



Strategy Document Rural Housing Reconstruction

Building Back Better:

**RURAL HOUSING RECONSTRUCTION STRATEGY
OF EARTHQUAKE HIT
DISTRICTS IN NWFP AND AJK**

March 2006

EXECUTIVE SUMMARY

RURAL HOUSING RECONSTRUCTION STRATEGY

Basic principles

- Reconstruction of houses will follow the principles of enablement
- Locally known construction technology will be promoted with pragmatic improvements for seismic resistance
- Reconstruction will be promoted based on timeliness, practicality, basic seismic safety and local technology in a time-bound manner, as any delays will increase the suffering and retrograde development
- To the extent possible the implementation of the programme and its elements will be decentralised to the lowest possible level
- Minimize future reliance of the community on technical assistance by creating a self sustainable talent pool in earthquake resistant construction. This pool will serve as a role model for other communities across the country
- Local uniqueness will be respected over monolithic implementation of standards
- Reconstruction efforts will consider environmental degradation concerns, support environmental friendly building techniques and promote sustainability awareness
- Housing reconstruction will be complemented by livelihoods and infrastructure support.

Strategic elements

- Opportunity to develop housing standards and earthquake-resistant techniques for non-engineered buildings will be seized
- Unrealistic technical excellence will be avoided in the interest of time and effectiveness of the reconstruction programme
- Awareness, Information, Local Training, and Linking Compliance with Incentive: beneficiaries-builders will be made aware of seismic resistant construction and artisans will be trained in seismic resistant construction techniques, popularised through intensive information dissemination campaigns
- Community Capital: Where feasible families will be encouraged to work as a group in managing the construction for example in joint procurement and transport of building material
- Peer Group Surveillance: Communities will be encouraged to undertake, validate, evaluate and monitor criteria for eligibility and compliance to standards

- Partnership: Given the scale of the destruction and the limited time in which reconstruction has to be carried out, responsibility for implementation will be shared across as many qualified partners as possible.

The ERRA Policy on Housing Reconstruction

The Earthquake Reconstruction and Rehabilitation Authority (ERRA) is mandated by the Government of the Islamic Republic of Pakistan as the coordinating agency for the reconstruction and rehabilitation of the earthquake devastated areas in Azad Jammu Kashmir and NWFP.

The overall objective of the rural housing reconstruction policy is to ensure that an estimated 400,000 houses that were either destroyed or damaged, will be rebuilt by using earthquake resistant building techniques, through grant assistance from the Government to eligible households.

The principles for housing reconstruction have been identified as the following.

- Establish building standards and designs that are earthquake resistant.
- Rebuild in situ. Minimum population relocation should take place.
- Rebuilding will be owner-driven, but assisted and inspected by the Government through partner organizations. Owners need to be in charge of the reconstruction of their houses and understand earthquake resistant building techniques.
- Familiar building methods and easily accessible materials will be used in rebuilding. Earthquake resistant elements need to be introduced in the traditional and currently used building techniques.
- Relocate settlements only when necessary – from sites that are hazardous
- A uniform financial assistance package for rebuilding will be disbursed to all affectees, which will not be compensation-based.
- Coordination is necessary to ensure full spatial coverage and avoid duplication of service provision.

The manifestation of these policy principles into specific implementation strategies and operational measures is illustrated in the table below:

Policy Principle	Manifested through the following corresponding strategies:
<p>ERRA’s Housing Program Objective: Provide financial and technical assistance to affected home owners in AJK and NWFP, in reconstructing or retrofitting their damaged houses, using a home-owner driven, but assisted and inspected construction regime.</p>	
<p>1. Ensuring Owner-Driven Housing Reconstruction – <i>homeowners in charge of rebuilding their own homes</i></p>	<p>Providing an enabling environment to builders and homeowners, through:</p> <ul style="list-style-type: none"> ○ Prior training, information, education and communication campaigns; ○ Rebuilding with familiar methods & easily accessible materials – <i>ensuring sustainability and cultural preferences in design;</i> ○ Providing technical assistance during construction; ○ Promoting the use of own labor, salvaged material, and additional resources such as hired trained craftsmen, etc. ○ Ensuring building materials supply chains; ○ Facilitating the opening of bank accounts, etc.
<p>2. Assisted and Inspected Reconstruction & Retrofitting</p>	<ul style="list-style-type: none"> ○ Mobilizing a large number of assistance and inspection (AI) teams, for house-to-house outreach ○ Disbursing cash grants in tranchés, linked to stages of construction and adoption of seismically acceptable

	<p>standards</p> <ul style="list-style-type: none"> ○ Tranché disbursement through Banks after progress/quality validation ○ Resources for forming the AI teams and their management structures to be procured through partnership arrangements
<p>3. Ensuring seismic safety</p>	<ul style="list-style-type: none"> ○ Having in place a review and approval mechanism for construction guidelines, structural designs, and training curricula, through the development of reference minimum structural design standards that meet internationally accepted requirements for low cost earthquake resistant housing, such as: <ul style="list-style-type: none"> ▪ Having Thinner walls ▪ Having Lighter roofing ▪ Having Well connected structural systems ▪ Excluding the use of katcha type construction ○ Construction and planning to take into account the results of seismic micro-zoning
<p>4. Ensuring uniform assistance packages – across all programs and funding sources – and Maximizing</p>	<ul style="list-style-type: none"> ○ Coordinate multiple reconstruction initiatives & standards for equity: ERRRA will ensure <ul style="list-style-type: none"> ▪ application of uniform policies across the board ▪ Ascertain application of seismic-resistant design standards ▪ Ensure full spatial coverage

<p>Outreach – through optimized designs & implementation mechanisms</p>	<ul style="list-style-type: none"> ▪ Reduce risks of beneficiary double counting or being missed out ○ Provide Cash grants for core housing unit which may not necessarily be proportionate to the replacement value of loss ○ Reconstructing only where necessary– through damage assessment that distinguishes against set criteria, between houses needing reconstruction and those only needing economically feasible restoration/retrofitting ○ Replacement of a destroyed house with a new seismic resistant core unit ○ Restoration and strengthening of damaged house to seismically acceptable standards ○ Rebuilding In-situ – addressing land ownership & availability issues, minimizing relocation costs ○ Relocating only where necessary – i.e., where risks or hazards remain very high due to: <ul style="list-style-type: none"> ▪ Seismicity ▪ Topography ▪ Soil conditions ▪ Other environmental factors ○ Enhance program sustainability through parallel efforts on rehabilitation of livelihoods, and physical and social infrastructure etc.
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<p>5. Ensuring judicious use of grants; reducing and managing conflicts and grievances; avoiding socio-economic distortions, inequities and disparities</p>	<ul style="list-style-type: none"> ○ Damage assessment criteria to remain consistent across all affected districts Eligibility criteria to include land title/ownership criteria; in case of tenants include agreements/authorization from owners to rebuild the house ○ MOUs to be signed with beneficiaries to ensure the judicious and best possible use of the grants, and application of seismic-resistant structural standards. ○ Developing and putting in place participatory and inclusive grievance redressal systems ;
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Financial Assistance

The financial assistance package applies to both Katcha and Pucca houses and will be disbursed directly to the bank account of landlords and tenants as per relevant policy. The payment of instalments will be linked to compliance with earthquake resistant standards issued by ERRA.

The housing reconstruction programme recognizes the need for a massive, collaborative effort to ensure reconstruction occurs according to agreed standards and guidelines. While the ERRA remains the chief coordinating body for housing reconstruction, the implementation will be community based and carried out through partner organizations. Where partner organizations are not available the task will be assigned to the Army Corps of Engineers. Eligibility assessment, training delivery, and ensuring compliance will be decentralized at Union Council level and be the responsibility of the partner organisations in collaboration with a government compliance officer. Beneficiaries will receive hands on training and technical assistance from a reputable partner organization. Partner organizations that meet the selection criteria will sign a Memorandum of Understanding with ERRA to undertake responsibility in one or more Union Councils.

Financial support will provide each beneficiary with a “core house” of between 250 and 400 sq. ft. depending on his/her choice of structural solution.. Choosing a more expensive structural solution may allow a lower covered area within the Reconstruction Grant of Rs. 1, 75,000. Beneficiaries are expected to use their own labour and/or hire labour as well as recycle building material as far as possible from the debris. Beneficiaries will receive the grants through local bank branches directly into their bank accounts.

Assistance funds will be disbursed the following way:

- For *destroyed houses or houses with structural damage beyond economic repair*, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. The balance of Rs. 1,50,000 is to be used for permanent housing. It will be paid in three instalments: Rs. 75,000 for mobilization; Rs. 25,000 upon completion to plinth level; Rs. 50,000 upon completion of the walls. A final technical inspection of the roof will be made for compliance with structural designs provided.
- For *structurally damaged houses within economic repair*, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. A cash grant of Rs. 50,000 will be paid in one instalment for restoration/retrofitting.
- Houses without structural damage will not be eligible for further Government assistance.

