Irrigation II Project, with over 220,000 affected people, improved resettlement work has made possible the lifting of disbursement suspension. The entire action-research process has been an exceptional opportunity for learning how to do resettlement better, for indentifying good practices, adjusting general approaches to particular sectors and circumstances, building institutional capacity for resettlement, and refining analytical and evaluation methodologies. In addition to the main report on the resettlement review study, a number of other economic, sociological, legal, and technical studies have been completed and will be published.

RECOMMENDATIONS FROM ACTION-RESEARCH TRANSLATED INTO DECISIONS

Taking into account the many findings and recommendations of this broad sociological study, the management of the World Bank adopted a series of important decisions aimed at: (a) strengthening the Bank's policy on resettlement; (b) increasing the financing of involuntary resettlement operations and the technical assistance provided to governments; and (c) improving internal Bank work on social issues and particularly on resettlement.

Adopting the study's recommendations, the World Bank's management defined the following „strategic priorities“, which match the key lessons of the study, for guiding the Bank's activity on resettlement in the post-study period:

1. **Ensure commitment.** The Bank will not finance projects involving large resettlement operations unless the country government concerned adopts policies and legal frameworks apt to lead to resettlement with income restoration. Agreement on policy with the country should be explicit from the outset. Loans in sectors with high resettlement needs should provide for gradual extension of improved resettlement standards from the project level to impact more broadly the whole sector.

2. **Enhance institutional capacity.** The Bank will help borrowing countries build their institutional capacity to implement resettlement, with a view to protecting people's rights. In countries with several Bank-assisted resettlement operations, the Bank will be prepared to support special institutional development

projects to assist the government in improving organizational capacities for addressing resettlement needs throughout project design and implementation.

3. Improve project design. Bank-assisted projects should avoid or reduce displacement as much as possible through technical and social studies for project design and execution. Every effort will be made before a project starts to search for technical and social options to minimize involuntary population resettlement. The Bank will make special efforts to identify and disseminate best practices, particularly as regards resettlement in urban and semi-urban contexts for which operational approaches must be further refined.

4. Promote people's participation. The Bank requires the active participation of would-be resettlers in the preparation, planning, and implementation of resettlement. As part of regular environmental assessments (EA), resettlement plans are made available to the public. Reliable information must be available to the project-affected people regarding resettlement and rehabilitation policy, entitlements, eligibility, options, due process, and appeals mechanisms. Public consultation on resettlement plans will stimulate participation of resettler and host populations in preparing such plans, and later in executing them.

5. Provide adequate Bank financing. To prevent impoverishment, all future projects will internalize the full cost of resettlement and of investments required for income restoration within total project costs. In the context of the overall project financing plan, the Bank will be prepared to increase its share in financing resettlement operations, as needed from case to case. As adequate financing still remains a problem in some recently approved projects, the Bank will consider supplementary financing whenever appropriate. Increased financing from domestic – and, when appropriate, from bilateral sources – for resettlement activities should also be secured.

6. Diversify project vehicles. The Bank will consider twin-project approaches for largescale civil works causing resettlement. Future infrastructural operations that displace a large number of people will normally be processed as twin projects, with the actual threshold for the stand-alone project to be determined on the basis of country and local capacity. Treatment of major resettlement operations as full fledged projects will better mobilize the appropriate administrative frameworks and skills needed to carry out resettlement successfully. An additional option is to use two-project sequences, with a rural or urban development project in the resettlement zone following immediately on the heels of the infrastructure operation involving displacement.

7. Strengthen the Bank's institutional capacity. The Bank is increasing its capacity to address the social and technical dimensions of resettlement projects, through additional staff capacity in critical fields such as social areas, enhanced project review, and ongoing performance monitoring and evaluation. To support overall strengthening of work on the social dimensions of projects, the Bank will allocate financial resources to a central fund designed to provide support for innovative projects addressing priority social dimensions, such as participatory

poverty assessments, methodologies for social analysis, the organization of natural resource users, and others.

In addition to adopting the above "strategic priorities" for future Bank lending, the Bank's near-term remedial and retrofitting actions should be continued or initiated for active projects found by the study to fall short of policy and legal provisions. Some projects may require restructuring, additional financing, or the creation of resettlement agencies. Borrowing agencies are expected to reallocate financial resources within project budgets to complete resettlement successfully, and the World Bank will consider additional financing, upon countries' requests.

The study also identified cases where resettlement plans agreed upon with the Bank were not implemented by the borrowing agency and completed projects have left a number of resettlers worse off. Therefore, the Bank expressed formally its readiness to provide further assistance to the respective governments in the remedial actions they propose to take. To the extent possible, such "retrofitting" actions should identify the people affected and seek to reverse their impoverishment. The retrofitting actions agreed upon between the Bank and India's National Thermal Power Corporation (NTPC) for several completed thermal projects is an example of such retrofitting actions. Now, the challenge moved to implementing these actions. Improvements have been and are being made also in (i) the analysis of resettlement at appraisal and in the design of development packages for resettlers, (ii) the in-house review of resettlement components before project approval, and (iii) the staffing and organization of operational units to enable them to address resettlement professionally and consistently.



