



# Relevance of Bank Assistance

**W**here does the World Bank fit in the scheme of things as borrowers respond to natural disasters and prepare for recovery and reconstruction? The external Web site states its role succinctly: “The World Bank is the largest funder of disaster recovery and reconstruction in the world.”<sup>1</sup>

What this means for borrowers facing a severe crisis is that if the Bank does not finance the solutions to the bigger reconstruction problems, they will often be addressed only piecemeal, if at all. Not returning to full functionality has a multitude of small impacts, and it has been argued that much of the longer-term GDP cost of disaster is the result of incomplete reconstruction (Linnerooth-Bayer and Mechler 2005).

When the Bank responds to a disaster, it often uses several of its funding mechanisms. For example, in Honduras, following Hurricane Mitch, the Bank’s primary response was balance of payment support through an Emergency Recovery Credit. This was supplemented by reallocations from seven existing projects and redirection of a social fund to assist in the recovery and reconstruction. A follow-on loan is being implemented to reduce vulnerability through strengthening municipal institutions for disaster management. The Bank has responded to other disasters—the Turkey earthquake, flooding in Bangladesh—with a similar mix of financing.

Flexibility and innovation are essential to success with a natural disaster response. Among the Bank-financed responses that have demonstrated such flexibility and innovation are the Maharashtra Earthquake Project (1997), which attempted to address the needs of the very poor and nomadic; North China Earthquake Reconstruction (1993), which integrated cultural heritage in the response; Yemen Emergency Flood Reconstruction (1989), which had particularly effective donor coordination; drought prevention in Niger (1988), which made highly efficient use of limited resources; and the Honduras Social Investment Fund (1999).

## Defining Relevance of Disaster Assistance

The relevance of the actions taken following a natural disaster depends on the extent to which they are timely, appropriate to country needs, and reduce vulnerability. However, the needs of the country and of those affected by disaster change dramatically day by day and month by month following a disaster. This makes it difficult to remain relevant without

building a measure of flexibility into planned actions.

In the dynamic circumstances following a natural disaster it can be difficult to do activities in order of priority. Several government officials interviewed during field visits made the point that readiness to implement too often outweighed the priority of the activity. This meant that some immediately relevant critical activities that required a plan (such as rehabilitation of public markets or housing for the poor) were put off until one could be prepared, while other activities not requiring a plan (such as repaving urban streets) were started sooner than necessary, diverting attention from the more critical activities. With a longer-term view of disaster risks, countries might recognize that getting the priorities right would require a level of advance planning by government ministries, as well as through institutions specifically focused on disaster risk management.

Over the past 20 years, Bank financing has supported 60 distinct types of activities in response to disasters, exhibiting a high level of innovation and flexibility. Projects contained anywhere from one activity type to 22, but generally projects have been designed to provide solutions specific to the unique situation presented by each event, taking

*The Bank has responded flexibly with a wide variety of activities.*

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where from one activity type to 22, but generally projects have been designed to provide solutions specific to the unique situation presented by each event, taking

into account geographic, cultural, and social factors, as well as hazard risks (see Appendix F, figure F.1). Table 4.1, which lists the 10 most frequent activities, shows that many projects have pursued activities related to reduction of vulnerability (such as those related to disaster management and to public awareness).

Timeliness is also extremely important—when an activity is done and how long it takes to complete are at least as important as what activities are undertaken. In the case of an earthquake, food is needed immediately post-disaster and not later. If it arrives later, it can actually detract from the sales of food harvested (and/or salvaged) in the interim (Jackson 1982). As droughts become increasingly serious, there is a time when the poor consume seed stocks and sell off domestic animals. Considering this, interventions that lead to speedy recovery need to begin before the next year's crops are consumed and draught animals are gone.

The same principle applies to Bank activities. For example, if balance of payment finance is to do any good, it must be disbursed quickly enough in the year following the event to cover the cost of imports needed for reconstruction, and not those unrelated to reconstruction. India, Madagascar, Mozambique, and Turkey used balance of payment lending for petroleum imports. In the following year, however, petroleum imports declined sharply, which suggests that the balance of payment loan may have led to an over-purchase of those products.<sup>2</sup>

The activity most frequently pursued—provision of supplies and equipment—may be of dubious relevance. Specialized equipment purchased through a loan needs to be used effectively and efficiently. Accomplishing this may require additional investment by the borrower (see box 4.1)—investment that may not be forthcoming or may lose out to other development priorities once the most pressing needs have been met.