A final list of beneficiaries is to be determined through a house to house assessment of damage and destruction by the Assistance and Inspection Teams, in collaboration with a designated government compliance official. Assistance and Inspection Teams are required to sign a memorandum of understanding with each beneficiary determined eligible for the financial assistance package. This will ensure agreement on the part of the beneficiary to rebuild according to the Earthquake resistant standards that will allow the beneficiary receipt of the full financial assistance package.

Institutional Framework

The implementation of rural housing reconstruction will be decentralized. ERRA headquarters will be responsible for the standard setting, provision of standard structural design options and construction guidelines, development of transparent criteria for PO selection, and overall coordination and monitoring and will provide a support structure for rural housing reconstruction from Federal to District level. In coordination with

Province/State, ERRA will also consolidate the technical/artisan/ house owner training programme, provide unified training guidelines and training curricula and train Training Coordinators. A technical advisory and design approval body, the Central Review & Approval Unit (CRAU), will also be housed at the Federal level for development of standard Structural Designs & Construction Guidelines.

The Provincial Earthquake Reconstruction Agency will act as the secretariat of the Provincial Steering Committee. An ERRA Regional Housing Coordinator will be posted in the PERA to supervise and coordinate provincial housing reconstruction activities and will report to both the PERA and the ERRA.

At the District level, the District Reconstruction Unit (DRU) will act as the secretariat of the District Reconstruction Advisory Committee. It will be the lead agency for all housing reconstruction activities including: (a) needs identification, (b) annual planning, (c) coordination, (d) financial management and (e) monitoring for all housing reconstruction activities assigned to the districts. An ERRA District Housing Coordinator will be posted in the District Reconstruction Unit to supervise and coordinate district housing reconstruction activities and will report to the Regional Housing Coordinator.

Eleven Housing Reconstruction Centres will be established with the eight DRUs in each of the affected District. Subsequently, based on implementation experience, their number may be increased with additional ones located at sub-district level. The Housing Reconstruction Centres will initially be responsible for providing training and technical assistance related to housing reconstruction, and will be under the supervision of the District Housing Coordinator. With time, they will develop adequate capacity to support reconstruction activities in other sectors as well.

While the PERAs and DRUs are still in the process of building capacity, ERRA will directly procure the services of POs for damage assessment, training and AI functions, with specific clauses in the GOP contracts with POs for the transfer of Client functions from ERRA to the PERAs and DRUs, as and when feasible. Concurrently, district authorities are encouraged to start identifying and engaging POs for AI contracts within their districts.

Reconstruction Process

In view of the extensive outreach needed for the credible administration and monitoring of the challenging task of housing reconstruction, it is clear that existing public sector institutional capacity will require considerable reinforcement. Since capacity building requires time, while the reconstruction activity cannot wait indefinitely, ERRA will enhance the public sector's delivery capacity through partnerships with reputable Partner Organizations/NGOs by inducting such organizations to support the implementation of the owner driven housing reconstruction program. Reputable POs will be engaged by NWFP and AJK using transparent screening criteria. POs will be asked to augment their technical capacity to appropriate levels for effective support to the Housing assistance program. Only one PO will be designated to work on housing reconstruction in each affected union council. The POs will be charged with: (i) providing guidance to affected communities in implementing the owner driven housing reconstruction program, including a comprehensive briefing on its key elements prior to release of the advance payment; (ii) training engineers and craftsmen; (iii) overseeing reconstruction/restoration activities to assure quality and EQ resistant construction; and (iv) ensuring compliance with social and environmental risk mitigating measures. Additionally, POs will also undertake the detailed damage and eligibility assessment survey. The Survey will be conducted to: (a) categorize the level of damage to each housing unit; and (b) establish lists of eligible beneficiaries.

In order to administer the survey and meet their overall obligations, the POs will constitute the Assistance and Inspection (AI) Teams. The teams would comprise a minimum of three persons – a local government representative, a social organizer, and an engineer. The teams will be hired and trained in assessment techniques and criteria so that these are applied uniformly, by specialists with overall administration by ERRA. The POs will establish field offices responsible for supporting the assistance, inspection, and training activities in a minimum of one or more Union Councils, as appropriate.

Skill and Compliance Training

Delivery of the proposed housing reconstruction/rehabilitation program over a 3-year period will involve an approximate ten-fold increase in pre-earthquake *pucca* housing activity in the affected districts, and a two-fold overall increase in this activity in NWP and AJK. Given the general increase in construction activity across the country over the past year, at best about 20% of this need will be met by the skilled construction workforce resident in the

affected areas or coming in from outside. This group will need to be provided limited training in EQ resistant construction practices. The remaining 80% of the required workforce will have to be trained from scratch as part of the program.

This training will be imparted by POs in two stages. The first stage will involve skilled craftsmen in key trades (mainly masons, steel fabricators and sheet roof fixers), who will be trained by senior technical specialists as master trainers at the Housing Reconstruction Centers. They will be: (i) briefed about the overall construction requirements for the core unit; and (ii) provided short, focused training in EQ resistant construction, and a general refresher on good construction practices. This will be done using a mix of visual training material and on-site practical demonstrations. Following this training, these craftsmen will be 'accredited' by the PO for the Housing program.

For the second stage, the POs will launch a craftsman training program in each affected district. Trainees will be registered, provided training at a central location, and then attached to accredited skilled artisans under an apprenticeship program that will involve on-the-job training spanning one complete construction cycle or at least 3 months. During this period the trainees will be provided a stipend, and at the end of this period they will be 'accredited' to operate independently and to train others. The pool of skilled construction workers will thus be gradually built up (broadly over the course of the first year), until the housing demand in the affected areas is fully met. The PO will also be responsible for information dissemination to house owners and communities on safe construction techniques through printed material and group/individual discussions. This will be achieved through mobile teams visiting communities on a regular basis. Each mobile team will be trained by Master Trainers and responsible for providing training and technical assistance in an average of six villages for self-builders, artisans, contractors and male and female community members. Based on this ratio, it is expected that 650 teams will be required to cover 4,000 villages.

BACKGROUND AND OVERVIEW OF THE STRATEGY

Background

The 7.6 magnitude earthquake that struck Pakistan on 8 October 2005 is widely regarded as the most devastating natural disaster in Pakistan's history. An estimated 80,000 people were killed and some 3 million people were rendered homeless. More than 1,000 aftershocks have been recorded in the area, ranging from magnitude 5.0 to 6.0.

The earthquake's impact was spread over an area of 27,000 sq. km across Azad Jammu and Kashmir (AJK), and North West Frontier Province (NWFP). In five districts of NWFP and four districts of AJK, public buildings, private housing, infrastructure, social services, livelihoods and businesses were damaged or destroyed. The rugged geography of the affected areas, combined with a scattered settlement pattern, pose significant challenges for both humanitarian and reconstruction efforts.

The private housing sector suffered the most extensive damage, followed by the transport, education, and agriculture and livestock sectors.

Housing Damage: An Overview

Virtually none of housing in the affected areas had incorporated seismic resistant considerations in their design. Compounding this is the general poor quality of construction and maintenance.

According to the joint assessment by the Asian Development Bank (ADB) and the World Bank, 203,579 housing units were destroyed and 196,575 units were damaged. Some 84 percent of the total housing stock was damaged or destroyed in Azad Jammu and Kashmir, while in North West Frontier Province, 36 percent of the total housing stock was damaged or destroyed. However, these figures are likely to grow in view of severe after shocks and increased access to remote areas after the initial survey. Ninety percent of the destroyed or damaged housing is found in rural areas.¹

¹ Asian Development Bank/World Bank (ADB/WB), "Pakistan 2005 Earthquake: Preliminary Damage and Needs Assessment," 15 November 2005, pp. 2-3.

Summary of Province of Total, Destroyed and Damaged Housing Units

District	% Urban	Total Units	Destroyed	Damaged	Total Damaged	Total Damaged %
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AJK Affected Districts

Muzaffarabad	12	123,679	69,943	28,278	98,221	79
Bagh	5	59,623	33,806	21,208	55,014	92
Poonch	11	61,678	12,823	38,882	51,705	84
<i>AJK Total</i>	<i>10</i>	<i>244,980</i>	<i>116,572</i>	<i>88,368</i>	<i>204,940</i>	<i>84</i>

NWFP Affected Districts

Shangla	0	67,003	15,661	10,821	26,482	40
Mansehra	14	203,109	31,323	43,282	74,605	37
Kohistan	0	74,087	4,350	18,395	22,745	31
Abbottabad	19	153,819	6,961	27,051	34,012	22
Batagram	0	44,585	28,712	8,657	37,369	84
<i>NWFP Total</i>	<i>11</i>	<i>542,603</i>	<i>87,007</i>	<i>108,206</i>	<i>195,213</i>	<i>36</i>
<i>AJK+NWFP</i>	<i>10</i>	<i>787,583</i>	<i>203,579</i>	<i>196,574</i>	<i>400,153</i>	<i>51</i>

Note: Distribution of housing damage, according to ADB/World Bank estimates.

