



**Government of Pakistan**



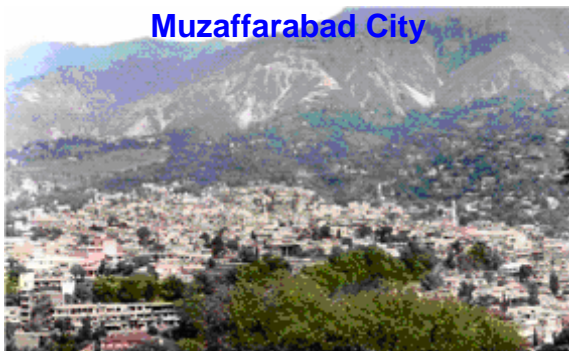
## **Urban Development Strategy**



**Rawalakot City**



**New Balakot City**



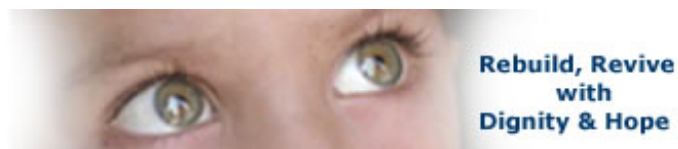
**Muzaffarabad City**



**Bagh City**

**“Build Back Better Planned Cities”**

**Earthquake Reconstruction & Rehabilitation Authority  
Islamic Republic Of Pakistan, Islamabad**



**Rebuild, Revive  
with  
Dignity & Hope**

No.

For Official Use Only

**Earthquake Reconstruction & Rehabilitation Authority**

Prime Minister's Secretariat (Public)

Islamabad

**For Questions & Suggestions**

Contact:

**Mr. Ejaz Ahmed Bajwa**

Program Manager (Urban Development)

Tel: +92-51-9030969 Fax: +92-51-9030847

Website: [www.erra.gov.pk](http://www.erra.gov.pk)

Email: [bajwa@erra.gov.pk](mailto:bajwa@erra.gov.pk)

Published in----- August, 2007

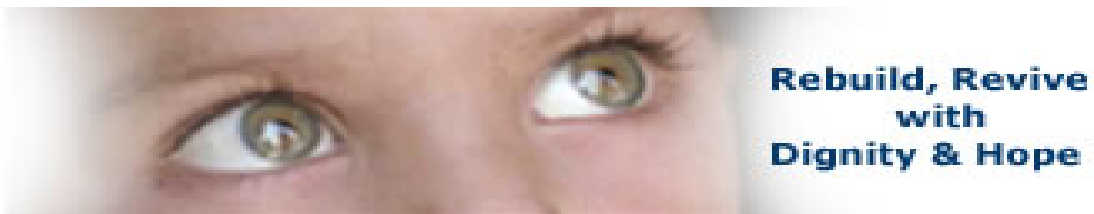
© No part of this book may be reproduced in any form without prior permission of ERRA.



**Planning Cities is a first step towards  
Building Back Better planned Cities**

# **Urban Development**

**A Strategy  
for  
Reconstruction, Rehabilitation and Development  
of  
Earthquake Affected Urban Areas**



**Government Of Pakistan**

**Earthquake Reconstruction & Rehabilitation Authority  
Prime Minister Secretariat (Public)**

## TABLE OF CONTENTS

### A. ORGANIZING FOR SUCCESS

<b>1. BACKGROUND</b>	1-1
1.1 The Earthquake	
1.2 The Damage & Consequences	
1.3 The Federal Response	
1.4 The Recovery Task	
<b>2. ERRA ORGANIZATIONAL &amp; IMPLEMENTATION FRAMEWORK</b>	2-1
2.1 ERRA Philosophy	
2.2 ERRA Organization	
2.3 ERRA Program Arrangement	
<b>3. ERRA URBAN PROGRAM</b>	3-1
3.1 Definitions	
3.2 Nature of Urban Development & Its Relation to ERRA Sectors	
3.3 Urban Development Strategy	
<b>4. STRATEGY FOR URBAN RE-DEVELOPMENT.</b>	4-1
4.1 Strategic Aim	
4.2 The Shared Vision	
4.3 Overarching Theme – Build Back Better Planned Cities	
4.4 Overarching Principles	
4.5 Urban Rebuilding Stages	

### B. THE TOWN PLAN

<b>5. THE PLANNING STRUCTURE FOR URBAN DEVELOPMENT</b>	5-1
5.1 Town Plans – The Basic Rebuilding Tool	
5.2 Interaction with Respective Governments	
5.3 Managing the Planning Process	
<b>6. THE CONTENTS OF A TOWN PLAN</b>	6-1
6.1 The Nature of the Town Plan	
6.2 An integrated array of Sub-Plans	
6.3 Prerequisites to Develop a Town Plan	
6.4 Sub-Plans Coverage	
6.5 Inter-relationships of Sub-Plans	
<b>7. MAKING THE TOWN PLAN WORK.</b>	7-1
7.1 ERRA Outsourced Planning Assistance to Respective Governments	
7.2 Towards Recovery of the Urban Program Cities	

- 7.3 Setting Priorities
- 7.4 Dealing with Phasing
- 7.5 Trade-off between Time and Cost
- 7.6 Implementing the Town Plan
- 7.7 Monitoring the Progress of the Town Plan
- 7.8 Development of Satellite Town, Muzaffarabad City

## **C. URBAN HOUSING**

<b>8.</b>	<b>URBAN HOUSING</b>	8-1
8.1	Overarching Theme and Principles	
8.2	ERRA Policy on Urban Housing Reconstruction	
8.3	Institutional Enhancement	
8.4	Financial Assistance	
8.5	Housing Damage Overview	
8.6	Technical Assistance	
8.7	Capacity Building	
8.8	Combined Payment of Urban Housing Subsidy	
<b>9.</b>	<b>OPERATIONAL GUIDELINES &amp; PROCEDURES FOR STRATEGY IMPLEMENTATION</b>	9-1
9.1	Assessment & Inspection Teams (AI teams)	
9.2	Resolving Eligibility Issues	
9.3	Disbursement of Urban Housing Reconstruction Grants	

## **D. SPECIAL CONCERNS**

<b>10.</b>	<b>RELOCATION, COMPENSATION, AND OTHER LAND MATTERS</b>	10-1
10.1	General Policy Guidelines for Relocation & Compensation of Residential Land	
10.2	General Policy Guidelines for Relocation & Compensation of Commercial Land	
<b>11.</b>	<b>MEDIUM TERM HOUSING STRATEGY</b>	11-1
11.1	Medium Term Housing Need	
11.2	ERRA's Approach to Medium Term Housing	
11.3	Critical Elements of the Medium Term City Plan	
11.4	Coordination with Other Sectors	

### **ANNEXEURES**

- Annexure A: Urban Housing Assessment Performa
- Annexure B: List of Acronyms Used
- Annexure C: Cartographic Evaluations of the Urban Program Cities (Source: UN-HABITAT, UNOSAT, Emergency Architects)
- Annexure D: Master Plans of Cities

## A. ORGANIZING FOR SUCCESS

### 1. BACKGROUND



#### 1.1 THE EARTHQUAKE

The 7.6 magnitude earthquake that struck Pakistan on October 8, 2005 is the most devastating natural disaster in the history of Pakistan. The earthquake was spread over an area of approximately 30,000 sq. km across Azad Jammu and Kashmir (**AJK**) and the North West Frontier Province (**NWFP**), and covered five districts of NWFP and four districts of AJK. More than 2,000 aftershocks are recorded in the area thereafter, ranging from a magnitude of 5.0 to 6.0 on the Richter Scale.

#### 1.2 THE DAMAGE AND CONSEQUENCES

The earthquake killed 73,338 people and injured 128,309 people in the affected districts. The earthquake damaged or destroyed more than 600,000 houses, 6,298 educational institutions and 782 health institutes in NWFP and the AJK. Some 84 percent of the total housing stock was damaged or destroyed in AJK and 36 percent was damaged or destroyed in NWFP. Ninety percent of the destroyed or damaged housing is found in rural areas.

The damage in the earthquake affected areas was far-reaching. Public buildings, private housing, infrastructure, social services, livelihoods and businesses were all extensively damaged or destroyed. Many urban areas were devastated while some cities, like Balakot, were completely destroyed. To date, the overall cost of relief and reconstruction efforts associated with the earthquake is estimated to be 6 billion U.S. Dollars.

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

#### 1.3 THE FEDERAL RESPONSE

In response to the earthquake, the Government of Pakistan created two entities:

- (a) The Federal Relief Commission (**FRC**) on October 09, 2005, with responsibility to provide relief assistance to the earthquake victims and to monitor and coordinate the overall relief effort; and,
- (b) The Earthquake Reconstruction and Rehabilitation Authority (**ERRA**) on October 24, 2005, as an autonomous authority (responsible for reconstruction, rehabilitation, and development of the areas affected by the earthquake of October 8, 2005 ERRA Ordinance: Section 3). The jurisdiction of ERRA covers the earthquake damaged areas of Pakistan (in NWFP) and AJK (Azad Jammu Kashmir).

The FRC was dissolved on March 31, 2006, and a core group of personnel was merged with ERRA. All residual relief activities that were still in process were transferred to the Transitional Relief Cell (TRC) of ERRA.

## **1.4 THE RECOVERY TASK**

The significant task facing ERRA is to provide the leadership, financial assistance, development framework, and coordination necessary to enable the earthquake affected areas to rehabilitate lives, communities, public services, and social structures to a degree of quality better than that which existed before the earthquake and to get this rebuilding done in a reasonable period, with minimal disruption, and at the optimum possible cost.

## **2. ERRA ORGANIZATIONAL & IMPLEMENTATION FRAMEWORK**



### **2.1 ERRA PHILOSOPHY**

The basic principle governing reconstruction and rehabilitation is that the process will be implemented at the local level by the Provincial/State Governments through the respective local governments. ERRA, and the Federal Government of Pakistan, will assist the local governments in planning, policy making, resources, technical assistance, coordination, and monitoring.

### **2.2 ERRA ORGANIZATION**

To provide an organization to work from the local tier to Federal level, ERRA has established the following administrative structure:

#### **(a) ERRA Headquarters:**

At the Federal level the ERRA headquarters is located at the Prime Minister's Secretariat and is responsible for: policy making, standard setting, overall coordination, strategic planning, monitoring, and providing a support structure for reconstruction from Federal to District level.

#### **(b) Provincial/State Steering Committees:**

The steering committees will act as the provincial/state focal point for all ERRA activities including on ground implementation of the Urban Development strategy, and approval of annual provincial / state urban 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 approved ERRA Strategies.

#### **(c) Provincial/State Earthquake Reconstruction and Rehabilitation Agency:**

The Provincial Earthquake Reconstruction and Rehabilitation Agency (**PERRA**) in the NWFP and the State Earthquake Reconstruction and Rehabilitation Agency (**SERRA**) in the AJ&K work as a

secretariat for the respective Steering Committee. These agencies are ERRA's counterpart offices at the provincial/State level and are responsible for: supervising, managing and coordinating all provincial/state reconstruction activities. PERRA/SERRA will coordinate and supervise district annual work plans for the reconstruction process. They will provide backstopping to the District Reconstruction Units. The PERRA/SERRA will prepare quarterly and annual progress reports on all sectors of ERRA.

**(d) District Reconstruction Advisory Committee (DRAC):**

The District Reconstruction Advisory Committee will approve annual ERRA-funded reconstruction plan in the district, including reconstruction plans prepared by the District Reconstruction Unit, and forward it to PERRA/SERRA. It will ensure full cooperation and support to the District Reconstruction Unit from all concerned departments of the Provincial/State Government. The Committee will also conduct quarterly and annual performance reviews of the District Reconstruction Unit.

**(e) District Reconstruction Unit (DRU):**

Eight DRUs, one in each of the affected districts except Neelum in AJK, which is managed by DRU Muzaffarabad, are established within the Implementation Framework. The District Reconstruction Unit will act as the secretariat for the District Reconstruction Advisory Committee. It will be the lead agency for the actual on-ground implementation of the entire reconstruction and rehabilitation process including, (a) Needs identification (b) Annual Planning (c) Coordination (d) Financial Management and (e) Monitoring of all reconstruction activities assigned to the districts.

## **2.3 ERRA PROGRAMMING ARRANGEMENT**

For purposes of planning, management, and administration ERRA has organized its program effort into sectors, which are important substantive areas. Housing sector is further divided into a rural and an urban program.

ERRA's sectors are: housing, health, education, livelihoods, transportation, environment, power generation, social protection, water supply and sanitation, industries and tourism, communication and Governance. Each of these sectors is the subject of its respective strategy document.

## **3. ERRA URBAN PROGRAM**



ERRA's urban program covers four urban cities, namely; Balakot in the NWFP; Muzaffarabad, Bagh and Rawalakot in the AJK, including all systems, resources, and activities related thereto within their municipal limits. All other population areas, regardless of size or name, are considered rural areas and their rebuilding comes under ERRA's rural program.



Areas around cities, sometimes called peri-urban areas, are rural areas for the purpose of ERRA's reconstruction and rehabilitation program unless an area is specifically defined and designated as a part of the urban program.

### 3.1 DEFINITIONS

The following words and phrases when used in the Urban Development Strategy shall have the meaning respectively ascribed to them in this section, unless the context clearly requires otherwise.

- (a) **“Affected Person (AP)”** – includes:-
  - (1) Any person adversely affected by the Earthquake of October 8, 2005.
  - (2) Any person or household adversely affected by acquisition of assets or change in use of land due to implementation of the Urban Development Strategy.
- (b) **“Building Code”** means the document which prescribes structural requirements, health and safety requirements, and material specification applicable to physical structures built within the jurisdiction.
- (c) **“Compensation”** may include cash payment, and deferred payment, entitlement to special treatment by Government and Semi-Government Departments, grant of alternative land, grant of business, trade, and commercial facilities.
- (d) **“Entitlement”** means the sum total of compensation and other assistance assessed according to the status of each individual within ERRA's Urban Program cities. The entitlement should be in accordance with the policies laid down by ERRA.
- (e) **“ERRA Sector”** means any of those sectors listed in Section 2.3 of this Urban Development Strategy.
- (f) **“Hazard Map”** is a physical map of a defined area that designates the extent of potential hazards (earthquake, flooding, and landslides) and the level of threat to be protected against.
- (g) **“Household”** means people residing under one roof, using the same hearth and operating as a single economic unit.
- (h) **“Involuntary Resettlement”** means any resettlement which does not involve the willingness of the persons being adversely affected, but are forced through an instrument of law.
- (i) **“Land Acquisition”** means the process whereby a person is compelled by a public agency to alienate all or part of the land a person owns or possesses, to the ownership and possession of that agency, for public purpose in return for a compensation.

