

PCR TOOL 1

People-centred Reconstruction (PCR): An Introduction

What PCR means

When disasters strike, they often affect the most vulnerable people; this is particularly true in the developing world. Home owners may lose their biggest asset; many people may be forced away from their livelihoods.

This toolkit focuses on reconstruction by and for poor people in urban and rural locations. The tools recognise that reconstruction often starts very soon after a disaster occurred and therefore needs to be planned for at a very early stage. In most cases some people start to repair or rebuild their houses immediately whilst others in the same location may be supported with tents or transitional shelters.

Out of disasters, low income communities realise their own houses with little or no professional inputs. This may be a lengthy, incremental process, with rooms being added or improvements made over the years, as money becomes available. And whilst they are in charge of the process, they may not do all the construction works themselves, but hire artisans or make use of more skilled friends or relatives. What makes the difference with more top-down approaches is that home-owners manage the entire construction process and take decisions individually or collectively to achieve this. Being in charge of the process can empower people and helps to reduce their vulnerability.

In rural areas, this is by far the most common housing process. In urban areas, though, there is a greater variety. In larger cities, the cost of land is so high, that vertical development e.g. in the form of multi-occupancy buildings has become a more affordable solution. Also, the most vulnerable cannot afford to own a house, and therefore become tenants. Others again end up as squatters, sometimes in very makeshift housing. The case of Mama Susan, to the right, is one example of current urban housing development.

Participatory practices exist since decades and, throughout the world, these methods are commonly accepted to be an important component of successful development programmes.

Whether we call them house owner-driven, community-based or simply 'people's process', there is evidence of growing interest in the use of participatory approaches also for post-disaster recovery and reconstruction in both urban and rural

Mama Susan builds a house

Mama Susan Taploko Maina lives in one of the spontaneous settlements that have sprung up around Nakuru in Kenya. Practical Action first came across her in 1997, when she was about 60 years old. She had lost her husband, and of the six children she had with him, four died young. She had managed to buy a plot with her savings and the help of others, and was living in a single-roomed house made of timber off-cuts and galvanised iron sheets. Her main income came from selling second-hand clothes and vegetables in the market. As she was getting older, she did not want to end up being a burden on her children. She needed a more secure income that could help her to improve her house.

Using some of her income from sales, she extended the house to add a single room that she rented out. The rental income helped her to build another room, and another. The more rooms she built, the more her income increased. By 2003, she was letting 12 rooms, at about \$7 per month. From this, she managed to raise the capital to invest in materials to build a better house for herself.

For many years, Mama Susan has been a member of a self-help group, initiated to improve the neighbourhood. They also started to discuss how their houses could be improved. They finally opted to build their walls with stabilised soil blocks, and Practical Action worked with the group to build their capacity to do so. Mama Susan now lives in a much better and larger house on her own plot.



Mama Susan's house in Nakuru

photo © Practical Action/Liz Fredericks

areas. Both the scale of present interest and their widespread acceptance among the aid community suggest that their application will continue to grow. But the path ahead to ensure broad adoption and mainstreaming of PCR is still not straightforward, hence the need for further tools and guidance.

PCR promotes the idea that housing is a process, not merely the provision of a product. The people living in these houses and their surrounding community should rightly be at the centre of this process. This means that households make their own choices including the project design, procurement of materials, construction preferences and use of specific technologies. They can opt for grants and rebuild themselves, or outsource part of the construction to external service providers, artisans and contractors. They may choose how much they wish to spend on the construction, care and maintenance of houses, in order to save some money to start livelihoods activities.

The case studies below exemplify how people-oriented processes that served to design spatial forms, enable livelihoods and build social infrastructures; taken together, they make people less vulnerable to future risks. The programmes described have had profound and durable effects on the local communities, which increased their sense of ownership and self-reliance. The variety of designs of houses and settlements demonstrate the vitality of the building culture and local construction practices that can be produced when residents are encouraged to take the lead in the reconstruction process.

The challenges and benefits of PCR

It is often believed that any participatory housing programme is slower, more arduous and time-consuming compared with conventional market-driven/ top-down approaches. A misleading assumption is that PCR lacks quality control mechanisms, leads to sub-standard buildings or opens the door to corruption.