For emergency shelter to do any good at all, it should be erected only after victims have been assisted as far as possible to provide themselves with shelter close to where their homes used to stand (or, as often happens, have permanently resettled elsewhere). Of course, relevance also

**Table 4.1: The 10 Most Frequently Pursued Activities**

Activity	Number of projects
Provision of supplies and equipment	88
Rehabilitation of road infrastructure	77
Rehabilitation of flood control infrastructure	53
Studies and research on disaster management	43
Institutional development for disaster management	43
Fire prevention activities	43
Early warning and public awareness campaigns	39
(Re)Development of education facilities	38
Planning for disaster management	37
Rehabilitation of irrigation and drainage	37

Source: IEG data.

### Box 4.1: Equipment Acquisition Can Be Particularly Problematic

Equipment acquisition requires careful planning to ensure its productive use. Technical assistance provided under emergency projects may persuade public officials to invest in modern equipment for early warning, improved communication, and emergency supplies and equipment for police, firefighters, and other first responders.

However, project experience has demonstrated a strong tendency for the devices to be bought but not installed. In other cases, equipment was installed or supplies warehoused, but no budget was made available for the people who were supposed to use it.

In some cases, large databases of geographic information have been established to provide information on different types of hazards, areas especially vulnerable to disasters, and available relief material, but they have not been regularly updated. In the Maharashtra Emergency Earthquake Project, data on disaster vulnerability was collected, but the government then classified it top secret, and it was not shared with the officials in charge of disaster management.

requires that they only be constructed in areas that experience severe winters, and early enough to be useful—otherwise it represents a waste of scarce resources.

The importance of timeliness is reflected in project performance. Of completed projects for which the time between approval and effectiveness was below the median (half the portfolio), 86 percent had satisfactory outcome ratings. For those above the median only 67 percent were rated satisfactory. Therefore, for projects experiencing difficulty in meeting effectiveness requirements, the performance was lower compared with those able to make a speedy first disbursement.

The funding mechanism used and the approach chosen depend on whether the intent is to finance an immediate response to urgent need, a medium-term response to assist recovery and reconstruction, or a long-term response for reconstruction and mitigation. As will be seen, however, this is not always the case. There is a general pattern, but there are exceptions. Each circumstance is worth considering separately.

### Delivering Quick Support for the Immediate Response

Countries affected by natural disasters often request quick assistance to replace lost capital and to prevent cascading negative economic effects from growing and multiplying. To help with this, the Inter-American Development Bank has established an Emergency Reconstruction

Facility that permits the commitment of up to \$20 million “in the first hours after the disaster takes place.”

The World Bank has nothing similar. Instead, it has relied on reallocations to fill this expressed need. Unfortunately, the documentation for reallocations is so incomplete that it has not been possible to determine the activities and uses of reallocated funds. Based on experience, however, the Bank has sometimes been pressed into ill-considered responses during the early part of a natural disaster response (box 4.2).

Reallocations are highly relevant where the relevance of the original project is reduced by disaster. Furthermore, those funds often keep their broad sector dedication. For example, funds originally intended for school improvement have been reallocated to school reconstruction after a hurricane or volcanic eruption had destroyed schools (the 1995 Honduras Basic Education Project, the 1995 Nicaragua Basic Education Project, and the 1993 Papua New Guinea Education Development Project). In other cases,

projects have had slow-disbursing components that, in an emergency, can be formally reallocated to reconstruction purposes

*Timeliness matters as much or more than the activities undertaken.*

*Activities requiring supplemental effort by the country may remain at risk.*

*The quickest Bank response is reallocation, but the use of reallocated funds is not transparent.*

**Box 4.2: A Sense of Urgency Can Lead to a Wasteful Response**

Zimbabwe experienced its worst drought of the century during the 1991/92 growing season. The Bank responded with an ERL supplemented by reallocations from three ongoing loans—a total of \$37 million.

The project was to be implemented by established units in several ministries. However, their capacity was insufficient to handle the extra volume of work. Procurement planning, for example, should have started at the earliest opportunity, but only began after credit effectiveness was declared.

The results were mixed. Relief goods such as foodstuffs were quickly imported, but the recovery was marred by delays in the emergency water program and underachievement of targets for agricultural recovery. Only limited institutional capacity was created to assist with future drought management, and proposed policy and organizational improvements were not carried out. In the end, more foreign exchange was made available than could be readily absorbed—\$23.5 million of the IDA credit was canceled and hardly any reallocated funds were used.

Source: IEG project database.