- (j) **“Rehabilitation”** means assistance provided to the earthquake affected people due to loss of productive assets, incomes, employment or sources of living to supplement the payment of compensation for acquired assets, in order to achieve restoration of living standards and quality of life.
- (k) **“Relocation”** includes moving of people, monuments, educational institutions, playgrounds, pastures, a village ‘shamlat’, healthcare facilities, etc and rebuilding commensurate housing, assets, productive land and public infrastructure etc in another location.
- (l) **“Resettlement”** means all measures taken to mitigate any adverse impacts resulting due to execution of relocation, on the livelihood of the affected persons, their property, and includes compensation, relocation and rehabilitation.
- (m) **“Resettlement Effect”** is the loss of physical and non-physical assets including homes, communities, productive land, income-earning assets and sources, resources, social structures, network / ties, cultural identity, and mutual help mechanisms.
- (n) **“Social Preparation”** is a process of consultation with the affected persons undertaken before the key resettlement decisions are made, to build their capacity to deal with the resettlement affects.
- (o) **“Squatters”** are persons who occupy / possess an asset without legal title.
- (p) **“Stakeholders”** include the affected persons and communities, proponents, private and public businesses, Government of AJK, Government of NWFP, and Community Based Organizations.
- (q) **“Sub-plan”** means any plan which is made a part of the town plan. The town plan is composed of sub-plans.
- (r) **“Urban”** means city areas within the Municipal limits of the ERRA Urban Program Cities.
- (s) **“Urban Development”** means any and all activities, singularly or in combination, intended to improve the physical and social aspect of the city environment.
- (t) **“Urban Plan / Master Plan / Town Plan”** is the guideline for future development of an urban area. It is the basic rebuilding strategy for how the city should be rebuilt. The town plan arranges the elements of a city (residential, business, industry, transport, environment, economic revival) and defines their functionality and quality (See section 5.0 for further elaboration). With special reference to earthquake affected cities it will emphasize on settlement of the affected population. For this strategy paper the preferred term is “Town Plan” and the other terms if used are used interchangeably with town plan.

- (u) **“Urban Program City”** means any one of the cities of Balakot, Muzaffarabad, Bagh and Rawalakot, and including all systems, resources, and activities related thereto within their municipal limits.
- (v) **“Zoning and Zoning code”**; Zoning is the instrumental tool for implementation of the Town Plan strategies, cities are divided into different zones. Each zone is meant for specific land use, for example residential, commercial, industrial, and agricultural, etc. Zoning is the legislative method of controlling land, regulations and policies which represent these controls is the zoning code. Zoning codes are an instrument for providing greater physical order in cities. Zoning codes may address: use, location and construction of building types; architectural and design controls; health and life safety matters; social and economic functions.
- (w) **“Zoning Map”** means the map of the city that shows the various zones established by the town plan.

### 3.2 NATURE OF URBAN DEVELOPMENT AND ITS RELATION TO ERRA SECTORS

Urban rebuilding programs are distinctly different from rural ones:

- (a) In rural situation residents are more independent in handling their needs. Most of their immediate needs are under their own control. In urban areas residents are more dependent, or interdependent on others for the provision of basic services. Therefore, most activities in which an urban dweller may engage require phasing with other activities and the involvement of other persons in order to complete tasks.
- (b) In urban areas zoning laws, building codes, public health and safety requirements impact urban activities and require planning and coordination to a much higher degree than is found in rural areas.
- (c) Time frames for completing tasks are usually longer, costs are usually higher, and involvements are usually more complex for activities in urban environments as compared to rural areas.
- (d) There is a larger number and greater diversity of actors involved in addressing urban issues than similar situations in rural areas, requiring greater levels of planning, coordination, and standards of operation.
- (e) Land and property issues are usually more complex and contentious in urban environments than in rural ones and land use options may be more limited.

Urban development, as a program effort is different from other program subjects and the other ERRA sectors. All the sectors identified in the ERRA structure (other than urban development itself) are necessarily involved (in varying degrees) in urban development. *In this regard urban development is an orchestration of sectoral activities.* This implies that the Urban

Development Sector encompasses nearly all sectors in its fold in relation to urban areas. Urban development is in reality a “sector of sectors.”

### 3.3 URBAN DEVELOPMENT STRATEGY

The Urban Development strategy is the basic overarching plan for reconstruction and rehabilitation of the Urban Program Cities and includes the individual town plans which are the blueprints for the actual rebuilding of the Urban Program Cities. The urban development strategy consists of a series of other associated sub-strategies.

- (a) **Urban Development Strategy** is the overarching strategy statement for all activities comprising reconstruction, rehabilitation, and development under the urban program. All other sub-strategies relating to urban activities are component pieces of the urban development strategy.
- (b) **Town Planning Strategy** is the strategy statement for the development of the town plans as defined Section 3.1(t) of this strategy.
- (c) **Urban Housing Strategy** is the strategy statement for the urban housing component of the urban development strategy.
- (d) **Master Planning Documents** are the Master Planning Reports prepared for each of the Urban Program cities by the respective consultant. These reports will lay down the required measures and projects for the rebuilding of the city’s infrastructure, which includes roads, water, drainage, sewers, power, waste and public safety (police, fire, emergency services).
- (e) Relocation, Compensation, and Land matters, is the component of the Urban Development Strategy that lays down the principles for relocation, land compensation, and resettlement of the affected people.
- (f) Medium Term Housing Component, lays down the policy framework for provision of transitional shelters in the urban areas prior to the long term redevelopment of the Urban Program Cities.

## 4. STRATEGY FOR URBAN RE-DEVELOPMENT



### 4.1 STRATEGIC AIM

The aim of the Urban Development strategy is to provide a comprehensive and holistic approach for the reconstruction and rehabilitation of the urban areas affected by the October 8, 2005 earthquake, to ensure a higher level of quality, functionality, and enhanced social services delivery that existed before the earthquake.

## **4.2 THE SHARED VISION**

The catastrophe that struck Pakistan on October 8<sup>th</sup>, that presents a unique opportunity to improve design, functionality and quality of life within cities those will be reconstructed. What a city should look like after its reconstruction is termed as the “**shared vision.**” Defining the city’s shared vision is probably the single most important activity in its rebuilding, because the shared vision is the aim of the rebuilding endeavor. The vision of the city is not a static picture but rather, it is a policy statement to show how the city will recover from the disaster and what functions and roles the city will establish in the future. The process by which the shared vision is evolved is as critical as the shared vision itself. Without a shared vision there is no Town Plan nor can Town Planning start in earnest. The overarching theme and overarching principles guide the shared vision of a city.

## **4.3 OVERARCHING THEME – BUILD BACK BETTER PLANNED CITIES**

The dominant theme of the urban development program is: to *Build Back Better planned cities*. The objectives of the program are to:

- (a) Rebuild to an enhanced level of functionality than existed before the earthquake.
- (b) Ensure provision of improved social service delivery and cost effective utilities.
- (c) Rebuild not just the physical infrastructure, but also the social infrastructure of the city. Moreover, rebuilding of infrastructure resistant to future disasters.
- (d) Improve the quality of life of the residents, by complete master planning of earthquake affected urban area.
- (e) Comprehensive and integrated development of urban areas, to convert these centers into engines of economic growth.
- (f) Sustainable development through creation of livelihood opportunities, Social inclusion and Environmental conservation.

## **4.4 OVERARCHING PRINCIPLES**

In order to help realize its mission, ERRA has adopted the following basic principles that govern the planning, implementation, and operations of its rebuilding effort:

- (a) Consultation with stakeholders during planning, strategy formulation, and implementation at all levels.
- (b) Institutional framework for decision-making at appropriate tier of government to be ensured.
- (c) All rebuilding to be citizen (owner) driven and ERRA to provide assistance and economic environment for individual success.
- (d) Local uniqueness and local desires to be respected over monolithic implementation.
- (e) Transparency and accountability of decision making and implementation to be promoted.
- (f) Urban planning to incorporate a 10-30 year vision.

## **4.5 URBAN REBUILDING STAGES**

The table below lists the key stages in the urban rebuilding process. These stages are not necessarily sequential activities. These stages may have interdependent priorities, will often have

to be phased with one another, and may have significant overlap. For purposes of ERRA's activities each of these stages should have its own accomplishment plan.

<b>NO.</b>	<b>STAGE</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
1	Rubble removal	Clear off all debris including debris created by demolition. This action sets the starting site for rebuilding.	Technically not part of rebuilding, it is a prerequisite to initiate rebuilding.
2	Creation of a hazard map	A mapping of the land area of the city that accurately delineates boundaries and quantifies the magnitude of hazard which the city is likely to face all points within the city.	The hazard map is the technical basis for creating the zoning map and zoning code. The hazard map does not tell where one can rebuild. It only tells the conditions to rebuilding.
3	Conduct a building damage assessment survey	A quantified definition of all physical structures in the city as to their soundness and degree of damage.	This survey constitutes the initial base-line data and provides the basis for dealing with transitional shelters and other temporary building needs.
4	Adoption of a zoning map and zoning code	This is the basic land use document. It is the public policy decision of what can be built where and to what standard.	This document has political dimensions to it. It must be determined by consensus, based on the best technical data available.
5	Adoption of a building code	This code tells the standards to which buildings must be built under various conditions.	This code is driven in great part by the zoning code because the zoning code is based on the level of hazard to be protected against.
6	Determine new land areas needed to contain the city	In some cities additional land will be needed in order to rebuild a city sufficient to accommodate the resulting population needs. This new land needs to be identified before the planning function starts.	This determination must be made before the town plan can be drawn.
7	Develop a final damage definition (damaged areas) and site status (non damaged areas) of the city	This definition sets the base line and strategically defines the starting point of the rebuilding process.	This definition is a collective process.
8	Determine the shared vision of what the rebuilt city should look like in future.	A description of what the city will look, feel and function after it is rebuilt.	A process for developing a shared vision is a prerequisite for development of a successful town plan.
9	Create the basic land use plan for the rebuilt city	This plan defines the organization and layout of the rebuilt city.	
10	Create the component attributes (sector definitions) for the rebuilt city	This stage is where the design, specifications, and content of each of the sub-plan subjects are fitted into the total Town Plan. This is where this component pieces are matched and brought together as a unified whole.	The Sub-plans need to be considered as a whole and properly structured into the town plan.
11	Integrate into the physical redevelopment infrastructure of the town plan the social infrastructure attributes.	Physical and Social Infrastructure cannot be considered as mutually exclusive of one another. The Physical and Social Infrastructure have to be synchronized with one another.	Close coordination between the Physical Infrastructure Sector and the Social Infrastructure Sector within ERRA.
12	Create the final town plan	This plan defines the structure, design, character and attributes of the city and	The plan should have a 10-30 year vision, divided into annual plans.

		the goals, policies and procedures for getting there.	
13	Create the town plan implementation design and address the time frames, costs, budget availability, resource needs, annual plan specifications and other details necessary for a staged and effective implementation of the Town Plan	This is a detailed implementation strategy for turning the town plan into reality. This stage defines the administrative management for the Town Plan.	The main effort here is deciding the annual plans, the financing patterns and trading off expectations for available resources.
14	Create the local means to implement the Town Plan	The respective municipal authority lacks the capacity and resources to effectively implement the town plan in its true spirit. The capacity of these authorities has to be enhanced.	One of the initiatives that will be used is to facilitate implementation of the town plan by placing a Management Unit within each Municipal authority.
15	Acquire requisite land interests	As deemed necessary by the town plan, additional land will have to be acquired by the respective Provincial / State Government.	One cannot underestimate the problems that will occur regarding land issues and there may have to be new procedures to deal with land issues.
16.	Provide Medium Term Housing to affected Population	Prefabricated houses will be provided both in AJK and NWFP to the affected population.	EVPs and landless people will also be eligible to apply.
17	Implement the town plan	Implementation is the process of making the Town Plan a reality. Implementation is the actual work effort of rebuilding the city. Implementation must be done in stages and through annual work plans; will take years to fully accomplish; will involve revisions of the town plan; and, will involve tremendous coordination of resources.	All stages before this point are preparation for the rebuilding encompassed in the implementation.
18	Conduct monitoring, evaluation and readjustment activities to keep the town plan on track.	This is the oversight process that provides the information and understanding necessary for management to keep the rebuilding on track and accomplishing the community's intent.	This process is important for keeping control, accountability and transparency for the whole city in its rebuilding effort.

## B. THE TOWN PLAN

### 5. THE PLANNING STRUCTURE FOR URBAN DEVELOPMENT



#### 5.1 TOWN PLANS – THE BASIC REBUILDING TOOL

Each urban program city will have a town plan which will be the city's basic rebuilding strategy. The city's town plan covers two points: it is a blueprint for rebuilding the city, and a chart for the city's future development. The city's town plan should be at least a 10 year plan, divided into annual work plans, with three years specifically covered. The town plan is a multi-sectoral, inter-related plan. Everything involved in rebuilding the city needs to be addressed in the city's town plan.

#### 5.2 INTERACTION WITH RESPECTIVE GOVERNMENTS

An issue as complicated as the rebuilding of cities affected by the October 8<sup>th</sup> earthquake, requires a functional working relationship among the various governments that are involved in the reconstruction and rehabilitation process. Each tier of government that is involved in urban development of a city needs to have adequate planning and project management capability in order to perform its responsibilities, control its development, and effectively interact with the governmental units above and below it; its citizens; and the international community.

Therefore, the Provincial government of NWFP and the State government of AJK each needs to have their respective planning / management units. These planning units should be designed as counterparts to ERRA's planning unit. Similarly, each Urban Program City needs its own planning unit, to effectively implement its town planning, which should be designed as a counterpart to their respective provincial or state planning units and functionally linked to ERRA's broader Urban Development Strategy.

These various planning units (and project management systems that will be generated) are related in that: as one goes from the top-down the government structure, each government unit plan is a more detailed break-down of the work expressed in the plan of the government unit above. The end of this descending process is the actual, specific project plan being undertaken. As one goes from the bottom-up the governmental structure, each government unit plan is an aggregation of higher level management tasks and objectives of the government units below. Thus, going down the government order discloses the evolving specifications of the work activities ending with the individual project plans and going up the government order discloses the broader social purpose of our activities ending with the shared vision. Each level of planning must continuously feed information to the others to keep the whole process coordinated and moving forward.

