IDPR, 37 (2) 2015 doi:10.3828/idpr.2015.14

Mojgan Taheri Tafti and Richard Tomlinson

Best practice post-disaster housing and livelihood recovery interventions: winners and losers

A review of the recent post-disaster recovery interventions in developing countries shows convergent trends in policies and practices. The World Bank has been in a position to exert its influence on post-disaster housing and livelihood recovery interventions, which has resulted in converging policies and practices. This paper focuses on the nexus between housing and livelihood recovery after disasters, highlighting the importance of rethinking the existing sector-based disaster recovery interventions. Focusing on the case studies of the 2001 earthquake in Bhuj, Gujarat, and 2003 earthquake in Bam, Iran, and drawing on subsequent major disasters in Sri Lanka and Pakistan, the article analyses a number of shortcomings in knowledge transfer on post-disaster housing and livelihood recovery. This knowledge transfer has rarely exposed and discussed the limitations of these policies, the gaps in knowledge concerning the impacts of these polices or the lessons learned about recurring problems arising from the interpretation and implementation of these policies. More importantly, the article discusses how the prescriptive nature of best practice housing recovery and the sector-based structure of recovery interventions overlook the needs and priorities of households and impact on their ability to achieve recovery.

Keywords: disaster housing recovery, livelihood recovery, best practice, World Bank, owner-driven housing reconstruction

On 26 January 2001, the state of Gujarat in India suffered an earthquake that led to the deaths of around 13,000 people and to the destruction of 1.2 million homes (World Bank, 2009b, 1). Key features of the disaster recovery efforts of the Gujarat State Disaster Management Authority (GSDMA) have been represented by the World Bank (2009b, 12) as 'international best practice'. In 2004, the GSDMA was awarded the Commonwealth Association for Public Administration and Management (CAPAM) Gold Award for 'Innovations in Governance'. In the same year, the Gujarat Emergency Earthquake Reconstruction Project won the World Bank 2004 Green Award. Land planning in Bhuj, the administrative centre of Kutch district in Gujarat, was included in the World Bank case studies of 'just-in-time good practice examples and lessons learned from projects and programs related to aspects of disaster risk management' (Dharmavaram, 2013, 2). In effect, Gujarat Earthquake Rehabilitation and Reconstruction Project has the status of a model a number of other governments have followed after major disasters.

Mojgan Taheri Tafti and Richard Tomlinson are affiliated with the Faculty of Architecture, Building and Planning, University of Melbourne – Urban Planning, 757 Swanston Street, Parkville, Melbourne, Victoria 3010, Australia; email: mtaheri@unimelb.edu.au; rht@unimelb.edu.au

Paper submitted August 2014; revised paper accepted September 2014.

This article examines the concept of 'best practice' and its application in the context of recovery interventions after major disasters in developing countries. The notion of 'best practice' is discussed by Tomlinson (2015) in the introductory article of this special issue. It has special significance for recovery after major disasters, as there are few institutions with the resources available and the capacity to implement recovery interventions at scale. Another feature of 'best practice' for post-disaster recovery is the importance of a timely intervention. Having access to knowledge concerning difficult and critical questions, including what form of assistance is best for the affected population, how much, within what time frame and under what arrangements it should be disbursed, who should be targeted, who should deliver the plans, and how interventions can be monitored are crucial in providing timely interventions. As a result, an international best practice is highly likely to shape and influence the responses of both international development agencies and countries in the chaotic context of major disasters.

The last decade has seen substantive changes in the roles of, and relationships between, international humanitarian agencies in post-disaster interventions. Increasingly, different agencies assume responsibility for different specific aspects of the interventions. In particular, for short-term activities the global cluster leads the early response, relief and early recovery, with members such as the International Federation of Red Cross and Red Crescent Societies (IFRC) and the United Nations Children's Fund (UNICEF) addressing one or more aspects of the response. While the 'humanitarian sector' is expanding and new institutional arrangements, platforms and multi-donor global partnerships are taking shape and becoming active, the World Bank has continued playing a leading role in longer-term recovery activities since the mid-1980s (Heltberg, 2007).

This role of the World Bank has been increasingly accompanied by other roles, such as the major policy advisor and coordinator of post-disaster recovery efforts in developing countries. Freeman (2004, 430) argues that the World Bank 'influences the behaviour of the entire international donor community'. The World Bank likewise views itself as being 'in a position to influence post-disaster reconstruction policies' (Jha et al., 2010, 93). Such influence is either direct, through assisting the loan recipient countries in 'developing a recovery strategy' (World Bank, 2007b, 1), or indirect, by generating and disseminating 'knowledge' about post-disaster recovery interventions through guidelines and 'lessons learned' documents. Furthermore, the World Bank often streamlines and gears up its policy perspectives through collaborations with other key international and regional role players like the Asian Development Bank (ADB) or through knowledge-based institutions, such as the Global Facility for Disaster Reduction and Recovery (GFDRR).

This article focuses on the World Bank because of the role it plays in developing, transferring and mainstreaming 'best practice' in the context of post-disaster recovery.

We investigate the World Bank's best practice concerning housing and livelihood recovery interventions – the only 'sectors' for which there is funding directly for the stricken population. In particular, we focus on the nexus between household housing and livelihood recovery after disasters, highlighting the need to rethink the existing sector-based post-disaster interventions. For this purpose, we investigate the implications of 'best practice' for the disaster-affected population where such policies were implemented. This includes examples from post-disaster recovery interventions in India, Iran, Pakistan and Sri Lanka.

The rest of the article is structured as follows: after a brief explanation of the research methods, we first explain current 'best practice' as promoted by the World Bank regarding housing recovery and livelihood recovery. Drawing on field studies in India and Iran and also investigating subsequent cases of major disaster recovery interventions, we explain the inadequacies in the knowledge that is transferred as best practice for post-disaster recovery. Some of these inadequacies have been discussed in the international development literature, but have rarely been examined in the context of disaster recovery interventions. This includes conceiving best practice as the 'proven' solution to the challenges of recovery and overlooking the needs and priorities of affected communities and households in building their own solutions. Other issues are more specific to the current knowledge and practices of post-disaster recovery. In such context, unpacking the pitfalls of the current 'best practice' can inform future disaster recovery responses in developing countries.

