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Doing More for Those Made Homeless by Natural Disasters

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Preface

The primary audience of this work is made up of World Bank operational task teams and sector managers. They are in the front line deciding how best to respond to individual borrower's demands for assistance to repair and rebuild shelter destroyed by natural disaster events such as floods, windstorms, earthquakes, landslides and volcanic eruptions. The paper aims to help task teams and sector managers do more to provide assistance to those made homeless by natural disasters within the framework of existing Bank policies and guidelines. It does not seek major changes in those policies, but rather encourages a more agile Bank response within the policy and operational parameters as they stand today. Bank country directors may find the discussions of Chapters 1 and 5 relevant to planning the Bank's lending and assistance program both worldwide and at the country level.

The Bank's Disaster Management Facility (DMF) and the Urban Cluster of the Latin America and Caribbean department (LCSFU) jointly commissioned this study in response to growing borrower demand for Bank assistance with housing reconstruction following natural disasters. The review examines the Bank's experience since 1980 in helping to finance some 37 housing reconstruction projects throughout the world, and suggests how constraints upon housing reconstruction assistance can be overcome, thereby stimulating and guiding further Bank involvement in this field.

The deliberations leading up to this report are the results of a team effort undertaken during the December 1998-March 1999 period. The inception team consisted of Alcira Kreimer (team leader), Anna Amato, Margaret Arnold, John Flora, Roy Gilbert, Jeffrey Gutman, Jelena Pantelic, Ronald Parker and Thakoor Persaud. The subsequent development of the work benefited from the contributions—through interviews, meetings and written comments—of many more people, including those named below. The author also contacted other donors and NGOs involved in housing reconstruction in order to gather their views about the challenges they faced in trying to help the disaster homeless throughout the world.

The following persons kindly shared their knowledge and experience in this field and their collaboration with this study is gratefully acknowledged. From the Bank, they include: Anna Amato (OEDST), Mats Andersson (EACCF); Armando Araujo (LCOPR); Margaret Arnold (INFDM); Alain Bertaud (ECSIN); Henry Boldrick (ECSIN); Robert Buckley (ECSIN); Eleoterio Codato (LCSFU); Charles di Leva (LEGEN); John Flora (INFTD); Junko Funahashi (LEGOP); Maninder Gill (SDV); Amaud Guinard (LCSFU); Jeffrey Gutman (LCSFU); Sonia Hammam (MNSIF); Larry Hannah (ECSPE); Mayumi Kato (MNSIF); Naushad Khan (ECSSD); Alcira Kreimer (INFDM); Frannie Léautier (EXC); Rodney Lester (FSD); Eugene McCarthy (ENV); Ferenc Molnar (LEGOP); Adrienne Nassau (ECSIN); Jelena Pantelic (INFDM); Ronald Parker (OEDST); Thakoor Persaud (LCSFU); Margret Thalwitz (ECSIN); and Piotr Wilczynski (ECSSD). Others outside the Bank included: Caroline Clarke (Inter-American Development Bank); Sarah Coppler (Habitat for Humanity International); Richard Hill (Intertech); Amy Hilleboe (Catholic Relief), Elizabeth Keyes (Catholic Relief), Charles Setchell (OFID-USAID); and Marge Tsitouris (CARE).

The report was written by Roy Gilbert, currently Urban Coordinator of the Bank's Operations Evaluation Department (OEDST).

Overview

Key Discussion Points

WHY THIS PAPER NOW?

To help Bank task teams and sector managers respond to the growing demand by borrowers for emergency housing assistance following natural disasters.

To provoke discussion and promote interest that can stimulate the Bank to provide more assistance to the increasing number of poor people made homeless by natural disasters—floods, windstorms, earthquakes, landslides and volcano eruptions—in developing countries.

To identify what has constrained Bank assistance thus far and suggest how it might be overcome.

To distill lessons from the Bank's experience to date on the topic. Over the past 20 years, the Bank has financed 37 projects to help rebuild and repair 750,000 homes in 26 countries worldwide.

WHY HELP THE DISASTER HOMELESS?

Nearly all those made homeless by natural disasters in the world—97.7% of the total—are from developing countries. Since 1980, 138 million people in those countries have been affected. The numbers are growing year by year.

Fighting poverty is the Bank's principal mission and the poor are particularly vulnerable to natural disasters.

The demand for Bank assistance is stronger than the response. Some 70 Bank post-disaster reconstruction projects financed since 1980 refer to the plight of the disaster homeless, but only half of them included housing components.

There is a need recognized by other multi-lateral development banks and also NGOs who are active in providing assistance.

Insurance penetration in developing countries is limited.

HOW SHOULD WE FRAME THE ASSISTANCE?