#### 5.3 MANAGING THE PLANNING PROCESS

In order to engage a city in the planning, implementation and control of its rebuilding process, the city must have the management capacity necessary to do the job. The city needs to



establish (or enhance) its capacity to plan, implement, operate, manage, evaluate and re-plan its rebuilding in accordance with its needs, its vision, and the Urban Development Strategy established by ERRA. Key capabilities include:

**(a) Management Infrastructure.** Create a ‘Management Unit’ within the city’s respective Development Authority. For accountability and control, the best approach is to establish a separate, but temporary unit as a management focus for the development and implementation of the city’s town plan. Resource may be assigned to the new unit as required.

**(b) Information Support Systems.** The rebuilding operation will depend heavily on information, so a good data capturing, categorization, indexing, storage and retrieval system, tailored to meet the demands of the rebuilding effort needs to be established. This system must be designed around the needs of the rebuilding effort. The city should not assume that its existing management information support will be adequate for the information demands of the rebuilding effort.

**(c) Public Information Program.** Keeping the various stakeholders informed of the city’s rebuilding effort is an important and critical function. The rebuilding process must be as transparent as possible to maintain public support, provide broad participation, keep the process moving smoothly, and assure accountability. There must be a timely public awareness and information program in support of the rebuilding effort. These public information capabilities need to be in place as soon as possible and will be needed at the start of the effort to define the shared vision.

## 6. THE CONTENTS OF A TOWN PLAN



### 6.1 THE NATURE OF THE TOWN PLAN

A town plan in the context of affected cities must address certain factors such as (1) the orderly arrangement of the parts of the city (residential, business, industrial) so that each part will perform with minimum cost and conflict; (2) an efficient system of circulation (modes of transportation) within and outside the city; (3) the development of each part of the city to optimum standards, in terms of lot size, sunlight, environmental quality, green space in residential areas, and parking and building spaces in business areas; (4) the provision of safe, sanitary, and adequate housing in a variety of dwelling types to meet the needs of all families; (5) the provision of recreation, schools, and other community and civic services of adequate size, location, and quality; and (6) the provision of adequate and economical water supply, sewerage, utilities, and public services.

### 6.2 AN INTEGRATED ARRAY OF SUB-PLANS

The town plan takes the city’s damage specification (the point from where we are starting) and the city’s shared vision (the point to where we are going) and connects these two points with a program to get there. A town plan is not an isolated activity. It is the process of taking an identified collection of individual needs, putting those needs into a particular context, and ordering those

needs so as to attain an agreed purpose. Therefore, a town plan is a collection of specific sub-plans held together by the plan's "shared vision" of what the city should look like. What sub-plans are to be included in any particular town plan depends on the purpose, nature, and starting conditions of the rebuilding effort.

### 6.3 PREREQUISITES TO DEVELOP A TOWN PLAN

If we consider the development of a town plan as a strategic stage in the rebuilding activity (see the table in chapter 4.4) then the products of each of the stages preceding the "creation of the town plan" is that table need to be available for the town planning activity to proceed. If these products are not available, due to need modification, then the creation of those missing products must be undertaken as part of the development of the town plan or else, the town plan development process must be postponed. The essential prerequisites creating the town plan are:

- The Shared Vision of What the City Should Be.
- The Hazard Map.
- The City Damage Specification.
- The City Zoning Map.
- The City Building Code.
- The readjustment of Physical Boundaries of the City.

### 6.4 SUB-PLAN COVERAGE

The town plan is the working blueprint of what needs to be done to rebuild the city. To some degree each town plan will have to cover all the activities in which cities participate.<sup>1</sup> Some of these major activity areas are covered in this section. Each town plan will have to determine the number, coverage and organization of its sub-plans to fit its rebuilding needs.

The town plan's sub-plans and ERRAs "sectors" may not be the same groupings. They may be related but they are different. The activities that comprise ERRAs sectors are broader than the activities that comprise any sector related sub-plan of a city town plan. For example "education" as a sector covers not only buildings but also teachers, curricula, and other quality of education matters. Within the town plan only the physical facility aspects of education are covered. *Areas or subjects which are "sectors" within ERRA's organization are noted in italic in this section.*

There are two aspects to any activity area: the "hard goods" and the "soft goods." "Hard goods" are the physical facilities or physical assets that are needed for the activity to function. These physical facilities are buildings, utilities, land, equipment, etc. Except for equipment, all physical facilities must be in the urban plan, even if the activity is the subject of a separate responsibility. Thus the physical necessity, location, and structure of a school in an urban area are urban planning issues, and not 'Educational Sector' issues.

---

<sup>1</sup> Activities that affect a city and the town plan can be grouped in any number of ways. The planners need to make the groupings based on such factors as: social and political importance, complexity, economic impact, cost, planning impact, management requirements, and other factors which the planners consider important.

“Soft goods” are the non-physical assets of an activity. For example, in the case of a school, the soft goods are the teachers, curriculum, books, equipment, etc. The soft goods of any activity are not generally part of the town plan. They are part of the educational plan developed by the relevant Education Department. In the case of ERRA’s rebuilding effort, there are number of ‘soft goods’ that need to be addressed, particularly with regard to “Building Back Better” such as: improved government procedures, disability issues, worker safety, civil and criminal process, to name a few. These ‘soft good’ matters need to be reflected in the rebuilding effort. Any impact that the needs of these ‘soft good’ matters have on physical facilities or assets must be covered in the town plan.

There can be as many sub-plans as necessary to adequately divide the complete rebuilding effort into meaningful and manageable areas of work. Each sub-plan, in addition to containing the materials germane to the subject of that sub-plan, will also contain necessary matters as: reference to all crosscutting subjects, all construction documents, designs, work schedules, timetables, material needs and delivery requirements, worker needs, acquisition of services and materials, organization, management and priorities, phasing with the other program activities, reporting and training requirements, building code compliance issues, quality assurance and evaluation, and the policies and procedures for interfacing with necessary governmental agencies and officials.

## **6.5 INTER-RELATIONSHIP OF SUB-PLANS**

No matter how the groups of activities are organized, there will always be subjects that fall within more than one of the groupings. No arrangement exists that can eliminate this problem. Those activities that affect more than one grouping are crosscutting activities.

Within the ERRA program structure two of the major crosscutting activities (that are also sectors) are “livelihoods” and “environment.” For example housing, roads, health facilities, education facilities, water and sanitation, and energy, all have environmental issues associated with them. Likewise these sectors also have livelihoods issues. So the question that emerges is that should environmental issues associated with housing be covered in the housing sub-plan or the environmental sub-plan. The answer is that the subject should be covered in detail in one sub-plan and referenced in the other(s). If the subject has its own grouping, like environment, then in our example the housing environmental issues should be in the environmental sub-plan and referenced in the housing sub-plan. In this way the whole rebuilding effort will stay coordinated.

The planner, when creating a particular sub-plan, must consider how each of the other sub-plans affects a particular sub-plan. These affects must be appropriately cross-referenced in the respective sub-plans.

**(a) Housing.** Housing is a lead sub-plan because it drives other activities. First, housing is critically important because people need a place to live – housing is a basic necessity. Without housing there will be no people and without people there will be no city. Second, housing acts as a “gravity center”; the location of roads, water, schools, health facilities, consumer businesses, etc., are influenced by the location of residential areas. Third, from a land use point of view, housing is the least offensive use, so “residential land” needs to be selected first and then land for other uses (business, government, commerce, industry, etc.) can be chosen.

Many of the other sub-plans are crosscutting to the housing sub-plan because they either impact on or are impacted by the housing sub-plan, such as solid waste, religious institutions, in addition to subjects listed in the preceding paragraph. One area that needs special focus is that of transitional urban shelter. Urban housing rebuilding requires much longer time period to accomplish than rural housing. For most cities, particularly Muzaffarabad and Balakot, the housing rebuilding time could be two to three years, or longer. Providing transitional shelter for urban residents for this extended period of time will be a critical issue.

The basic eligibility criteria for appropriate areas for housing construction are: (a) safe land (b) availability; and (c) the proper zoning area.

**(b) Educational Facilities.** This sub-plan identifies all educational physical facility work to be undertaken in the city. This sub-plan covers all schools (primary, secondary and high schools; colleges, universities and trade schools; special schools) whether public or private; and all auxiliary educational support facilities and campuses. This plan includes: site selection, site preparation, utility services, all activities related to actual construction, and hand over activities and requirements.

**(c) Health Facilities.** This sub-plan identifies all health physical facility work to be undertaken in the city. This sub-plan covers hospitals, clinics, trauma centers, health units, hospital complexes, and all auxiliary support facilities. This plan includes: site selection, site preparation, utility services, all activities related to actual construction, and hand over activities and requirements.

**(d) Government Facilities.** This sub-plan identifies all government buildings including civil and military, office buildings, administrative centers, courts, and supporting facilities such as vehicle centers, warehouses, etc. This plan includes: site selection, site preparation, utility services, all activities related to actual construction, and hand over activities and requirements.

**(e) Business and Industry Facilities.** This sub-plan identifies: all industrial and manufacturing facilities; industrial physical facility work to be undertaken in the city. This plan includes: site selection, site preparation, utility services, all activities related to actual construction, and handing over of activities and requirements.

**(f) Miscellaneous Facilities.** This sub-plan covers all buildings, not elsewhere covered. Technically all physical facilities could be grouped under one heading, but because ERRA has organized its activities in this way, it is appropriate to organize the physical facilities being rebuilt in a manner that parallels ERRA's sector categorization as close as possible. For this reason this miscellaneous category is necessary. Facilities covered in this category would include: libraries, recreational facilities, stadiums, emergency and disaster response facilities, and evacuation needs etc.

**(e) Roads and Bridges.** Roads and bridges are taken out of "transportation" because the establishment of the road network is one of the critical and essential elements of a town plan. The basics of the road network precede the determination of some of the redevelopment parameters. This sub-plan must be closely tied to the transportation sub-plan and could be incorporated into that plan if desirable. This sub-plan also deals with the relationship of the road networks to the

other sector needs that require a supporting road network (emergency services, industry, business and commerce, etc.). The sub-plan includes: all streets, roads, sidewalks, bicycle systems, pedestrian systems, alleys and walkways, physical traffic control, etc.

(f) **Transportation.** This is one of the critical sub-plans and has a major affects on the design of the city. This sub-plan includes: transportation hub, mass transit, airports, parking issues, inter-modal transportation systems, regional transportation matters, etc.

(g) **Water and Sanitation.** This sub-plan includes water sources, storage, purification, treatment, transition, distribution, and waste water treatment, etc.

(h) **Power Generation.** This sub-plan deals with all “energy” matters and includes: electrical generation, transmission and distribution, natural gas supply and distribution, coal and oil for power generation, and energy conservation.

(i) **Industry and Tourism.** This sub-plan is closely related to the economic development sub-plan and would normally be covered in that sub-plan except for the fact that this is also an ERRA sector. This sub-plan includes: industrial parks, tourist facilities, physical amenities for tourist programs, etc.

(j) **Environment.** This sub-plan includes all traditional environmental matters (solid waste, hazard and toxic waste and human waste disposal, erosion control, pollution, drainage, etc.) plus all environmental issues related to the rebuilding effort, and all matters regarding the improvement of the environment.

(k) **Livelihoods.** This sub-plan includes all special programs directed toward generating livelihood as a transitional program because of the economic dislocation caused by the earthquake. ‘Livelihood’ as a separate program ends when job creation programs are up and running under economic development programs.

(l) **Economic Development.** This sub-plan covers economic programs that are not covered elsewhere in the town plan and include: employment, business development, commerce improvement, job training, and physical aspects of government incentive programs, etc.

(m) **Quality of Life.** This sub-plan covers those physical improvements that support an improved quality of life and include: arts and humanities, religious institutions, volunteer and charitable institutions, cemeteries, and museums, etc.

(n) **Land Matters.** Land matters will be of considerable importance in the town planning effort and for this reason they are singled out as a separate sub-plan. Land use of such a high scale program of ERRA, misuse and reuse, as well as ownership and tenure, are always issues in the rebuilding effort. Independent of the foregoing systemic issues, to the related issues are:-

- (1) Environmental risk (earthquakes, floods, landslides) should be one of the primary criteria in determining land use policy.

- (2) The town plan should encourage economic development by planning the use of land space to promote the development of contributing business activities such as commerce, trade, industry, small business and professional activities and by creating usable space for new and expanding businesses within an integrated town design.
- (3) Quality of life land uses such as open spaces, green spaces and recreational areas to create people-friendly urban environments should be programmed into the rebuilding land use plan.
- (4) The acquisition of land for required public improvements, the trading or redistribution of land for settlement of land damage claims, and the addition of new land areas to the city to meet the new population and use requirements.
- (5) Relocation and compensation of the dislocated / relocated urban populations.

(o) **Medium Term Rehabilitation Concerns.** During any rebuilding activity there is a need for transitional efforts. While a school is being rebuilt, a temporary school facility will have to be used. The medium term reconstruction need applies to hospitals, government buildings and housing. The town plan must identify these needs and indicate how they are to be addressed. Because of the scope of the transitional needs in the reconstruction and rehabilitation effort, ERRA has established medium term reconstruction needs as a separate sector to plan and coordinate these needs. However, any transitional needs that impact the urban area need to be prioritized and their construction coordinated in the town plan.

## 7. MAKING THE TOWN PLAN WORK



### 7.1 ERRA OUTSOURCED PLANNING ASSISTANCE TO RESPECTIVE GOVERNMENTS

ERRA has outsourced the Town Planning of each Urban Program City to develop its town plan. The following table indicates these assignments.

NO.	CITY	PLANNING CONSULTANT
1	Muzaffarabad	The Japan International Cooperation Agency
2	Bagh	The University of Engineering and Technology, Lahore
3	Rawalakot	The National Engineering Services Pakistan (Pvt.) Limited
4	Balakot	The National Engineering Services Pakistan (Pvt.) Limited

### 7.2 TOWARDS RECOVERY OF THE URBAN PROGRAM CITIES

For the recovery of the urban program cities, the ERRA Urban Development Strategy incorporates the following components:

- (a) ***Self-help, Mutual-help, and Government Assistance***  
Self-help, Mutual-Help, and Government Assistance are the basic concepts that will be applied for the recovery of the cities. It is especially important to involve the affected population in the recovery process.
- (b) ***Redevelop an Urban Fabric that is Resistant to natural Disasters***  
Redevelopment should be conscious of the need that what happened to the urban program cities should not be repeated in the future. The ultimate aim is to develop an urban fabric that is resistant to natural disasters.
- (c) ***3-Phased Recovery & Reconstruction Process***  
The recovery process is planned to include three phases: rehabilitation period, early reconstruction period, and full-scale reconstruction period.  
***Phase I (rehabilitation period): Involves formation of temporary planned urban areas;***  
***Phase II (early reconstruction period): Involves transforming temporary planned urban areas to permanent urban areas;***  
***Phase III (full-scale reconstruction period): Completing the permanent urban area***

### 7.3 SETTING PRIORITIES

In establishing ERRA’s Urban Development Strategy there are two matters that need consideration: priorities and phasing. Priorities deal with importance – which activities are most important. Everything cannot be done at once, therefore, prioritizing is necessary. Priorities are basically a management value judgment -- which activities are the most important -- driven by the program mission, goals and objectives.