Much of the professional social knowledge needed for carrying out successful resettlement resides in the Bank, and the study has enriched it. This knowledge is being more fully used now.

One year after the completion of our action-research, and after the formal adoption by management of the strategic and operational measures described above, a review of the progress achieved over the year was conducted and the findings were summarized in a new report (World Bank 1995). The empirical evidence contained in this new report testifies to the effectiveness of the large scale action-research described in the present study. The monitoring of the systematic follow up effort found that corrective actions have obtained some significant results, and that the planning of new projects with resettlement is being improved along the lines recommended by our action-research. Measurable positive changes have occurred in the Bank's culture and staff's work patterns with respect to resettlement because the lessons derived through the action-research are gradually internalized by the Bank as an institution and its staff.

The important learning process that has taken place due to and during the study has increased awareness of the complex issues and risks involved in involuntary resettlement operations. By setting more exacting norms for the operations it assists, and promoting resettlers' reestablishment at comparable or improved income levels, the Bank is working to narrow the gap between resettlement objectives and unsatisfactory but entrenched practice in enveloping many countries. Closing this gap requires time, resources and steady effort.

Unfortunately, bad standards continue to prevail in much of the displacements taking place today in domestically sponsored projects, outside Bank-assisted programs. By supporting resettlement centered on preventing impoverishment, the Bank promotes policies and approaches that are relevant far beyond the Bank-financed projects. Improving capacity in developing countries will benefit not only Bank-assisted operations, but also many other involuntary resettlement processes that affect larger numbers of people. This is the road that must be travelled in future resettlement work, even though it is not an easy one. There will be many difficulties on this road. Resettlement caused by necessary development processes, despite all improvements in social science knowledge and in practice, will still remain a formidable social challenge. Sociologists must continue to focus their research instruments on such processes and contribute to improving them.

BIBLIOGRAPHY

- Butcher, David. 1990. "Review of the Treatment of Environmental Aspects of Bank Energy projects", World Bank Industry and Energy Department, PRE Working Paper, March.
- Caro, Robert A. 1975. *The Power Broker - Robert Moses and the Fall of New York*. New York: Random House.
- Cernea Michael M. 1995a. "Understanding and Preventing Impoverishment from Displacement. Reflections on the State of Knowledge". Keynote Opening Address presented at the international Conference on Development-Induced Displacement, University of Oxford, Oxford, UK.
- 1995b. "Social Integration and Population Displacement: The Contribution of Social Science". *International Social Science Journal*, Blackwell Publ.
- 1995c. "Social Organization and Development Anthropology". 1995. Malinowski Award Lecture. Delivered at the 55th Annual Meetings of the Society for Applied Anthropology, Albuquerque, New Mexico, March 31, 1995.
1993. "Anthropological and Sociological Research for Policy Development on Population Resettlement". In vol. Michael M. Cernea and Scott E. Guggenheim (eds.), *Anthropological Approaches to Involuntary Resettlement: Policy, Practice and Theory*, Boulder Colorado: Westview Press.
1991. "Involuntary Resettlement: Social Research, Policy, and Planning". In M.M. Cernea, ed. *Putting People First: Sociological Variables in Rural Development*, 2nd ed. New York, London: Oxford University Press.
1990. *Poverty Risks from Population Displacement in Water Resources Development*, Cambridge: Harvard University, HIID/DDP 355.
- 1988a. "Involuntary Resettlement and Development", in *Finance & Development*, September.
- 1988b. *Involuntary Resettlement in Development Projects. Policy Guidelines in World Bank-Financed Projects*, World Bank Technical Paper No. 80. Washington, DC.
- Colson, Elizabeth. 1971. *The Social Consequences of Resettlement: The Impact of the Kariba Resettlement Upon the Gwembe Tonga*. Manchester: Manchester University Press.
- Fahim, Hussein. 1983. *Egyptian Nubians: Resettlement and Years of Coping*. Salt Lake City: University of Utah Press.
- Fernandes, Walter and E. Ganguly Thukral, eds. 1989. *Development, Displacement and Rehabilitation*. New Delhi: Indian Social Institute.
- Gans, Herbert J. 1959. "The Human Implication of Current Redevelopment and Relocation Planning". *Journal of the American Institute of Planners*, Vol. 25, No. 11: 15-25.
1968. *People and Plans: Essays on Urban Problems and Solutions*, New York: Basic Books.
- Guggenheim, Scott E. 1994. *Involuntary Resettlement: An Annotated Reference Bibliography for Development Research*, The World Bank, Washington, DC.
1989. *Development and the Dynamics of Displacement* in Fernandes, Al (ed.). Workshop on Rehabilitation of Persons Displaced by Development Projects, Bangalore, Myrada.
- Hamilton, Susan. 1992. *Yacyreta Evaluation Study*, Syracuse University, 1992.