Private housing reconstruction represents 44 percent of the total estimated reconstruction costs (approximately US\$1.0 billion out of the US\$3.5 billion total).² Of the US\$962.68 million housing reconstruction programme estimated by the World Bank, US\$ 784.91 million is estimated to be required for reconstruction, while US\$147.77 million is the estimated requirement for rehabilitation (restoration and strengthening). An additional US\$30 million is foreseen as the requirement for technical assistance and capacity-building.

Policy regarding adoption of villages and individual sponsors

It is very important for the government to maintain uniformity in the reconstruction of the houses and to provide standards for houses of pre-defined size and cost. This is essential to ensure equity. In order to maintain this uniformity, donors will be required to adhere to the government endorsed reconstruction norms and strategy in the reconstruction of villages of their choice or alternatively fund the reconstruction of schools and hospitals. If a particular donor insists otherwise it will be allowed to build houses for the vulnerable group only while adhering to the overall governments housing reconstruction strategy. If a donor expresses preference for a particular village he would be required to place funds as trust with ERRRA for reconstruction in that village. However no village will be renamed to acknowledge the contribution of the donor.

² Op cit, World Bank (2005), p. 15.

Housing Reconstruction Strategy Overview

The Government has adopted an “owner-driven” strategy for housing reconstruction. Affected households will receive housing grants from the Government. These households will then be able to utilize their own labour, hire skilled labour, and receive technical assistance from approved partner organisations to reconstruct or rehabilitate their houses.

The guiding principles for housing reconstruction include:

- Incorporate earthquake resistant standards and designs in housing reconstruction;
- Rebuild in situ: wherever possible encourage households to rebuild on their original plot of land.
- Owner-driven approach - owners will manage the rebuilding of their own houses. They will hire labourers or use their own labour or both. Thus, each owner-builder need to understand earthquake resistant building techniques;
- Rebuild with familiar methods and easily accessible materials - earthquake resistant elements need to be introduced in the traditional and currently used building techniques;
- Relocate settlements only when necessary to minimize exposure to hazards
- Ensure that urban re-planning is strategic and limited;
- Offer uniform, not compensation-based, assistance packages;
- Coordinate to ensure full spatial coverage and avoid double counting or missing affected households;
- Complement housing reconstruction with livelihoods and social and physical services support.

The strategy and guiding principles will apply to both rural and urban areas, however, their interpretation and implementation will vary in each. A separate strategy note is under preparation for urban areas and will be appended to this document in due course.

Strategy Components

The owner-driven strategy consists of three components: (a) housing grants for reconstruction or restoration and strengthening; (b) technical assistance and (c) capacity-building of all affected stakeholders.

Housing Grants

The financial assistance package will apply to both *katcha* (non-permanent) and *pucca* (*permanent*) houses. The package has been calculated on the basis of each beneficiary being able to build a “core house” of between 250 and 400 sq. ft. depending on his/her choice of structural solution. Choosing a more expensive structural solution may allow a lower covered area within the Reconstruction Grant of Rs. 1, 75,000. Beneficiaries are expected to use their own labour and/or hire labour as well as recycle building material as far as possible from the debris. A final list of beneficiaries will be determined based on a detailed damage and eligibility survey and local verification through the process described in section 3. Beneficiaries will receive the grants in instalments through local bank branches directly into their bank accounts. The payment of instalments will be linked to compliance with earthquake resistant standards issued by the ERRA for which they will receive technical assistance from a reputable partner organization and are expected to supplement the cash grant with their own labour and recycled building materials from the debris. Houses without structural damage will not be eligible for Government assistance.

The grants system will work as follows:

- For *destroyed houses or houses with structural damage beyond economic repair*, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. The balance of Rs. 1, 50,000 to be used for permanent housing will be paid in three instalments: Rs. 75,000 for mobilization; Rs. 25,000 upon completion to plinth level; Rs. 50,000 upon completion of the walls. A final technical inspection of the roof will be made for compliance with the structural designs provided.
- For *structurally damaged houses within economic repair*, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. A cash grant of Rs. 50,000 will be paid in one tranche for restoration/retrofitting.

Technical Assistance

Technical assistance will be required to support ERRA, local authorities and partner organisations in the implementation of the housing reconstruction strategy:

- *Hazard Risk Mapping* to identify areas susceptible to future natural disasters including earthquakes, landslides and erosion/settlement. Hazard risk maps will be prepared, including micro-zoning for seismic risk and to clearly identify sites highly vulnerable to landslides and/or soil or foundation failures. These would identify need for special foundation treatments or localized re-sitting where appropriate.
- *Damage and eligibility assessment* to (a) categorize the level of damage to each house; (b) establish lists of eligible beneficiaries (c) estimate the material requirements for reconstruction to contribute to supply chain management; (d) to verify the lists of eligible beneficiaries.
- *Earthquake-resistant Housing Solutions: Earthquake-resistant Housing Solutions:* including construction drawings, bills of quantity, fabrication drawings, material schedules and illustrated construction manuals for each type of wall and roof system. There will not be a standard design for a house, rather, standard design principles for different wall and roof systems common to each area.
- *Facilitating the Building Materials Market:* In view of the unprecedented scale of reconstruction activity in the affected regions, the Government will need to facilitate the smooth supply of building materials in the required quantities. The TA would further support the government's efforts through establishing direct links with the private sector at the national and local levels to assist the flow and purchase of building materials, particularly by rural committees and other community-based organizations. Proactive measures will be undertaken at various levels, to ensure that the planned 10-fold increase in *pucca* housing construction activity is not constrained by building material shortages, and that input prices can be maintained at reasonable levels:
 - ERRA and the provinces will widely publicize the multi-year housing reconstruction program and corresponding aggregate annual demand for building materials particularly cement, steel, CGI Sheets, etc.³, and identify net

³ Initial estimates indicate the following annual material requirements: Cement: 200,000 tons; Steel: 40,000 tons; CGI Sheets: 25 million sq. ft.

import needs so that domestic material manufacturers as well as traders/importers can gear up to meet this increased demand in time.

- Local governments will provide suitable sites for setting up of local building material markets, to supply affected owners.
 - POs active in micro-credit initiatives will be encouraged to provide entrepreneurship training and funding to locals in the affected areas to set up shop in the above material markets; and technical training in production of prefabricated housing elements such as: formwork; pre-cut and shaped reinforcement bars; door frames and shutters; window units; structural steel roof framing members, etc.
- *Land and Property-Related Issues:* It is expected that there will be instances in which relocation will be required for affected households and/or parts of villages. Decision on relocation will be based on voluntary consent and will be taken in consultation with affected communities. A clear policy for land acquisition and relocation will be developed in consultation with relevant local governments. It is also foreseen that there may be instances of housing, land or property disputes involving dispossession of owners, tenants, and widows. Protection of rights of vulnerable groups especially women be given special attention. Studies will be undertaken and policies will be developed to respond to these situations. A specific local dispute resolution mechanism will be created to address these issues and will be decentralised to the lowest possible level.

Capacity-building

Beyond technical advice to the ERRA, capacity-building will be provided to support local authorities and partner organisations through an intensive information dissemination campaign, as well as formal and informal training programs in the following areas:

- *The ERRA policies and procedures:* to ensure that consistent information of the ERRA policies and procedures are provided to beneficiaries;
- *Social Mobilisation,* including sensitization of communities, preparation of village profiles to guide the overall reconstruction effort, establishment of Community Housing Reconstruction Committees, procurement sub-committees, community monitoring, etc.

- *Specialised modules* on subjects such as community land adjudication; relocation and re-planning; land and property rights; etc.
- *Environment degradation reduction:* to ensure that reconstruction considers environmental impacts and includes environmentally sustainable reconstruction techniques in order to avoid increasing future natural hazards.
- *Housing Reconstruction Training:* Simple guidance provided at the village level on incorporating earthquake resistant reconstruction techniques and materials into local housing types, and reconstruction using standard housing designs;
- *Skilled Labour Training:* More detailed, targeted skills training for skilled labour such as masons, carpenters, metal workers, plumbers and electricians as part of the overall livelihoods strategy;
- *Compliance Training:* enabling Government officials and partner organisation staff to be able to verify whether housing reconstruction has correctly incorporated earthquake resistant techniques.

Public information and support

In addition to technical support and capacity building, there will be a need to provide the public with accurate information and to offer a grievance redressal mechanism.