However, there is no escape in the fact that long-term recovery and real bottom-up development requires long term commitment. In order to ensure that more marginal groups are involved and empowered, significant efforts must be invested to consult widely. In this sense, there are no shortcuts to getting this process right. Designing a building is much easier than designing a process of social engagement – by which recovery strategies, ideas, practices and core values are shared and disseminated in collaboration with the greater civil society.

Despite this, examples illustrate that well planned and implemented projects can produce quite the opposite: house-owners will be faster at purchasing materials, at contracting out part of



photo © Léon, IFRC

People building improved adobe walls, following an earthquake in Pisco, Peru.

the work if they need to, at assisting on technical supervision and quality control. All this generally ensures that the level of satisfaction with the end product is higher.

Guidance for PCR

We have chosen not to produce a manual on PCR, but a toolkit, for two reasons:

- Three guidance documents, listed below, are in an advanced stage of production, and aim to reach those involved in reconstruction, at decision making as well as field levels. They contain a lot of information, on which PCR can draw. Whilst a manual on PCR would add other information, that in itself is not sufficient reason to produce one at this stage.
- Tools can be more flexible. They will be designed to add value to the existing information, e.g. to address gaps in the handbooks, or explain aspects that make PCR different from other approaches being discussed in the humanitarian community. Above all, they can easily be updated as and when new experience becomes available.

What are the handbooks, and how does this Toolkit relate to them?



photo © Gonzalo Lizzaralde

In this reconstruction project in Colombia, money was made available to rebuild livelihood infrastructure (in this case for coffee processing, the elevated part) as well as housing

Guiding Principles for PCR

1. Support and empower communities to recover, rebuild and become resilient.
2. In particular, invest in training, of communities, local builders and local authorities. Where possible, use local training colleges and build their capacity to provide and continue the training, to prepare for future disasters.
3. Work with affected communities to plan their rebuilding and coordinate the response effectively according to the expressed needs of the communities, and the resources available.
4. Ensure the active participation of all the most vulnerable groups and people in community recovery and give special attention to the needs of people who were tenants or squatters, have lost family members or are disabled.
5. Be firm and realistic about commitments to time-scale. Donors, governments and the media often have unrealistic expectations to get results quickly. This creates pressure for rapid centralised capital expenditure and reduces popular participation.
6. Base the reconstruction plan on a thorough assessment of risks, damage, needs and resources with active community participation.
7. Adopt or improve indigenous construction technologies that have proven to resist the disaster reasonably well, as these are well known and would need less capacity building. Provide adequate technical support to ensure appropriate construction quality.
8. Ensure that communities have the capacity to maintain buildings and infrastructure as well as institutions established by the reconstruction process in the future.
9. Avoid relocating households or settlements unless there are critical safety risks, as this moves people away from where they make a living, and may slow down reconstruction as land may be hard to find and the provision of trunk infrastructure can be costly and lengthy.
10. Minimise duration and distance of displacement, when relocation is essential, and ensure transport services.
11. Ensure security of tenure and property rights for affected people, and in particular women.
12. Support the affected population to make informed choices on recovery and reconstruction, recognising the important roles of NGOs and CBOs in promoting information sharing and community-based learning.
13. Prioritise reducing vulnerability and mitigation of potential future disasters through reconstruction.
14. Use reconstruction as an opportunity to rebuild livelihoods and local markets.
15. Where needed, integrate productive or commercial activities in house designs (e.g., grain storage or livestock rearing in rural areas, or small shops or home-based enterprises in urban areas).
16. Ensure fair and transparent distribution of government and agency money and resources for reconstruction, according to needs.
17. Strengthen the resilience of the affected population to future potential disaster risks through awareness raising and participation in contingency and preparedness plans.
18. Prioritise environmental sustainability in recovery and reconstruction because degradation of the environment is quite often and important contributory factor in the occurrence of a disaster.
19. Ensure compliance with reconstruction standards that reduce vulnerability to future disasters, adopting local building regulations and codes that are relevant. Do not set standards too high, as that would make compliance difficult, once reconstruction aid dries up. Consider incremental and affordable housing standards.
20. Advocate for government recognition and support for People-Centred Reconstruction, particularly through enabling policies, strategies, laws and regulations.
21. Monitor achievement of the plans together with affected populations and amend if necessary; build in the flexibility in the reconstruction processes to make changes if they are needed.
22. Evaluate the reconstruction process comprehensively and effectively, together with communities who undertook the rebuilding; use the evaluation to learn lessons, improve processes and change policies.
23. Insist on an independent ombudsman or monitoring unit, to which individual households can take grievances.

