

Involuntary Resettlement The Large Dam Experience

THE BANK'S RECENT STUDY OF INVOLUNTARY resettlement shows that if countries do not have both the capacity and the commitment to handle involuntary resettlement well, they should not embark on a large dam project. For years, the infrastructure and human sides of projects were utterly disconnected in most instances. That is now changing, as more countries voice their commitment to handle resettlement well. An even better indication of that commitment would be putting stronger monitoring and evaluation in place.

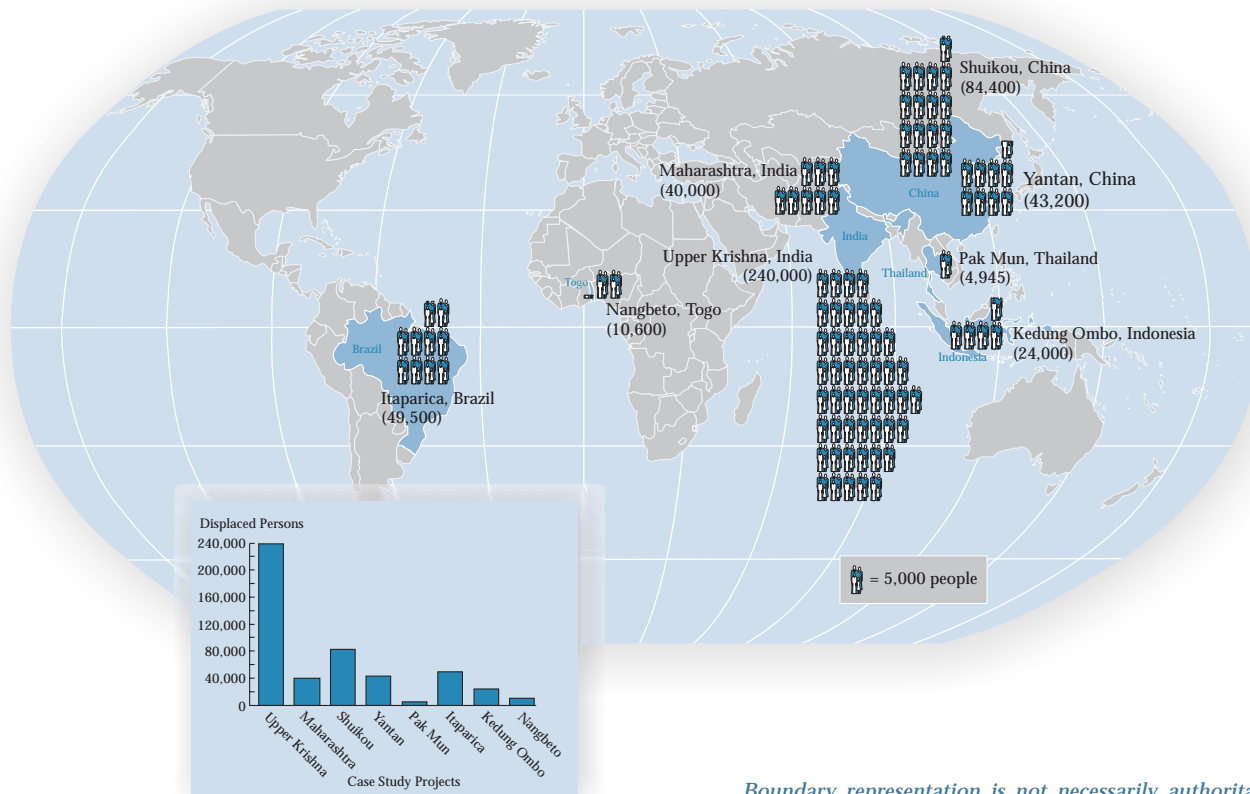
The best signal will be when governments treat resettlement not as a problem but as an opportunity. One key element in this is to mix land-based and diversified strategies, not just to restore people's incomes but to improve them. A second is to get outside the traditional project cycle and instruments. That means planning for income-generating opportunities well in advance of resettlement and continuing to assess how the resettlers are faring after the dam and relocation are complete. It also means going beyond the project's funds to tap other sources. The third key element is to work with NGOs, the private sector, government agencies, and external donors—to improve resettlement's chance for success.