- *Mass Information Campaign:* The widespread and timely dissemination of information on the full range of assistance options, their eligibility criteria, and the means of accessing them is imperative for the efficient implementation of the program. Moreover, effective information dissemination would also be needed on seismically acceptable construction solutions, alternative materials, methods of constructions, material availability and pricing variations. Affected people will be provided with all information they need to be able to make informed decisions for housing reconstruction. The information campaign will especially ensure that women and vulnerable groups are receiving all the information they need. The information campaign will promote sustainable awareness in relation to housing reconstruction. With a clear media strategy, the Government will be able to disseminate the information pertaining to the training curriculum and the role and responsibilities of the various stakeholders to the grass root level. Through the information campaign clear

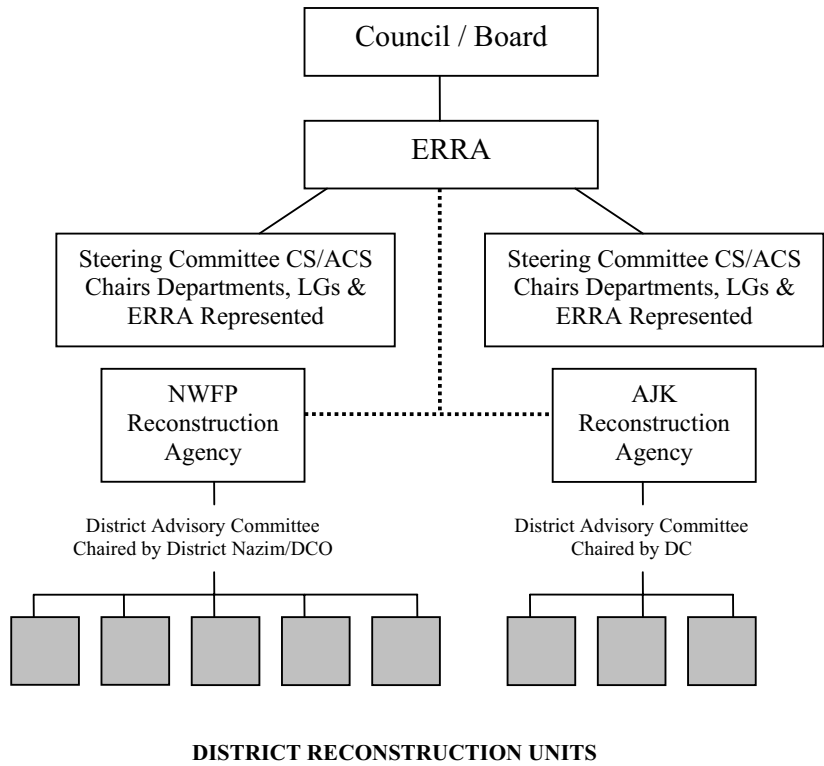
messages will be disseminated on Government intention to take strong action against anyone who plans to take undue subsidy from the government.

Following the completion of the Damage Assessment surveys, the list of home owners eligible for reconstruction or restoration grants will be determined. ERRA and the POs will communicate this information to the respective communities/households, including detailed guidance on how to access these grants, and a comprehensive briefing on the key elements of the owner driven housing reconstruction strategy. Widespread public education programs on the risks posed by practices such as clearing of rubble into river courses would be required, together with measures to ensure adequate supply of suitably sourced materials. An effective information, education, and communication strategy will thus be developed by a communications firm with requisite experience

- *Grievance Redressal Mechanism*: a formal and transparent grievance redressal mechanism will be developed in order to allow affected people to raise their concerns and grievance. The mechanism will cater for the following scenarios:
 - Incorrect eligibility/housing damage assessment
 - Incorrect amount of payment
 - Lack of payment despite eligibility
 - Payment delays
 - Land and property related disputes

The operation of this mechanism and its composition will be based on the appropriate legal guidance and will be decentralised to the lowest possible level.

INSTITUTIONAL FRAMEWORK FOR THE HOUSING STRATEGY



Key: _____ : Approval and Reporting
 ----- : Reporting & Monitoring

The Earthquake Reconstruction and Rehabilitation Authority (ERRA)

The Earthquake Reconstruction and Rehabilitation Authority has been mandated by the Government of the Islamic Republic of Pakistan as the planning and coordinating agency for the reconstruction and rehabilitation process of the areas in Azad Jammu Kashmir and NWFP Province devastated by the 8 October earthquake.

The ERRA mandate on rural housing reconstruction includes: standard setting, provision of standard structural design options and construction guidelines, development of transparent criteria for PO selection, and overall coordination and monitoring and Will provide a support structure for rural housing reconstruction from Federal to District level. In coordination with Province/State, ERRA will also consolidate the technical/artisan/house

owner training programme, provide unified training guidelines and training curricula and train Training Coordinators.

Central Review & Approval Unit: A technical advisory and design approval body for Designs & Construction Guidelines, the Central Review & Approval Unit (CRAU), will be established and operate under ERRA at the Federal level.. It will be housed in Islamabad. Its membership includes provincial, national and international stakeholders that will support the Government in rural reconstruction as a technical advisory and approval body for development of earthquake resistant housing solutions, including construction drawings, bills of quantity, fabrication drawings, material schedules and illustrated construction manuals for each type of wall and roof system and Construction Guidelines.

Role of the Central Review and Approval Unit:

- Technical support on earthquake resistant building techniques
- Establish standard structural and architectural design solutions
- Approval of additional structural and architectural design solutions
- Establish standard construction guidelines
- Approval of additional construction guidelines
- Establish principles and minimum structural specifications into a reference/checklist and provide reference aids to artisans and beneficiaries.
- Review of earthquake resistant building techniques training curricula

Provincial/AJK Steering Committees

The steering committee will act as the provincial focal point for all ERRA activities including the development of the housing reconstruction strategy and approval of annual provincial/state housing reconstruction plans. It will ensure availability of information, personnel and resources, will review implementation progress at District and Provincial levels, and identify issues that may interfere with implementation of the housing reconstruction provincial strategy.

Provincial Earthquake Reconstruction Agency (PERA)

The Provincial Earthquake Reconstruction Agency will act as the secretariat for the Steering Committee. The PERA will coordinate and supervise District annual work plans for housing reconstruction. It will provide backstopping to the District Reconstruction Units. The PERA will prepare quarterly and annual progress reports on housing reconstruction. An

ERRA Regional Housing Coordinator will be posted in the PERA to supervise and coordinate provincial housing reconstruction activities.

District Reconstruction Advisory Committee (DRAC)

The District Reconstruction Advisory Committee will approve annual ERRA-funded reconstruction plan in the District including housing reconstruction plans prepared by the District Reconstruction Unit and forward it to PERA. It will ensure full cooperation and support to the District Reconstruction Unit from all departments concerned with housing reconstruction. The Committee will also conduct quarterly and annual performance reviews of the District Reconstruction Unit.

District Reconstruction Unit (DRU)

The District Reconstruction Unit will act as the secretariat for the Advisory Committee. It will be the lead agency for all housing reconstruction (a) needs identifications, (b) annual planning, (c) coordination, (d) financial management and (e) monitoring for all housing reconstruction activities assigned to the districts. An ERRA District Housing Coordinator will be posted in the DRU to supervise and coordinate district housing reconstruction activities and will report to the Regional Housing Coordinator.

Role of the District Housing Coordinator

- Act as the principal coordinator among relevant District departments on all matters related to reconstruction of housing, and especially on the implementation of earthquake resistant construction standards;
- Participate as a member of the District Reconstruction Advisory Committee (DRAC);
- Supervise the work of the Partner Organizations contracted by ERRA for performing training and AI functions; as well as identify potential POs active in the district.
- Provide ongoing advice and advocacy on all housing related issues and on the implementation of the ERRA housing policy to the DCO/DCs and through them to the District Reconstruction Unit (DRU);
- Provide regular reports to the ERRA Regional Housing Coordinators in Peshawar and in Muzaffarabad on progress regarding housing reconstruction and related training activities;
- Coordinate closely with Tehsil and Union Council administrations to make sure that there is compliance with earthquake resistant standards within each Tehsil/Union Council and provide any technical advice that may be requested by Tehsil/Union

Council administrations;

- Monitor the implementation of the ERRA housing policy, including the disbursement of compensation packages, and report any difficulties or constraints through the DCO to the ERRA in Islamabad;
- Maintain District data base on housing reconstruction;
- Prepare, in collaboration with the RCs, the annual District training programme and ensure its review and approval by the DRU;
- Report regularly, through the DCO/DDC, to the ERRA on the progress of housing related training in the District;
- Chair District level weekly coordination meetings among all stakeholders on housing reconstruction;
- Support the activities of the Housing Reconstruction Centres and be the pivotal liaison officer between the District authorities and the s;
- Undertake regular monitoring visits to Union Councils to evaluate levels of compliance to earthquake resistant reconstruction techniques;
- Monitor and report to the ERRA's Islamabad-based Housing Advisor and to the DRU incidents of housing and land disputes arising in the district or any other housing related grievances; and
- Undertake other housing related tasks assigned by the DCO/DDC.