*Reallocations can be highly relevant, but reallocation is not always an option.*

without regard to sector (such as Bolivia 1998, Vietnam 1995, and Mexico 1993).

For some countries, however, reallocation is not an option. Small

island states and small countries with fragile economic and political systems<sup>3</sup> often have few ongoing loans to reallocate, and even if they do, they are small relative to the assistance required. These borrowers are limited to requesting new lending from the Bank, which takes time to process and adds to their overall debt.

An alternative to reallocation in some cases has been the redirection of a social fund, which by its nature is multisectoral and intended to respond to community needs. In Honduras and Nicaragua, following Hurricane Mitch, social funds were an important part of the Bank's early response, transforming themselves overnight from centralized social investment funds into nimble rehabilitation and reconstruction agencies. Such redirections can provide critical support to the poor in affected communities, but they ultimately do little to address the problems faced by the government. More recent

alternatives to reallocation show some promise for meeting immediate needs, but their value remains to be seen.

*The ERL is typically used for short- to medium-term assistance.*

### **Delivering New Projects for the Recovery**

In the short to medium term, countries typically request assistance such as budget support, technical assistance for reconstruction planning, rapid reconstruction of transport infrastructure essential to international trade, and the provision of equipment and supplies. The Bank now customarily provides such support through ERLs.

### **Balance of Payment Support**

Balance of payment support is intended to be a quick-disbursing activity that meets the most pressing financial needs of affected countries. Designed to provide quick inputs to stabilize macroeconomic conditions and facilitate recovery following a calamity, this kind of support is not very common; only 15 loans have been made for balance of payment support following natural disasters.

Despite its emphasis on the rapid disbursement of funds, balance of payment support took an average of about 7 months (214 days) to reach effectiveness and 2.4 years (860 days) to reach closing. It thus did not meet institutional intentions that it be an effective means of providing quick transfer of resources to affected countries.<sup>4</sup> As one task manager who implemented this type of support noted, "I am very skeptical about disaster relief/emergency projects going through the budget in most countries. In [reference to country deleted] we were supposed to finance reconstruction through the budget,

which never happened and, in the end, the emergency project had neither a positive balance of payment nor reconstruction impact.”

### **Support for Social and Economic Recovery**

Ideally, the Bank tries to separate activities that benefit from a nearly immediate start-up and those where there is a need to plan more slowly for medium-term recovery and mitigation. OP 8.50 and Bank Procedure (BP) 8.50 call for consolidating project preparation activities, expediting processing procedures, and disbursing resources rapidly. Disaster projects are allowed accelerated processing and are expected to have a short implementation period. OP 8.50 and BP 8.50 establish a timing framework for emergency recovery lending that limits the elapsed completion time to three years.

Although Bank policy for emergency lending emphasizes a quick response and compressed implementation time, experience with the earthquake, drought, and tropical storm projects suggests that a quick response does not always lead to the most relevant response. The completion time of disaster projects appears to be determined by the time needed to complete each activity, an interval that is predictable. Responding effectively to a specific disaster requires picking and choosing from the full menu of 60 activities, and not concentrating on those that can be quickly accomplished. Therefore, a quick response is necessary and possible only in cases where the required activities can be carried out in a short time.

Having a disaster policy that emphasizes time limits for the intermediate term may lead Bank staff to rush certain activities unnecessarily. For example, in the St. Lucia Watershed and Environment Management Project, pressure to start reconstruction led to inadequately analyzed designs and implementation that did not reduce vulnerability to the next storm. Specifically, silt was removed from waterways, but the denuded hillsides in the surrounding watershed were not stabilized, and the waterways quickly refilled with silt.

Another risk inherent in a policy with time limits is that projects may exclude some activities that take longer but achieve long-term development goals. The analysis of activity

frequency specifically for ERLs shows that of the most commonly implemented activities, the top 10 are dominated by rehabilitation (of roads, schools, water systems, irrigation systems, health facilities, flood control infrastructure) and the purchase of equipment.

Among the 10 least frequently pursued ERL activities are land and water resource management, community-based disaster prevention, fire prevention, and forest management. The degree to which rehabilitation has been allowed to overshadow prevention, the low relevance of some activities, and the absence of follow-on projects indicate that greater attention to country needs and flexibility with regard to implementation time, coupled with a more varied assortment of lending instruments, may be called for.

The disaster activities carried out during recovery and reconstruction exhibited significant variance in implementation time, ranging from two to seven years. Figure 4.1 shows how long projects containing each disaster activity took, on average. Only one of the activities was carried out in projects completed within three years, as stipulated for ERL projects by OP 8.50.