Research methods

This article draws primarily on research conducted in India and Iran to investigate the long-term recovery process of households in the two cities of Bhuj and Bam that were affected by earthquakes in 2001 and 2003 respectively. The selection of the two cases was based on their similarities in the nature of the disaster, population size and the relative temporal proximity of the two events. More importantly, both recovery interventions were partially funded by the World Bank and both adopted the housing owner-driven reconstruction (ODR) approach as their main strategy for post-disaster housing provision. The ODR approach, as will be discussed in this article, has been promoted by the World Bank as best practice post-disaster housing provision.

Methods of data collection consisted of conducting ninety-five semi-structured interviews with disaster-affected people, examining policy documents and internal or published reports of the relevant institutions (in particular, the Housing Foundation of Iran for the case of Bam and Bhuj, and the Area Development Authority and Gujarat State Disaster Management Authority (GSDMA) in the case of Bhuj). We also conducted twenty interviews with senior bureaucrats in central or state governments, heads of departments directly responsible for post-disaster reconstruction,

urban planners and other key players at the city, district and state level in order to obtain information beyond what is found in published documents.

The article also reflects on the World Bank operational policies, as well as its project appraisal documents – in particular, the cases of Gujarat (2001), Bam (2003), Pakistan (2005) and Turkey (1999) earthquakes, as well as Sri Lanka after the 2004 tsunami. Secondary sources on these disasters were also examined to obtain further information about the recovery interventions and their implications for the disaster-affected populations.

Multi-sectoral recovery interventions

The World Bank support in post-disaster recovery interventions has generally been in the form of a multi-sectoral plan, which determines a framework for the design, funding, implementation, monitoring and evaluating mechanisms for recovery interventions for each sector. This multi-sectoral response became more prevalent from the mid-1990s, after the Maharashtra earthquake in 1993 in India. As noted, among these sectors, housing and livelihood sectors may be involved with providing affected households with direct assistance. The hazard literature has established that these two aspects of recovery play a critical role in the perception of affected individuals about their general recovery after disasters (Bates and Peacock, 1993; Bolin, 1982; Bolin and Bolton, 1983).

In developing countries, a significant share of the available post-disaster financial resources is allocated to the housing 'sector' (Freeman, 2004; Lyons, 2009). According to Lester (2003), half of the World Bank's loans for post-disaster recovery projects has being channelled for this purpose. Table 1 shows the proportion of World Bank's Emergency Recovery Loans that has allocated to housing reconstruction in the selected and reviewed major disasters. Freeman (2004) argues that investigating the politics of housing provision explains this extensive allocation of scarce available funding to housing. He asserts that housing provision produces visible outcomes with enormous political appeal. Politicians often justify this allocation of funding on the grounds that housing is a basic human right and simultaneously supports an industry that generates economic activities. Nevertheless, Freeman argues that in practice these arrangements mostly benefit middle-income households.

Table 1 The World Bank emergency recovery loan after a number of major disasters in the developing countries

ENREF 22	*WB commitment (US $million)*	*Housing as per cent to the commitment*
1999 – Marmara earthquake project, Turkey	505.00	47%
2001 – Gujarat earthquake project, India	442.50	61%
2003 – Bam earthquake project, Iran	220.00	82%
2004 – Sri Lanka tsunami project	75.00	55%
2005 – Pakistan earthquake project	400.00	40%

Source: World Bank (2014).

In the following sections, we briefly explain the policies and practices of housing and livelihood post-disaster recovery, which have been promoted by the World Bank. This will be followed by a discussion of the shortcomings of these policies and practices through examining their impacts on the disaster-affected households.

Best practice post-disaster housing provision

Probably the World Bank's foremost source on post-disaster housing recovery is its *Handbook* (Jha et al., 2010), which is intended to assist 'policymakers' to 'design a reconstruction policy' and to provide 'a frame of reference for specialists'. Policymakers are advised to 'encourage the use of the handbook by central and local government of officials, NGOs and civil society organizations to help them develop a common understanding of goals and the means to reach them and to improve the consistency of their interventions and, therefore, the efficiency of reconstruction' (2010, xii). Ready at hand, on the internet, a carefully researched, detailed and well-presented resource with 'how to do it' guidelines, the *Handbook* is exceedingly useful and, in it, the ODR approach emerges as the default approach to post-disaster housing recovery.

The ODR approach is summarised as: 'conditional financial assistance is given, accompanied by regulations and technical support aimed at ensuring that houses are built back better' (Jha et al., 2010, 93). The approach is listed as one among five[1] potential approaches, and then is recommended because it 'has *proven* to be the most empowering, dignified, sustainable, and cost-effective reconstruction approach in many types of post-disaster situations' (Jha et al., 2010, 93 [emphasis added]). The word 'proven' has the same prescriptive character and intent as 'what works', which was discussed in the introductory article of this special issue (Tomlinson, 2015). The assertion of proof follows shortly after the reader is cautioned to adopt a policy that is

1 Cash approach, ODR, community-driven reconstruction, agency-driven reconstruction in situ and agency-driven reconstruction on the relocated site.

'context-specific' and, in effect, negates that caution. In addition to the World Bank, this approach to post-disaster housing provision has been advocated by other key international institutions such as the UN-Habitat (e.g. UN-Habitat, 2007).

The ODR approach to housing provision in its current form was initially implemented in some villages affected by the 1993 Latur earthquake in India and became more prevalent after the 2001 Gujarat earthquake (World Bank, 2009b). It was adopted as a main strategy for post-disaster housing provision after the Bam and Pakistan earthquakes, as well as in Thailand and Sri Lanka after the 2004 tsunami. The ODR approach as a prevalent approach for post-disaster housing provision replaced the contractor-based housing projects managed by state or donor agencies that were prevalent in the 1980s (Davis, 2011b). The superiority of the ODR approach compared with the previous approaches has been highlighted by numerous empirical studies (e.g. Barenstein, 2010; Lyons, 2009). In particular, the ODR approach is advocated in light of shortcomings of the contractor-driven approach, such as creating a sense of 'victim/saviour relationship', 'neglecting social capital' and overlooking housing as a process (Sanderson and Sharma, 2008, 184). Housing people through the ODR approach is found to result in a higher level of perceived satisfaction and higher occupancy rate (e.g. Barakat, 2003; Barenstein and Iyengar, 2010; Karunasena, 2010; Lyons, 2009). Furthermore, a number of researchers assert that this approach is more economically efficient, as owners supplement the assistance with their own assets (Lyons, 2009).[2]

The academic and institutional acknowledgement of the superiority of the ODR approach over the state- and donor-driven approaches has become part of the rhetorical framework associated with knowledge transfer on post-disaster housing provision. The drawbacks of this approach, however, have rarely been examined (Taheri Tafti, 2012). In particular, knowledge transfer regarding the ODR approach has rarely included any lessons learned about recurrent problems that have arisen from adopting this approach in different contexts.