Capacity and Commitment Are Both Essential

Public agencies are typically limited in their capacity to handle resettlement. In most of the study's cases, public sector agencies mishandled or ignored resettlement. Frequently the public agencies have a technical mandate, unrelated to resettlement. In India and Indonesia, the irrigation department was initially responsible for resettlement; in Thailand, Brazil, China, and Togo, it was the power-generating authority (box 1). In addition, obtaining the cooperation of other public agencies that are needed to make resettlement a success (agricultural extension, health, education) can be difficult.



Figure 1: Displaced Persons, by Project



Genuine country commitment to doing resettlement well is the key to success. In China, where the commitment to restore settlers' incomes was a clear mandate, the resettlement succeeded even in such remote areas as Yantan. In India, the idea is beginning to gain acceptance, but this has taken time to achieve. Above all, monitoring and evaluation have to be an integral part of planning and implementation—not a Bank-inspired exercise that enters and exits with the Bank's presence. The borrowers' undisguised indifference must give way to their recognizing these tools as the essential basis for improved management.

Governments are becoming more committed to good resettlement. In two of the cases here, borrowers exceeded Bank standards. There naturally are many levels of commitment. Sometimes there is commitment at higher, more policy-oriented levels, but relatively less at the resettlement-officer level, where the resettlement posting is sometimes viewed as an undesirable two-year career step. At other times dedicated individuals in the field are frustrated by indifference at higher levels, which robs them of the resources and other tools needed to perform effectively.

In Brazil, although the implementing agency intended to provide the infrastructure and services

resettlers needed, often the federal government did not or could not allocate the funds needed to do so. This led to delays that further increased costs. In Indonesia, implementation proceeded without knowledge of the large number of affected villagers who refused to move because local governments were not responsible for reporting on their migration. Although central government's commitment was questionable in any case, the lack of follow-up at the local level aggravated the situation. At Nangbeto, too, responsibilities were not successfully transferred as planned to other ministries.

Improving incomes is too big a challenge for implementing agencies alone. Except in China—where decades of experience with a command economy, allocating jobs, and planning for incomes provided the necessary institutional capacity and political will—government agencies and bureaucracies lack the flexibility and grassroots experience to design income-generating options well-suited to resettler capabilities and needs. NGOs should be called on to make a much greater contribution. The private sector can also be drawn in. Looking ahead, governments should solicit cooperation and useful inputs from the earliest stage, forging a wide range of public, private, community, and institutional partnerships.

In all circumstances, adequate resource allocations are

essential both during and after the construction period. In Brazil, Togo, India, and Indonesia, relocation preparations and resettlement activities lagged behind because too few resources had been dedicated to them. In Thailand, by contrast, ample resources enabled the implementing agency to achieve a satisfactory resettlement outcome (resettlers are not necessarily satisfied, as NGOs urge them to complain and get more compensation).

The Devil Is in the Details

Planning for Economic Rehabilitation

Needs to Improve

Economic rehabilitation of resettlers is the weakest aspect of resettlement planning. This was clearly the case in Togo, where rehabilitation was not even an afterthought. So, resettlers' incomes and living conditions deteriorated for years without the implementing agency even realizing it. Nor were the strategies based on transmigration assumptions viable for many resettlers at Karnataka, Itaparica, and Kedung Ombo.

The planners either failed to address the operating constraints adequately or avoided the issue until it was too late to implement a good strategy. They were forced into second-best solutions—or worse, they developed no solutions.

Intelligent planning does not necessarily imply microplanning. A general structure of plausible income opportunities is enough to establish a basis for budgeting and interactive implementation, after which the real lessons about feasible and popular options can be documented and fed back into the cycle.

Relying on the regional economy to take up the slack is risky, especially where overall economic prospects are uncertain. In none of the cases did the authorities specifically rely on regional economic growth to ensure income restoration. But the absence of regional growth was a complicating factor in the Itaparica area of Brazil, and in India and Togo.