Almost all of the most crucial disaster response activities required more than three years, in part because they were conducted without pre-disaster planning. For instance, projects involving land acquisition activities took an average of 7.5 years, and for those with infrastructure activities, 6.5–7 years was the average, depending on the type of infrastructure.

In planning for projects related to natural disaster recovery, too little time was generally budgeted for implementation. This is highlighted by the revised implementation time for most disaster activities

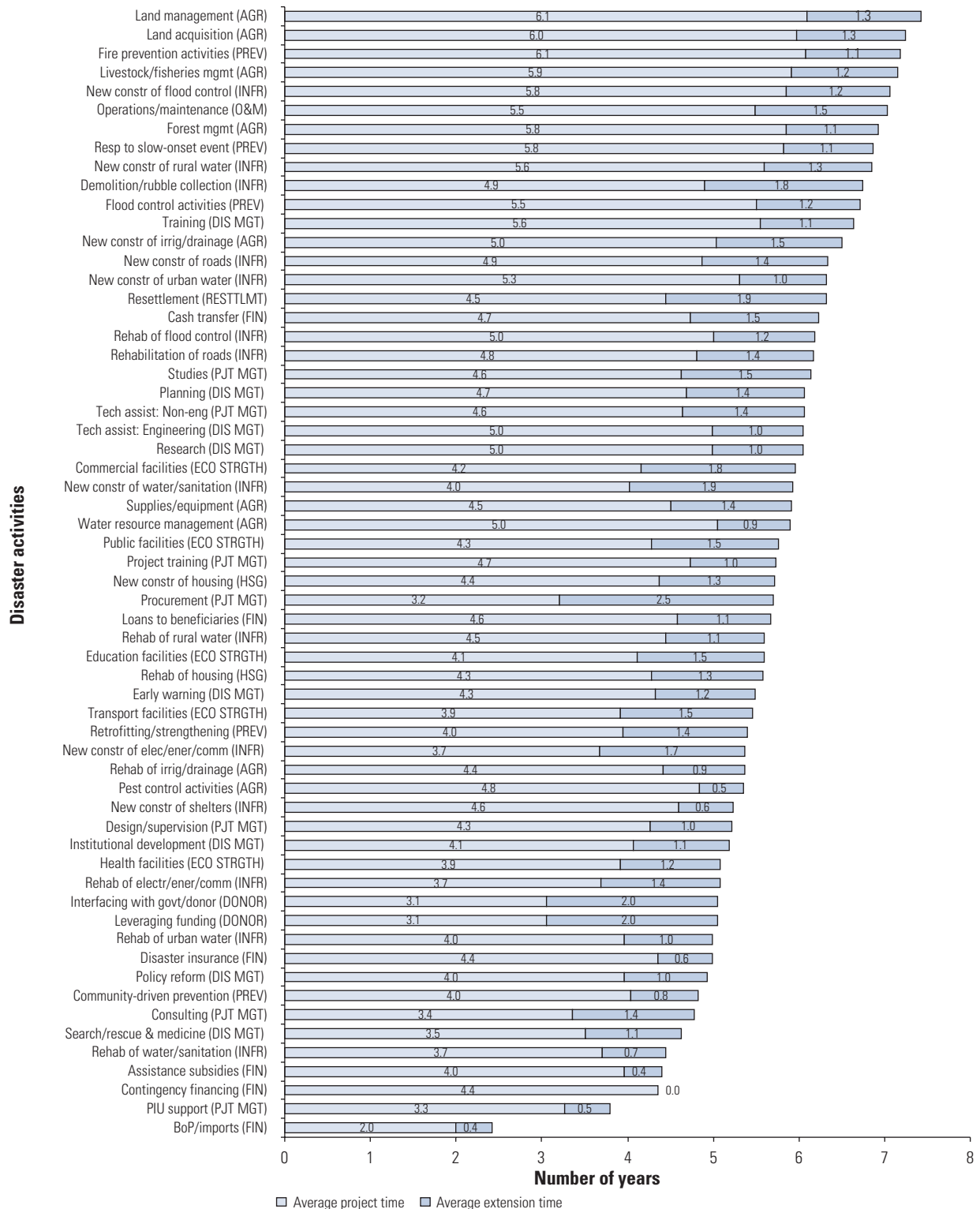
(shown in figure 4.1). For example, on average, the completion of projects with irrigation and drain-

*Balance of payment support has not been an effective means of providing quick transfer of resources.*

*The time required to complete particular types of activities affects project completion time.*

*Only one activity type has been completed in less than three years.*

**Figure 4.1: Average Implementation and Extension Times for Projects Containing Disaster Activities: All Disaster Projects**



Source: IEG data.