A review of cases where the ODR approach has been adopted after major disasters shows a number of recurring problems that arose because of the ways in which the approach is conceived, interpreted and implemented (Taheri Tafti, 2012). This partly relates to the role of the loan recipient governments, their interests and their aspirations in such interpretations and implementation arrangements. As McFarlane (2006) mentions, such interpretations depend on who decides how it (the best practice) is used.

One such recurrent problem arises from misinterpreting the approach as targeting only homeowners, whereas it can be used to transform squatters and tenants into

2 In many of these comparative studies – like those in Sri Lanka after the 2004 tsunami – the ODR approach was adopted in in situ reconstruction and the donor-driven approach was adopted in relocation sites. In none of these studies is the impact of in situ/relocation (with the former often generating higher satisfaction) carefully distinguished from the impact of owner-driven/donor-driven approaches.

homeowners. This problem is often exacerbated when the ODR approach is considered as the sole strategy for post-disaster housing provision. This has been especially problematic in urban contexts, where non-homeowners constitute a considerable portion of the disaster-affected population. In both Bam and Bhuj, the ODR only targeted pre-disaster homeowners. In Bhuj, renters and squatters were not included in the ODR policy (Taheri Tafti and Tomlinson, 2013). In Bam, no policy was introduced for the housing recovery of renters for the first two years after the earthquake. Despite numerous changes in policies, newly female-headed households without land rights in Bam and squatters in Bhuj were excluded from housing provision policies altogether. Several studies on the 2005 earthquake in Pakistan also raised concerns about the exclusion of rural and urban tenants from housing provision policies (Cosgrave and Nam, 2007; Strand and Borchgrevink, 2006).

In his analysis of forty years' of experience of disaster shelter, Davis (2011b) suggests a 'user-driven' approach to housing recovery, which is a more inclusive interpretation of the ODR approach. This means that the ODR is not targeting ownership, but is more concerned with households, regardless of their tenure status, being involved in their housing recovery. The approach can also be interpreted as future owners getting involved in housing reconstruction. Furthermore, the fundamental necessity of considering the ODR approach *as one among other* policies for post-disaster housing provision in the affected areas has rarely been highlighted during knowledge transfer on disaster housing recovery (Taheri Tafti and Tomlinson, 2013).

Another recurrent problem in adopting the ODR approach and defining its beneficiaries is overlooking the context-specific characteristics of housing arrangements and tenure patterns. In Bhuj, housing recovery policies incorporated the generic idea of ODR to address a hypothetical condition where beneficiaries were mainly single family, owner-occupiers of detached damaged houses. The beneficiaries of housing reconstruction assistance were defined as owners (and, in the case of land allotments, as families). Policies were silent on the issue of multiple ownership of properties, which is the prevalent mode of ownership in the old areas of the city, as a result of traditional inheritance practices. Policies were also silent on the city's predominant domestic pattern and household type, which is the co-residence of joint families. This resulted in ambiguities around the issue of who is the 'owner'. The later inclusion of ration cards for identifying families did not solve the problem. Middle-income and educated interviewees received multiple plots and multiple assistance packages for one damaged house on the grounds of holding separate ration cards, while the poor interviewees mostly received only one assistance package. In Bam, policies also did not take into account the existence of polygamous households in the city or consider what can be defined as a family or household.

A third example of recurrent problems relates to the safety of the reconstructed buildings – an issue also observed by other researchers (Barakat, 2003; Todd and Todd,

2011). In both Bam and Bhuj, residential units were predominantly built by contractors or skilled labourers hired by homeowners. Supervising the process of construction, engineers appointed by the government had the responsibility of controlling the conformity of construction with the seismic code at each stage and issuing permits for the disbursement of the next instalment of the grant to owners. In both cities, when housing reconstruction took a long time, the concern over earthquake safety lost its priority to economic hardship for households. This affected the quality of the built houses. In addition, the official termination of technical inspections four to five years after the earthquake, when a considerable proportion of housing construction projects had not yet been finished, meant that safe construction practices became less likely (Gharaati-Kopaei, 2009).

Finally, in terms of implementation, the assumption implicit in the ODR approach is that the large majority of households have a uniform capacity to manage construction. The necessity of providing additional support in the ODR approach to households lacking, or prohibited from having, this capacity has rarely been incorporated into knowledge transfer on disaster housing recovery. For instance, in Bam, female-headed households found it very difficult to manage their housing projects in the male-dominated field of construction. These interviewees had to trust and rely on the help of their male relatives or acquaintances to oversee the construction process. Households with injured family members and lower-income households all faced difficulties in keeping up with the strict official arrangements in policies of owner-driven housing reconstruction.

Most of these drawbacks are not inherent problems of the ODR approach and could have been addressed if the knowledge transfer had provided a more comprehensive picture of the on-the-ground realities of the adoption and implementation of this approach. Problems inherent in the ODR approach can be best explained by taking into account the multi-sectoral nature of recovery interventions and will be discussed later in this article.

Best practice livelihood recovery

The World Bank's best practice for livelihood recovery originates from its post-disaster response to the 1999 earthquakes in Turkey. This response consisted of a one-off cash payment to the affected households. According to the World Bank's Independent Evaluation Group (IEG, 2006, 49): 'the 1999 Turkey earthquake reconstruction project implemented a cash transfer component that was widely considered successful, and even a model to be emulated, as four subsequent projects have already done'. Since 1984, 'the Bank has funded over $850 million in cash support (mostly cash transfer) […] Approximately 94 percent of these funds have been lent since the Turkey Emergency Earthquake Reconstruction Loan was appraised in 1999' (IEG, 2006, 48).