Planners have to present plans with land and non-land options, flexible models, and fall-back positions in

Box 1: A Summary of Dam Projects

THIS STUDY OF INVOLUNTARY RESETTLEMENT associated with big dams selected projects from six countries—all appraised well after the Bank's resettlement guidelines were first issued and while they were being strengthened. Two projects each were included from India and China, to assess the representativeness of the primary selections from the two countries that dominate the portfolio.

The projects range widely in size. On average they displace about four times as many people as other Bank projects with dams. The dams were not significantly more expensive or larger in reservoir surface area, but they were in more densely populated areas.

A higher percentage of the projects had resettlement problems than the portfolio as a whole, largely because more recently approved projects have generally had fewer problems. Three are among the most controversial in the Bank's portfolio.

India—Upper Krishna. In Karnataka, two dams are displacing a total of 40,000 households, or about 240,000 people, the largest resettlement operation in the Bank's history. This does not include another 150,000 to 200,000 people who will be displaced when the dam is raised to its ultimate height, not part of the Bank-financed project. Implementation of the resettlement plan ran into problems almost immediately, and the Bank suspended the project twice, in 1992 and 1995. Resettlement has finally improved. Compensation rates have approached market levels; a consent award system has almost eliminated the need for resettlers to sue for increased compensation; house construction, land purchase, and income-generation grants have helped supplement compensation; and nongovernmental organizations (NGOs) have begun income-generating activities. Resettler incomes have started to increase after a long period of decline.

In *Maharashtra*, two much smaller dams displaced about 40,000 people. Resettlers were moved into the downstream area irrigated by the reservoirs displacing them. Some resettlers have done well, but many have not received irrigation, or have received it sporadically and in limited quantities, insufficient to compensate for the reduction in land-holdings. A follow-up plan to make up for these deficiencies had not done much more than improve community infrastructure in its first year.

China—Shuikou and Yantan. At Shuikou, 67,000 people were relocated from the valley floor, and another 17,000 from Nanping City, at the upstream end of the reservoir, to make way for embankments that avoided the need to relocate more of Nanping's 200,000 inhabitants. All relocation was completed by 1992. Although the original resettlement plan called for using traditional agriculture to rehabilitate 74 percent of those displaced, in actuality 75 percent were rehabilitated by other means. Local government officers aggressively developed the reservoir fishery, oyster beds, fruit and timber trees, and township and village enterprises, and even recruited foreign investors to establish factories to employ resettlers. The incomes of displaced people recovered to premove levels by 1994 and increased 44 percent by 1996, almost doubling the increase in non-resettler income growth. Treating resettlement as a development opportunity led to the most successful resettlement outcomes among the case study projects.

Yantan displaced 43,000 people and affected the incomes of another 19,000. Located in a much more remote and isolated region, Yantan did not benefit from a rapidly growing coastal economy. Nonetheless, resettler incomes increased, and were supplemented by a grain ration until they reached the target level. Furthermore, the government

case the regional economy cannot quickly absorb the displaced. Planners should aim for a viable package, adequately managed and funded, that can establish the conditions for restoring full employment—even when the economy is stagnant.

Results, Not Plans, Are the Appropriate Touchstone for Quality Management

Although intelligent planning is a prerequisite to sound implementation, excessive reliance on “paper plans” is dangerous. Reality almost always differs from plans. When it came time to move in Indonesia, despite surveys of villager desires before planning the Kedung Ombo resettlement, far fewer people were willing to enter the transmigration program than originally said they would go. In China, plans estimated that larger numbers of people could find farm-related employment than proved to be the case. In both instances, adjustments had to be made.

This is the downside of the progress with planning. Although better planning usually means better imple-

mentation, this assumption has not held up for involuntary resettlement. As a subsidiary operation, resettlement continues to receive inadequate attention during implementation. In none of the six cases did implementation follow plans, either because implementation failed to keep up with the timetable, or because plans made incorrect assumptions about resettler needs and resource endowments. Countries that monitored results and had the flexibility to alter plans when warranted did the best. China, which altered its land-based income restoration strategy when farm employment did not reach high enough levels, is the best example of this.