Note: Each bar represents the average actual implementation time of all projects with a given activity.

age infrastructure took 1.5 years longer than planned, and demolition took 1.8 years longer. Overall, of 303 completed projects, 28 percent were completed when they were expected. The rest ranged between 18 days and five-and-a-half years late. Of ERLs, 42 percent were completed in the timeframe originally anticipated, though estimated times often exceeded the policy requirement.<sup>5</sup>

### Reducing Vulnerability over the Longer Term

The Bank's standard lending instruments generally are well suited to efforts that reduce vulnerability through new or rehabilitated infrastructure (shelters, early warning systems, flood control works) or through developing the capacity to manage disaster risks. As figure 4.1 shows, such activities take longer than three years on average, and the time needed to implement them usually is underestimated by a year or more. Some ERLs have overreached by trying to cover such activities. Yet if such activities are left out of the ERL with the expectation that additional borrowing will follow, those activities may never be undertaken. ERLs have been followed up with normal disaster investment projects only 17 percent of the time. Of 59 completed ERL projects, only 10 have had follow-on projects that took place within three years after they closed (with activities related to either reconstruction or prevention).

For most low-income countries that have not faced a disaster recently, reducing vulnerability to disasters is just another of their many development priorities, and for those that have experienced disasters recently, vulnerability reduction quickly falls off the development agenda as governments turn their attention elsewhere. As seen in Chapter 3, disaster risks do not make it into the CAS or PRSP as often as country exposure to such risks would seem to warrant. When a CAS does discuss natural disasters, it is likely to discuss activities related to vulnerability reduction (such as strengthening disaster management, long-term planning, early warning systems; see Appendix E, table E.1).

When vulnerability is addressed, it can take a long time, but it can have a lasting impact on poverty (box 4.3). It can also represent significant savings.

Insurance that covers disaster damage is an important part of vulnerability reduction in most developed countries, but it is rare in developing countries. While about half of the costs of natural disasters are covered by insurance in the United States, less than 2 percent of the costs are covered in the developing world. The study

*Too little time is generally budgeted for implementation.*

*Investment lending instruments can fill disaster needs, but ERLs are rarely followed up with such lending.*

#### Box 4.3: Reducing Vulnerability May Also Reduce Poverty

The Small Rural Operations (SROs) Project in Niger adopted a development approach to reducing drought vulnerability based on transfer of responsibility to beneficiaries. By intensifying off-season crop production through widespread use of existing simple, low-cost technologies, the project generated rural income and helped mitigate food shortages.

The project took 11 years to implement (1988–98). It contributed to the financing of 88 SROs in off-season production of horticultural products and fruit trees, soil conservation, smallholder fish production, stock-raising, and animal husbandry. About 35,000

Source: IEG project database.

rural farmers benefited directly from these income-generating activities. A strong impact on the incomes of the farm families arose from higher cropping intensities, cultivation of higher-value crops, and diversification toward non-crop activities.

The project's impact on food security and poverty reduction has been positive in much of the project area, which has a chronic food deficit and where other donors are noticeably absent. The impact on the welfare of women beneficiaries, who dominate the project's horticultural marketing and food processing activities, has been significant.

*Limited experience with insurance shows difficulties in implementation and sustainability.*

database shows that the Bank has supported activities focused on laying off risk in 10 projects (see Appendix F, table F.3). These have included catastrophe bonds, index-based insurance, catastrophe models to facilitate coverage, work through microfinance institutions, contingency lines of credit, and the creation of a catastrophe insurance pool.

The limited experience has seen some success and encountered a number of difficulties. Perhaps the most successful of these experiments was the catastrophe insurance pool developed for Turkey following the Marmara earthquake, but the long-term success of that experiment is not yet assured (box 4.4). Among

the difficulties that need to be faced is getting people to understand how insurance works and the benefits of paying into it. There also are good reasons that

insurance coverage may not be available. In many developing countries, for example, the cost of hedging against risks exceeds the cost of simply paying for damages when they arise. This is an issue the Bank will need to address in future attempts to put insurance schemes in place.

### Does the Bank Respond Quickly?

Disaster projects are prepared and implemented under difficult working conditions. They may have to overcome shortages of critical materials, severed transportation links, and weak capacity or capacity loss due to disaster damage. Under such circumstances a quick response is difficult, but essential, to achieve. Based on analysis of the 528 projects examined, the Bank does not appear to have increased its response time by using ERLs.