Housing Reconstruction Centres (HRC)

Eleven Housing Reconstruction Centres will be established with the eight DRUs in each of the affected District. Subsequently, based on implementation experience, their number may be increased with additional ones located at sub-district level. The Reconstruction Centres will initially be responsible for providing training and technical assistance and capacity building related to housing reconstruction to partner organizations and local authorities, and will be under the supervision of the District Housing Coordinator. With time, they will develop adequate capacity to support reconstruction activities in other sectors as well.

The Centre will report to the District Reconstruction Unit to ensure close coordination with the broader reconstruction effort and the resolution of issues coming from the field. The staff of the Housing Reconstruction Centre will include a Senior Trainer, a team of two Training Coordinators, a team of two Technical Experts and one technical staff member

responsible for coordination, monitoring and evaluation. In addition, to these positions each centre will house management and administrative support staff.

Housing Reconstruction Centres will have a permanent display of building techniques and materials as well as displays on related issues link with housing reconstruction such as environment, needs for vulnerable groups, gender, water supply and sanitation, health and hygiene. They will also be responsible for supporting the District Housing Coordinator for coordination and information management. Land to establish each Housing Reconstruction centre will be made available by the Governments of AJK and NWFP.

Role of the Housing Reconstruction Centre

- Training of Master Trainers
- Capacity-building of local authorities
- Technical reference and public awareness
- Coordination of training Implementation
- Training quality control of training delivered by Master Trainers
- Reporting on training monitoring to District Housing Coordinator

Partner Organisations

In view of the extensive outreach needed for the credible administration and monitoring of the challenging task of housing reconstruction, it is clear that existing public sector institutional capacity will require considerable reinforcement. Since capacity building requires time, while the reconstruction activity cannot wait indefinitely, ERRA will enhance the public sector's delivery capacity through partnerships with reputable Partner Organizations/NGOs by inducting such organizations to support the implementation of the owner driven housing reconstruction program. Reputable POs will be engaged by NWFP and AJK using transparent screening criteria. POs will be asked to augment their technical capacity to appropriate levels for effective support to the Housing assistance program.

Only one PO will be designated to work on housing reconstruction in each affected union. The POs will be charged with: (i) providing guidance to affected communities in implementing the owner driven housing reconstruction program, including a comprehensive briefing on its key elements prior to release of the advance payment; (ii) training engineers and craftsmen; (iii) overseeing reconstruction/restoration activities to assure quality and EQ resistant construction; and (iv) ensuring compliance with social and environmental risk

mitigating measures. Additionally, POs will also undertake the detailed damage and eligibility assessment survey. The Survey will be conducted to: (a) categorize the level of damage to each housing unit; and (b) establish lists of eligible beneficiaries.

In order to administer the survey and meet their overall obligations, the POs will constitute the Assistance and Inspection (AI) Teams. The teams would comprise a minimum of three persons – a local government representative, a social organizer, and an engineer. Each mobile team will be responsible for supporting six villages. Based on this ratio, it is expected that 650 teams will be required to cover 4,000 villages. The teams will be hired and trained in assessment techniques and criteria so that these are applied uniformly, by specialists with overall administration by ERRA. The POs will establish field offices responsible for supporting the assistance, inspection, and training activities in a minimum of one or more Union Councils, as appropriate. Partner organisation can, if they have sufficient capacity, assume responsibility for more than one Union Council.

Role of Partners Organisations

- Ensure adherence to the principles of policy and implementation laid out in this document, and the detailed operational procedures included in ERRA's Housing Operational Manual – this will primarily include the sensitization, training and supervision of AI teams vis-à-vis this policy document and the detailed OM
- To form mobile Assistance and Inspection team. (AI Teams)
- Damage assessment and eligibility of the destroyed and damaged houses on the basis of the ERRA assessment form.
- Briefing communities regarding the programme prior to the disbursement of the first payments
- Train engineers/technical inspectors in seismic-resistant principles, designs, and construction details
- Train artisans, and community members at the Union Council level
- Certify trainees
- Monitor training adequacy
- Form mobile training teams
- Ensure compliance with social risk mitigating measures
- Ensure environmental sustainability of reconstruction activities
- Provide technical assistance during construction

- Oversee reconstruction/restoration activities to assure quality control
- Inspect the completion of building stages (plinth, walls and roof)
- Certify compliance with seismic-resistant standards at each stage, for release of next tranche.

Field Offices: Partner organisations either have, or will establish, field offices responsible for supporting assistance, inspection, and training in one or more Union Councils, as appropriate. The field offices will be staffed appropriately to be able to shoulder the Spectrum of responsibilities undertaken for housing reconstruction.

Community Housing Reconstruction Committees

The stated “owner-based” approach places the responsibility for reconstruction on individuals. Community based organisations will play a central role in housing reconstruction ensuring that local traditions and social needs are taken into consideration.

Community-based approaches will be used to complement the payment of grants to individuals in several ways, including: group procurement, group transport, reinforcing training messages regarding standards and norms, resolving conflicts over land, facilitating relocation where necessary, ensuring access to skilled labour for vulnerable groups, linking housing to livelihoods and infrastructure planning and integrating communities in the certification process.

A community-based approach is an important policy choice taken to complement the individual-based grants. While the method for social mobilization can be left to the judgement of experienced partner organizations or NGOs, there will be a common set of outputs to be generated in each village. A generic set of training materials to support partner organisations will also be produced to help ensure equity in support provided to all communities.

Role of Community Housing Reconstruction Committees

- Inform committees about housing reconstruction policies
- Assist mobile team in organising assessment, training and inspection
- Lead housing reconstruction planning activities
- Promote earthquake resistant building techniques
- Contribute to data on the community
- Organise collective building material procurement, material quality control and logistics
- Contribute to compliance through advising beneficiaries
- Organise community environmental management activities in relation with housing reconstruction
- Support community based land dispute resolution
- Assist vulnerable families

OPERATIONAL GUIDELINES & PROCEDURES FOR STRATEGY IMPLEMENTATION

Selection of Partner Organisations

Potential partner organizations have been identified through a participatory process over a two month period that concluded in a mapping exercise of potential partners indicated where they are active, what they plan to do or would like to do in terms of housing reconstruction support. A transparent, credible, process for assigning partner organisations the responsibility for housing in certain geographic areas has been adopted. In union councils where there is an expression of interest from more than one partner organisation, the ERRA will make an executive decision over which partner organisation will be given responsibility for a given union council.

Selection criteria for partner organisations (other than Army POs)

The potential partner organization must:

- Be registered under one of the existing registration laws of Pakistan. International NGOs require registration with EAD of GoP. Preference will be given to organizations registered under the Voluntary Social Welfare Agency Ordinance 1961, the Societies Registration Act 1860, or Section 42 of the Companies Ordinance 1984, or with the Pakistan Centre for Philanthropy.
- Be involved in participatory development at the grass-roots level, have the capacity to expand its outreach and have a well-developed strategy and work plan for the future.
- Have had a presence in the Union Council or District prior to the earthquake or during the relief phase.
- Have previous experience in provision of Community Infrastructure
- Have a track record for training delivery
- Have technical and community development staff and contact with Community Based Organisations and other local community members
- In the case of International NGOs, have local partnerships as part of service delivery strategy
- Number of local staff available for reconstruction works
- Number of years in practice
- Total turnover of the financial assistance managed by the agency over the past three years
- Whether the agency is person centric or has a board of directors to manage and oversee the operations (give more marks for board management)
- Number of reconstruction projects handled by the agency during the past three years
- Number of direct beneficiaries targeted in these projects
- Number of projects implemented by the agency in the project area (give more marks)
- Past experience in managing any disaster management/ reconstruction projects/social mobilization (more marks)

Additional criteria if more than one organisation in the same Union Council

- Capacity to deliver to the entire Union Council

- Ability to cover another Union Council
- Existing field offices with support staff and logistics
- The extent of existing community networks through previous interventions

Fiscal requirements

- The organization must have a proper accounting system supported by balance sheets and profit and loss account statements or income and expenditure statements with the minimum requirement of a cash-book supported by a bank statement.
- The organization must have a system of internal controls and external audits.
- The organization must be willing and able to maintain all relevant records, documents and information in respect of financing received from its donors and to furnish these upon request.

Supporting documentation

- Registration documents
- Annual/financial report
- Staffing table
- Information on donors and current programme structure

Contracting Partner Organisations

After receiving an expression of interest and required documentation from a partner organisation that meets the selection criteria, a Memorandum of Understanding will be signed between the ERRA and the partner organisation.

Training of Partner Organisations

The ERRA is taking necessary steps to train the master trainers of partner organisations in earthquake resistant construction technique as well as in social mobilization. The ERRA, therefore, is making arrangements with nationally and internationally renowned organisations to develop a training curriculum relating to earthquake resistant housing techniques to be imparted to the partner organisations.