In developing the Urban Development Strategy and setting priorities one needs to look at three spheres of involvement, because these spheres of activities must be developed in unison:

- (a) **The housing sector:** This sector (with its linked support activities, water, sewer, gas, and electricity etc.) is the single most important need for the individual. Without this sector residents cannot return, effectively engage in livelihoods, start putting their lives back in order, or be productive members of the urban rebuilding.
- (b) **The government sector:** This sector provides the organization and basic services necessary for functioning of urban area and therefore, this sector must be rebuilt in parallel with the development of the urban areas to maintain the provision of services and support the rebuilding activities.
- (c) **The business sector:** This sector provides the economic engine for the urban area and its surroundings. It is the key sector for livelihoods, trade and commerce.

### 7.4 DEALING WITH PHASING

Phasing deals with the order, or scheduling, of tasks to optimize performance. There is an element of prioritization in phasing, because we often have to bring into play a given event so that

another event will be possible. Phasing is setting the stage for events to unfold as planned. Making sure that concrete arrives at the time the masons are ready to work is a matter of phasing. In order to deal with phasing one needs an effective interactive charting capability and a good understanding of the behavior of the activities involved.

## **7.5 TRADE-OFF BETWEEN TIME AND COST**

Time and cost are always linked. If time is of no concern then all programs could be implemented at the lowest cost possible. Events that require activity in the first place need to be completed within stipulated time (or needed). If cost is of no concern then all programs can be accelerated to be completed in the least time, however, such is not the case. The truth is that for any project the trade-off between time and cost lies somewhere in between the two extremes and involves value judgment, compromise and program balance. One way to contend with the time-cost issue is to divide the project into parts, leaving some parts of a larger project for the next phase. In this way eventually the full benefit is obtained while still achieving acceptable short term benefits.

In the rebuilding effort one of the key concerns is trying to balance the long-term urban development goals with the victims' short-term needs, in particular the rebuilding of urban housing.

## **7.6 IMPLEMENTING THE TOWN PLAN**

Once the town plan is finished it must be implemented. Generally the developers of the town plan do not directly implement the plan. Under ERRA's strategy each Urban Program City is assigned a planning consultant to work with the city and ERRA to create the town plan for that city. Once the town plan is completed it is presented to the city and it is the responsibility of the city authorities, in collaboration of the respective Provincial / State Government to implement the plan since it is the city's basic responsibility to rebuild the city. However, just as assistance is required to develop the town plan, assistance will also be needed to effectively implement it.

The implementation of the town plan is basically the process of prioritizing, phasing, coordinating, budgeting, scheduling, monitoring and making adjustments. Issues that must be addressed in this regard are:

- (1) Determine priorities within and among the sub-plans.
- (2) Determine the phasing or sequencing of activities within and among the sub-plans.
- (3) Address costs, timeframes, and budget availability.
- (4) Create a master schedule of activities with a progressive cost table so that the program can be appropriately expanded or contracted to meet implementation contingencies and budget fluctuations.
- (5) Assign the various activities to be undertaken by qualified managers.



- (6) Establish a timely monitoring and reporting system to keep the city officials and the public informed of progress and activities.

There are a number of management systems and charting procedures available to help a city control this process. The important requirement is that the implementation method should be effective to manage activities, timeframes, costs and interrelationships. It must also be a method that all participants can use and once adopted it must be used consistently. The most sophisticated (and complicated) charting process is a method known as the “critical path method (CPM).

## 7.7 MONITORING THE PROGRESS OF THE TOWN PLAN

Keeping the town plan development process on track is an important oversight activity. The table below lists the key stages in the development of a town plan.

NO.	STAGE	COMMENTS
1.	Consultant development team complete and in place, and facilities established	Each city will need a different set of skill sets on the town planning team depending on the major issues facing the city’s rebuilding. It is important to build the right team and assemble the right resources.
2.	1 <sup>st</sup> draft of working statistics and planning assumptions	The “correct” data is never completely available and the process can not wait until good data is available. One must start with the best “guesstimates” they have (and their underlying assumptions) and build the first draft of the plan. As new and better data comes in the plans can be adjusted. It is important that good analysis go into the planning assumption. Planning assumptions are not just wild guess numbers, but thoughtful hypothesis.
3.	1 <sup>st</sup> draft of potential land area constituting the city (old and new)	Where the city’s land mass may change (additions, deletions, modifications) these changes to the city’s territory must be accurately determined as a prerequisite to the development of the town plan and this information must be supplied to the town planning group.
4.	1 <sup>st</sup> draft of a detailed hazard map for the city completed	The hazard map may be related to stage 2 above. Land that is lost or now given restricted use will require the city to find or expand to new land areas. The hazard map should be quantified. This map is a prerequisite to the development of the town plan and is information that must be supplied to the town planning group.
5.	1 <sup>st</sup> draft of the physical damage survey results (map and specs.)	This stage defines the “starting point” of the rebuilding effort. Where ever the city is going (the town plan), this damage map (and accompanying specifications) is where the rebuilding effort starts.
6.	Report on land acquisition, title issues and other problems involving land needs	Land issues are usually complicated and take extended time to resolve, so they need to be accurately identified as soon as possible and the legal work begin quickly so as to minimize any time delay impacts on the rebuilding effort.
7.	Starting working table statistics and planning assumptions	This stage is the refinement of stage 2 above. Because of the importance of these assumptions they usually have to go through some time of vetting process where a consensus is reached and an officially agreed table is adopted.
8.	1 <sup>st</sup> draft of the plan for determining the shared	Developing the shared vision for the rebuilt city is probably the most critical undertaking of the planning process. The shared vision is the

	vision of the rebuilt city	foundation for all the work that follows. The process by which the shared vision is determined is as important as the shared vision itself. This process needs to be properly planned.
9.	1 <sup>st</sup> draft of zoning map	The zoning map is driven off the hazard map (stage 4 above) and is a prerequisite to the development of the town plan. The zoning map must be supplied to the town planning group. The establishment of the zoning map is a governmental, public policy, regulatory function.
10.	1 <sup>st</sup> draft of the potential alternatives of the shared vision (map and specs.)	The shared vision will have to be developed in stages. Usually there are a handful of possible “visions” that first emerge. This draft of alternative vision is used to create the two or three visions that will be the core of public debate and pool of ideas from which the final vision will come.
11.	1 <sup>st</sup> draft of the arterial road sub-plan	Roads are one of the first design factors that must be considered in the town planning process. The layout of arterial road drives the other aspects of the town plan.
12.	1 <sup>st</sup> draft of housing sub-plans	Locations for housing are another critical design factor and one of the drivers for most of the other aspects of the town plan.
13.	1 <sup>st</sup> draft of all other building sub-plans	This sub-plan is driven in large measure by the road and housing sub-plans and other factors that may be particular to the type of building being considered.
14.	1 <sup>st</sup> draft of the utility sub-plans	Utilities need land easement and therefore have a lot of the characteristic of roads in terms of their consideration in the town planning process. The ability to economically provide utility easements to an area will have an impact on what will or can be developed in that area.
15	1 <sup>st</sup> draft of the economic development sub-plans	These would be the sub-plans that cover livelihoods, small business assistance and development, tourism, commerce and all other sub-plans dealing with the economic development of the city.
16	1 <sup>st</sup> draft of all other sub-plans	Each sub-plan comprising the town plan must be fully developed and then integrated into the final town plan design. The sub-plans are first developed essentially as individual plans and then collectively worked into an integrated design.
17	Preliminary draft of integrated town plan	This is the first unified town plan. This is the draft where all the pieces are now a part of the whole. All the sub-plans are now viewed as part of a collective whole, rather than individual pieces.
18	Final draft of town plan delivered to city officials	It is nice to have a public presentation, with pictures, of the town plan to keep the citizens informed and to energize them for the rebuilding effort. If the development process was properly done, then the citizens should be supportive of the final product and feel apart of the effort.

## 7.8 DEVELOPMENT OF SATELLITE TOWN, MUZAFFARABAD CITY

The Urgent Development Study on Rehabilitation and Reconstruction of Muzaffarabad City, conducted by the JICA Study Team (as mentioned in 7.1), has proposed development of a Satellite Town for accommodating the displaced population of the city by the year 2016. Accordingly, the Government of AJK, in consultation with ERRA has approved the development of a Satellite Town for a population of approximately 30,000, in the vicinity of Muzaffarabad Airport in the South-Eastern part of the City.

The Satellite Town, once developed, will provide accommodation to the population that will be dislocated due to the implementation of the master plan (i.e. widening of roads etc.), and due to the demarcation of Highly Hazardous Zones (i.e. areas in close proximity to the known fault

lines, and areas vulnerable to landslides etc.), and will also cater for the increase in population over the next 10 years.

The residents so dislocated will be either allotted land in the Satellite Town as compensation, or they will have the option to purchase land in the Satellite Town as per policy stated in Sections 10.1 and 10.2.

***As per policy, the dislocated residents of Muzaffarabad city will have the first claim to purchase property in the Satellite Town. Property in the Satellite Town will be available for open purchase only after all dislocated residents of Muzaffarabad city have been accommodated in the Satellite Town.***

## C. URBAN HOUSING

### 8. URBAN HOUSING



#### 8.1 OVERARCHING THEME & PRINCIPLES

*The overarching theme of the Urban Housing Reconstruction Strategy is:*

- Consultation with stakeholders during planning, strategy formulation, and implementation at all levels. Decentralize decision-making to the greatest extent possible;
- Promote transparency and accountability of decision-making and implementation / enforcement;
- Rationalized relocation of residential sectors where necessary;
- Ensure owner compensation in case of relocation / possession of private land;
- Increase homeownership opportunities; Promote decent affordable housing. Encourage pro-poor focus by providing house ownership opportunities to the poor segments of society.

*The Principles that the Urban Housing Strategy will follow are:*

- Urban Housing Reconstruction to be synchronized with Town Planning & Urban Development. Redevelopment will be phased to prioritize reconstruction;
- Urban Residential Areas to be fully functional & Integrated parts of the broader town plan;
- Reconstruction implementation to be based on new seismic sensitive building codes;
- Urban Residential Areas to ensure emergency preparedness;
- Facilitate residents, government machinery, and other organs of the community to resume normal activity and participate in the reconstruction process;
- Educate stakeholders to comprehend the cause of damage and how to reduce vulnerability to future damage through disaster resistant rebuilding;
- Develop a self-sustainable talent pool in the respective government machinery to minimize future reliance on technical assistance;
- Be comprehensive, coherent, and coordinated to avoid duplication;
- Facilitate uninterrupted supply of building material.

## 8.2 ERRA POLICY ON URBAN HOUSING RECONSTRUCTION

The overall objectives of the urban housing reconstruction policy are threefold, to ensure;

- a) that an estimated 28,000 urban houses that were either destroyed or damaged, conform to the new disaster resistant building codes approved by the respective State / Provincial Government;
- b) equitable compensation of land, or monetary compensation as the case may be, in case of relocation;
- c) minimum possible dislocation / relocation for urban residents (except Balakot town).

The principles of the urban housing reconstruction policy will be achieved through the following measures:-

- **Rebuilding to be owner-driven:** Reconstruction of urban houses to be the responsibility of the house-owner with facilitation in the form of monetary compensation, land allocation (where necessary), and financial incentives by the Government of Pakistan;
- **Ensure compliance to building codes** and designs that are earthquake resistant. Earthquake resistant elements need to be introduced in the traditional and currently used building techniques;
- **Rebuild in situ:** The preferred option would be to build in situ. The aim would be to ensure, as far as possible, that minimum population and settlement relocation takes place (excluding Balakot), while catering for a better level of functionality in the urban fabric;
- **Kutcha houses not to be allowed within the municipal limits of the city.** Owners of previously damaged or destroyed *kutcha* houses to be guided to rebuild their houses in compliance to new seismic resistant building codes;
- **Slum areas** to be converted into low-income residential areas through re-planning and financial incentives;
- Owners of **damaged or destroyed pucca houses** to get their house designs approved by the municipal authorities to ensure compliance to new seismic resistant building codes;
- A **uniform financial assistance package** for rebuilding to be disbursed to the earthquake affected urban population.

Policy Principle	Manifestation through the following corresponding strategies
<b>1. Rebuilding to be owner-driven</b>	Providing an enabling environment to house owners through:- <ul style="list-style-type: none"> <li>• Financial compensation as per government policy</li> <li>• Land compensation in case of relocation</li> <li>• Information and communications campaign regarding new land use plan</li> </ul>

	<p>and building codes</p> <ul style="list-style-type: none"> <li>• Ensuring building materials supply chain</li> <li>• Facilitating the opening of bank accounts for disbursement of compensation</li> </ul>
<b>2. Establishing building codes</b>	<p>Have in place a review and approval mechanism within the respective Development Authority for construction guidelines, structural designs, and building codes etc.</p> <ul style="list-style-type: none"> <li>• Enforce new building codes developed by the Government, consistent with internationally accepted requirements, while simultaneously sensitive to local materials and construction methods;</li> <li>• Enhance capacity of the Development Authority through ‘Management Units’;</li> <li>• Codes to cater for seismic micro-zoning.</li> </ul>
<b>3. Rebuild in Situ</b>	<p>In case of Muzaffarabad, Rawalakot, and Bagh, urban planning to be sensitive to minimum relocation of urban residential areas while simultaneously taking into account the seismic micro-zoning requirements</p>
<b>4. Construction of Houses</b>	<p><i>Kutch</i>a houses not to be allowed in urban areas.</p> <ul style="list-style-type: none"> <li>• Urban slums and squatters to be re-planned as better / integrated low-income urban dwellings that conform to land zoning and building codes;</li> <li>• In case of relocation, owners of previously <i>kutch</i>a houses to be provided equivalent area of land (or monetary compensation, as the case may be);</li> <li>• Incentive in terms of provision of land and physical infrastructure to owners of previously <i>kutch</i>a houses / slums;</li> <li>• Financial compensation for owners of previously <i>kutch</i>a houses through a tranche system laid down hereinafter.</li> </ul> <p><i>Pucca</i> houses to be constructed after approval from the respective Development Authority to ensure compliance to the new earthquake resistant building codes</p> <ul style="list-style-type: none"> <li>• Financial compensation to owners of <i>pucca</i> houses through a tranche system laid down hereinafter</li> </ul>
<b>5. Urban Residential Areas</b>	<p>Urban residential areas to be fully integrated parts of the broader town plan. Urban residential areas to:-</p> <ul style="list-style-type: none"> <li>• be provided better social and physical infrastructure;</li> <li>• be planned with a view to population projection for the next 40-50 years;</li> <li>• improve the quality of life of the residents through better planning;</li> <li>• provision of services and open spaces in conformity to internationally accepted principles.</li> </ul>

### 8.3 INSTITUTIONAL ENHANCEMENT

The implementation of urban housing reconstruction will be decentralized to the local level in the ERRA Urban Program Cities. Respective Development Authority will be provided technical assistance in the form of a ‘Management Unit’ instituted within the respective Development Authority. The ‘Management Unit’ will consist of architects, town planners, structural engineers, and draftsmen etc. The ‘Management Unit’ shall supervise and coordinate respective urban housing reconstruction activities and will report to the respective Development Authority.