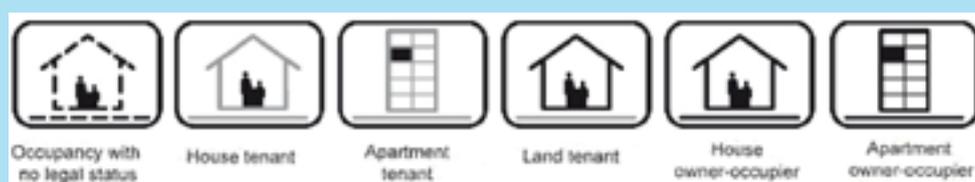
1. Shelter after disaster: strategies for transitional settlement and reconstruction

This handbook, produced by the Office for Coordination of Humanitarian Affairs (OCHA), the Shelter Centre and the Department for International Development (DFID) has been produced in collaboration with members of the humanitarian community and has been tested as a field edition from 2008. The guidelines cover coordination, strategic planning and implementation relevant to transitional settlement and reconstruction following natural disasters. Guidance covers the transition following a natural disaster from the emergency shelter needed for survival to recovery for communities, including identifying needs for support to communal infrastructure such as roads and hospitals, after a period of several years. The guidelines introduce the six options for displaced, and six options for non-displaced populations which have been shared through extensive consultation with the humanitarian community. Based on the field test, some of the categories will need further definition.

Six options for displaced populations



Six options for non-displaced populations



The 2008 field edition categorised 12 assistance methods, which following field testing and further discussion within the humanitarian community have expanded to 16 and are now classified in relation according to their contribution to the different livelihoods assets.

The PCR Toolkit will aim to contribute additional information that can be used in the six options for non-displaced populations, and the two self-settlement options for displaced populations. It will also add information on assistance methods, but not to all 16 of them.

2. Safer homes, stronger communities: A handbook for reconstructing after natural disasters

This handbook, written by A. Jha et al. on behalf of the World Bank, is meant to assist Bank staff and their government counterparts in planning large-scale reconstruction programmes. The book contains a set of guiding principles that are being harmonised with those of the previous handbook, and have been mostly incorporated in those for PCR. The various chapters then take us through the stages of reconstruction: needs assessment, planning, implementation, monitoring and evaluation, as well as some cross-cutting issues like participation. Each chapter contains its own guiding principles, useful checklists for planners, and recommendations. But since the handbook is aimed at decision makers in the first place, it is rather short of practical tools and examples, which is where the Toolkit will add value.

3. Owner driven housing reconstruction guidelines

These guidelines, written by the International Federation of Red Cross and Red Crescent Societies (IFRC) are designed for use by the IFRC and its national member societies and meant for field practitioners planning and implementing reconstruction programmes. They are currently in final draft format. After an introductory chapter on what ODR is, further chapters cover programme development, participatory process, technical support and financial assistance. Since the guidelines are written for people in the field, they are of a more practical nature than the above two handbooks that are more geared towards decision makers. The annexes cover a number of tools promoted by the IFRC, e.g. on community action planning, community development funds and community contracting, which are particularly useful to PCR too.

Understanding PCR

How long does reconstruction take?

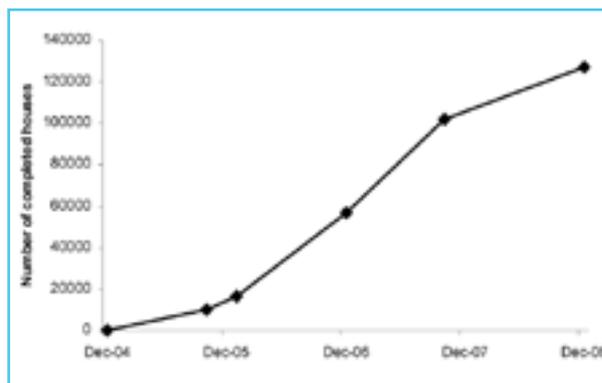
After a disaster strikes, a small proportion of people- usually the ones with more resources or less losses - manage to recover within a few months to a year. The bulk of the people though tend to recover their most important assets, including permanent housing, within 12 to 36 months after a disaster. But for those who lost most of their assets or have more constraints to overcome, it may take four, five, or even more years. The recovery pattern after disasters thus follows an S-curve, as shown to the right.