Help to the disaster homeless involves piecing together the victims' lives. From the Bank's perspective, its purpose is to.

- Help the disaster homeless get back on their feet again as quickly as possible.
- Focus primarily and expeditiously on *recovery* needs.
- Provide most assistance to the poor who do not have access to insurance.
- Bring existing good housing sector policies and practices to bear on housing reconstruction.
- Encourage mitigation measures that can help reduce the impact of future disasters.

The Bank should focus on emergency housing reconstruction, therefore, as a *recovery* effort. The often chaotic aftermath of a natural disaster is not a propitious moment for advancing new long-term housing sector goals or pursuing housing sector reform.

Housing components of emergency reconstruction projects thus become primarily instruments of short-term economic and social recovery. When implemented on a large scale, however, they can impact the overall supply of housing. For that reason, they should not undermine housing sector policy or reform, and embody best practice standards, especially in adopting land use and building codes that mitigate the risks of exposure to existing natural hazards.

WHERE SHOULD MOST HELP BE FOCUSED?

The priority beneficiaries of direct housing assistance by the Bank should be the uninsurable poor, proven disaster victims with the following characteristics:

- Low income, unable to afford insurance
- Insurance unavailable to them at the price they are willing to pay
- Their assets are uninsurable (poor structure, low value or no legal title)
- They are uninformed about risks and how to mitigate them.

Others too would benefit from Bank assistance that fosters insurance solutions for managing risk and also mitigation measures to reduce the impact of future disasters.

Direct assistance tightly focused on the uninsurable poor and provided for a limited period only should provide an incentive for individual households who can afford it to take responsibility for managing the disaster risks to their own assets.

Emergency assistance should be tightly circumscribed and not try to embrace otherwise deserving and needy cases of poor families, but who were unaffected by a disaster. Resources for reconstruction are limited and these people would be beneficiaries of normal development programs and projects.

As a *temporary intervention*, emergency assistance also needs to be tightly constrained in time lest it undermine long-term sector policies and reform. Thus, all emergency disbursements should be completed by approximately 30 months. After this period, attention should shift to insurance, mitigation and sector work

CLARIFYING ISSUES AND ADVANCING GOOD PRACTICE

A clear framework of emergency housing reconstruction as primarily a *recovery* effort can help Bank task teams respond to growing demands within an appropriate Bank policy context.

Bank safeguard policy on involuntary resettlement (OD 4.30 and the forthcoming OP 4.12) does not apply to the victims of natural disasters, who are explicitly exempted from its provisions.

To respond more closely to demand, the Bank could shift more attention to homelessness caused by flooding disasters. These account for 68% of the total homeless, but only 32% of Bank financed projects. Meanwhile, earthquakes account for only 4.4% of disaster homelessness, but 49% of Bank financed projects.

Across regions, there is scope for more help for those made homeless in South Asia and East Asia, in particular. These two regions alone account for 85% of the world's disaster homeless, but only 23% of Bank financed housing reconstruction projects

Mine the portfolio of 37 completed projects for lessons of good practice

Chapter 1.

A Recovery Framework for Disaster Homelessness

HUGE DEMAND AND UNDER-SUPPLY

1.01 In the past two decades, 141 million people have lost their homes through 3,559 natural disaster events such as earthquakes, windstorms, floods, and landslides throughout the world. Disaster homelessness, being almost exclusively a problem for poor countries, is central to the Bank's own fight against poverty. Nearly all the world's disaster homelessness—97.7% of the total—occurs in developing countries, where 72.2% of the natural disasters themselves strike. Thus, 138 million people were made homeless in developing countries, against just 3.3 million in industrialized countries.¹ Five larger developing countries alone have each suffered more disaster homelessness than the developed world as a whole. In relation to their lesser populations many smaller developing countries have been hit even harder. (Table 1.1).

By far the biggest causes are floods and windstorms, which together are responsible for 92.1% of all disaster homelessness. Despite the greater media attention given them, earthquakes account for only 4.4% of those made homeless by natural disasters (Fig. 1.1)

1.02 Against this backdrop, the Bank financed more than 200 disaster-related operations from 1980 to 1998 through loans totaling US\$14.0 billion, approximately half mitigation² and half reconstruction operations.³ Of the 117 Bank

Table 1.1: Countries with most Disaster Homelessness 1980-2000

<i>Total homeless:</i>		<i>Homeless per 1,000 pop:</i>	
China, P Rep	45,150,654	Bangladesh	299
Bangladesh	37,609,000	Samoa	166
India	12,271,585	Sri Lanka	138
Pakistan	10,136,069	Philippines	123
Philippines	9,271,951	Mozambique	111
Sri Lanka	2,598,291	Comoros	95
Vietnam	1,970,133	Maldives	91
Mozambique	1,880,800	Vanuatu	85
Sudan	1,166,700	Chad	80
Brazil	1,030,367	Pakistan	77
Chile	783,876	Chile	53
Turkey	747,600	Nicaragua	52
Madagascar	717,000	Madagascar	49
Colombia	698,334	Benin	48
Nigeria	627,750	El Salvador	43