Damage and Eligibility Assessment Survey

A house-to-house assessment of damage and destruction will be carried out by the partner organization in collaboration with a designated government compliance official in the union council they are responsible for, prior to the commencement of reconstruction. The assistance and inspection teams (AIs) will be organised at the Union Council level.

Assistance and Inspection Teams (AI Teams)

Composition

- Engineer / Technical person (provided by the partner organisation)
- Social mobiliser (provided by the partner organisation)
- Government official

Role and responsibilities of AI Teams

- Damage assessment after receiving training from the Master Trainers
- Equip themselves with the Inspection tools that will be provided to them during the training (damage assessment form and instructions on its completion).
- Door to door assessment and compile lists of eligible beneficiaries (Beneficiaries who would not have opened the Bank account will be advised to do the same and his/her name will not be included in the list till the time of opening of Bank account).
- AI teams will sign the MOU with the beneficiary who is eligible for compensation. This will establish that the beneficiary will undertake to build his/her house according to the set minimum seismic-resistant standards to enable him to receive the full compensation package.
- Submit the lists to the partner organisation at the union council level for onward processing/compilation
- Certify compliance with seismic-resistant standards at each stage, for release of next tranche.
- Assess the situation of vulnerable members of community.

To verify the eligibility of the potential beneficiary, the teams will use as a baseline the original beneficiary lists prepared by the military and/or the Revenue Departments that were used to disburse the initial instalment of Rs. 25,000. Eligibility criteria and verification will be included in the Housing Reconstruction Operational Manual. In addition to determining the

eligibility of beneficiaries, the assessment will allow the identification of houses that are safe for re-occupation and houses that are unsafe but occupied. A separate training module for engineers to carry out assessments will be provided.

Each Assistance and Inspection team will be required to sign a “Memorandum of Understanding” with each beneficiary who is eligible for compensation. This will establish that the beneficiary will undertake to build his/her house according to the set minimum seismic-resistant standards to enable him/her to receive the full compensation package.

Resolving Eligibility Issues:

It is expected that there will be a variety of eligibility issues that will require policy guidelines. These will be documented in more detail in the Housing Reconstruction Operational Manual, but some issues are outlined below:

Official list of damaged houses is inaccurate: the initial, rapid survey may have overlooked or double-counted some houses. Moreover, in some cases the distinction between damaged or destroyed is either not provided or is erroneous. Persons may have been overlooked or inadvertently double-counted. The AI team on the basis of its finding will make a recommendation to the ERRA for decision.

Settlement and documentation of land claims where property records have been lost: Families with damaged houses who do not have proper property ownership/title (unauthorized habitats) will not be immediately eligible for housing assistance. It is however recognized that loss of land records can be a significant source of social risk associated with housing reconstruction. Hence cases where records have been lost and are not retrievable, shall either be resolved through community-based interventions and evidence mechanisms, or referred to the grievance redressal system. Further, the district administration may consider the need to setup mobile land tasks forces to examine these cases and provide solutions, wherever possible.

Damaged house is located in a hazardous location: relocation may be required and reconstruction grant payment may be delayed. Such cases must be brought to the notice of District government, provincial government and ERRA. Separate list of such cases must be

compiled and provided to Respective district, Provincial/state governments and ERRA.

Eligibility in case of Inheritance that has not been Recorded/Formalised: This must be verified by the AI teams through local means.

Eligibility in case of joint ownership or “vesh” of the property

There are few affected areas where traditionally the property is shared among the family members. One family member retains the ownership of the property for certain number of years on the expiry of which, the property gets transferred to other member. In such cases, the family member who was the owner of the house at the time of the damage will be eligible for the housing subsidy.

Owner - tenant eligibility

There are some cases in which owner has several houses and has rented them to various tenants. In that case owner will only be eligible for the housing subsidy with respect to one house in which he or she was residing when the damage was caused to that house. In case of rented houses belonging to the same owner, the owner will have to sign an agreement with the occupant/tenant of his house according to which tenant will receive the restoration/restoration grant to reconstruct/restore the house on behalf of the owner. The government will disburse the funds to the occupant of the house once the occupant produces the agreement signed by the actual owner of the house. The agreement between the owner and tenant will include a no-objection/permission from the owner, allowing the tenant to receive the grant and reconstruct/restore the house without any interference from the owner. Under this arrangement, the eventual longer-term beneficiary of the grant will still be the asset (house) owner, while the tenant will be the grant recipient and executor only and thus avail the immediate benefits of the grant. As such, the owner-tenant agreement will have a specific non-eviction clause, allowing the tenant to reside in the house for a period of at least 3 years after the reconstruction/restoration is completed.

Housing Reconstruction underway and not conforming to earthquake resistant reconstruction guidelines: Households that have already begun or completed reconstruction of their houses, without availing financial assistance from any other ongoing program or preexisting facility, will also be eligible to receive the government grant either in full, or in part, as determined by the AI team. The following conditions, in addition to those stipulated in Section 4.2.2, will need to be met by the homeowner/tenant to establish a claim

for reimbursement and for further grant installments, if applicable:

- i. The RCR certifies that the house has not been rebuilt/repared with donor assistance
- ii. The Houses is included in the original TSS grant list
- iii. The AI team assesses the damage based on the new construction and certifies that : (a) the house falls within the categories listed in Section 4.2.1; (b) seismic resistant construction practices have been followed by the owner, or if that is not the case, the owner agrees to dismantle the reconstructed parts at his own cost and ; (c) agrees to carry out all further reconstruction following seismically safe standards.

Initial Disbursement Made to Many people in one house: In such cases payment will be made to one owner and undertaking will be obtained from other brothers/occupants that they have no objection to payment being made to one person who will build the house on behalf of the others.

If Male Members Are Away From Home: In case the actual owner of the house is away due to any reason including employment and is unable to come back at the time of damage assessment, then he/she will have to give the power of attorney in favour of spouse or blood relative, who will be eligible to sign MOU with the assessment team on the basis of which assessment of the house will be done. But in any case payment will be made into the bank account of the original owner.

Subsidy Will Be Given On The Basis Of Houses And Not Households: If more than one family are residing under one roof and during the initial damage assessment Rs 25000 were given on the basis of stoves, second tranch will only be given to one who is the owner of the house and undertaking will be obtained from other residents that they have no objection on subsidy given to one person who will build the house on behalf of all.

Resolving Land Disputes: For the just and equitable disbursement of the funds and to ensure that the money goes to the rightful owner of the property, it is very important that title and the ownership of the house are not ignored. Determining the correct title of the property has become difficult due to the destruction of the legal documents during the earthquake. Determining the ownership of the property will be the responsibility of the Assistance and Inspection teams (AI Teams) who will do it by resorting to legal documents wherever

possible and in case the legal documents have been destroyed, the title will be established through developing alternate mechanisms as well as local verification from the community.

Special attention will be given to ensure that land and inheritance claims can be dealt with in a timely manner, with particular attention given to making these mechanisms easy to access for women and socially disadvantaged groups.

Issue of Bank Account: Housing subsidy will only be given directly into the bank/post office account of the beneficiary. The bank account can be in any part of Pakistan for this purpose but house owner will have to be at the site of his/her house at the time of damage assessment and MOU signing.

House Built on Government Land: The Policy for this issue is that in case an affectee's house is built on Government land then in order to obtain a housing subsidy the affectee must obtain an NOC from the Provincial/State Government or from the particular Government Department to whom the land belongs.

Non Payment of 1st Installment of Rs. 25000: Affectees who have not received the first installment due to any reason should file an appeal through the Grievance Redressal System at the Tehsil Level. The AI Teams would collect such lists on a weekly basis and undertake assessment of such houses separately. These kind of cases would be dealt with separately from the laid down procedures as after due verification by AI Teams such houses would be given initial installment of Rs. 25000 plus the next installment of Rs. 75000 simulataneously.

Skill and Compliance Training:

Delivery of the proposed housing reconstruction/rehabilitation program over a 3-year period will involve an approximate ten-fold increase in pre-earthquake *pucca* housing activity in the affected districts, and a two-fold overall increase in this activity in NWP and AJK. It is roughly estimated that the following size of skilled and unskilled workforce will be needed annually:

Reconstruction Workforce Requirements

	Skill	Numbers
1.	Site Engineers	150
2.	Supervisors/surveyors	150
3.	Masons	40,000
4.	Steel Fabricators (fixers/fitters)	700
5.	Carpenters/Sheet Roof fixers	13,000
6.	Plumbers	2,500
7.	Electricians	2,000
8.	Painters	1,000
	Total skilled	59,500
9.	<i>Semi-Skilled/Unskilled</i>	<i>80,000</i>

Given the general increase in construction activity across the country over the past year, at best about 20% of this need will be met by the skilled construction workforce resident in the affected areas or coming in from outside. This group will need to be provided limited training in EQ resistant construction practices. The remaining 80% of the required workforce will have to be trained from scratch as part of the program.