Development Authorities will be responsible for implementing the new approved building designs with the assistance of ERRA and approval of the applicable tier of Government. ERRA headquarters will be responsible for the overall coordination and monitoring and will provide a support structure for urban housing reconstruction from Federal to District level.

The District Reconstruction Unit will facilitate the Development Authorities in the reconstruction activity. SERRA shall be the leading agency for all urban housing reconstruction (a) needs identifications, (b) annual planning, (c) coordination, (d) financial management and (e) monitoring for all urban housing reconstruction activities assigned to the districts.

#### **8.4 FINANCIAL ASSISTANCE**

The financial assistance package applies to both, previously *Kutcha* and *Pucca* houses and will be disbursed directly to the bank account of the owner of the house as per the Government policy. The payment of instalments will be linked to compliance with earthquake resistant standards approved by the respective Government.

The financial compensation mechanism used for rural housing reconstruction is neither applicable nor practicable for urban housing reconstruction. Rs. 175,000 is sufficient to provide a core housing unit of 400 sq. ft in the rural areas, and this amounts to a major percentage of the cost of reconstruction for the rural dweller. However, for the urban dweller, this amount constitutes a minor percentage of his total cost of reconstruction. Therefore, this amount is not the driving force behind reconstruction of urban houses.

The urban housing reconstruction program recognizes the need of a massive, collaborative effort to ensure reconstruction according to new seismic building codes and standards. While ERRA remains the chief coordinating and monitoring body of urban housing reconstruction, the implementation of seismic resistant reconstruction will be the responsibility of the respective provincial / state government. Beneficiaries are expected to use their own labour and/or hire labour.

Financial assistance funds will be disbursed in the following way:

- For ***completely destroyed pucca houses***, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. The balance of Rs. 150,000 is to be used for permanent housing. It will be paid in two instalments: Rs. 100,000 upon damage assessment conducted by the Assessment & Inspection Teams; Rs. 50,000 upon reaching the roof level after due inspection for compliance to building codes.
- For ***completely destroyed kutcha houses***, an initial payment of Rs. 25,000 has been made to cover immediate shelter needs. The balance of Rs. 150,000 is to be used for permanent housing. It will be paid in two instalments: Rs. 100,000 upon damage assessment conducted by the Assessment & Inspection Teams; Rs. 50,000 upon reaching the roof level after due inspection for compliance to building codes.
- For ***partially damaged houses***, 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 upon damage assessment conducted by the Assessment & Inspection Teams;

- Completion certificate will not be issued for any house unless reconstruction complies with the new building codes;
- Financial compensation shall be based on the principle of ‘affected houses’ and not on the principle of ‘affected households’;
- The capacity of the respective Development Authority shall be enhanced through the “Management Unit” described hereafter.
- Destroyed houses / buildings located in Highly Hazardous Zones will not be allowed reconstruction in situation and will be relocated;

Houses without structural damage will not be eligible for Government assistance. A final list of beneficiaries is to be determined by on-spot assessment and verification. A house to house assessment of damage and destruction is expected of the Assessment & Inspection Teams (AIs). Affected people will be eligible for financial assistance.

## **8.5 HOUSING DAMAGE 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 initial joint assessment by the Asian Development Bank (ADB) and the World Bank conducted in October – November 2005, 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. Ten percent of the destroyed or damaged housing is found in urban areas.<sup>2</sup> Table 1 shows the results of this initial joint assessment.

---

<sup>2</sup> Asian Development Bank/World Bank (ADB/WB), “Pakistan 2005 Earthquake: Preliminary Damage and Needs Assessment,” 15 November 2005, pp. 2-3.



**Table 1:**

<b>Summary of Destroyed and Damaged Housing Units</b>						
District	% Urban	Total Units	Destroyed	Damaged	Total Damaged	Total Damaged %
<b><i>AJK Affected Districts</i></b>						
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
<b><i>AJK Total</i></b>	<b>10</b>	<b>244,980</b>	<b>116,572</b>	<b>88,368</b>	<b>204,940</b>	<b>84</b>
<b><i>NWFP Affected Districts</i></b>						
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
Abbotabad	19	153,819	6,961	27,051	34,012	22
Batagram	0	44,585	28,712	8,657	37,369	84
<b><i>NWFP Total</i></b>	<b>11</b>	<b>542,603</b>	<b>87,007</b>	<b>108,206</b>	<b>195,213</b>	<b>36</b>
<b><i>AJK+NWFP</i></b>	<b>10</b>	<b>787,583</b>	<b>203,579</b>	<b>196,574</b>	<b>400,153</b>	<b>51</b>

However, based on a second more detailed survey conducted with the assistance of the AI Teams, the damage figures were revised. Table 2 shows the housing damage figures for urban areas.

**TABLE 2:**

<b>Revised Regional Summary of Destroyed and Damaged Urban Housing Units*</b>						
City	Pop (1998 Census)	Total Units	Damaged	Destroyed	Total Affected	Total Affected %
<b><i>AJK Affected Cities</i></b>						
Muzaffarabad	78,000	15,123	5,132	7,418	12,550	83
Rawalakot	44,203	11,076	2,390	4,854	7,244	65
Bagh	34,800	4,552	769	2,789	3,558	78
<b>Total (AJK)</b>	<b>157,003</b>	<b>30,659</b>	<b>10,045</b>	<b>11,309</b>	<b>21,354</b>	<b>70</b>
<b><i>NWFP Affected Cities</i></b>						
Balakot	37,721	7,296	39	6,926	6,965	95
<b>Total (NWFP)</b>	<b>37,721</b>	<b>7,296</b>	<b>39</b>	<b>6,926</b>	<b>6,965</b>	<b>95</b>
<b>AJK + NWFP</b>	<b>194,724</b>	<b>37,955</b>	<b>10,084</b>	<b>18,235</b>	<b>28,319</b>	<b>75</b>

\*Based on Assessment conducted by the AI Teams for the disbursement of the 1<sup>st</sup> Housing compensation tranche

## 8.6 TECHNICAL ASSISTANCE

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

- **Hazard Risk Mapping:** This is required to identify areas susceptible to future natural disasters including earthquakes, landslides and erosion/settlement. Hazard risk maps have been prepared, including micro-zoning for seismic risk to clearly identify highly vulnerable sites. Urban planning will be undertaken in accordance with the hazard risk mapping.
- **Damage and eligibility assessment:** (a) assess the safety of the damaged urban houses if not relocated; (b) categorize the level of damage to each house; (c) estimate the material requirements for reconstruction to contribute to supply chain management; (d) to verify the lists of eligible beneficiaries. Base-line survey will be conducted by the respective consultant stated in Section 7.1. Detailed assessment on the demographics of urban housing to be conducted by AI Teams.
- **Disaster-resistant building codes:** Existing building codes have to be evaluated and if considered necessary, new disaster-resistant building codes need to be developed to include structural specification, FARs for residential buildings, setbacks, and height limits. The Federal Government of Pakistan through the Ministry of Housing will develop new building codes which will be adopted by the provincial Government of NWFP and when approved, by the state Government of AJK. The capacity of the respective Development Authority will be enhanced to ensure implementation of these codes.
- **Facilitating the Building Materials Market:** Including establishing links with the private sector to facilitate the flow and purchase of materials. Net requirements will be identified and publicized for key materials to enable traders to gear up and to meet increased demand in time. Local building material centres already established by ERRA in strategic locations will be utilized.
- **Land and Property-Related Issues:** The city of Balakot will be entirely relocated while parts of Muzaffarabad, Rawalakot, and Bagh be relocated. Areas that need to be relocated depend on Hazard Map and the Zoning Map. It is expected that there may be instances of land ownership disputes, and relocation compensation disputes involving dispossession of owners, tenants, and widows. Protection of rights of vulnerable groups especially women will be given special attention.

## 8.7 CAPACITY-BUILDING

Capacity-building will be provided to support local authorities in the following areas:

- **The ERRA Policies and Procedures:** To ensure that consistent information of the ERRA policies and procedures are provided to beneficiaries, including redressal mechanism for land related disputes;
- **Allocation of Land and Ownership Deeds:** To enhance the capacity of the respective DA to issue ownership deeds and address related issues.

- **Mass Information Campaign:** The widespread, accurate, and timely dissemination of information on the full range of assistance options, eligibility criteria, ERRA policies, reconstruction, relocation, and compensation is imperative for the efficient implementation of the program. Affected people will be provided with all information they need to be able to make informed decisions for housing reconstruction and relocation. 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. 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.
- **Grievance Redressal Mechanism:** The formal and transparent grievance redressal mechanism developed for Rural Housing Program will be used for the Urban Housing Program as well, in order to allow affected people to raise their concerns and grievance. The mechanism will cater for the following scenarios:
  - Incorrect amount of payment
  - Incorrect eligibility / housing damage assessment
  - Lack of payment despite eligibility
  - Payment delays
  - Issues related to allotment and ownership of land (in case of relocation)

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.

## **8.8 COMBINED PAYMENT OF URBAN HOUSING SUBSIDY**

Payment of 3rd tranche is likely to be delayed in urban areas of AJK ,3rd and 4th tranche in urban areas of NWFP; due to the following reasons:-

- Though the master planning of cities and detail designs have been finalized but physical development work at sites are going to take considerable time.
- The regulation of housing construction in accordance with approved plans and codes in urban areas is prime responsibility of concerned Development Authority, and dedicated institutional arrangement placed therein, as such it seems inappropriate for ERRA to regulate that activity.
- ERRA is making the policy shift and immediately disbursing 3rd tranche of the housing subsidy in urban areas of AJK, 3rd and 4th installment in urban areas of NWFP after obtaining the following certification from the affectee that:
  - The drawing approved is in accordance with seismic resistant building codes.
  - The Development Authorities will ensure compliance with the approved plans and codes.

## 9. OPERATIONAL GUIDELINES AND PROCEDURES FOR STRATEGY IMPLEMENTATION

### 9.1 ASSESSMENT & INSPECTION TEAMS (AIs)

A house-to-house assessment of damage and destruction will be carried out by the Assessment & Inspection Teams (AIs).

#### *Composition*

- Engineer / Technical person
- Social mobilizer
- Government official

#### *Role and responsibilities of AIs*

- Door-to-door assessment and compile lists of beneficiaries.
- Door-to-door reassessment of incomplete / inaccurate assessment forms.
- Reassessment of forms that are subject to a formal grievance.
- Beneficiaries who do not have bank accounts will be guided to open bank accounts.

To verify the eligibility of the potential beneficiary, the teams will conduct door-to-door damage assessment surveys on the 'Urban Housing Damage Assessment Proforma' especially designed for the purpose (Annexure A). All the fields in the Proforma will be entered by the AI Teams and corresponding MoU will be signed between the AI Team and the owner of the damaged / destroyed house. The assessment will allow the identification of houses that are safe for re-occupation, houses that are unsafe but occupied, and houses that are completely destroyed.

### 9.2 RESOLVING ELIGIBILITY ISSUES

It is expected that there will be a variety of eligibility issues that will require policy guidelines. Some of the 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 houses is either not provided or is erroneous. The town planning baseline survey by the town planning consultants may have overlooked the demographic composition of each house. Persons may have been overlooked or inadvertently double-counted. AIs on the basis of their finding will make recommendations to ERRA for decision.

***Owner / tenant eligibility:*** There are some cases in which an owner may have more than one house and has rented them to tenants. In that case the 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. However, in case an owner has more than one house in an urban area that is planned to be relocated, the owner will be compensated equitably for each of the plots of land that he / she

vacate. However, the same owner shall only be paid compensation of Rs. 175,000 for one house. The point here is to distinguish the financial compensation of Rs. 175,000 from the compensation for relocated land in terms of land allocation.

***Housing Reconstruction underway and not confirming to earthquake resistant reconstruction guidelines:*** Beneficiary will be advised to incorporate earthquake resistant building techniques, and construct his / her house as per the new seismic resistant building codes, in order to be able to access the compensation package, and to obtain the completion certificate. The owner of any house that is not constructed as per the criteria adopted by the respective Development Authority will not receive a completion certificate and therefore, will not be eligible for the 3<sup>rd</sup> tranche, as the case may be.

***If Owner is Away from home:*** During the assessment by the AIs, it is mandatory that the owner of the house should be present on location. In case the actual owner of the damaged / destroyed house is away due to any reason, including employment, and is unable to return to his / her house at the time of damage assessment, then he / she will have to give the power of attorney in favour of the spouse or a blood relative, who will be eligible verify assessment to the AIs. However, in any case, compensation payment will be done into the bank account of the original owner.

***Financial subsidy will be Given on the Basis of Houses and not Households:*** If more than one family is residing under one roof, the tranches of compensation will only be given to the owner of the house. The principle is that compensation shall be based on the ‘number of houses’ affected, and not on the ‘number of households’ affected.

***House Built on Government Land:*** In case an affectee’s house is built on Government land, then in order to obtain the financial compensation, the affectee must obtain an NOC from the Provincial / State Government or from the particular Government Department to which the land belongs. In case the land on which the house exists is relocated, then the affectee will be provided other Government land to reconstruct the house.

### **9.3 DISBURSEMENT OF URBAN HOUSING RECONSTRUCTION GRANTS**

In order to ensure transparency and to avoid multiple disbursement of assistance package, grants will be disbursed to the beneficiary through Banks. The beneficiaries will open 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 urban areas, if needed.