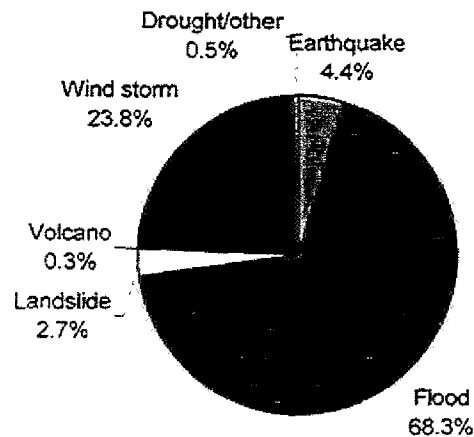
Source: EM-DAT: The OFDA/CRED International Disaster Database www.cred.be/emdat Université Catholique de Louvain, Brussels, Belgium.

¹ This data is drawn from "EM-DAT. The OFDA/CRED International Disaster Database www.cred.be/emdat Université Catholique de Louvain, Brussels, Belgium. The database includes information on more than 8,000 twentieth century natural disasters. The large scale of homelessness can be appreciated from the fact that 18 disaster events—all but one in Asia—each left more than one million people homeless since 1980. For the purposes of this data and the present discussion, the homeless are defined as people needing immediate assistance in the form of shelter. Data are based upon field reports. If they contain only the number of houses or families affected, the figures are multiplied by 5 for developing countries or 3 for industrialized countries.

² In this paper, mitigation is understood as made up of precautionary actions to reduce the severity of the impact of a natural disaster *before* it strikes. Such actions—not normally of an emergency nature—might include building flood defenses, retrofitting building in earthquake zones or simply relocating people away from areas of risk, for instance.

³ For details, see: Gilbert, Roy and Alcira Kreimer *Learning from the World Bank's Experience of Disaster-Related Assistance*. World Bank Disaster Management Facility, Washington DC, 1999.

Fig. 1.1 Causes of Disaster Homelessness 1980-2000



reconstruction projects in that portfolio, 37 supported borrowers' efforts to help homeless victims by rebuilding and repairing 750,000 homes in 27 countries during this period (details: Chapter 3). Although a substantial reconstruction effort in itself, it directly helped only 2.8% of all those made homeless. Of course, the Bank provided additional assistance to them indirectly through disaster mitigation operations. But still it is evident that housing reconstruction supply through Bank-financed projects has been dwarfed by a very much larger potential demand.

1.03 Ideas of under-supply and insufficient response to date are reinforced by 70 Bank-financed reconstruction projects prepared since 1980 that highlighted housing losses—often quoting precise figures—in their appraisal diagnostics, but did not include any housing components in their assistance. Even for those 37 projects that did, the number of housing units provided was invariably only a fraction of those reported lost and damaged. Of course, the Bank is not alone in providing housing reconstruction assistance. Help comes from other quarters and many homeless disaster victims have to help themselves.⁴ The huge demand and under-supply point to opportunities for the Bank to do much more.

1.04 More would also mean giving more help to the poor, who are the principal victims of natural disasters. The Bank's 2000/2001 WDR—itself focused upon fighting poverty—records their vulnerability well:

"Like economic crises, natural disasters can cause sharp increases in poverty and slow the pace of human development. And like economic crises, they hurt poor people in the short run and diminish their chances of escaping poverty in the longer run." (WDR 2000/2001 p. 170)

Why, therefore, has relatively little assistance been forthcoming from the Bank to a core poverty group in dire straits? What are the obstacles to broader assistance? How can they be overcome? Answers to these questions are crucial and urgent, given increasing impacts of natural disasters upon homelessness. Although varying a lot from year to year, the number of disaster homeless in developing countries has increased at an annual average rate of 6.5% over the past twenty years. Ironically, the growth in the number of victims is a by-product of economic growth and change that places ever more valuable targets—such as evolving but

⁴ How so many poor homeless victims of natural disasters manage to find shelter and eventually re-house themselves is a topic worthy of further research to identify how the Bank can facilitate such efforts. Solidarity of friends and family prove particularly important as community members rehouse themselves.

vulnerable cities and plantations, for instance—in the paths of devastating storms, floods and earthquakes.⁵ In responding to this worsening scenario, the Bank can draw upon lessons of its own valuable experience in providing post disaster housing assistance (see Chapter 3). The experience of other key players can be a valuable source of good practice too (details paras. 1.10-1.16).