Compensation Must Be Adequate and Timely

Land compensation—the most difficult part of the dam-related compensation package to get right—needs to be handled early, but even this does not guarantee success. Pak Mun’s original land compensation rates proved too low—land prices increased when the reservoir rose, and successive compensation increases only pushed land

arranged to transfer several thousand households to two sugar estates and another state farm in other parts of the province. Average incomes among those resettlers have increased the fastest.

Thailand—Pak Mun. The power company that built the dam changed the design by lowering the dam five meters and moving it 1.5 kilometers upstream. While this reduced power benefits by one-third, it reduced the size of the reservoir by more than half. Families whose houses would be close to the reservoir, excessively isolated by the reservoir, or inconvenienced by dam construction were also offered relocation and resettlement. Land compensation rates were quintupled to \$8,750 per hectare. The generous compensation allowed resettlers to shift occupations and acquire household assets. Less than 6 percent was spent on purchasing land, as the low returns to farming were no longer seen as attractive. The main outstanding contentious issue is the hotly debated impact on the reservoir fishery, and what would be adequate compensation for the alleged impacts on fishing.

Indonesia—Kedung Ombo. The original plan was for 90 percent of the 24,000 people displaced to join the transmigration program and move off Java to the outer islands. In actuality, only 25 percent of the displaced people did so, largely because of the serious delays in developing the transmigration sites. About 60 percent of the people resettled themselves in the reservoir area, often taking jobs in nearby towns. Given the rapidly growing central Java economy at the time, their incomes increased rapidly. Results for the transmigrants varied considerably, even at the same site. Some resettlers got good land, while neighbors across the road received miserable land. Some resettlers received their oil palm plantings and are making a good living, while oth-

ers were still waiting for their plantings 12 years after they moved. There was very poor follow-through in monitoring resettler conditions to see that the plans were implemented in a timely way.

Brazil—Itaparica. The dam was built without Bank financing, but the Bank agreed to finance the resettlement component as part of a power sector loan. The 49,500 displaced people, organized into a resettler’s syndicate, demanded irrigated plots near the reservoir. Creating viable irrigated lots in sandy soil with difficult marketing arrangements proved prohibitively expensive—resettlement costs escalated past \$1 billion and are estimated to reach \$1.5 billion before completion, or almost \$200,000 per household. In contrast, households that accepted compensation to resettle themselves received about \$5,000. Resettlers receiving irrigated plots are still dependent on free irrigation water and income maintenance payments. Resettlement has been a costly failure; a sustainable solution remains elusive.

Togo—Nangbeto. The reservoir displaced 10,600 people, of which 3,000 lost their houses but little of their land. The other 7,600 had to be moved to resettlement zones 30–55 kilometers from their old homes. The zones were in sparsely populated areas, but since the move in 1987, in-migration and natural growth have caused overpopulation, which curtailed the former system of extensive agriculture based on rotation among landholdings of the land area farmed in any single year. Without sufficient incomes to afford fertilizers, improved seeds, and other inputs to maintain soil fertility, resettlers often get trapped in a spiral of declining yields and incomes. This demonstrates that even apparently successful resettlement requires monitoring and follow-up.

Box 2: China Treats Resettlement as a Development Opportunity

TWO CHINA DAM EXPERIENCES, AT SHUIKOU AND Yantan, show how sound resettlement practices can lead to successful and relatively rapid income restoration for affected households, even though large numbers of people had to be moved to terrain much less hospitable for farming than the areas they left.

Both dams filled river valleys surrounded by steep hills, forcing most resettlers to forsake traditional paddy farming for intensive farm crops, tree crops, and nonfarm employment. In some cases, especially in Yantan, families had to migrate to other areas to be assured jobs. Despite the life-style change this required, most households have seen their incomes increase substantially. Housing and services are better than before, and resettlers, especially in Shuikou, express satisfaction with their situations. Shuikou families' economic improvement was boosted by strong regional growth, a situation that did not apply to the more isolated Yantan. Nonetheless, in both areas most resettled households restored and increased family incomes surprisingly quickly.