#### **Disbursement procedure**

The beneficiaries’ lists shall be provided to ERRA in batches as and when these are ready at 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 the 2<sup>nd</sup> tranche in case of damaged houses and 3<sup>rd</sup> tranche in case of destroyed houses.

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.

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 as currently underway.

All overpayments / irregular payments shall be recovered and refunded to ERRA 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 ERRA.

## D: SPECIAL CONCERNS

### 10 RELOCATION, COMPENSATION, AND OTHER LAND MATTERS



#### 10.1 GENERAL POLICY GUIDELINES FOR RELOCATION & COMPENSATION OF RESIDENTIAL LAND

ERRA's urban program consists of four urban program cities, Balakot in NWFP; Muzaffarabad, Bagh and Rawalakot in AJK. It includes all systems, resources, and activities related thereto within their municipal limits. All other population areas, regardless of size or name, are considered rural areas and their rebuilding comes under ERRA's rural programs.

The Hazard Maps of the affected urban areas have necessitated re-planning of the urban program cities, namely; Muzaffarabad, Balakot, Rawalakot, and Bagh. As stated in Section 7.1, the town planning of these four cities has been outsourced by ERRA. It is expected that matters pertaining to land allocation, acquisition, and compensation in the four re-planned cities may arise. For the residents of these cities issues regarding allocation of land as specified and equitable compensation for the property foregone as a result of relocation or Government acquisition will be of utmost importance. Furthermore, the complexion of compensation will also depend on the nature of the property foregone, i.e. whether the property foregone is commercial or residential.

As a policy decision, it has been decided to relocate Balakot to a place near Bakriyal. The complexion of land matters due to relocation has two dimensions, namely;

- a) Relocation of residential land,
  - i) Due to implementation of the Master Plan
  - ii) Located in Highly Hazardous Zones
  - iii) Due to loss of previously owned land as a result of landslides
- b) Relocation of non-residential land
  - i) Due to implementation of the Master Plan
  - ii) Due to declaration of Highly Hazardous Areas
  - iii) Due to loss of previously owned land as a result of landslides

The Urban Development Strategy distinguishes between the financial assistance of Rs.175, 000 paid to the affected owner of a house for damages incurred to his / her house, and the compensation of land required due to relocation. Whereas, financial assistance of Rs.175, 000 is standardized across the board. The Strategy realizes that the compensation for land has to be more flexible in nature and should be based on the principle of equity to the land foregone.

The Fundamental Guidelines for relocation and compensation of commercial land are covered in Section 10.2 of this Chapter. The Fundamental Guidelines for relocation and compensation of residential land is as follows:

### ***General Policy Guidelines for Residential Land:***

***Allocation of Land on the basis of Houses and not Households:*** For a house that exists in a zone earmarked for relocation, the owner of the house will be allotted a specified equitable area of land, or monetary compensation based on valuation (as the case may be) in the relocated area regardless of the number of families / households living in the house.

***Land Allocation to be on the Number of Properties and not Households:*** If an owner owns more than one discontinuous property that is relocated, he / she will be compensated with an equitable piece of land, or monetary compensation based on valuation (as the case may be) for each property that is relocated. However, the same owner shall only be paid compensation of Rs. 175,000 for one house.

***Joint Ownership of Residential Property:*** If residential land is jointly-owned by two or more persons, all the owners will be provided joint ownership of the allocated residential land. Each joint owner will not be provided separate residential property. In case the joint owners are provided monetary compensation based on valuation, the amount will be liable to division among the joint owners.

***Land Compensation on the Principle of ‘Relocated Properties’:*** Land compensation will be based on the principle of ‘relocated properties’ and not on the principle of ‘relocated households’.

***Destroyed Houses Located in Highly Hazardous Zones:*** destroyed houses in Highly Hazardous Zones will not be allowed reconstruction in situ and will be relocated.

***Resolving Land Disputes:*** For just and equitable disbursement of funds, and to ensure that compensation is dispensed to the rightful owner of the property, it is important that title and 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 AI Teams that will do so by resorting to legal documents wherever possible and in case legal documents have been destroyed, the title will be established through local verification, making investigation 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. An appropriate mechanism will be developed for identifying and resolving land disputes and will be decentralised to the lowest possible level.

### ***Policy Guidelines for Residential Land in Old Balakot:***

Residential reconstruction will not be allowed in Old Balakot town. All residential properties will be relocated to New Balakot near Bakriyal. Owners of residential property will be allotted a specified equitable area of land as compensation for relocation. In Old Balakot, residents will not be monetarily compensated on the basis of valuation. Owners of residential property will be compensated under along the following criteria:



**Relocated Plot of 7-Marlas or less:** Owner of the property will be allotted 7-Marla plot.

**Relocated Plot between 7 to 10-Marlas:** Owner of the property will be allotted 10-Marla plot.

**Relocated Plot between 11 to 15-Marlas:** Owner of the property will be allotted 15-Marla plot.

**Relocated Residential Plot of 16 Marla and above:** Owner of the property will be allotted 1-Kanal plot.

**Ownership of Residential Land in Old Balakot:** Owners of residential land in Old Balakot will continue to own their land. However, this land will no longer be utilized for residential purposes. Owners will *not* be allowed to reconstruct houses on this land. Instead this land may be utilized for any other purpose, such as agriculture or commercial activity. As compensation, owners will be allotted a residential plot in New Balakot as per criteria stated above.

### ***Policy Guidelines for Residential Land in Muzaffarabad, Bagh, and Rawalakot:***

For relocation of property in the cities of Muzaffarabad, Bagh, and Rawalakot, the following two criteria will be used;

***Property Relocated due to Implementation of the Master Plan:*** If the State Government of AJK deems it necessary to acquire private residential land in pursuance of implementing the approved master plan, the Government shall do so. Owners of the property to be acquired (partially or completely) will be compensated on the basis of valuation of property on market rates. The property to be relocated will be acquired by the Government of AJK, and the owner of the property will forego his / her ownership of the property.

The residents so relocated and compensated will have the option to purchase a residential plot either in the newly developed Satellite Town, or elsewhere in the city. In case, the residents choose to purchase residential plots in the Satellite Town, they will have to pay the actual cost per plot incurred by the Government of AJK, i.e. the cost of land for each plot plus the development charges incurred on it.

***Relocation of Property Located in the Highly hazardous Zones:*** Compensation policy for relocated property located in the Highly Hazardous Zones will be the same as that for Old Balakot town (stated above). The owner of such property will be allotted a specified equitable area of land in the newly developed Satellite Town (or other developed areas of Bagh and Rawalakot).

However, owner of a house in a Highly Hazardous Zone, which survived the earthquake, will not be authorized to utilize the house for living. The owner will be monetarily compensated for this house on valuation basis and will be allotted an equitable area of land in the Satellite Town as per the policy stated above.

### **Imposition of restriction on sale of land (Residential plus Commercial).**

It is decided that owner of acquired property in new urban settlements will not be allowed to sell their newly allotted land for a period of 25 years to ensure that end user gets the benefits of development carried out on public expense.

## 10.2 GENERAL POLICY GUIDELINES FOR RELOCATION & COMPENSATION OF COMMERCIAL LAND

For the residents of the cities that need to be re-planned and relocated (partially or completely), issues regarding equitable compensation for the commercial land foregone as a result of relocation will be of utmost importance.

While the owners of damaged / destroyed houses are provided financial assistance of Rs.175,000, financial compensation is not paid for any commercial property damaged / destroyed by the earthquake. However, the Government will provide land compensation to those owners whose commercial property is acquired by the Government to implement the town-plan of the specific urban program city. The Fundamental Guidelines for relocation and compensation of commercial land is as follows:

### ***General Policy Guidelines for Commercial Land:***

***Land Allocation to be on the Number of Properties:*** If an owner owns more than one discontinuous commercial property that is relocated, he / she will be allotted an equitable area of land, or monetary compensation based on valuation (as the case may be) for each property relocated.

***Joint Ownership of Commercial Property:*** If commercial property is jointly-owned by two or more persons, all the owners will be provided joint ownership of the allocated commercial land. Each joint owner will not be provided separate commercial property. In case the joint owners are provided monetary compensation based on valuation, the amount will be liable to division among the joint owners on the basis of mutually agreed criteria.

### ***Ownership of commercial Property in Old Balakot:***

Owners of commercial property in Old Balakot will continue to own their Property. However, this property may continue to be utilized for commercial activity other than hotels and accommodation. In addition, owners of shops and commercial enterprise will be provided equitable commercial land in New Balakot.

### ***Policy Guidelines for Commercial Land in Muzaffarabad, Bagh, and Rawalakot:***

For relocation of property in the cities of Muzaffarabad, Bagh, and Rawalakot, the following two criteria will be used;

***Property Relocated due to Implementation of the Master Plan:*** If the State Government of AJK deems it necessary to acquire private commercial land in pursuance of implementing the approved master plan, the Government shall do so. Owners of the property to be acquired (partially or completely) will be compensated on the basis of valuation of property on market rates. The property to be relocated will be acquired by the Government of AJK, and the owner of the property will forego his / her ownership of the property.

***Residents Relocated in the case of Muzaffarabad:***

The owners so relocated and compensated will have the option to purchase a commercial plot either in the newly developed Satellite Town or elsewhere in the city. In case, however, if the owners choose to purchase commercial plots in the Satellite Town, they will have to pay the actual cost per plot incurred by the Government of AJK, i.e. the cost of land for each plot plus the development charges incurred on it.

***Relocation of Property Located in the Highly hazardous Zones:*** Compensation policy for relocated property located in the Highly Hazardous Zones will be the same as that for Old Balakot town (stated above). The owner of such property will be allotted an equitable area of commercial land in the newly developed Satellite Town (or other developed areas in Bagh and Rawalakot).

***Resolving Land Disputes:*** For just and equitable disbursement of the funds and to ensure that compensation is dispensed to the rightful owner of the property, it is important that title and ownership of land 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 AI Teams that will do so by resorting to legal documents wherever possible and in case legal documents have been destroyed, the title will be established through local verification by making investigation 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. An appropriate mechanism will be developed for identifying and resolving land disputes and will be decentralised to the lowest possible level.

## 11 MEDIUM TERM HOUSING STRATEGY



### 11.1 MEDIUM TERM HOUSING NEED

Because of the complexity of city environments, these require much longer lead times to rebuild. In case of the urban program cities significant rebuilding of the housing stock alone is expected to take a minimum of 2 to 3 years. During this required rebuilding period, steps must be taken to provide medium term urban services and facilities until the permanent counterparts are reconstructed. People need medium term housing; businesses need transitional facilities; and basic civil services need to be provided.

The concept of medium term urban area is, “an urbanized area that supports temporary livelihoods until it is transformed into a permanent one; it has to involve the residents, who are staying within or near-by urban areas which are largely affected, in mutual cooperation for urban rehabilitation.”<sup>3</sup> Medium term urban areas will serve as intermediary step between livelihoods of evacuation areas and permanent rehabilitated residential areas.

### 11.2 ERRA’S APPROACH TO MEDIUM TERM HOUSING

#### *Principles for Promoting Medium Term Housing*

- a) Ensure provision of medium term housing to the earthquake affected urban population.
- b) Medium term housing to be provided on the number of affected houses and not affected households
- c) Minimize the number of households living in tents or in makeshift shelters.
- d) Medium term houses to be placed in-situ, where possible, to restore the social networks that already exist in the neighbourhood.
- e) Provision of in-situ Medium term houses to encourage residents to participate in the rehabilitation process.
- f) Develop integrated functions around medium term houses that will support livelihoods, including commercial stores, medical clinics, and schools etc.
- g) Medium term houses to be the ownership of the owner of the previously existing house

As a policy it is stated that following criteria may kindly be observed for prioritizing the provision of the said houses:

- a) Red zone affectees
- b) Population affected due to implementation of Master Plan
- c) Urban landless
- d) Selected EVFs (Extremely Vulnerable Families) on need basis.

Certain segments of the affected urban population have lost their residential land as a result of landslides. ERRA, in consultation with the Governments of AJK and NWFP, has decided to

<sup>3</sup> JICA Study Team: The Urgent Development study on Rehabilitation and Reconstruction of Muzaffarabad City

provide alternate land for installation of Medium Term Houses for those residents who have lost their land as a result of landslides or due to implementation of the Master Plan.

### 11.3 CRITICAL ELEMENTS OF MEDIUM TERM CITY PLAN

The scope, dimension and duration of a Medium Term City Plan is driven by the town plan. The table below lists the key considerations in establishing transitional areas within and around the urban program cities.


NO.	TASK	DISCRIPTION
1	Identify the land mass of the city to be rebuilt.	This activity has been completed for the four urban program cities. Areas that have been declared as Highly Hazardous Zones have been demarcated and in the case of Balakot, the entire town has been declared unfit for redevelopment.
2	Medium Term Housing to be in-situ	Medium Term Houses will be installed in-situ on the site of previously existing houses. For those residents who have lost their land as a result of landslides, alternate land will be provided as Medium Term Neighborhood Villages.
3	If new land is being added to the city, locate within the new city land mass those areas where major building will not occur or be allowed to occur in the next 3 years. This is <b>transitional use area 1</b> .	There will be areas within the new city land mass that have the potential to be used for transitional activities without obstructing or interfering with the rebuilding of the city. Example of such transitional use areas include: areas that will be used as open areas under the town plan; areas that will be used for government offices but where temporary offices can also be built, such as where parking lots or open areas will be placed; and areas that will be used for future growth. The Governments of NWFP and AJK will identify appropriate areas where Medium Term Neighborhood Villages can be located.
4	Locate within the existing city, areas that can be easily cleared and which may be used for transitional activities. This is <b>transitional use area 2</b> .	There will be areas within the old city that have the potential to be used for transitional activities. These need to be areas where only minimal effort will be necessary to make these areas useful, because we can not divert resources away from the rebuilding effort.
5	Locate around transitional areas 1 and 2 locate any other areas that can reasonably used for transitional activities. This is <b>transitional use area 3</b> .	Areas 1 and 2 will generally form the end points of a region and anywhere in this region has the potential to be used for temporary or transitional activities. This identification can include land that is not part, or will not be part, of the rebuilt city.
6	Create a Medium Term area land map.	Medium Term use areas 1, 2 and 3 constitute the potential land mass for the city's Medium Term Neighborhood Villages for

		those residents that have lost their land as a result of landslides.
7	Create a simple land use map for the Medium Term City.	The key functions and their location on the Medium Term City land use map are: housing; roadways; business/trade/commerce areas; civil service operations; schools; health facilities; human waste disposal sites; solid waste disposal sites; water and sanitation systems; recreation sites; and religious institutions. These will be the best sites to establish the temporary or transitional facilities needed to carry out the associated service or activity. The physical facilities to support these functions will be transitional building and may be provided by tents (but not for housing), pre-fab building units, Medium Term Housing, modified shipping containers and other non-permanent buildings.
8	Create a transitional service system for the city.	The key services that will have to be carried out for a functional transitional city include: government social services; government administrative services; human waste disposal; solid waste disposal; water; power; financial services; and, livelihoods.