THE PREDICAMENT IN MANAGING DISASTER HOMELESS

1.05 This paper focuses on housing reconstruction after natural disasters such as earthquakes, floods, windstorms and landslides, covered by the Bank's policy on Emergency Recovery Assistance (OP 8.50), whose aim is to restore assets and production levels in a disaster-struck economy. The discussion here does not cover infrastructure reconstruction, more effectively addressed by Bank operations in the past. Nor does this paper look at the issue of post-conflict housing reconstruction. Physical damage to housing after a war may look similar to the destruction wrought by a natural disaster event, but the social dynamics of post-conflict reconstruction—especially involving reconciliation—are much more complex and not reviewed here.

1.06 Emergency *relief*—to meet life preservation and basic subsistence needs—often involves temporary shelter in the hours and days following a natural disaster, but this too is not examined in this paper. *Relief* work of this kind is typically done by local government teams and NGOs, such the Red Cross, who can be on the spot immediately after a disaster has struck and give the immediate response called for. For its focus on long-term recovery and development issues, the Bank's comparative advantage is not in *relief* work, nor does it normally get involved in *relief* operations.⁶

1.07 Fighting poverty is the Bank's overarching objective (OD 4.15 para. 6) and, being unable to afford safer locations and better quality building materials, the poor are more likely to be victims of natural disasters. The Bank's *World Development Report 2000/2001: Attacking Poverty*, in calling for enhancing the security of the poor, specifically highlights helping poor people to cope with shocks and manage risks associated with natural disasters (WDR 2000/2001 p. 7). To ensure that Bank assistance is well targeted on those least able to cope and manage these risks, this paper argues that Bank support should focus primarily on the *uninsurable* poor (see Box 1.5). Those who are able to afford it should pay for insurance to

Box 1.1: Ten Common Dilemmas in Disaster Homeless Management

	<i>one view:</i>	<i>opposing view:</i>
1	An emotional imperative to do something	A rational requirement to help effectively and efficiently
2	A tragedy for the homeless victims	A good opportunity for a fresh start
3	An intense spotlight on the problems of poverty	Attention is short-lived and disaster quickly forgotten
4	Housing is the first demand of homeless survivors	Housing solutions take time, even years
5	Natural disaster: a temporary crisis	The permanence of housing solutions
6	A quick response to meet urgent needs	A diligent response to avoid inefficiency and corruption
7	Priority attention to victims who suffered most	Less attention to those who were better prepared just because they suffered less
8	Top priority for victims made homeless by disaster	"Queue jumping" over equally destitute poor unaffected by the disaster
9	Housing needs can be enormous	By itself, the Bank can do very little
10	Scarce resources demand a tight boundary around homeless problem	The "social disaster" of poverty call for a broader boundary

⁵ Thus the impacts of the natural disasters have grown more rapidly than the number of disaster events themselves whose increase has been only 1.5% per year, on average over the same 1981-2000 period. Data from EM-DAT, the OFDA/CRED International Disaster Database.

⁶ Other multilateral development banks have differing policies on relief assistance. The Asian Development Bank policy explicitly excludes such assistance (ADB OM section 25, Dec 1995), while the Inter-American Development Bank offers "timely assistance in such urgent fields of activities as clearing and cleaning up the disaster area."

indemnify their losses from natural disasters. Thus far in most developing countries, insurance has only limited penetration but, with Bank assistance, it can be expected to grow.

1.08 In responding to borrower requests for housing reconstruction assistance, Bank task teams have to confront a series of dilemmas that reflect a lack of overall consensus in the field of disaster management itself (Box 1.1). Wrestling with conflicting interpretations and recommendations is made less easy for task teams by unclear Bank policy directives as far as housing reconstruction is concerned (details Chapter 2).

1.09 For the Bank to provide a meaningful response to borrower demands, task teams and sector managers will have to resolve these dilemmas. A clearer, and perhaps changed, perspective focused on recovery is perhaps long overdue. Recent Bank appraisals highlighted housing losses—500,000 dwellings in the case of Bangladesh and around 500,000 people affected each in Honduras and Nicaragua—while project designs provide no replacements or repairs.

DILEMMA FACING OTHER DONORS AND NGOS

1.10 The Bank is not alone in facing dilemmas and constraints in their efforts to assist those made homeless by natural disasters. To find out more about how other key players approach emergency housing reconstruction, a number of representatives of donors and NGOs were interviewed for this study.⁷ Interviewees were chosen from among those active in natural disaster reconstruction work. The interviews focused on the demands the respondents faced, the services they provided, what kinds of obstacles prevented satisfactory service delivery and how the constraints were overcome. Most interlocutors reported strikingly similar concerns to those of the Bank itself. Most important, perhaps, was how to reconcile relatively small levels of assistance with the overwhelming demands for housing reconstruction that large-scale natural disasters generate.