This training will be imparted by POs in two stages. The first stage will involve skilled craftsmen in key trades (mainly masons, steel fabricators and sheet roof fixers), who will be trained by senior technical specialists as master trainers at the Reconstruction Centers. They will be: (i) briefed about the overall construction requirements for the core unit; and (ii) provided short, focused training in EQ resistant construction, and a general refresher on good construction practices. This will be done using a mix of visual training material and on-site practical demonstrations. Following this training, these craftsmen will be 'accredited' by the PO for the Housing program.

For the second stage, the POs will launch a craftsman training program in each affected district. Trainees will be registered, provided training at a central location, and then attached to accredited skilled artisans under an apprenticeship program that will involve on-the-job training spanning one complete construction cycle or at least 3 months. During this

period the trainees will be provided a stipend, and at the end of this period they will be 'accredited' to operate independently and to train others. The pool of skilled construction workers will thus be gradually built up (broadly over the course of the first year), until the housing demand in the affected areas is fully met. The PO will also be responsible for information dissemination to house owners and communities on safe construction techniques through printed material and group/individual discussions. This will be achieved through mobile teams visiting communities on a regular basis. Each mobile team will be trained by Master Trainers and responsible for providing training and technical assistance in an average of six villages for self-builders, artisans, contractors and male and female community members. Based on this ratio, it is expected that 650 teams will be required to cover 4,000 villages.

The Reconstruction Centre will carry out training for the trainers of POs and provide technical assistance and capacity building to partner organizations and local authorities. The Centre will have a permanent display of appropriate building techniques and training materials, as well as displays on housing related issues such as water supply, sanitation, environment, health and hygiene. The centre will also be the body for resolving rebuilding related issues coming from the field. Once fully operational, these centres will also support reconstruction activities within that District under other sectoral programs.

The staff of each centre will include a senior trainer, a team of two Training Coordinators and a team of two Technical Experts, management and administrative support staff and one technical staff member responsible for coordination, monitoring and evaluation.

The approach to ensuring compliance should aim to create a "culture of compliance" rather than a system of policing beneficiaries – this would be achieved through a 3 pronged approach, involving mass information and canvassing campaigns, artisan and community training, and effective community mobilization (through the POs social mobilizer on the AI team) on the need for seismic resistance construction. Therefore, training will be organized in an incremental way over a period of three years and technical support will be made available to beneficiaries throughout the reconstruction process.

The training strategy is presented in more details in section 4.

Inspection and compliance

The ERRA will be responsible for coordinating implementation at the District level. However some responsibilities including disbursement oversight and quality control oversight will be devolved to partner organisations, with the involvement of a relevant government compliance official. This approach will help ensure an effective division of labour and smoother implementation over a large and difficult topography.

Upon completion of building stages (plinth, walls and roof) the partner organization will inform the relevant government compliance official so that inspection can be carried out and the building certified for the timely disbursement of further instalments of compensation. The required forms will be duly signed as provided for in the Housing Reconstruction Operational Manual.

ERRA's Operational Manual will specify the conditions (payment triggers) for the release of the progressive grant instalments to the beneficiaries, including provisions in the MOU to ensure the overall judicious use of the grants and seismic safety of construction works carried out after the last grant instalment has been made to the beneficiaries (specially for ensuring the quality of roof construction which is a key strategic element in ensuring seismic safety). Similarly, the MOU will also require either a confirmation from the beneficiary on having received training in seismic resistant construction, or an undertaking to receive such training immediately after the first grant instalment.

Disbursement of rural housing reconstruction grants

In order to ensure transparency and to avoid the multiple disbursement of assistance package, grants will be disbursed to the beneficiary through Banks. The beneficiaries will open the bank accounts into which money will be transferred. For this purpose the National Bank of Pakistan and other Pakistani banks will open additional branches in the affected areas. Where it is difficult to open a bank branch mobile banking teams will be sent to facilitate the receipt of compensation.

Disbursement procedure

The beneficiaries' lists shall be provided to ERRA in batches as and when these are ready on regular intervals. The nominated branch of the National Bank of Pakistan will release the funds to the partner bank branches once the two governments provide authenticated copies

of the lists of the beneficiaries along with the bank account numbers with the instructions to get the accounts of all the beneficiaries credited at their respective banks by a certain date by debiting their accounts.

After crediting the accounts of the beneficiaries all branches of respective banks shall return the lists of beneficiaries to NBP with a certificate of disbursement to the beneficiaries as per list provided to them. All exceptions shall be noted on these lists and the corresponding amount shall be returned by the respective banks to NBP. Certified copies of disbursement provided by the banks shall be returned by the NBP to the respective government at agreed level and shall be kept in safe custody of designated officers for internal and external audit. Monthly accounts/statements of disbursements shall be provided by the governments of NWFP and AJK to ERRA in the prescribed format and on the dates fixed by ERRA. ERRA shall provide reports to the Federal government and to the donors on quarterly basis.

The same procedure shall be followed for disbursement of 3rd tranche of Rs. 25,000 and 4th tranche of Rs. 50,000 for fully damaged houses on the basis of certificates issued by the Assistance and Inspection Teams. All unspent balances shall be refunded to ERRA

The ERRA shall transfer the required funds from the central ERRA fund to the designated branches of National Bank of Pakistan by the governments of AJK and NWFP for onward distribution to the beneficiaries through the branches of the National Bank of Pakistan and designated partner banks.

Measures to Facilitate the Opening of Beneficiary Bank Account

National Bank of Pakistan and other partner banks shall not charge any fee for opening of new bank accounts or any service charges from the beneficiaries nor shall they require maintenance of minimum balance by the beneficiaries. Charges for provision of service, if any, shall be agreed upon by the two governments with National Bank of Pakistan and shall be paid by them out of the funds provided the ERRA.

Banks shall not insist upon the production of Computerized National Identity Card for the opening of Bank accounts and shall follow the instructions of State Bank of Pakistan for this purpose. However, one window operation shall also be launched at Union Council /

Tehsil / District level where staff of NADRA shall issue Computerized National Identity Card to the applicants on a fast track basis.

All overpayments / irregular payments shall be recovered and refunded to the ERRRA by the two governments. A system shall be put in place by the governments of NWFP and AJK to redress grievances of eligible persons to the satisfaction of the ERRRA.

Coordination

The District Housing Coordinators in the DRUs will be responsible for the effective coordination between all partner organisations in their area of responsibility. They will also monitor and report progress to the District Reconstruction Units. Though the main emphasis of coordination will remain at district level, regular coordination and progress meetings and policy information dissemination will continue at provincial/state and federal level.

Monitoring and Evaluation

The partner organizations will be responsible for the monitoring and evaluation of progress in the union councils they are responsible for. The Housing Reconstruction Centres are responsible for the monitoring and evaluation of partner organizations delivery of training. The District Reconstruction Unit will carry out periodic spot checks in the affected union councils to monitor progress and compliance. Monitoring and Evaluation will also be carried out by the central level to ascertain further training, curricula development and additional technical assistance needs.

The following indicators will be used for monitoring outcomes:

- Amounts of restoration/reconstruction grants disbursed;
- Number of houses reconstructed/restored to earthquake resistant standards;
- Number of craftsmen trained in key trade (masons and carpenters);
- Percentage of complaints redressed.

Reporting

Partner organizations will be responsible for reporting to the Housing Coordinators (HC) of the District Reconstruction Units. Each HC will compile the data from all partner organizations in their area of responsibility and feed this information to the overall database in the DRU.. The Unit in turn reports to the relevant government departments and the ERRA Regional housing Coordinator who in turn will report to the ERRA at the federal level.

TRAINING STRATEGY

The training strategy was developed according to recognized “good practice” and reflects the knowledge and consensus of actors on the ground.

Training in earthquake resistant building techniques will be provided in the earthquake affected areas. The Federal ERRA in coordination with Province/State is responsible for the consolidation of the training programme, providing the training guidelines and training curricula and the training of Training Coordinators to be placed at district level in the Housing Reconstruction Centres.

At District level the ERRA Housing Reconstruction Centre will train the Master Trainers of partner organizations (including Army POs & AI Teams) and provide technical support for the reconstruction process.

Partner organizations will be responsible at Union council level, for the training of mobile teams and at village level for the training of artisans, self-builders, contractors and male and female community members.

Federal and district level bodies and activities are fully funded without any costs to the partner organisations. The cost of training activities of partner organisations will be covered by partner organisations own fund raising or funds raised through the United Nations led Action Plan.