**11.4 COORDINATION WITH OTHER SECTORS**

The sectoral relationship that we find in the town planning function will also occur in the transitional planning process (See for example sections 6.5 and 7.3). Coordination between the transitional town plan and the other sectors will have to be ensured. All sectors involved in the transitional town plan will have to have their activities reflected in the transitional town plan, but this need does not mean that the urban development sector is responsible for the other inter-related sectoral activities involved in the transitional town plan. The transitional town plan is the coordinating mechanism to assure that all the various transitional activities needed to support the city population as the city is being rebuild, properly prioritized, phased and coordinated.

# Annexure 'A': Urban Housing Damage Assessment Proforma

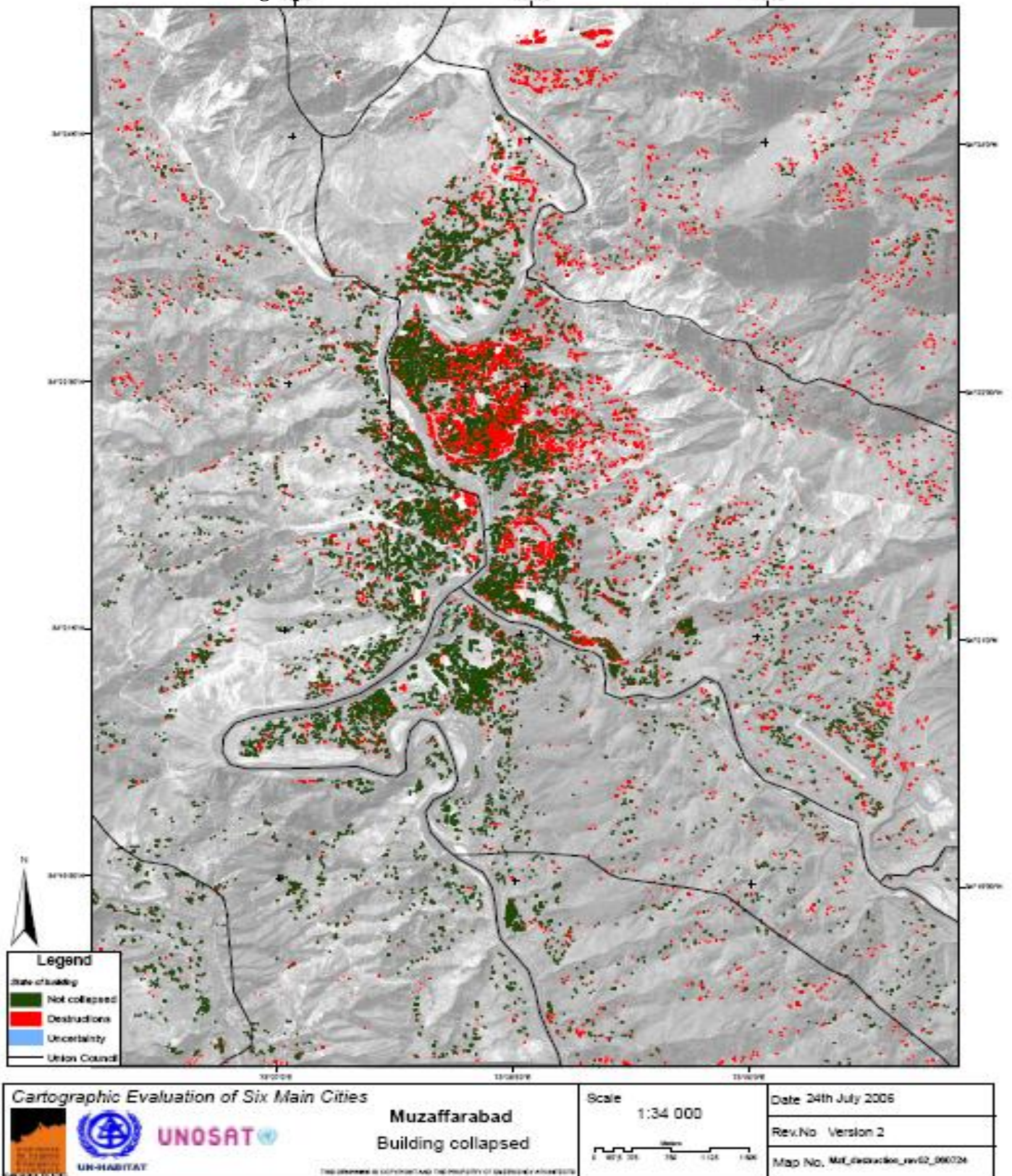
		<b>Urban Housing Project</b> Form Number: <input style="width: 100px;" type="text"/> Date: <input style="width: 20px;" type="text"/> / <input style="width: 20px;" type="text"/> / <input style="width: 20px;" type="text"/> - <input style="width: 20px;" type="text"/> - <input style="width: 20px;" type="text"/>																					
<b>Earthquake Reconstruction and Rehabilitation Authority</b> <b>Detailed Visible Damage Assessment</b>																							
Cross Reference with Army/Govt Survey Serial Number: <input style="width: 100%;" type="text"/>	Damage Category: Livable <input type="checkbox"/> Unlivable <input type="checkbox"/>	Previously Payment Made: Yes <input type="checkbox"/> No <input type="checkbox"/>	Engineer: <input style="width: 100%;" type="text"/> Govt Representative: <input style="width: 100%;" type="text"/>																				
<b>1. Location of House</b>		<b>2. Livelihood</b>																					
1. Admin Code: <input style="width: 100%;" type="text"/> 2. Tehsil: <input style="width: 100%;" type="text"/> 3. Union Council: <input style="width: 100%;" type="text"/> 4. Province/City: <input type="checkbox"/> Muzaffarabad <input type="checkbox"/> Rawalakot <input type="checkbox"/> Bagh <input type="checkbox"/> NWFP <input type="checkbox"/> Abbottabad <input type="checkbox"/> Mansehra <input type="checkbox"/> Balakot <input type="checkbox"/> 5. Area of the House Plot (Marla): <input type="checkbox"/> < 5 <input type="checkbox"/> 5 - 10 <input type="checkbox"/> 11 - 15 <input type="checkbox"/> 16 - 20 <input type="checkbox"/> 21 - 40 <input type="checkbox"/> > 40 <input type="checkbox"/> 6. Proximity of the House Plot to the nearest commercial area: 0-50 yds <input type="checkbox"/> 50-500 yds <input type="checkbox"/> 500-1000 yds <input type="checkbox"/> 1000-1500 yds <input type="checkbox"/> 7. House Plot Location: Primary Rd <input type="checkbox"/> Secondary Rd <input type="checkbox"/> Tertiary Rd <input type="checkbox"/> 8. Did you own a shop? Y <input type="checkbox"/> N <input type="checkbox"/> 9. If yes, Number of Shops: <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> 10. Was the house insured? Y <input type="checkbox"/> N <input type="checkbox"/> 11. Outstanding House Loan? Rs. <input style="width: 50px;" type="text"/>		12. Your livelihood before earthquake? Private Business / Industry <input type="checkbox"/> Trained Labor <input type="checkbox"/> Govt. Service <input type="checkbox"/> Private / Professional <input type="checkbox"/> Livestock / Farming <input type="checkbox"/> Shop <input type="checkbox"/> Hotel / Restaurants <input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify): <input style="width: 100%;" type="text"/>																					
<b>3. Family Information</b>																							
13. Occupant's Name: <input style="width: 100%;" type="text"/> 14. Father's Name: <input style="width: 100%;" type="text"/> 15. NIC/CNIC Number: <input style="width: 100%;" type="text"/> 19. Gender: Male <input type="checkbox"/> Female <input type="checkbox"/> 16. Land Ownership: <input style="width: 100%;" type="text"/> 20. Age (Years): <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>		17. Number of Households (living in the house): 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> > 3 <input type="checkbox"/> 18. Number of Persons (living in the house): <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> 21. Marital Status: Married <input type="checkbox"/> Unmarried <input type="checkbox"/> Widow <input type="checkbox"/> Separated/Divorced <input type="checkbox"/>																					
<b>4. Applicant's Bank / Post Office Information</b>																							
22. BANK <input type="checkbox"/> POST OFFICE <input type="checkbox"/> NO ACCOUNT <input type="checkbox"/> 23. Title Account (Must be same as Occupant's Name): <input style="width: 100%;" type="text"/> 24. Account Number: <input style="width: 100%;" type="text"/> 25. Name of Post Office/Bank: <input style="width: 100%;" type="text"/> 26. Post Office/Bank Branch Address: <input style="width: 100%;" type="text"/>																							
<b>5. House Description</b>																							
<b>KATCHA</b> Type of Roof: Wooden Beams With Mud Covering <input type="checkbox"/> Others: <input style="width: 100%;" type="text"/> Type of Wall: Masonry in Mud Mortar <input type="checkbox"/> Others: <input style="width: 100%;" type="text"/>	<b>PUCCA</b> Type of Roof: Wooden Truss With CGI Sheets <input type="checkbox"/> Steel Truss With CGI Sheets <input type="checkbox"/> Reinforced Brick Masonry Slab <input type="checkbox"/> Reinforced Concrete Slab <input type="checkbox"/> Others: <input style="width: 100%;" type="text"/> OR Type of Wall: Masonry in Mud Mortar <input type="checkbox"/> Others: <input style="width: 100%;" type="text"/>	<b>Load Bearing Masonry</b> Rubble masonry in Cement/Sand Mortar <input type="checkbox"/> Dressed Stone masonry in Cement/Sand Mortar <input type="checkbox"/> Brick Masonry <input type="checkbox"/> Concrete Masonry <input type="checkbox"/> RCC Band at Plinth <input type="checkbox"/> RCC Band at Lintel <input type="checkbox"/>	<b>RCC Frames Structure</b> YES <input type="checkbox"/> NO <input type="checkbox"/> Type of Floor (For more than 1 Story): RCC <input type="checkbox"/> Timber <input type="checkbox"/> Others: <input style="width: 100%;" type="text"/>																				
<b>6. Screening Criteria Triggering Reconstruction Grant</b>																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 5%;">A</th> <th style="width: 85%;">Completely Destroyed/Partially Collapsed (above 25% of Covered Area)</th> <th style="width: 5%;">Yes</th> <th style="width: 5%;">No</th> </tr> <tr> <td>B</td> <td>Structurally Damaged Katcha House</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>C</td> <td>Ground Failure Endangering Building Safety</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>D</td> <td>Less Than 250m From a Visible Fault Line</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>E</td> <td>Other Aspects of Layout/Designs That May Endanger Structural Stability, e.g. House Abuts/Retains Hill Side Fill</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		A	Completely Destroyed/Partially Collapsed (above 25% of Covered Area)	Yes	No	B	Structurally Damaged Katcha House	<input type="checkbox"/>	<input type="checkbox"/>	C	Ground Failure Endangering Building Safety	<input type="checkbox"/>	<input type="checkbox"/>	D	Less Than 250m From a Visible Fault Line	<input type="checkbox"/>	<input type="checkbox"/>	E	Other Aspects of Layout/Designs That May Endanger Structural Stability, e.g. House Abuts/Retains Hill Side Fill	<input type="checkbox"/>	<input type="checkbox"/>	If 60% of columns (nos.) have developed major cracks as defined in field manual, then mark as "completely damaged/ structural damage beyond repair" in Section 8 <input type="checkbox"/> Yes <input type="checkbox"/> No  If answer of any of 5 questions in section 6 is YES, proceed directly to Section 8, mark as unsafe; otherwise fill Section 7	
A	Completely Destroyed/Partially Collapsed (above 25% of Covered Area)	Yes	No																				
B	Structurally Damaged Katcha House	<input type="checkbox"/>	<input type="checkbox"/>																				
C	Ground Failure Endangering Building Safety	<input type="checkbox"/>	<input type="checkbox"/>																				
D	Less Than 250m From a Visible Fault Line	<input type="checkbox"/>	<input type="checkbox"/>																				
E	Other Aspects of Layout/Designs That May Endanger Structural Stability, e.g. House Abuts/Retains Hill Side Fill	<input type="checkbox"/>	<input type="checkbox"/>																				
<b>7. Type of Damage</b>																							
<b>LOAD BEARING WALLS</b> Fully Collapsed <input type="checkbox"/> Ft. <input style="width: 20px;" type="text"/> Partially Collapsed <input type="checkbox"/> Ft. <input style="width: 20px;" type="text"/> Length of Wall with Major Cracking <input type="checkbox"/> Ft. <input style="width: 20px;" type="text"/> Length of Wall with Minor Cracking <input type="checkbox"/> Ft. <input style="width: 20px;" type="text"/> Length of Wall out of Deflection <input type="checkbox"/> Ft. <input style="width: 20px;" type="text"/>	<b>RCC COLUMN</b> Spelling of Concrete / Major Damage <input type="checkbox"/> Number: <input style="width: 20px;" type="text"/> Total number of RCC Columns <input type="checkbox"/> Number of Structurally Damaged Columns <input type="checkbox"/> <b>Corners</b> Number of Opening Corners <input type="checkbox"/>	<b>RCC BEAMS</b> Spalling of Concrete/Major Damage <input type="checkbox"/> Number: <input style="width: 20px;" type="text"/> Total number of RCC Beams <input type="checkbox"/> Number of Structurally Damaged Beams <input type="checkbox"/> <b>Roof</b> Visible Deflection/Sliding/Tilting of Roof: Yes <input type="checkbox"/> No <input type="checkbox"/>																					
<b>8. Degree of Destruction</b>																							
Completely Damaged / Structural Damage Beyond Repair <input type="checkbox"/> Repairable Structural Damage <input type="checkbox"/> Negligible Structural Damage <input type="checkbox"/>																							
<b>9. Present State of building now</b>																							
No Construction <input type="checkbox"/> Foundation Started <input type="checkbox"/> Completed <input type="checkbox"/>		Walls Started <input type="checkbox"/> Completed <input type="checkbox"/>																					
		Roof Started <input type="checkbox"/> Completed <input type="checkbox"/>																					
Name and Signature of Engineer: <input style="width: 100%;" type="text"/>		Name and Signature of Social Organizer: <input style="width: 100%;" type="text"/>																					
Name and Signature of Govt. Representative: <input style="width: 100%;" type="text"/>																							