1.11 Despite widely differing statutes across agencies, the purposes of emergency housing reconstruction assistance provided by a variety of agencies were remarkably similar to the Bank's. NGOs, however, generally focused more directly on alleviating the immediate suffering of homeless disaster victims than multilateral banks that gave more emphasis to recovery in the short to medium-term. NGOs also gave more attention to community development aspects of disaster reconstruction. Multilateral donors—including the World Bank itself—emphasized more how to 'jump-start' the recovery process through providing some, but not all of the housing needed. Nevertheless, all partners were equally concerned about helping get the most vulnerable victims back on to their feet again and rebuild their lives.⁸ Most importantly, all agencies contacted felt strongly that rehousing was an essential ingredient of this recovery effort. Mitigation measures to diminish the impact of future disasters feature strongly in all their work, where agencies want to enhance the resilience of poor communities to disasters, so that these people can better help themselves in the future.

1.12 In the case of the World Bank and the Inter-American Development Bank (IADB), demand for housing reconstruction assistance comes directly from borrower governments. IADB's experience confirms that interest in such assistance varies considerably across countries (within one region, in their case). Experience shows that there can be a considerable time lag before a borrower will approach a multilateral development bank for help, since governments will first explore all avenues of less costly bilateral assistance with fewer strings attached. Information sources about the demand for housing reconstruction assistance by

⁷ Donors included: (i) the US Office of Foreign Disaster Assistance (USAID-OFDA) and (ii) the Inter-American Development Bank (IADB). NGOs included: (i) CARE; (ii) Catholic Relief Services; and (iii) Habitat for Humanity International

⁸ IADB emergency recovery policy's emphasis on the poor is supported by participating in activities, among other things, to: "Carry out programs targeted at helping absorb the shock of the disaster on the most seriously affected social sectors, which are often the weakest groups. Thus in keeping with [Inter-American Development] Bank policy to assign priority to the needs of the economically most disadvantaged population groups, these programs will help address the immediate and longer-term effects of a natural disaster on the population."

NGOs are much more varied, coming through their own staff in the field, other local or international NGOs and local church organizations. In general, NGOs seem to be more proactive than multi-lateral development banks in seeking out this demand. In the case of NGOs, it rarely comes directly from governments themselves. For bilateral donors, disaster assessments made by their own embassies play an important role in formulating the demand (to their own governments) for assistance.

1.13 Just as the Bank is now asking itself why there is less assistance for housing reconstruction after disasters than demanded, other donors and NGOs are posing the same question. Most often, they simply feel that they lack the resources and organizational and financial capacity to respond on the scale that large-scale disasters require. Many bilateral donors see housing reconstruction as a very expensive operation. They fear involvement in it can lead to an endless commitment that would be politically unattractive at home. Without exception, all agencies felt that they must be selective and focus their limited help in some way.

1.14 As well as being unable to meet the scale of the demand, many agencies were unwilling to respond to some aspects of the demands placed on them. Multilateral development banks, for instance, were generally reluctant to get involved in financing temporary housing, fearing this might undermine permanent good practice housing solutions. NGOs, on the other hand, were more willing to go along with borrower demands although often unable to respond to them in geographical areas in which the NGOs did not operate.

1.15 Although all external agencies in the business of helping the disaster homeless profess to respond to demands placed upon them directly or indirectly by the victims, some supply-driven efforts can be justified. Among the most important of these is the introduction of disaster resistant building technologies, especially involving seismic construction to protect buildings from earthquakes. The victims are not always aware of the technical options available. Another rarely demanded but important service provided by all donors and NGOs, is support for mitigation efforts that involve better land use and building codes to reduce natural disaster risk. These can involve top-down enforcement that cannot be driven by the demands of individual beneficiaries. A technical solution often provided, but rarely asked for, is water sterilization equipment to help sustain public health in the immediate post-disaster situation.

1.16 Even when there is overall agreement on the demand for assistance, there can be important constraints on meeting it. Among important obstacles for bilateral donors is the feeling that housing reconstruction after a large natural disaster can be a financial 'black-hole' sucking in expensive and unending commitments. Another problem is that while interest in major natural disasters can be intense and widely disseminated, the attention span is only very short. Even a large-scale natural disaster that makes breaking news on CNN, for instance, is likely to be forgotten in the media within a matter of weeks or even days when the real massive recovery effort has barely begun. Clearly, all agencies involved in natural disaster reconstruction are aware of this dilemma and see the need to mobilize their efforts for the long-haul stay that reconstruction requires long after media and political interest has evaporated.