Although current World Bank policy statements consider relief as being 'outside the Bank's traditional area' (World Bank, 2007b, 2), the Bank has been increasingly involved with supporting transitional safety net activities (World Bank, 2007a). The Bank supported several cases of the deployment of cash grants to affected households during the relief phase,[3] including in the Maldives and Sri Lanka after the 2004 tsunami, and in Turkey and Pakistan after the 1999 and 2005 earthquakes (Heltberg, 2007, 688). In all these cases, cash distribution has taken place within six months after the disaster. In the Maldives and Turkey, the response was a one-off cash payment during the relief phase. In Sri Lanka, the response constituted of four rounds of cash grants starting four months after the 2004 tsunami (the last two rounds were targeted assistance) (World Bank, 2009a). In Pakistan, six monthly grants were paid as relief (Heltberg, 2007). Even in cases where livelihood support was not a component of the Wold Bank recovery loan, cash assistance has been distributed in the relief phase, as in Iran after the Bam earthquake.

The importance of introducing some social welfare support during the relief phase is indisputable. The United Nations International Strategy for Disaster Reduction (UNISDR) guidance note on livelihood recovery (UNISDR, 2010, 4) mentions that 'disaster affected populations have overwhelmingly identified livelihoods as their greatest recovery priority'. Cash grant distribution has been advocated on the grounds that it gives the recipients the power to decide on their own priorities, according to their needs and aspirations (Harvey, 2005; UNISDR, 2010). As a result, this approach is reported by recipients as highly preferable compared to in-kind support (IEG, 2006, 49). Recipients often use cash for basic survival and to protect their livelihoods (Harvey, 2005). The IEG (2006, 48) notes that 'during the recovery process, getting cash support to victims quickly has positively affected people's sense of safety and security. It has been a prominent first sign of the government's support in a time of acute need'.

According to Regnier et al. (2008), planning for livelihood recovery may pursue three different objectives: relief-based interventions, livelihood protection or restoration and livelihood promotion. Livelihood protection involves 'protecting household livelihood system, infrastructure repair and reconstruction', and livelihood promotion 'is a set of development-based interventions that involve improving the resilience of household livelihoods so that food and other basic needs can be met on a sustainable basis' (UNISDR, 2010, 8). It entails strategies for creating new income-generating activities and strengthening markets. Knowledge and practices related to livelihood protection and promotion have rarely been documented. Integrating livelihood promotion into recovery strate-

3 The relief phase is often involved with short-term activities. It is a phase of disaster management – sometimes called response – starting after the disaster and is followed by longer-term recovery activities. After major disasters, this phase often takes more than a year.

gies has been limited and only recently been recognised by key international role players (UNISDR, 2010).[4]

Post-disaster livelihood interventions supported by the World Bank have predominantly pursued the first objective (relief-based interventions). Similarly, various practices of the majority of donors are concentrated on the relief phase. These programmes have rarely been extended for more than a year. Even effective programmes might not have a long-lasting impact if abandoned early (during the relief phase). For instance, Mulligan and Nadarajah (2012, 364) mention that in Chennai after the 2004 tsunami, while the initiative of non-governmental organizations (NGOs) in working with communities in temporary housing settlements with no-interest microcredit was effective, it was abandoned later 'when it mattered most'. The results included the destitution of some households, leading to prostitution and the sale of human organs to generate income (Mulligan and Nadarajah, 2012).

The UNISDR (2010, 35) highlights the importance of a long-term commitment for livelihood recovery: 'There is no "quick fix" for economic vulnerability. Humanitarian actors, with short funding terms and a very different mandate, are often poorly prepared to take on these long term "development-oriented" objectives.' While there is no question regarding the necessity of introducing social welfare promptly, claims about its positive impact on 'getting local economies moving again' (IEG, 2006, 49) are questionable. There is a lack of rigorous investigation about the long-term impact of these cash payments (Harvey, 2005; Heltberg, 2007).

Livelihood recovery is considered as still being in the experimental stage (UNISDR, 2010). The knowledge transfer at the time of livelihood recovery suffers considerable shortcomings compared to housing recovery. Most documents of international organisations about post-disaster livelihood recovery have a rural-focus origin. Likewise, the existing literature lacks rigorous studies in urban settings. This might be the result of 'livelihood thinking [being] emerged mostly from a rural perspective' (Sanderson, 2001, 4). As a result, there is a significant gap in knowledge, policies and practices for addressing the complexities of livelihood recovery in urban contexts.

4 A review of recent post-disaster recovery efforts identifies additional strategies for providing relief and protecting livelihoods, such as material distribution, temporary income-earning opportunities (cash for work programmes) and distribution of livelihood-related equipment. There is, in particular, an extensive body of literature on the interventions after the 2004 tsunami that were mainly involved with asset replacement (Khasalamwa, 2009; Regnier et al., 2008). Mulligan and Nadarajah (2012, 364), in their evaluation of these practices in Sri Lanka, report a 'considerable' waste and duplication in handing out equipment and that little thought was given as to whether or not there would be a market for the goods and services provided by microenterprises in such low-income communities. Small shops started to fail, there were too many three-wheeler drivers for any to prosper, people who had not been fishermen were given fishing equipment.

Does multi-sectoral recovery work *best* at the household level?

The World Bank's first guiding principle for post-disaster housing provision is that 'housing reconstruction is key to disaster recovery, but it depends on the recovery of markets, livelihoods, institutions, and the environment' (Jha et al., 2010, 1). In this section, we argue that a major pitfall of any knowledge transfer on post-disaster recovery relates to the sector-based understanding of recovery and a lack of a meaningful connection between the housing and livelihood 'sectors'. This argument is based on the winners and losers of such disconnection in recovery interventions.

In previous sections, we introduced the World Bank's main response concerned with housing and livelihood recovery. While livelihood responses were mostly cash payments within the first year after the disaster, owner-driven housing reconstruction often begins much later. This is particularly the case in urban disasters, where a need to develop new plans for the affected urban areas often results in a prolonged start to the reconstruction process. In Bhuj, the town plans were not sanctioned until more than a year and a half after the earthquake, and the allocation of residential plots began two years after the earthquake. In Bam, the new structural plan of the city was developed in fourteen months, but it took more time to prepare the detailed plans for implementation. The reconstruction of residential units started two years after the earthquake (Omidvar et al., 2010).