## **ANNEXURE ‘B’: LIST OF ACRONYMS USED**

AJK	Azad Jammu and Kashmir
CGI	Corrugated Galvanised Iron (sheets)
DAM	Development Authority Muzaffarabad
DRU	District Reconstruction Unit
EQ	Earthquake
ERRA	Earthquake Reconstruction and Rehabilitation Authority
GoP	Government of Pakistan
HVCA	Hazards, Vulnerability and Capacity Assessment
IAP	Institute of Architects Pakistan
NGO	Non-Government Organization
NWFP	North West Frontier Province
PEA	Preliminary Environmental Assessment
PERRA	Provincial Earthquake Reconstruction and Rehabilitation Agency (NWFP)
SERRA	State Earthquake Reconstruction and Rehabilitation Agency (AKJ)

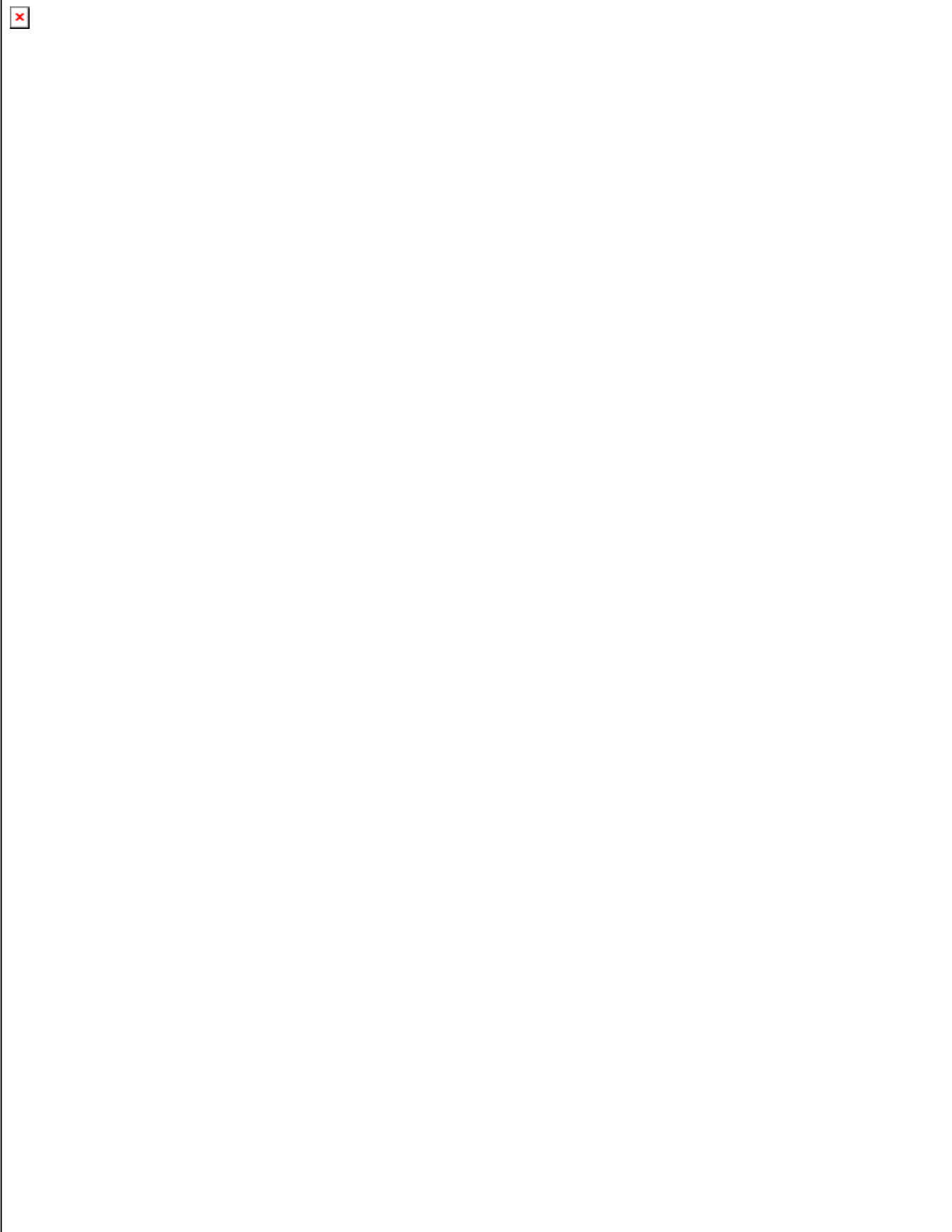


## Annexure – C : Cartographic Evaluations

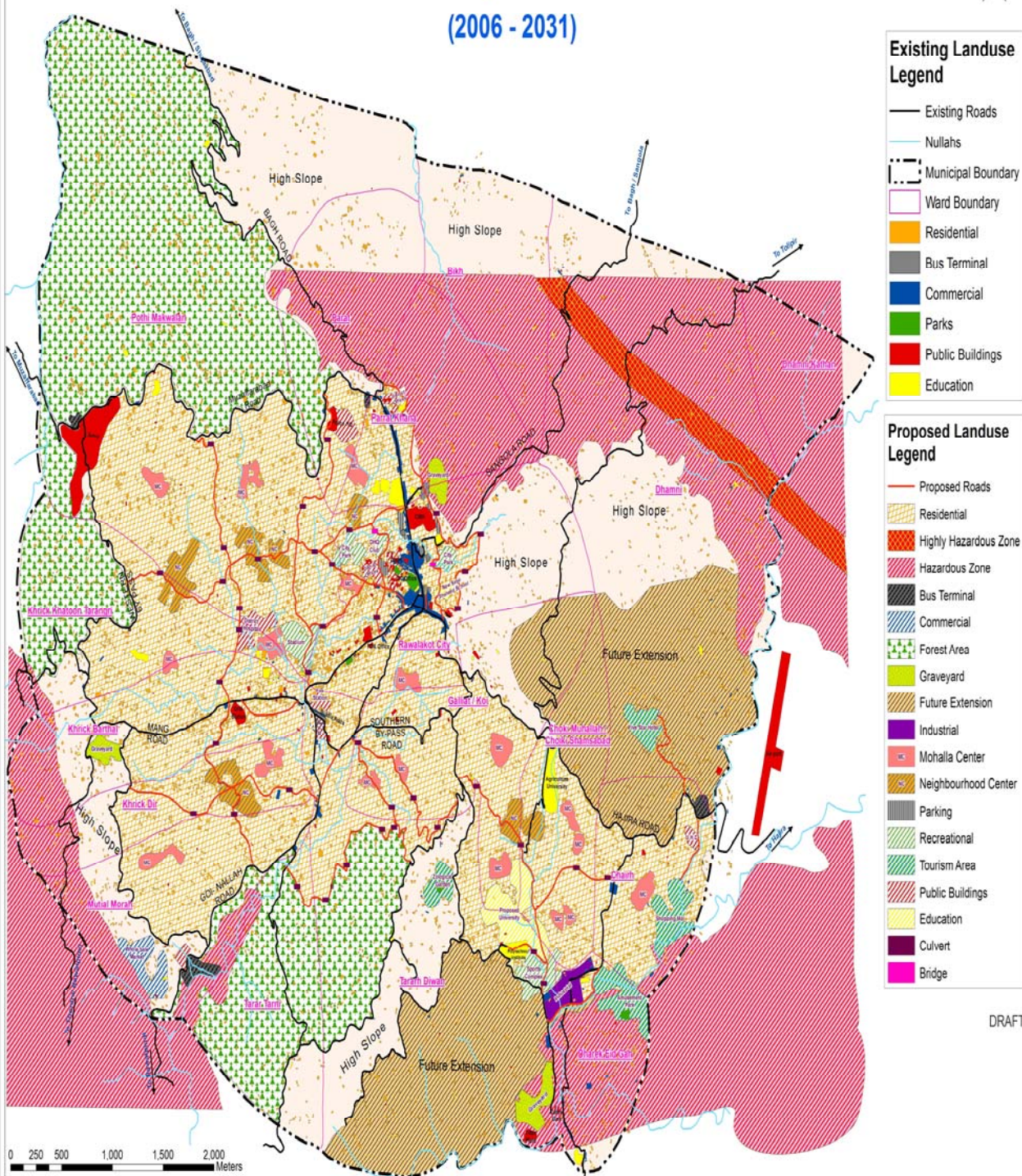


Annexure – D : Master Plan of the Cities





# Rawalakot Proposed Master Plan (2006 - 2031)



### Existing Landuse Legend

- Existing Roads
- Nullahs
- - - Municipal Boundary
- Ward Boundary
- Residential
- Bus Terminal
- Commercial
- Parks
- Public Buildings
- Education

### Proposed Landuse Legend

- Proposed Roads
- Residential
- Highly Hazardous Zone
- Hazardous Zone
- Bus Terminal
- Commercial
- Forest Area
- Graveyard
- Future Extension
- Industrial
- Mohalla Center
- Neighbourhood Center
- Parking
- Recreational
- Tourism Area
- Public Buildings
- Education
- Culvert
- Bridge

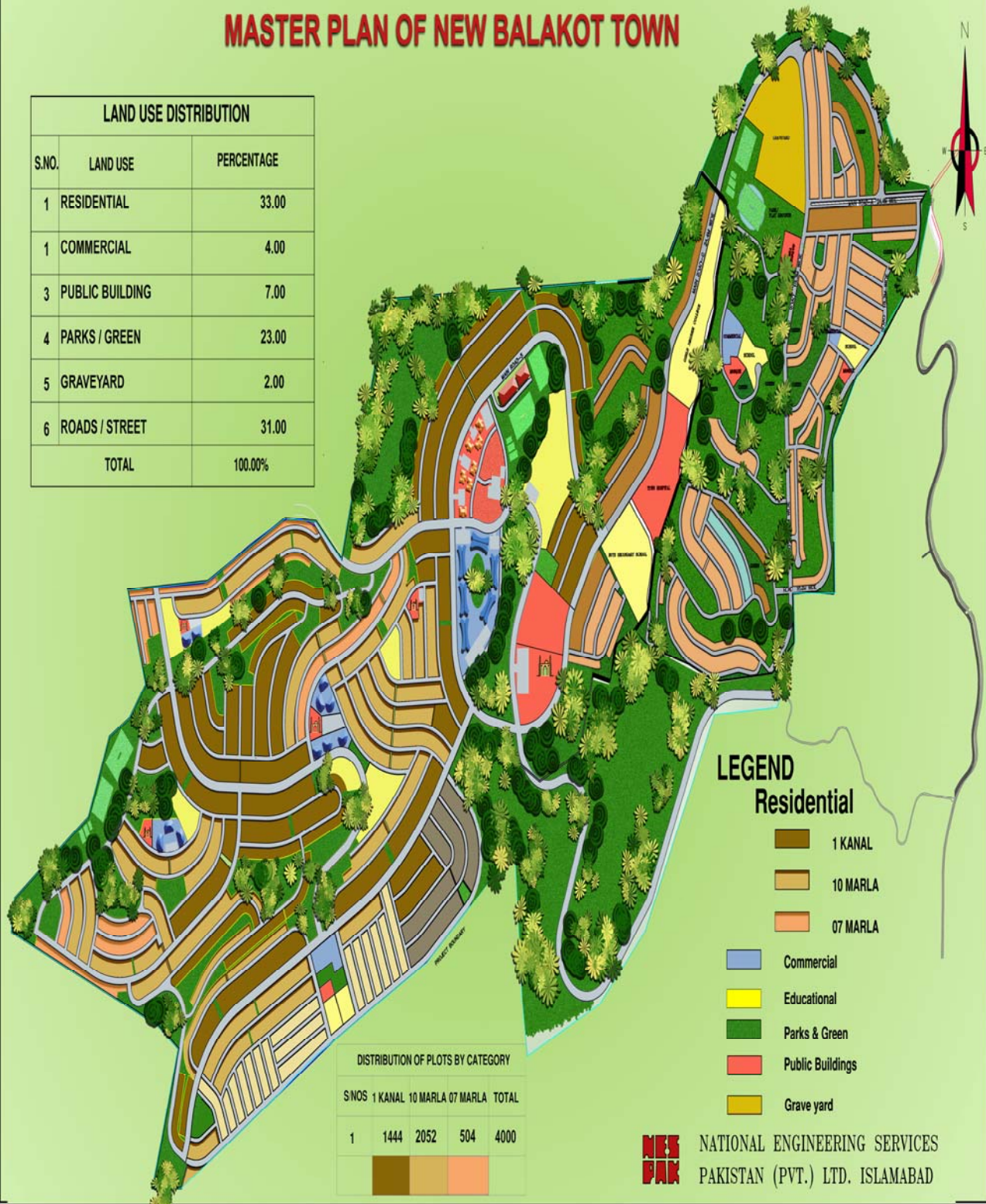
DRAFT

Note:  
 1. Master Plan has been prepared for a period of 25 years i.e. 2006-2031. However ERRRA would finance projects related to reconstruction and rehabilitation of Rawalakot for an Interim Plan Period of 3 years i.e. 2006-2009.  
 2. Municipal Boundary and ward boundaries have been provided by Officials Rawalakot Municipal Committee and its authentication has to be done by A.K Government.

GIS Map Prepared by: Saker Hassan  
 GIS Map Checked by: Sameer Ahmad

# MASTER PLAN OF NEW BALAKOT TOWN

LAND USE DISTRIBUTION		
S.NO.	LAND USE	PERCENTAGE
1	RESIDENTIAL	33.00
1	COMMERCIAL	4.00
3	PUBLIC BUILDING	7.00
4	PARKS / GREEN	23.00
5	GRAVEYARD	2.00
6	ROADS / STREET	31.00
TOTAL		100.00%



**LEGEND**

**Residential**

- 1 KANAL
- 10 MARLA
- 07 MARLA

**Commercial**

- Commercial

**Educational**

- Educational

**Parks & Green**

- Parks & Green

**Public Buildings**

- Public Buildings

**Grave yard**

- Grave yard

**DISTRIBUTION OF PLOTS BY CATEGORY**

S.NOS	1 KANAL	10 MARLA	07 MARLA	TOTAL
1	1444	2052	504	4000

**NES PAK** NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD. ISLAMABAD