The average amount of time that elapsed between an emergency event and the presentation of a loan or credit to the Bank's Board of Executive Directors (figure 4.2) was 6.7 months (201 days). When disaggregated, the difference between ERLs and disaster projects that use other instruments was small. The non-ERL

*The Bank averages about seven months to get a disaster project to the Board.*

#### Box 4.4: Bank Helps Finance Insurance Scheme in Turkey

In order to extend liquidity to homeowners, reduce government liability, and lessen dependence on foreign donors in the event of future disasters, Turkey launched a disaster insurance scheme in September 2000. The scheme, which will cover \$1 billion in damages in the event of a disaster, was launched in a timely fashion, and soon had more than tripled the level of insurance penetration for earthquake coverage compared with that previously achieved by the private insurance market.

The scheme also demonstrated its ability to pay claims quickly in a number of small- and medium-size earthquakes that have occurred since its initiation. A successful public awareness campaign, combined with an affordable average annual premium of \$20, brought the scheme significant initial penetration (the average is currently \$46), and the level has held steady at around 2 million policies over the past three-and-a-half years. Increased penetration is awaiting passage of the draft Earthquake Insurance Law. Meanwhile, the Bank is investigating several measures to increase the number of policyholders.

The scheme faces some difficulties in not only sustaining but increasing the numbers of insured in the country, however. Two newly enacted laws pertaining to state-owned enterprises, the Public Financing and Supervision Law and the Procurement Law for State-Owned Enterprises, may terminate the insurance program's current exemption from all state regulations applying to government-owned enterprises. (It was created as a special, non-government entity, as it does not have government employees, and the government only intervenes in the event of a disaster calling for over \$1 billion in coverage.)

Whether these laws will apply to the catastrophe insurance pool is currently being clarified. The current Disaster Law #7269 (which provides easy compensation to earthquake victims), along with the lack of a strong insurance culture in Turkey, adds to the challenges faced by the scheme.

Source: Project Performance Assessment Report: Turkey (IEG 2005b).

disaster projects were found to have an average of 7 months (209 days) pass before they received Board approval. For ERLs, the preparation time averaged 6.6 months (198 days)—just 11 days less than projects that used other instruments.

The projects in the Bank’s disaster portfolio<sup>6</sup> required an average of seven months (208 days) to reach the effectiveness date, the first day on which a borrower is eligible to withdraw against an approved loan. Of these projects, however, only 27 percent<sup>7</sup> were able to reach effectiveness within four months of Board approval. If the time from event to Board approval is added to the time from approval to effectiveness, it is clear that having the current emergency lending mechanisms already in place does not significantly accelerate project processing and it does little to expedite the disbursement of disaster funds.

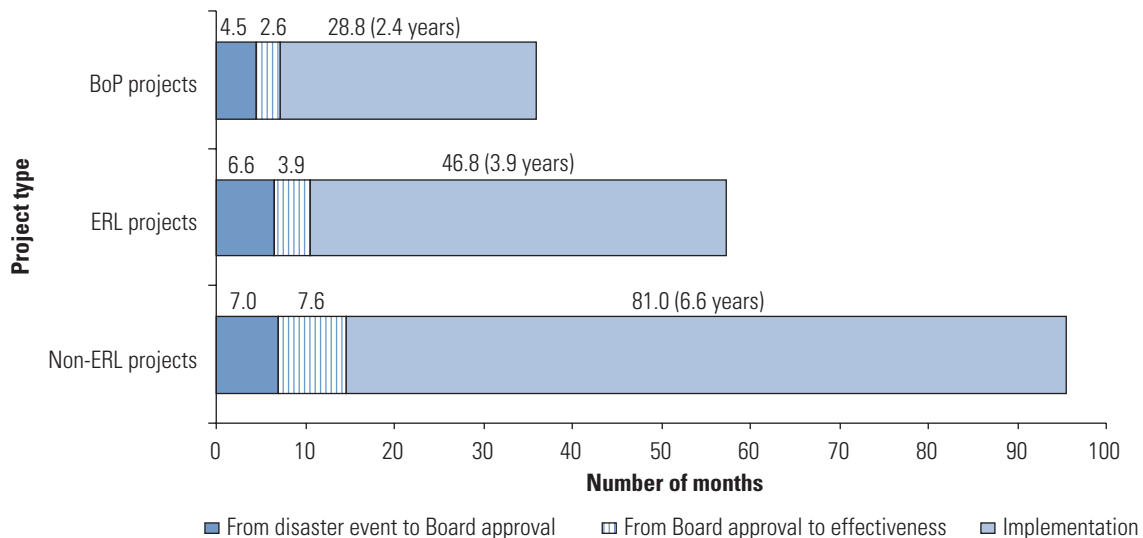
The ongoing projects, on average, have also taken longer to prepare and to reach effectiveness than those that have closed, though in some of the largest responses, such as those for the Indian Ocean tsunami, the Marmara and Hebei earthquakes, and Hurricane Mitch, have been very quick. As the definition of emergen-