The time difference between receiving cash assistance and housing assistance in both cases implies that during the longer-term recovery activities households receive assistance only for housing purposes. This time frame also implies that households might have had to start their housing reconstruction while they might not have achieved their livelihood recovery. In such cases, households with low asset portfolios were unable to comply with the rigid and inflexible instalment-based arrangements of the ODR. In both cities of Bam and Bhuj, under severe conditions, resources allocated for housing were spent on basic consumption or for addressing contingencies, such as illness. In Bhuj, lower-income groups whose livelihood was disrupted by the earthquake consumed their housing assistance, and therefore did not have the money to implement construction work up to the stage necessary to be eligible to receive the second instalment. As Table 2 shows, 22 per cent and 29 per cent (respectively) of those who received their first instalment for owner-driven construction did not receive the second and third instalments. The housing recovery of these households therefore hinged upon finding other sources.

Table 2 Housing assistance for unrepairable houses in urban areas in Kutch district in Gujarat as of February 2008

	Sanctioned cases	*1st instalment*	*2nd instalment*	*3rd instalment*
Recipients	17,559	17,559	13,720	12,475

Source: Burns and Tiwari (2008, 27).

According to our interviewees in Bhuj, the nine-month difference between receiving the first instalment and the start of the reconstruction process exacerbated this problem and increased the probability of using the first instalment for addressing any contingencies.

> We got the first instalment very soon. But at that time my mother was badly sick and we spent all that money for her treatment and our daily expenditure. So I did not have money to start my building. Then my boss agreed to pay me Rs.45,000 to build the house up to the lintel and deduct the money in instalments from my salary. […] I am a mason and I could finish the walls and get the second instalment. (Interview BJ 01-40-26/09/2012)

In Bam, despite the allocation of considerable assistance and subsidies (like free utilities) to shopkeepers, as well as providing a minimum social safety net for female-headed households and those with disabilities, housing reconstruction was slow. According to the internal reports of the Housing Foundation of Iran, the construction of approximately 30 per cent of the residential units had not been completed by 2009, six years after the disaster. The double digit inflation in the country also contributed to a slow reconstruction process. The main problem, however, was the 34 per cent unemployment rate among the twenty to sixty-five age cohort (SCI, 2011). According to the census of 2011, 7,510 households were still living in temporary housing or tents eight years after the earthquake in the city (SCI, 2011). A number of interviewees were still living in temporary housing in their plots. Some of them have already started building rooms in their plots through traditional and unsafe construction practices.

> It is four years ago that we left the reconstruction of this house unfinished. We couldn't finish it and we are living in these two Conex [shipping containers]. […] I used to work daily as a labourer. It is several months that I have not found a job. I built these two rooms for my daughter and her family. My son-in-law is living with us now. […] The other Conex in front of the door is used by my other daughter. She is using it as a beauty parlour. She is now the breadwinner of the family. (Interview BM 31-28/12/2010)

That the difficulty in achieving income recovery is likely to adversely impact on housing reconstruction for lower-income households reveals two shortcomings inherent in current knowledge transfer on post-disaster housing and livelihood

recovery: abandoning livelihood-related interventions during the recovery phase and an inflexible sector-based payment of assistance.

While the best practice on post-disaster recovery views recovery as part of a sector-based framework, households plan cross-sectorally for their recovery. The sector-based structure of recovery interventions at the macro level can be critical in facilitating programme management. At the micro level of households and individuals, however, adhering to the sector-based approaches for recovery seems to be grounded on a misconceptualisation of recovery at this level.

Our research in Bam and Bhuj shows that the earthquake-affected households compromised, delayed or reconfigured their housing reconstruction in order to address other short-term or long-term priorities – in particular, income-generating activities. For instance, some middle-income homeowner interviewees in Bam delayed their housing recovery to build multiple housing or commercial units, either for their next generation or for income-generating purposes. In Bhuj, some low-income tenant interviewees received a house from an NGO, then rented it out or sold it and moved to illegal settlements, in order to have a source of income or better access to income-earning opportunities and infrastructure.

The current best practice approach for housing and livelihood 'sectors' does not represent the priorities and needs of affected households, especially for the lower-income groups. The next section explains the mechanisms that enforce this artificial separation of livelihood and housing 'sectors', which overlook the priorities of the affected population.

Who decides what is best?

After a disaster, the opportunity for participatory and context-sensitive policy and practice is limited. Disaster recovery interventions differ from other developmental interventions due to their urgency. As noted, the concern around providing a timely intervention implies a high probability of best practice disaster recovery being embraced as 'a universal solution' ready for implementation; a perspective which marginalises the knowledge and needs of local people.

At a macro level, in almost all cases of recent major disasters, the frame of reference for recovery programmes in terms of time frame, beneficiaries and output indicators has often been defined in advance, with no input from the disaster-affected population. This includes decisions about the allocation of assistance, its purpose, its recipients and its mode of delivery. While the recipient governments have a role in such processes, the World Bank's emphasis on a timely response leaves no room for negotiation and deliberation, due to the urgency of a prompt intervention: 'Project appraisal documents note that several past emergency loan projects (Columbia Popayan, Mexico Earthquake, Jamaica Hurricane Emergency Reconstruction, El

Salvador Earthquake, among others) reveal that a speedy response is imperative' (World Bank, 2005, 30).

It is at the project level that most of the World Bank's requirements for, and emphasis on, participation of the 'beneficiaries' in planning and implementation is concerned. However, even at the project level, the World Bank's track record in post-disaster recovery interventions indicates a more top-down approach (Ahmed, 2011). Ganapati and Mukherji (2014) highlight how the Bank's recovery loan mechanism – in particular, in terms of time frame for project implementation – played a role in leaving limited opportunity for an inclusive participatory approach. In many of the World Bank-supported recovery programmes following major disasters, participation was conceived and implemented from a narrowly-defined perspective (Ahmed, 2011; Ganapati and Ganapati, 2008). For instance, in Bhuj, the preparation of urban development and the town planning process were accompanied by numerous consultation meetings with citizens. In practice, however, the town planning process was only concerned with landowners and overlooked those who were living (e.g. tenants and squatters) or working (e.g. tenant shopkeepers) in the affected neighbourhoods.