Disasters of large magnitude attract worldwide attention and funding. Whilst much of this is for immediate relief, increasing proportions of aid are now being used for longer-term recovery and reconstruction. Humanitarian agencies, however, are often under a lot of pressure to achieve quick results and therefore reluctant to stay on for much more than three years.

This may leave those who are struggling to recover and perhaps most in need of support - typically often including the landless, disabled or tenants - deprived of it. Agencies adopting PCR will have to commit themselves to work with affected communities for the medium term, to address housing problems and reduce the vulnerabilities of all members.

What about small-scale disasters?

In between the occasional large-scale disasters which get the majority of media coverage, a multitude of smaller disasters are affecting poor people worldwide on a daily basis. These however, rarely make the headlines. Such disasters attract little external help; the affected rely mostly on community resources and traditional knowledge for their recovery. Communities that are regularly



Graph showing post-tsunami reconstruction in Aceh and Nias, after "Building Back Better: Delivering people-centred housing reconstruction at scale", Practical Action Publishing, Rugby, 2010, p. 154.

affected by disasters such as floods, or under threat of slow-onset environmental disasters often take steps by themselves to reduce their vulnerabilities and minimise loss of assets. This can work well in stable communities, usually in rural areas. In the event of small to medium disasters, even small PCR projects with limited external resources can still be quite effective, to increase awareness of disaster mitigation and preparedness, address underlying vulnerabilities, identify and strengthen traditional skills and coping mechanisms, and ultimately support people to rebuild.

Reconstruction in an urban setting

Post-disaster reconstruction in urban areas has proven to be particularly challenging because communities are less stable; people have lost traditional skills or access to traditional resources and they often lack secure tenure and face a multitude of regulations. Many of these challenges have been overcome in normal urban housing or upgrading projects and programmes, from which



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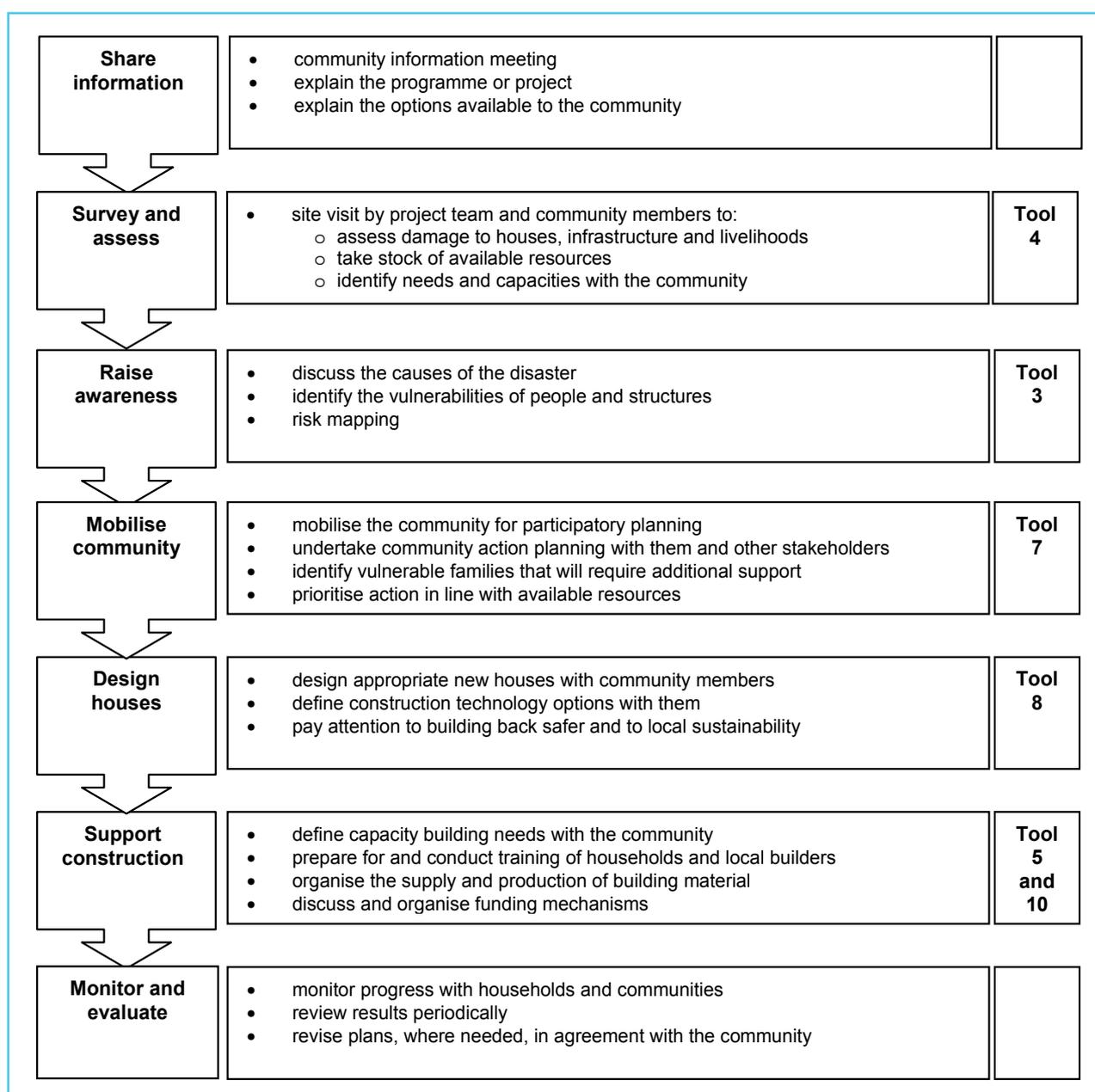
Rural residents of Gaibandha district in Northern Bangladesh get flooded every few years