China's performance in these two projects is impressive. When funding shortfalls and delays in execution upset the implementation schedule for relocating households, the executing agencies were determined to catch up, and invariably did so. The emphasis on jobs and incomes, and the thoroughly participative process whereby households and local government authorities are brought into planning and implementation, represent "best practices" for involuntary resettlement efforts.

The most impressive aspect of this story is that China takes income restoration and development as seriously as it takes physical relocation. China and the provincial governments have grasped resettlement as an opportunity for promoting regional development.

The impression is enhanced by the high standards China sets for the minimum conditions on the jobs it is trying to create. It is aiming to provide secure bases for family income and welfare. China does not consider some traditional occupations—such as rainfed farming for subsistence—as acceptable outcomes.

The Shuikou incomes policy was pushed along hand-somely by the rapid industrialization of the southeastern Chinese coast. Yantan's progress in job recreation and income restoration has been slower. But the Yantan authorities did something the Shuikou authorities did not have to do: organize the migration of workers to areas with excess cultivable land. For both schemes, spontaneous migration by individual workers also helped to broaden the income base. Promoting organized and spontaneous migration to strengthen an incomes policy for resettlement is a creative solution when remunerative employment opportunities are within the reach of the migrants.

In many ways China is unique. The persistence of planning, the collective ownership of rural land and other resources, and the importance of local government in shaping investment are advantages impossible to export. Even so, at least four ingredients in the China recipe apply elsewhere:

- The idea of approaching involuntary resettlement as a development opportunity and marshaling a range of instruments to carry it out.
- An imaginative exploration of micro-opportunities, propelled by the conviction that any but the most hostile environment offers a multitude of options. The ability to force the expansion of fish farming from cages and pens, of pearl culture from these and similar pens, of stone cutting, of exotic fruits when the traditional ones fail, and even of polished golf club heads, is an acquired skill, not unique to the Chinese.
- The flexibility to adjust strategies when early ones break down, shifting to other sets of employment opportunities if necessary, or stepping back in to rehabilitate or restructure failing enterprises.
- The crucial involvement of local governments, especially the elected leaders. The objective is not only to secure their ownership but also to "wed their interests to those of local residents."

prices higher. When large numbers of resettlers take unrestricted cash packages and compete for a limited land pool, land prices spiral beyond all reasonable budget limits. China handles this issue properly by counting heads, identifying opportunities for land-based employment, then broadening the search to take up the excess. In Brazil, if land compensation based on nearby resettlement had been considered earlier, the analysis could have led to something other than the high-cost, high-risk irrigation schemes that were negotiated.

Cash options need to be on the list. Inevitably, the dam will result in less land, of lower quality, being available for resettlers around the reservoir. Since resettlers generally wish to remain close to their original homes, a cash option provides alternatives—unavailable in the land-only option—for resettlers to pursue other income-generating

options or to improve their homes. In Thailand, recipients used cash compensation to make financial reallocations among household members, so that they could buy houses or land, get better education, or get ahead in an occupation. In Togo, cash compensation was a significant help to the poorest resettlers, and compensation in general helped resettlers get by when the economy collapsed.

The most enterprising resettlers do best on their own and reduce the economic and management burden of the resettlement operation. Tied-cash options—with installment payments, joint accounts, and specialized training programs to steer excess families away from the land—are underused instruments. The Indian authorities have tried these methods, but so far without much success. Clearly, they will not work everywhere, but they have good potential.

Emphasis Should Shift from Income Restoration to Income Improvement

Interruptions to the previous lifestyle along the river are usually inevitable and characteristic of a modernizing economy. They do not mean the resettlement program has failed. Conversely, fairness and equity require that the disruption in the quality of life of affected communities be not only compensated but also managed to community and individual advantage. The emphasis should shift from restoring incomes—which can suggest recovery to but stagnation at predam lifestyles—to improving incomes to bring the displacees into the developmental process along with the project's primary beneficiaries.