cies has broadened and more projects have attained emergency lending status, project preparation and effectiveness times have grown increasingly similar for ERLs and non-ERLs (figure 4.2). In other words, the more recent projects are, on average, slower than those of a few years ago. Considering that even emergency projects were prepared and reached effectiveness roughly one year after the disaster event, which was similar to non-ERL disaster projects, it appears that the Bank has usually reacted slowly to emergencies, and this trend is becoming more pronounced.

Disaster projects as a whole took longer to close than regular investment lending. From Board approval to the final project closing date, the average implementation time of disaster projects<sup>8</sup> was 6.6 years (2,396 days), with a median of 7 years (2,541 days). In contrast, the overall Bank portfolio took less time, with all projects<sup>9</sup> having an average implementation time of 6.1 years (2,214 days) and a median of

*ERLs have not moved significantly faster than other lending instruments.*

**Figure 4.2: How Long Do Projects Take?**



Source: IEG project database.

Note: The timeline includes an additional interval (project preparation) not used in the Bank’s calculation of project completion time, and therefore it does not reflect the total project completion time found in program documents. BoP = balance of payment.

*Disaster projects generally take longer to close than other projects, and the time required to complete them is consistently underestimated.* 6.1 years (2,230 days).<sup>10</sup> Even for ERL projects,<sup>11</sup> which are designed to meet the most urgent needs of a country following a disaster, the average implementation time was 3.9 years (1,433 days).

Projected and actual implementation times indicate that the Bank consistently underestimates the time required to complete disaster-related projects. For the 303 completed projects, the implementation time was extended by an average of 1.2 years (433 days), or about 20 percent. In addition, two-thirds of all ERL projects were not at all quick—they were extended an average of 1.2 years (448 days), representing a 33 percent increase above the policy requirement of three years.

Is implementation time a function of the activities undertaken rather than the type of lending instrument chosen? The time needed to complete a disaster project has varied significantly according to the mix of the disaster activities (Appendix F, box F.1 describes the range of objectives in the projects examined). The implementation time of those activities ranged from almost 2.5 years to 7.5 years. Despite the various permutations, each area of activity corresponded to average project completion

#### Box 4.5: Damage Sustained Is a Function of a Community's Level of Vulnerability

“Strictly speaking, there are no such things as natural disasters, but there are natural hazards. A disaster is the result of a hazard’s impact on the society. So the effects of a disaster are determined by the extent of a community’s vulnerability to the hazard (or conversely, its ability, or capacity to cope with it). This vulnerability is not natural, but the result of an entire range of constantly changing physical, social, economic, cultural, political, and even psychological factors that shape people’s lives and create the environments in which they live. ‘Natural’ disasters are nature’s judgment on what humans have wrought.”

Source: Asian Disaster Reduction Center (ADRC) [http://www.adrc.or.jp/LWR/LWR\\_abridged/definitions.pdf](http://www.adrc.or.jp/LWR/LWR_abridged/definitions.pdf)

times, which showed significant variation between activity types over a five-year range.

#### Using a Long-Term View to Select Short- and Medium-Term Actions

At the project level, there has been some degree of success in reducing vulnerabilities—by building safe housing for victims, supporting proper watershed maintenance, building retaining walls, relocating people out of dangerous zones, and funding monitoring and warning systems—but the general social and economic situation of a country can exacerbate vulnerabil-

#### Box 4.6: Reducing Vulnerability Takes Time

The Loess Plateau Project is a best practice example of how vulnerability to flooding can be reduced by reversing severe environmental degradation. The agricultural project, focused on a highly eroded region of China, took eight years, but raised production and family income for poor farmers.

Numerous small check dams were built to intercept runoff and eliminate destructive flash floods. Severely sloping lands were planted with trees, shrubs, and grasses to stabilize the land and produce fuel, timber, and fodder. Gullies were controlled and converted into first-class crop lands. By building terraces, using

contour ditches and stone barriers, the farmers were able to reduce sediment inflows to the Yellow River.