THE LOGIC OF THIS REVIEW

1.17 This paper's own point of departure is to consider that rebuilding and repairing housing lost through natural disasters is part of *recovery* business; it is not a normal part of *housing sector* business. Housing sector activities are what go on in normal, day-to-day conditions of economic and social development, not within the crisis conditions precipitated by natural disasters. As part of the broader disruption they instill, natural disasters interrupt normal housing sector business too. Surveys of housing need, for instance, that can be carefully carried out in *normal* conditions, usually have to take second place—but only *temporarily*—to assessments of disaster damage following an earthquake, for instance. In that sense, normal housing sector business itself becomes one more disaster *victim*—but only *temporarily*.

1.18 The Bank's own Operational Policy 8.50 on emergency recovery lending provides a clear conceptual framework of *recovery* for any emergency reconstruction activity by the Bank, including housing. According to that policy, the purpose of recovery assistance—sheltering the homeless included—is to "restore assets and productive activities in an economy disrupted by a disaster". Furthermore, OP 8.50

makes it quite clear that the solution of long-term sector problems—such as issues of housing sector policy—is not the object of ERLs, any more than long-term urban planning should concern itself with day-to-day fighting or civil defense mobilization in emergencies.⁹ Instead, the long-term concerns of reconstruction operations should focus on mitigation efforts to help ensure that a disaster will not be repeated, at least not with the same degree of destruction. In the case of housing, such mitigation would include urban land-use controls to avoid the re-occupation of hazardous sites, as well as the use of already familiar disaster-resistant materials and designs.

Box 1.2 Applying Mr. Wolfensohn's Three Pillar Crisis Management Approach to Housing Reconstruction

Although with a different kind of crisis in mind, the Bank President's "three-pillar" approach in his speech to the 1998 Annual Meetings provides a good model framework for the Bank to manage disaster-induced housing crises:

- *Prevention* Normally referred to in disaster management as mitigation, this is key. Mitigating the effects of natural disasters as far as housing is concerned, means locating housing units in low risk areas and building structures to disaster-resistant technical specifications, and taking out insurance to cover possible losses.
- *Response*: Despite best efforts at mitigation, natural disasters are still likely to occur somewhere in the world and emergency responses will still be necessary. As per the Bank OP 8.50, response should aim at restoring assets and productive activities in a disrupted economy, while continuing to pursue mitigation. This is after immediate relief activities carried out by others.
- *Safety nets*: (Consisting of the uninsurable poor) Natural disasters inequitably pick the most vulnerable social groups made up of poor families, who cannot afford to bid themselves into less disaster-prone but more expensive locations.

1.19 The aftermath of a disaster is strewn with physical destruction and social disruption where the intended beneficiaries need to be treated as victims of an exogenous shock event. The post-disaster aftermath is neither an appropriate time nor scenario to explore and pursue with *victims* what in normal times would be valid sector issues such as affordable housing standards and cost recovery, etc. Nor would this be the right time to research the design of new building standards or introduce construction technologies and methodologies with which local builders cannot use to rapid effect. Disaster reconstruction can still, of course, be an opportunity to introduce sound technologies and good policy practices that were well known and understood prior to the disaster, but were neglected by victims and the authorities beforehand.

1.20 There are important caveats to this prescription, however. First, emergency efforts to help the homeless should avoid undermining good housing sector policies, and always seek to incorporate best practice prescriptions of such policies whenever possible. Second, emergency housing reconstruction should be an explicitly *temporary* intervention circumscribed both in scope and time. It should only hold policy reform in abeyance *temporarily* to ensure that it does not, by default, set a different standard for regular housing sector policy.¹⁰ Third, emergency housing reconstruction efforts should always embody the Bank's priority concern with benefiting the poor, by providing priority assistance to those unable to afford it by other means.

1.21 One—perhaps negative—dimension that sets emergency housing reconstruction apart from regular housing programs is the intense but all-too-brief media attention that it attracts. The emotionally charged atmosphere following a natural disaster is both an opportunity and a challenge for Bank task teams. Media-attention—often through international TV news networks for disasters on a large scale—can help mobilize

⁹ At the time of writing, OP 8.50 is under review by the Bank's Disaster Management Facility, but the OP's *recovery* focus is likely to remain intact in the revised and updated version

¹⁰ In addition, task team vigilance is needed to ensure that a natural disaster does not become a backdoor through which a regular housing sector program—ostensibly presented as an emergency recovery effort—enters surreptitiously.

resources for reconstruction and hasten otherwise difficult political decisions. This opportunity is fleeting and must be seized quickly by those managing the recovery, since housing reconstruction efforts in particular have to continue long after the media have lost interest.