At the individual level, the power of decision-making for recovery is constrained by mechanisms that are embedded in the best practice housing recovery. The core idea of the ODR approach originates from 'aided self-help housing' reconstruction, based on the pioneering work of John F. C. Turner, following the Peruvian earthquake in the late 1960s (Davis, 2011a). The major difference between the 'aided self-help housing' and the ODR approach is the instalment-based disbursement of financial assistance in the ODR reconstruction, contingent on the construction of the house according to the building regulations to ensure safe building practices. Another mechanism is establishing a maximum amount of assistance based on the size of the house. These two conditions imply that most of the affected population will aim at building the maximum housing size in order to receive the maximum assistance;[5] they cannot, for instance, decide to build a smaller house and allocate a portion of their assistance to their income recovery.

The ODR approach provides directions through assistance conditionality, instalment-based disbursement and fines to push people to do what policies defined as the 'right thing' to do – i.e. to build earthquake-resilient houses within a fixed time frame. The failure of a number of households in both cities of Bam and Bhuj to achieve their housing recovery was partly a result of the incompatibility between the policy assumption of what is the 'right thing' to do and the priorities and needs of the affected population. There was also incompatibility between what was considered

5 In both Bam and Bhuj, housing recovery programmes explain that the maximum assistance will be adequate for building the maximum size of the house determined in the policies (80m2 in Bam and 45m2 in Bhuj). This was not the case, in particular, for those who began their housing construction later than others or those whose reconstruction process took a longer time compared to others.

the 'right way' to achieve recovery and the actual capacity of different households to comply with the inflexible assistance disbursement mechanism.

The ODR approach prescribes the purpose for which the recipients should use the assistance, establishes their recovery priorities and defines how 'recovery outcomes' should be evaluated in terms of 'housing ownership'. Shelter is a basic need, and housing ownership is often the biggest asset of a household. What needs to be highlighted here is that these arrangements are mostly in line with the priorities and aspirations of middle-income groups. These groups are more likely to own a house and value housing ownership, and to have other assets and access to finance for addressing their income recovery. In both cases of Bam and Bhuj, access to finance was especially critical to address additional contingencies during the recovery period. It provided flexibility for financial resources, as opposed to the inflexible instalment-based payments in the ODR approach.

For lower-income households, however, ownership of a house – and, in particular, an earthquake-resilient one – may not be the only or the highest priority. In Bhuj, according to Virmani (2010, 155), during the recovery phase, the first priority of small businesses (like small retailers) was their livelihood: 'their request was that instead of a grant of 1.5 lakhs [Rs150,000] for a house, receive a loan of Rs20,000 to 25,000 so they can restart their small shops that gives them an earnings of Rs7,000 to 8,000 a month'.

The World Bank guideline for housing reconstruction asserts that the ODR 'is the most empowering and dignified approach for households' (Jha et al., 2010). However, the fact that the adoption of the ODR approach leaves little room for the disaster-affected households to decide upon their own needs and priorities questions its ability to 'empower' them.

What are the measures of success?

The first four objectives of the World Bank's rapid response are:

a. Rebuilding and restoring physical assets.
b. Restoring the means of production and economic activities.
c. Preserving or restoring essential services.
d. Establishing and/or preserving human, institutional, and/or social capital, including economic reintegration of vulnerable groups. (World Bank, 2007b, 2)

These objectives imply a narrowly defined conceptualisation of recovery that focuses on asset replacement and, in particular, on physical assets. The World Bank's independent evaluation group also highlights that the Bank's supported projects were best at restoring physical assets (IEG, 2006).

In line with these objectives, the Bank's most frequently mentioned measures for the evaluation and success of recovery interventions have two metrics: time and quantity. The metrics for evaluating housing and livelihood recovery interventions

are the number of residential units built and the number of cash transfers within a particular time frame.[6] The existing literature has criticised both the time element, as it compromises the process of community development, deliberation and negotiation (Ganapati and Mukherji, 2014; Mulligan and Nadarajah, 2012), and the element of asset replacement, for being inadequate for achieving recovery (Khasalamwa, 2009; Mulligan and Nadarajah, 2012).

Here, we further these critiques by highlighting the contested meaning of recovery and the objectives of recovery interventions. These four objectives of the World Bank, which have also been reflected in most post-disaster emergency loan documents, are questionable on both rational and moral grounds. From a rational perspective, the four objectives often do not result in recovery – in terms of bringing the post-disaster situation to some level of acceptability (Quarantelli, 1999) – for all social groups. In Bam, for instance, the number of built residential units reached its pre-earthquake level six years after the earthquake.[7] At the same time, 7,510 households were still living in temporary housing or tents eight years after the earthquake (SCI, 2011), even though the city lost one-fourth of its population in the wake of the disaster. Many low-income renters or homeowners could not achieve their housing recovery, while higher income groups accumulated new assets (Taheri Tafti and Tomlinson, 2013). The number of built commercial units was double the pre-earthquake number, while some renter shopkeepers could not achieve their livelihood recovery. Therefore, the number of people who receive assistance or a quantitative restoration of the lost assets cannot represent the number of those who actually achieved recovery.

More importantly, aiming to restore lost assets, such as housing, economic activities and income, also raises moral questions. This conceptualisation of recovery means perpetuating previous inequalities, because focusing on 'restoring the means of production and economic activities' and 'rebuilding and restoring physical assets' serves the owners of enterprises and of housing. While the World Bank might advocate the slogan 'build back better', the prospect for squatters is that of returning to their pre-disaster housing condition. As mentioned in the case of Bhuj in Gujarat, squatters were practically excluded from assistance distribution.

While there are a considerable number of aid agencies trying to fill the gaps in policies and specifically target assistance for vulnerable groups, there is a definite need to revise the asset-driven assessment of recovery interventions of major development institutions and the governments they influence. Such revision needs to shift the focus of recovery interventions from lost assets to disaster-affected households. This can be conducive to a more equitable distribution of recovery gains and pains.

6 For instance, it rates its cash grant programme in Sri Lanka as satisfactory on the grounds that it was 'completed ahead of time in 2005' (World Bank, 2009a).

7 The Housing Foundation's annual progress reports (internal reports).

Conclusion

This article provides a deeper understanding of the current knowledge and practices of post-disaster recovery as it is often promoted, funded and evaluated by the World Bank in developing countries. In particular, the article focused on policies and practices of housing and livelihood recovery – the only two 'sectors' involved with the direct distribution of assistance among the disaster-affected population. We have analysed a number of problems associated with best practice and, more generally, 'knowledge transfer' in the context of housing and livelihood recovery. Knowledge transfer on disaster recovery has rarely included lessons learned from recurring problems arising, due to the ways in which generic policies are interpreted, conceived and implemented.