photo © Practical Action, Theo Schilderman

Slum in Mavoko, 30 Km to the East of Nairobi, Kenya, with houses built of waste materials, and hardly any infrastructure

Components of a PCR process



PCR can learn a lot. There are many examples of projects where communities took a central role in planning and implementing improvements to their housing and infrastructure, and developed effective partnerships with local authorities and NGOs to achieve those. A particularly innovative early example of this is the Million Houses Programme in Sri Lanka in the 1980s. More detailed information on this is provided in PCR Tool no.5: Learning from the Housing Sector. What PCR will have to add to such urban housing approaches is a strong element of vulnerability reduction. There are some examples of integrated urban development projects which aimed to improve people's financial as well as physical assets, which provide useful lessons. There are fewer, however, that have incorporated making housing more disaster-resistant.

Applications

PCR is a new concept, so there are few examples yet where it has been fully applied and documented. The following examples from post-disaster reconstruction or regular housing development have been selected because they are relevant to specific aspects of PCR; see the Resources section for full references to them. Further examples and cases are discussed in other tools in this toolkit.

Case Study 1: The Subsidiary Housing Approach in Gujarat

After a huge earthquake hit Gujarat in India in 2001, an NGO assisted some 270 of the poorest households in Kachch district in their recovery efforts. It provided technical and material assistance to households rebuilding their own homes, through the State Government's assisted ODR programme. About 20% of households in the area, though, did not qualify for State assistance, and for these the NGO entirely rebuilt their houses. Additionally, the NGO sought to improve the livelihoods of the local people who were mostly engaged in agriculture through projects to improve water supplies and rainwater harvesting, as well as the distribution of seeds and tools. In a user-satisfaction survey of houses, both categories of beneficiaries expressed high satisfaction, though the ones who had received houses from the NGO slightly less so than those who had built their own houses. [Barenstein, 2006]

Case Study 2: Community-Driven Reconstruction in the Andaman and Nicobar Islands

Following the 2004 tsunami the charity Action Aid provided relief and then continued to assist many people in the islands with reconstruction and recovery work. Action Aid undertook a Participatory Vulnerability Analysis to identify the most vulnerable people and prioritised support to reconstruction to them. Significant features of the reconstruction projects included:

- Understanding how people were building, what they were already doing to safeguard their homes and how this knowledge could be used to design the new houses with the active participation of the communities
- Promoting safety and future disaster mitigation
- Training and technical support to residents building their houses and promotion of quality standards
- Use of locally sustainable materials and ecological production
- Transparency and information sharing
- Improved security of tenure, especially for women who were allocated land titles in their own name or jointly with their husbands
- Distribution of funds for reconstruction through bank accounts managed by communities
- Advocacy for community-led policy change in collaboration with other NGOs and networks