- Huang, Yao Fei. 1984. "On the Reform of Resettlement Policies in China", *Chinese Journal of Water Conservation*, No. 6.
- Institute of Ecology. 1989. *Environmental Impact Analysis of the Cirata Dam*, Padjadjaran University, March.
- Mburugu, Edward K. 1988. *A Resettlement Survey in the Kiambere Hydroelectric Power Project - Preliminary Report*, March.
- Merton, Robert K. 1957. *The Sociology of Science, Theoretical and Empirical Investigations*, Chicago/London: University of Chicago Press.
- Mougeot, Luc J.A. 1988. *Hydroelectric Development and Involuntary Resettlement in Brazilian Amazonia: Planning and Evaluation*, Edinburgh: Cobham Resource Consultants.
- Nayak, P.K. 1986. *Resettlement at Rengali Dam*. Bhubaneswar, Orissa, p. 50.
- Ngaide, Tidiane. 1986. *Socio-Economic Implications of Irrigation System in Mauritania: The Boghe and Fom-Gleita Irrigation projects*. Thesis submitted for Master of Science (Land Resources), University of Wisconsin-Medison.
- OECD-DAC. 1992. *Guidelines for Involuntary Population Resettlement*. Paris.
- Padjadjaran University. 1989. *Environmental Impact Analysis of the Cirata Dam*, Padjadjaran University: Institute of Ecology, March.
- Partridge, William L. 1990. "Involuntary Resettlement in Development Projects". *Journal of Refugee Studies*, 2(3), pp. 373-384.
- Rew, Alan W. and P.A. Driver. 1986. *Evaluation of the Victoria Dam project in Sri Lanka*. Volume III. Initial Evaluation of the Social and Environmental Impact of the Victoria Dam project. Annex J Social Analysis. Annex K Environmental Analysis. (Mimeo).
- Roy-Burman, B.K. 1961. *Social Processes in the Industrialization of Rourkhela*. New Delhi: Census of India.
- Scudder, Thayer and Elizabeth Colson. 1982. "From Welfare to Development: A Conceptual Framework for Analysis of Dislocated People". In Hansen, A. and A. Oliver-Smith (eds.), *Involuntary Migration and Resettlement*. Boulder: Westview Press.
- Shihata, Ibrahim F.I. 1991. "Involuntary Resettlement in World Bank Financed Projects", in *The World Bank in a Changing World*. The Netherlands: Martinus Nijhoff Publishers, p. 181.
- Soeftestad, Lars T. 1990. "On Evacuation of People in the Kotmale Hydro Power Project: Experience from a Socio-Economic Impact Study", *Bistaandsantropologen*, June.
- Suarez, F.R. Franco, and E. Cohen. 1984. *Efectos Sociales de las Grandes Represas en America atin*. Buenos Aires, Argentina: CIDES-ILPES.
- World Bank. 1995. *Final Report: Regional Remedial Action Planning for Involuntary Resettlement*. May. Washington, DC.
1994. *Resettlement and Development. The Bankwide Review of Projects Involving Involuntary Resettlement 1986-1993*. The Environment Department.
1993. World Bank Operations Evaluation Department, *Early Experiences with Involuntary Resettlement*, Report No. 12142, June 30.
1980. Operational Directives No. 4.30. *Involuntary Resettlement*. Washington, DC.

THE WORLD BANK



Headquarters

1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

Telephone: (202) 477-1234

Facsimile: (202) 477-6391

Telex: WUI 64145 WORLDBANK
RCA 248423 WORLDBK

Cable Address: INTBAFRAD
WASHINGTONDC

World Wide Web: <http://www.worldbank.org>

E-mail: books@worldbank.org

European Office

66 avenue d'Iéna
75116 Paris, France

Telephone: (1) 40.69.30.00

Facsimile: (1) 40.69.30.66

Telex: 640651

Tokyo Office

Kokusai Building
1-1 Marunouchi 3-chome
Chiyoda-ku, Tokyo 100, Japan

Telephone: (3) 3214-5001

Facsimile: (3) 3214-3657

Telex: 26838

The full range of World Bank publications, both free and for sale, is described in the annual *Index of Publications*, and of the continuing research program of the World Bank, in *World Bank Research Program: Abstracts of Current Studies*. The most recent edition of each is available without charge from:

DISTRIBUTION UNIT,
OFFICE OF THE PUBLISHER
DEPARTMENT F
THE WORLD BANK
1818 H STREET, N.W.
WASHINGTON, D.C. 20433
U.S.A.

PUBLICATIONS
THE WORLD BANK
66 AVENUE d'IÉNA
75116, PARIS
FRANCE