The argument of the article critiqued the existing best practice of post-disaster recovery, as promoted by the World Bank, identifying its prescriptive nature, as well as its asset-based conceptualisation and evaluation of recovery. The ODR approach prevents affected households from deciding upon their own priorities and determines housing ownership as the best outcome of their recovery efforts. This, in particular, does not always represent the priorities and needs of lower-income households. Ellerman (2005) asserts that in order to help people help themselves, the first step is to respect their priorities and needs. The existing housing recovery best practice as discussed in this article is more in line with the interests and aspirations of middle-income households.

The predominant sector-based recovery interventions have been transferred without sufficiently rigorous examination of their implications for the affected population. This article explains that the two sectors central to the recovery of households – housing and livelihood – follow a different sequence and that the losers of their artificial partitioning are often the lower-income groups. There is a possibility of gaining substantial knowledge by breaking down any separation between these two aspects of recovery. Further research is required in order to bring these two domains closer, with a view to enabling disaster-affected households to decide upon their own recovery priorities.

References

AHMED, I. (2011), 'An overview of post-disaster permanent housing reconstruction in developing countries', *International Journal of Disaster Resilience in the Built Environment*, **2**, 148–64.

BARAKAT, S. (2003), 'Housing reconstruction after conflict and disaster' (Network Paper No. 43), London, HPN (Humanitarian Practice Network), available at: http://www.odihpn.org/documents/networkpaper043.pdf (accessed May 2010).

BARENSTEIN, J. D. (2010), 'Who governs reconsrtuction? Changes and continuity in policies, practices and outcomes', in G. Lizarralde, C. Johnson and C. Davidson (eds), *Rebuilding After Disasters: From Emergency to Sustainability*, New York, NY, Spon Press, 149–76.

BARENSTEIN, J. D. and IYENGAR, S. (2010), 'India: from a culture of housing to a phylosophy of reconstruction', in M. Lyons and T. Schilderman (eds), *Building Back Better: Delivering People-Centred Housing Reconstruction at Scale*, Warwickshire, Practical Action, 163–88.

BATES, F. L. and PEACOCK, W. G. (1993), *Living Conditions, Disasters, and Development: An Approach to Cross-Cultural Comparisons*, Athens, GA, University of Georgia Press.

BOLIN, R. (1982), *Long-Term Family Recovery From Disaster*, Colorado, CO, University of Colorado Press.

BOLIN, R. and BOLTON, P. (1983), 'Recovery in Nicaragua and the USA', *International Journal of Mass Emergencies and Disasters*, **1**, 125–45.

BURNS, T. and TIWARI, D. (2008), 'Post-disaster land issues: case study of the 2001 earthquake in Gujarat, India' (case study), Post-Disaster Land Case Studies, Global Land Tool Network, available at: http://www.gltn.net/en/general/post-disaster-land-guidelines.html (accessed April 2013).

COSGRAVE, J. and NAM, S. (2007), 'Evaluation of DG ECHO's Actions in Response to the Pakistan Earthquake of 2005' (seventh review of humanitarian action), London, ALNAP, http://www.alnap.org/resource/5233.aspx (accessed 12 February 2015).

DAVIS, I. (2011a), 'Reducing disaster risks 1980–2010: some reflections and speculations', *Environmental Hazards*, **10**, 80–92.

DAVIS, I. (2011b), 'What have we learned from 40 years' experience of disaster shelter?', *Environmental Hazards*, **10**, 193–212.

DHARMAVARAM, S. (2013), 'Land Value Capture in Urban DRM Programs' (DRM knowledge notes, Working Paper Series No. 26), Washington, DC, The World Bank, available at: https://openknowledge.worldbank.org/bitstream/handle/10986/16113/805830Brief026 0Box0379807B00PUBLIC0.txt?sequence=2 (accessed 26 June 2014).

ELLERMAN, D. P. (2005), *Helping People Help Themselves: From the World Bank to an Alternative Philosophy of Development Assistance*, Ann Arbor, MI, University of Michigan Press.

FREEMAN, P. K. (2004), 'Allocation of post-disaster reconstruction financing to housing', *Building Research and Information*, **32**, 427–37.

GANAPATI, N. E. and GANAPATI, S. (2008), 'Enabling participatory planning after disasters: a case study of the World Bank's housing reconstruction in Turkey', *Journal of the American Planning Association*, **75**, 41–59.

GANAPATI, N. E. and MUKHERJI, A. (2014), 'Out of sync: World Bank funding for housing recovery, post-disaster planning and participation', *Natural Hazards Review*, **15**, 58–73.

GHARAATI-KOPAEI, M. (2009), 'Knowledge transfer in post-disaster reconstruction: the problem of post-post-disaster reconstruction' (Doctor of Philosophy in Architecture thesis), Montreal, McGill University.

HARVEY, P. (2005), 'Cash and vouchers in emergencies' (HPG Discussion Paper), London, ODI (Overseas Development Institute), available at: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/432.pdf (accessed 14 February 2014).

HELTBERG, R. (2007), 'Helping South Asia cope better with natural disasters: the role of social protection', *Development Policy Review*, **25**, 681–98.

IEG (INDEPENDENT EVALUATION GROUP) (2006), 'Hazards of nature, risks to development: an IEG evaluation of World Bank assitance for natural disasters' (IEG evaluation), Washington,

DC, The World Bank, available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/06/29/000160016_20060629133433/Rendered/PDF/366150Hazardsoandorisks01PUBLIC1.pdf (accessed May 2012).

JHA, A. K., BARENSTEIN, J. D., PHELPS, P. M., PITTET, D. and SENA, S. (2010), *Safer Homes, Stronger Communities: A Handbook for Reconstructing After Natural Disasters*, Washington, DC, The World Bank.

KARUNASENA, G. (2010), 'Post-disaster housing reconstruction: comparative study of donor vs owner-driven approaches', *International Journal of Disaster Resilience in the Built Environment*, **1**, 173–91.

KHASALAMWA, S. (2009), 'Is "build back better" a response to vulnerability? Analysis of the post-tsunami humanitarian interventions in Sri Lanka', *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography*, **63**, 73–88.