In order to achieve this kind of success the project had to be designed in close consultation with those villages with the right to cultivate the land. Measures that would work had to be identified, and the means to best communicate them to stakeholders had to be developed. Finally, the first efforts had to be successful to demonstrate to potential adopters that the improved practices could have a significant impact on poverty.

Source: IEG project database.

ity levels across the board. This sort of vulnerability will not be reduced substantially within the scope of a single ERL.

Bankwide experience has shown that while a quick response to natural disaster is important, it is equally important to identify local vulnerabilities and determine how to reduce them in ways that lead to durable solutions. While extreme events will always wreak some damage, sustainable development can limit the extent to which this occurs (box 4.5).

With increasing frequency, the Bank has helped borrowers to assess disaster damages and to develop a recovery strategy. Based on the analysis in this chapter, it might be expected that the variability in the nature of the damage encountered and the type of activities required to address long-term vulnerability would lead identification missions to identify root causes that in many cases could only be properly addressed by a careful appraisal and a standard investment loan.

Addressing root causes makes economic sense; over the course of 40 years, China has invested \$3.15 billion in flood control measures, avoiding what is believed to be potential losses amounting to \$12 billion (Benson 1997). Yet almost three-quarters of all the disaster assessments (23 out of 32) in which the Bank was involved led to the abbreviated preparation and more rapid response of an ERL. Such loans enable the Bank to respond more quickly to a disaster, but rarely address dangerous practices such as farming on steep hillsides without proper watershed maintenance and neighborhoods

located in landslide and flood-prone areas (box 4.6). In general, sustainable and significant reduction of vulnerability cannot realistically be attained in the three years allotted to an ERL.

Their short timeframe notwithstanding, as noted in Chapter 2, the Bank's emergency projects perform well, surpassing the outcome ratings of the overall Bank portfolio. However, if the three-year time constraint is allowed to drive implementation, projects financed with ERLs may leave too much undone. It is preferable that activities financed by the Bank contribute directly to the speedy resumption of the development process and the protection of the most vulnerable segments of society.

What the Bank can bring to the immediate response to disaster is its knowledge of international experience and a commitment to participate in the evolving donor dialogue regarding the nature of the overall program to rebuild and the scale of the Bank's likely contribution to that effort. As part of this process, the Bank can also more consistently and effectively support comprehensive damage and needs assessment activities, which set in motion processes that increase local capacities and reduce vulnerabilities, and which in turn will help to set the recovery framework (see box 4.7).

*Vulnerability has been reduced somewhat, but local vulnerabilities may be overlooked.*

*Three-quarters of disaster assessments have led to ERLs, though damage assessments can be used to identify root causes of disastrous impacts.*

**Box 4.7: Damage Assessments Are Useful But Have Some Shortcomings**

The Bank has participated in damage assessment in 32 projects since 1984 and its involvement has increased (half of the assessments have taken place since 1998). Assessments, at least for the most recent disasters, are generally a cooperative effort of the government, the Bank, and other donors. Joint assessments facilitate donor coordination by helping to divide reconstruction tasks early on.

In current best practice, successful damage assessments are quick, detailed, focused, and updated as the situation unfolds, and not abandoned after the initial effort. They are performed by a multisector team, and they involve affected people and institutions. They can be used to:

- More effectively design reconstruction projects by facilitating efficient donor coordination and promoting a consensus decision-making process.
- Measure the impact of disasters in monetary terms, and estimate the disaster's effect on economic flows and on the capacity for reconstruction and need for international cooperation.
- Determine social and physical reconstruction needs, identifying key sectors in need of assistance, thereby targeting the response and helping the country start reconstruction expeditiously.

*Source:* IEG project database.

- Identify economic policy changes called for following a disaster.
- Reduce vulnerability.
- Solicit donor funds.

Past assessments have had several shortcomings:

- They generally have not been updated as more accurate information comes in.
- Country and social context and the differential effects of disaster on vulnerable groups have received little attention.
- They have focused on needs without considering capacities.

Surveyed Bank staff report needing guidance with damage assessment. Almost half that had not used the Hazard Management Unit stated that the kind of support they would need from such a unit would be in damage and needs assessment.

As the Bank has performed damage assessment in such a small percentage of the projects in the study database (6 percent), and each disaster context calls for a tailored solution, giving guidance for damage assessments in the Good Practice section of the policy may be preferable to mandating it in the OP.