ECONOMIC IMPACT OF SHELTER LOSSES THROUGH NATURAL DISASTERS

1.22 In addition to their social dimensions in singling out poor victims, large-scale natural disasters can also severely disrupt a regional or even a national economy (see Box 1.3). *Direct* economic losses, as far as housing is concerned, are most simply measured by the replacement costs of homes lost plus the repair costs of houses damaged. *Indirect* economic losses can be significant even when those who faced most of the direct costs were the poor. Being homeless and unable to work can halt public services, commerce and farming, as cities and rural areas count the costs of the interruptions. *Secondary* economic losses of homelessness are often the most significant, yet difficult to measure. Unexpected housing expenditures for reconstruction can set back the long-term improvement of the housing stock by many years and undermine other development programs whose financing was reallocated to meet the emergency housing need. For countries that suffer natural disasters year after year, this can leave regular programs in a constant state of flux as they are repeatedly raided for resources to help pay for unexpected reconstruction.¹¹

Box 1.3 Impact of Homelessness on Economic Development

- **Direct effects:** material losses of housing assets actually destroyed or damaged.
- **Indirect effects:** costs of lost and interrupted production and services through economically active homeless being unable to work
- **Secondary effects:** can include: (i) failure to meet long-term development goals as resource are reallocated to emergency housing; (ii) unforeseen deficits in public finances and balance of payments; (iii) possible fall in productive investments as investors factor in disaster risks.

1.23 In reviewing the economic impact of disaster homelessness, it is important for task teams to make a realistic assessment of the economic costs incurred, and also the number of victims involved. Experience shows that estimates of both of these tend to be exaggerated in the aftermath of the disaster event. Immediate emotional shock combined with financial incentives for overstating the damage feed hyperbole. The reconstruction effort itself, especially when it involves considerable expenditure on housing, will have an important multiplier effect, though. In the medium term, it can stimulate renewed economic activity probably to an even higher level than before the disaster.

LIMITED PENETRATION OF INSURANCE IN DEVELOPING COUNTRIES

1.24 In developed countries, private insurance and reinsurance companies share an important part of the risk of natural disaster impacts on homeowners. Individually or in groups, private households (as well as businesses) can transfer their own risks of losses to a third party through an insurance policy. In the event of a natural disaster, they receive indemnity in the form of a cash payment for the losses suffered. This system works well in rich countries where most types of risks are covered. From this business, insurers and re-insurers report healthy profits year after year, but also lament heavy losses when a major disaster event—such as a hurricane in the southeastern United States—strikes. This can oblige them to make huge payouts to insured customers whose homes have been damaged or destroyed.

¹¹ For a more detailed discussion of the economic impacts of natural disasters see chapter 2 of Kreimer, Alcira et al, *Market Incentives for Mitigation Investment Mexico Case Study* World Bank Disaster Management Facility, Washington DC, February 1999

1.25 Why do formal insurance arrangements provide so little cover for the majority of people at risk from natural disasters, namely those in the developing world? With more such cover, more disaster homeless would be directly compensated for their losses and the need for reconstruction assistance requested by World Bank borrowers could correspondingly diminish. Key constraints on both the supply and demand sides help explain limited private insurance penetration in developing countries thus far (Box 1.4).

1.26 These constraints can seriously inhibit insurance penetration in important developing countries markets. In Mexico, for instance, that country's Insurance Industry Association estimates that of the 50 million

Box 1.4: Why No Housing Insurance for the Poor?

DEMAND-SIDE CONSTRAINTS

- Most poor people cannot afford to insure their homes
- Moral hazard—among those who can pay—of believing that their risks will be covered by government
- Potential victims' lack of awareness of insurance possibility
- Cultural factors—superstition, fatalism or undue optimism—may weigh against insurance
- Distrust of insurance industry through inadequate claims payment record and lack of legal recourse
- Low-income dwelling may be uninsurable without legal title or official recognition

SUPPLY-SIDE CONSTRAINTS

- Very low-value dwellings may be unprofitable to insure, given overhead costs
- Market distortions: new entrants crowded out by exclusive government contracts and/or promises of indemnity to victims who otherwise can afford insurance
- Difficulties of making actuarial assessments of disaster risks involving large aggregate claims
- Capacity constraints of global insurance industry, despite coverage mostly confined to developed countries (responsible for less than 2.5% of all disaster homelessness)

residences there, some 30 million are insurable in having regular titles, solid structures and utility services. However, only 0.8 million are actually insured, barely 2.6% of the total.¹² Each one of the constraints listed in Box 1.4 is in play at one point or another.