LESTER, R. (2003), 'Applicability of corporate risk management techniques to catastrophe risk management at the country level' (paper presented at the conference, Financing the Risks of Natural Disasters: A New Perspective on Country Risk Management, Washington, DC, 2–3 June 2003), available at: http://info.worldbank.org/etools/docs/library/158277/natdisaster/agenda.html (accessed 12 February 2014).

LYONS, M. (2009), 'Building back better: the large-scale impact of small-scale approaches to reconstruction', *World Development*, **37**, 358–98.

MCFARLANE, C. (2006), 'Knowledge, learning and development: a post-rationalist approach', *Progress in Development Studies*, **6**, 287–305.

MULLIGAN, M. and NADARAJAH, Y. (2012), 'Rebuilding community in the wake of disaster: lessons from the recovery from the 2004 tsunami in Sri Lanka and India', *Community Development Journal*, **47**, 353–68.

OMIDVAR, B., ZAFARI, H. and DERAKHSHAN, S. (2010), 'Reconstruction management policies in residential and commercial sectors after the 2003 Bam earthquake in Iran', *Natural Hazards*, **54**, 289–306.

QUARANTELLI, E. L. (1999), 'The disaster recovery process: what we know and do not know from research' (Working Paper), Disaster Research Center, The University of Delaware, Disaster Research Center, Ohio State University, available at: http://udspace.udel.edu/handle/19716/309 (accessed May 2010).

REGNIER, P., NERI, B., SCUTERI, S. and MINIATI, S. (2008), 'From emergency relief to livelihood recovery: lessons learned from post-tsunami experiences in Indonesia and India', *Disaster Prevention and Management*, **17**, 410–29.

SANDERSON, D. (2001), 'Urban livelihoods and natural disasters' (report), London, CARE International, available at: www.radixonline.org/resources/sanderson.doc (accessed March 2012).

SANDERSON, D. and SHARMA, A. (2008), 'Winners and losers from the 2001 Gujarat earthquake', *Environment and Urbanization*, **20**, 177-186.

SCI (STATISTICAL CENTRE OF IRAN) (2011), 'National population and housing census' (SCI – provincial data – Kerman Province), available at: http://www.amar.org.ir/Default.aspx?tabid=1536 (accessed May 2013).

STRAND, A. and BORCHGREVINK, K. (2006), 'Review of Norwegian earthquake assistance to Pakistan 2005 and 2006' (CMI reports), Bergen, CMI ChR, Michelsen Institute, available

at: http://bora.cmi.no/dspace/bitstream/10202/86/1/Report%20R%202006-18.pdf (accessed June 2014).

TAHERI TAFTI, M. (2012), 'Limitations of the owner-driven model in post-disaster housing reconstruction in urban settlements' (paper presented at the procedings of the International Conference on Disaster Management (IIIRR), Kumamoto, 24–26 August).

TAHERI TAFTI, M. and TOMLINSON, R. (2013), 'The role of post-disaster public policy responses in housing recovery of tenants', *Habitat International*, **40**, 218–24.

TODD, D. and TODD, H. (2011), 'Natural disaster response lessons from evaluations of the World Bank and others' (Evaluation Brief Paper No. 16), Washington, DC, Independent Evaluation Group Communications, Learning, and Strategy, The World Bank, available at: http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/6E05ABFAE2ED2CF5852579440077 4EAE/$file/eval_brief_nat_disaster_response.pdf (accessed June 2014).

TOMLINSON, R. (2015), 'Introduction: "best practice" in development planning: products, processes and networks', *International Development Planning Review*, **37**, 119–28.

UN-HABITAT (2007), 'Building back better in Pakistan' (paper presented at the twenty-first session of the governing council, Nairobi, UN-Habitat, 16–20 April), available at: http://www.unhabitat.org/downloads/docs/4627_75789_GC%2021%20Financing%20Field%20Report%20Pakistan.pdf (accessed April 2012).

UNISDR (UNITED NATIONS INTERNATIONAL STRATEGY FOR DISASTER REDUCTION SECRETARIAT) (2010), 'Guidance note on recovery: livelihood' (guidance note), Kobe, Japan, International Recovery Platform (IRP), United Nations International Strategy for Disaster Reduction Secretariat (UNISDR), United Nations Development Programme (UNDP), available at: http://www.unisdr.org/files/16771_16771guidancenoteonrecoveryliveliho.pdf (accessed December 2012).

VIRMANI, S. (2010), 'Compounding disasters, first natural, then man-made: failed interventions we can learn from', in S. B. Patel and A. Revi (eds), *Recovering From Earthquakes: Response, Reconstruction, and Impact Mitigation in India*, New Delhi, New York, NY, Routledge, 142–58.

WORLD BANK (2005), 'Project performance assessment report: Turkey earthquake rehabilitation and reconstruction project, Turkey emergency flood and earthquake recovery project' (project evaluation report), Washington, DC, Operations Evaluation Department, World Bank, available at: http://ieg.worldbank.org/Data/reports/ppar_32676.pdf (accessed May 2014).

WORLD BANK (2007a), 'Toward a new framework for rapid bank response to crises and emergencies' (rapid response paper), Washington, DC, Operations Policy and Country Services, The World Bank, available at: http://siteresources.worldbank.org/PROJECTS/Resources/40940-1205169918173/Rapidresponseboardpaper.pdf (accessed May 2014).

WORLD BANK (2007b), 'The World Bank operation manual - emergency recovery assistance (revised in 2013)' (operation manual), Washington, DC, The World Bank, available at: http://siteresources.worldbank.org/OPSMANUAL/Resources/EntireOM_External.pdf (accessed May 2014).

WORLD BANK (2009a), 'Implementation completion and results report - Sri Lanka Tsunami ERL' (report for the South Asia region), Washington, DC, Sustainable Development

Department, Urban and Water Unit, The World Bank, available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/08/09/000333037_20090809235548/Rendered/PDF/ICR11050P09420101Official0Use0Only1.pdf (accessed May 2014).

WORLD BANK (2009b), 'Implementation completion and results report for Gujarat emergency earthquake reconstruction project' (Report No. ICR0000638 for the India Country Management Unit, South Asia region), Washington, DC, The World Bank, available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/06/08/000333038_20090608014529/Rendered/PDF/ICR6380P074018101Official-0Use0Only1.pdf (accessed May 2012).

WORLD BANK (2014), 'Projects and operations' (projects), Washington, DC, The World Bank, available at: http://www.worldbank.org/projects (accessed July 2014).