In planning for land-based as well as non-land-based occupations, it is essential to be realistic about the resource base, the activities it can support, and especially the skills and traditions of the displacees. In none of the cases were initial plans correct about adequacy of the resource base or the desires of the displacees. Itaparica is perhaps the saddest case. The hope was to settle the families that chose the rural option on small lots irrigated by sprinklers and dependent on unfamiliar, high-input and high-output farming practices. Even if the irrigation infrastructure had been put into place on the timetable needed, technical assistance would have been required to give subsistence dryland farmers the skills they needed for the land-intensive irrigated farming they were expected to adopt.

Income-generating schemes have to be diverse. They aided resettlement success in China, Indonesia, and Thailand. They provided income supplementation in Togo and India to families that otherwise would have had their incomes fall. Marketing channels must be identified and, if possible, ensured before venturing into new crops, products, or services—or significant expansions of existing activities. An income-generating scheme is only as good as its weakest link.

Most of the successful resettlement experiences in the study either were not land based or were very land intensive (for example, mushrooms, fish cages). Almost all the self-resettled households moved to non-land-based economies. Recreating existing production systems, while it sounds culturally superior, is often not feasible for dam resettlement. But because many families are likely to opt initially for maintaining their previous lifestyle, alternatives must be researched thoroughly, organized well, and presented and discussed to the families' satisfaction.

Countries need to explore all available options—and mobilize the energies of all their development partners—to achieve better resettlement results. This applies especially to projects involving substantial movement of people, the loss of present occupations, and the complicated task of generating new jobs and livelihoods. Big dams are the quintessential example of where such an “incomes” approach should be used. Many resettlement components in other projects, by contrast, will continue to be primarily concerned with reestablishing houses and community infra-

structure after urban, highway, and other dislocations—maintaining jobs rather than creating new ones. This “shelter” approach may not need radical redesign, for this study's investigations show that in all six countries the compensation for lost houses and construction of new ones has been reasonably well handled.

Treat Relocation as a Development Opportunity

Countries should offer irrigated lots in the command areas (for irrigation projects) and support land-intensive activities and traditional dryland cropping elsewhere. They should also shift to diversification activities (supported by training), and use tied-compensation packages, joint accounts, and tranching payments to promote them. Experience with these options in the study projects has been no more impressive than with resettlement in rainfed areas, and the benefits have been equally elusive. That means putting the best development planners to this task, along with the best resettlement experts. Resettlement must not be seen as an inconvenient add-on, but as integral to the project. The emerging concept of resettlement as a development opportunity rather than a burdensome obligation is a step in the right direction. China understands this; the other five countries do not (box 2).

Countries should shift the emphasis to improving income and living standards, opening the way for displacees who are motivated and capable of moving from their valleys to take a new place in the regional or national economy. The design of the project must not only provide water, power, and other conventional benefits below the dam, but also be part of a regional development plan shaped to support the affected families above the dam. Enough benefits should be captured to justify the local social disruption and to help establish sustainable, progressive employment and incomes for the displaced. The aged, infirm, and unmotivated may not welcome the opportunity to “modernize,” and should not be forced into it. But the resettlement strategy as a whole should reflect more ambitious aspirations.

Where stand-alone resettlement projects are not feasible, countries need other instruments inside and outside the conventional investment lending program to influence upstream and downstream activities essential to resettlement success. On the upstream side are training and testing new strategies. Downstream, other devices may be necessary. Since the monitoring and evaluation of resettlement impacts and resettler incomes tend to disappear when the Bank exits the project, continuing Bank involvement in supervision through the resettler rehabilitation phase would support improved monitoring. Further finance may also be necessary.

Above all, displacees must be beneficiaries of the project. Merely aiming to restore standards of living and lifestyles common to isolated river valleys can be a dead-end development strategy. The opportunity must be taken to establish new and dynamic sources of sustainable

growth. In nonreservoir cases, that impulse may be less compelling, because communities are usually not so deeply disrupted. The recommendation applies especially to big dams, because they involve major social dislocations, and thus require special arrangements. Many families are likely to be apprehensive about “dynamic growth,” and their legitimate concerns can be addressed only by excellent preparation of the most cost-effective alternatives, with the families’ full participation.