[Development Alternatives, 2008, pp.27-30]

Case Study 3: Addressing Urban Poverty and Vulnerability through Integrated Projects

People with very low incomes face many challenges to access safe and secure housing. In urban areas of the Third World, many of them live in slums or informal settlements prone to a multitude of hazards. Housing improvement as an intervention may not be a viable starting point for reducing the vulnerability of those people, because of underlying constraints, such as their poverty preventing them to invest in safe housing, a lack of tenure and restrictive regulations. Housing improvements may therefore have to be combined with other actions, particularly to improve incomes and address legal constraints, as well as the provision of key services. In doing so, various actors – local authorities, communities, NGOs, utilities and others - will have to come together to pool resources. Integrated projects then stand for an integration of both activities and actors. Care should be taken that in this complex context, that the voice of poor communities, and particularly of their most vulnerable members, is not drowned, but strengthened.

Practical Action (formerly the Intermediate Technology Development Group) has been undertaking integrated urban development projects since 1988 in Kenya, Zimbabwe, Sudan, Bangladesh, Nepal, Sri Lanka and, through a partner, in India. These have done a lot to reduce poverty and vulnerability in the communities concerned. Though those who have realised better housing, like Mama Susan in Nakuru at the start of this Tool, are still in a minority, there now are many more income generating opportunities, greater access to community-based and external savings and credits, stronger community organisations, improvements to infrastructure services such as water, sanitation, roads and drains, and waste management, and secure tenure in some localities. [Lowe, undated] reduce poverty and vulnerability in the communities concerned. Though those who have realised better housing, like Mama Susan in Nakuru at the start of this Tool, are still in a minority, there now are many more income generating opportunities, greater access to community-based and external savings and credits, stronger community organisations, improvements to infrastructure services such as water, sanitation, roads and drains, and waste management, and secure tenure in some localities. [Lowe, undated]

Case Study 4: Assisted Self-Help Reconstruction Programme after an Earthquake in Peru

On August 15th 2007 an earthquake of 7.0 affected the southwest coast of Peru, mostly affecting the regions of Pisco and Ica. As part of the Government response to the disaster, the FORSUR (Fondo para la Reconstrucción del Sur) was created to manage the funds for reconstruction and develop guidance for rebuilding process. In their initial plans priority was given to people living in urban settings and owning their house/land that was damaged by the earthquake. This also meant that the most vulnerable people residing in rural areas without legal title would not access funding to repair/build their houses.

After an initial emergency phase that led to the construction of temporary timber frame shelters, IFRC together with the Peruvian RCNS, started a programme in the rural areas for the most vulnerable target groups. This programme focused on four objectives:

1. Disaster risk management at community level, by identifying and addressing vulnerabilities through risk maps and preparedness measures.
2. Assist reconstruction of houses and community centres, built with safe and affordable earthquake-resistant features, and developing training people on these low-cost technologies during the construction process.
3. Develop small entrepreneurship, small business and other income-generating activities around construction (material production, skills improvement etc).
4. Analyse the legal aspects of land ownership in rural areas in order to better assist landless to obtain a formal status.

The project defined four areas in the Pisco province, where 600 houses and 2 community centres were built, while in the Chincha province an additional 4 community centres and 400 houses were constructed. Technical assistance was provided on the adopted technology, the 'adobe mejorado' (reinforced adobe), and on the job training offered at household level. The distribution system was done by creating 'material construction banks' at community level, through bulk purchasing to reduce costs, where families directly obtained what they needed.

The beneficiary targeting took into consideration the level of damaged houses but also the prior to earthquake social conditions of the most vulnerable. Additional technical and management support was provided to those who couldn't handle the process by themselves.

Future extensions and incremental improvement of the houses have been done directly by the beneficiaries, who had been trained on the job. In addition, construction manuals were developed to showcase and explain the technologies used, as well as provide guidance on how to repair, care and maintain the constructions.

IFRC and Peruvian RC worked in partnership with La Católica University to optimise the construction technology and implement the programme in a sustainable way.

Resources

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Further resources are listed in PCR Tool no.2: *PCR Resources*.

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