Planning Assumptions

For the sake of planning purposes, the following assumptions regarding the scope and nature of the challenge were developed, namely:

- the training will have to promote earthquake resistant reconstruction in 4,000 villages in 9 Districts of the affected area, though there are houses outside the affected area that will also have to be reached;
- some 400,000 plus houses will be reconstructed or repaired over the course of 3 years, the majority of which will take place in year one – the initial housing reconstruction will be rapid, widespread and asynchronous (ie, according to the beneficiary's own plans);
- in at least 50% of the villages there is some form of village institution, that is supported by an external organization;
- Union Councils in rural areas are made up of geographically contiguous villages and fairly homogeneous social groups that can be used to divide training responsibilities;
- people have already started rebuilding and, unless the incentives and potential sanctions are clearly communicated to the people, they will not wait for the Government to rebuild
- training must be integrated into the system for ensuring compliance with earthquake resistant construction guidelines and standards
- the World Bank assumes that some 59,500 skilled labourers will be required annually to support housing reconstruction, with 80% of these people requiring training;
- different training packages must be provided to different target groups:
 - Local authorities and decision-makers
 - Architects and Engineers
 - Masons and artisans
 - Self-builders
 - Contractors
 - Beneficiaries for both men and women

Strategic Approach to Training

In the above context, the overall approach to training should be guided by the following considerations:

- *Holistic Approach to Housing.* The mobile IA teams will take on the responsibility of assessment as the first working phase of the training. But they will also ensure a holistic approach to housing, which, at minimum, will include the provision of a latrine and hygiene education. In rural areas, however, the definition of shelter must include

provision for livestock. The teams will also serve as the bridge between communities and other interventions, supporting a coordinated, equitable reconstruction. In training terms, modules could be developed for a variety of issues, with the close involvement of teams.

- *Three Year Plan for training materials development.* Adopting an incremental, experience-based, bottom-up approach to materials development. There is a need to immediately have simple guidelines in the field, but these guidelines will be expanded and improved over time, eventually being incorporated into more formal textbooks.
- *Year 1 Training to emphasize village level.* Training may be required at the District level, urban areas and in camps, but as the majority of the rebuilding will take place in villages in year one, a concerted effort will be to target skilled and semi-skilled labour in villages, as well as self-builders themselves.
- *Refresher Trainings, Demonstration Houses and Monitoring* will be essential to ensure the training is absorbed and implemented in the reconstruction. The goal will be to provide initially an overview of the entire house construction process; however, specific elements will have to be repeated in refresher courses. The training should be as hands-on as possible, particularly in rural areas. The refresher trainings will also support the monitoring of progress.

Integrating Training with Compliance

The concept of compliance means that houses are rebuilt according to earthquake resistant standards. The Government's policy is to link the payment of housing grant instalments to certification of compliance with the appropriate building standards.

The approach to ensuring compliance will aim to create a "culture of compliance" rather than a system of policing beneficiaries. To create such a climate, there will be a structured approach to create diverse agents of compliance, who each, in their own way, reinforce common standards and messages. For training purposes, mobile teams will be staffed, and training packages will be developed, to support the compliance role of the following agents:

- *General Public:* through an information and public awareness campaign that will draw its messages from the unified training materials developed.

- *Mobile AI Teams*: the mobile teams will be the first line of compliance, communicating the standards for earthquake resistant reconstruction, as well as the incentives and sanctions to ensure their implementation.
- *Village Committees*: Where village development councils exist, the peer pressure of these institutions should be channelled to support compliance. These committees will be encouraged to form a sub-committee on reconstruction monitoring whose role is to monitor the overall housing reconstruction programme, support compliance efforts and regularly report on progress to the wider community. This committee will be particularly important for ensuring vulnerable groups such as women-headed households, the elderly and widows are able to access reconstruction benefits. Community pride and creative incentives, such as a national competition, will be developed to promote solidarity and mutual support.
- *Women*: Women have a special role to play in ensuring compliance. Women and children suffered tremendous loss of life during the earthquake. They have a clear vested interest in understanding earthquake resistant construction. Within the family structure, *informed* women can play an important role in ensuring compliance.
- *Monitoring*: to complement the work of the trainers, monitoring from the Housing Reconstruction Centres will be deployed to do “spot-checks” to ensure that the training has been clearly communicated and that beneficiaries are incorporating the standards during the reconstruction. The number of these teams need not be large, as even the possibility of a visit from them will contribute to creating a culture of compliance.
- *Certification Teams*: These teams will be responsible for certifying compliance at each stage of the housing reconstruction. A Government official will be part of the team. The precise operation of this system will be detailed in the “Operational Manual” governing the programme.

The compliance system cannot simply be sanction-based, but should also be linked to a system of incentives. The grant instalments are linked to an incremental building system. The first instalment should be sufficient for the construction of the foundation, upon which the work is certified and the second tranche is released. The approach is repeated until

completion. There will also be some scope for considering a community-level incentive. For example, if 85% of the houses at the *tehsil* level are duly certified as having rebuilt their community according to the guidelines, they might be able to access a dedicated fund for other community projects.

Indicative Training Curricula:

Training packages will be developed according to the role and function of each target group. The framework below determines the appropriate level of information to be communicated.

	Activities	Est Time Required	Expected Output(s)	Supporting Tools
A.	ORIENTATION			
1	Coordination Meetings at District and UC levels		Local authorities support secured	(a)PPT and/or handouts (b)targets & work plan
2	Initial Community Orientation: elders and religious leaders and Village Committee rep		Common understanding of project objective	(a)letter from Government?; (b)project overview cartoon
3	Village gathering to explain programme, confirm agreement and establish reconstruction committee (RC) and monitoring committee (MC)		Agreement for PO/NGO support and commitment to implement according to project principles and rules	(a) Community Agreement and (b) project overview & FAQ (illustration/cartoon format)
B.	PLANNING & PREPARATION			
4	Training and orientation for planning committee: overview of training; assignment of tasks re: damage assessment, land, mapping <i>[Optional: review of community develop plan]</i>		(a) Preliminary beneficiary list (b) Village Map & Profile (c) Identification of potential land/property disputes	(a)Project overview & FAQ (b)Map & Profile forms (c)Land/Property dispute form

	Activities	Est Time Required	Expected Output(s)	Supporting Tools
5	Review of Information Collected		(a) Clustering of households (b) Damage assessment plan (c) List of skilled labourers (d) List of most vulnerable	(a) Village map (b) Village profile
6	Conduct Detailed Damage Assessment, with monitoring committee & skilled labourers		(a) Detailed damage assessment (b) Typology of wall & roof systems in the community	(a) Damage assessment form; (b) Village map (c) Beneficiary list
7	Village gathering to present findings and confirm results of discussions with the recon committee and brief on housing reconstruction policies and procedures		Awareness of damage assessment, beneficiary numbers & names, skilled labor	(a) Damage assessment form; (b) Village map (c) Beneficiary list
7b	Resolution of Planning Issues (relocation of houses/settlement, settlement re-planning, land and property disputes, etc.)		Resolution of Disputes or referral to appropriate Government body Grievances identified & processed	Dispute resolution references and forms
C.	RECONSTRUCTION TRAINING			
8	Training of Reconstruction Committee & Monitoring Committee		(a) Materials procurement plan based on clusters; (b) Cluster work plan (c) Master Skilled labourers list (d) Master self-builders list	(a) Housing Policies and Procedures (b) Generic cluster work plan
9b	Training of Master Self-Builders from each cluster		Understanding of process & good practice for reconstruction	(a) Cluster work plan (b) Typical house work plan (c) Self-builder checklist (d) Housing policies and procedures

	Activities	Est Time Required	Expected Output(s)	Supporting Tools
9c	Training of Women's Lead Trainers from each cluster		Basic understanding of process & good practice for reconstruction Basic hygiene awareness	(a) Cluster work plan (b) Self-builder checklist (c) Health & Hygiene poster
10	Construction of Demonstration House & Latrine for vulnerable family		Demonstration house to serve as model for future	
D.	REFRESHER TRAINING & MONITORING			
11	Refresher Training of Reconstruction Committee & Monitoring Committee		(a) Strengthened understanding of process and identification of problem areas in process and/or training; (b) Assessment of progress (c) Areas for improvement in training identified	(a) Training materials as required (b) Monitoring tools
12a	Refresher Training for Skilled Labourers from each cluster (including, but not limited to Master Skilled Labourers)		(a) strengthened understanding of techniques; (b) assessment of understanding (c) areas for improvement in training identified	(a) Training materials as required (b) Monitoring tools
12b	Refresher Training for Self-Builders from each cluster (including, but not limited to Master Self-Builders)		(a) strengthened understanding of techniques; (b) assessment of understanding (c) areas for improvement in training identified	(a) Training materials as required (b) Monitoring tools
12c	Refresher Training for Women		(a) strengthened	(a) Training materials as

	Activities	Est Time Required	Expected Output(s)	Supporting Tools
	(including, but not limited to Women's Lead Trainers)		understanding of techniques; (b) assessment of understanding (c) areas for improvement in training identified	required (b)Monitoring tools
	D. MAINTENANCE & HANDOVER			
13	Maintenance Guidelines Training		Understanding of maintenance required for shelter and latrine	Maintenance plan
14	Village Gathering to celebrate at 85% completion		Training Certificate Distribution	Certificates