1.27 In responding to borrowers' demands for housing reconstruction assistance, Bank task teams and their government counterparts might want to ask themselves, which key constraints—in each particular case—prevented disaster victims from having a private insurance solution to their risk sharing needs? A diagnostic of these obstacles can lead to recommended actions by a project to overcome some or all of them. After attending to the emergency reconstruction needs of the disaster homeless, therefore, a Bank supported operation can turn to enabling greater insurance penetration, a process requiring a longer-term implementation that continues when the emergency phase of reconstruction is over. Project actions supporting insurance might include: (i) educating those at risk about the benefits of insurance; (ii)

strengthening regulations to ensure that legitimate insurance claims are paid promptly and in full; (iii) legitimizing land occupation where this is in doubt; (iv) exploring possibilities of collective insurance schemes that reap economies of scale for low income communities; (v) reviewing existing government legislation and contractual arrangements that may impede new entrants into catastrophe-risk insurance business; and (vi) further research to improve knowledge about natural disasters and necessary actuarial work on them (involving low-frequency/high value claims).¹³

1.28 Efforts to deepen insurance penetration should be guided by clear ground rules about the responsibilities for the costs of reconstruction. Governments may want up-front to delineate candidly and publicly the limits of its own responsibility for emergency housing reconstruction and where the responsibility

¹² *Ibid* Chapter 4.

¹³ Traditional actuarial assessments—more comfortable with high frequency/low value claims typically associated with motor vehicle insurance—can have difficulty dealing with low-frequency/high value claims associated with natural disasters. Assessments of extremely high disaster risks has, in the past, led private insurers to withdraw from some markets altogether, as they did as in Hawaii after Hurricane Iniki and in Fiji in the mid-1980s (Pollner *op cit* p. 3).

of an individual householder begins. Better public information about the inadequacy of government resources alone to meet all private reconstruction needs can help rein in untested populist claims that officialdom will take care of all the needs of disaster victims. Public resource constraints alone require that responsibility for risk management be borne by individual householders, subject to affordability constraints. By making it clear that priority assistance will go to the poorest, for instance, governments can help draw a line in the sand that will remove ambivalence and diminish moral hazard, by giving incentives to those who can afford them to seek private insurance solutions. On-going ambiguity about these responsibilities, the moral hazard of (wealthy) free-riders not taking out insurance in the belief of being compensated by the government have contributed to stalled private insurance penetration in developing countries.

1.29 Recent Bank experience points to complementary public and private roles for providing insurance coverage to homeowners at risk from natural disasters. In most developing countries today, the insurance market is far from crowded out. There is generally plenty of room for new entrants, including overseas suppliers in what is becoming a global market. Care should be taken to monitor new markets, which are at risk from monopolies forming, especially where large landholdings are involved. New Bank sector work has proposed a public/private insurance partnership for the Caribbean, a region of the world particularly vulnerable to natural disasters.¹⁴ Another important example is the proposed Turkish Catastrophic Insurance Pool component of the Marmara Earthquake Reconstruction Project (Loan 4517) which, among other things, aims to spread disaster risk beyond the public sector alone. Behind these efforts the ground rule is that individuals who can afford it should pay for their own disaster risk management.

PRIORITY FOR THE POOREST

1.30 Direct Bank assistance, therefore, should go to the poorest groups affected by the disaster, who typically lack access to traditional insurance mechanisms. But who are these people and how is it possible to identify them in practice? A first step would be to look for the common characteristics they all share (see Box 1.5). Then for each case, a reliable disaster assessment by a trusted partner—in government or an NGO—would be an essential ingredient in identifying the eligible uninsurable poor on the ground for the purpose of directing Bank assistance.

1.31 Given the present state of insurance in developing countries, a three-prong strategy for Bank disaster homeless assistance, might include: (i) direct Bank assistance to the uninsurable poor; (ii) support to government efforts to increase insurance penetration; and (iii) better preparedness through greater efforts at mitigation.¹⁵ By so doing, the Bank can remain focused on fighting poverty and removing constraints to long-term market solutions for those unable to afford them.

Box 1.5: The uninsurable poor among the disaster homeless – profile of the principal Bank client

- Proven victim of a natural disaster
- Low-income, unable to afford formal insurance*
- Insurance unavailable at the price the low-income victim was willing to pay
- Assets themselves are uninsurable because of poor structure, low value or lack of legal title
- Victim uninformed about risks and how to mitigate them

* for an insurer, the price of insurance must cover the expected loss plus a margin for uncertainty plus expenses.

¹⁴ See: Poliner, John. *Managing Catastrophic Risks Using Alternative Risk Financing Mechanisms*. Caribbean Country Management Unit, World Bank, June 2000.

¹⁵ Private insurers themselves see government and not themselves as having prime responsibility for mitigation efforts (Poliner *op.cit.* p. 17).