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## **A Critical Analysis of the Livelihood Rehabilitation Strategy Implemented after the 2005 Pakistan Earthquake**

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### **Abstract**

Pakistan suffered its biggest earthquake since independence on October 8, 2005. The earthquake left three million people without homes besides killing over 80,000 and injuring 70,000.

A Livelihood Rehabilitation Strategy with a slogan of 'Build Back Better' was designed by the Earthquake Reconstruction and Rehabilitation Authority (ERRA) to cope with the unprecedented development challenge after the earthquake. Built on international practices, ERRA has taken as its mandate the rebuilding and capacity building of all stakeholders. This Strategy document is built around standard sustainable livelihood principles of being people centered, holistic, dynamic and having micro-macro links. It takes stock of the pre-earthquake situation, for example inadequate infrastructure and low per capita incomes, to guide future policy. Elaborate participatory institutional mechanisms such as a Community Investment Fund have been provided in the Strategy paper to put affected people at the heart of development. The Strategy may fall short of expectations owing to complex political and socio-economic realities which have not been considered in the Strategy.

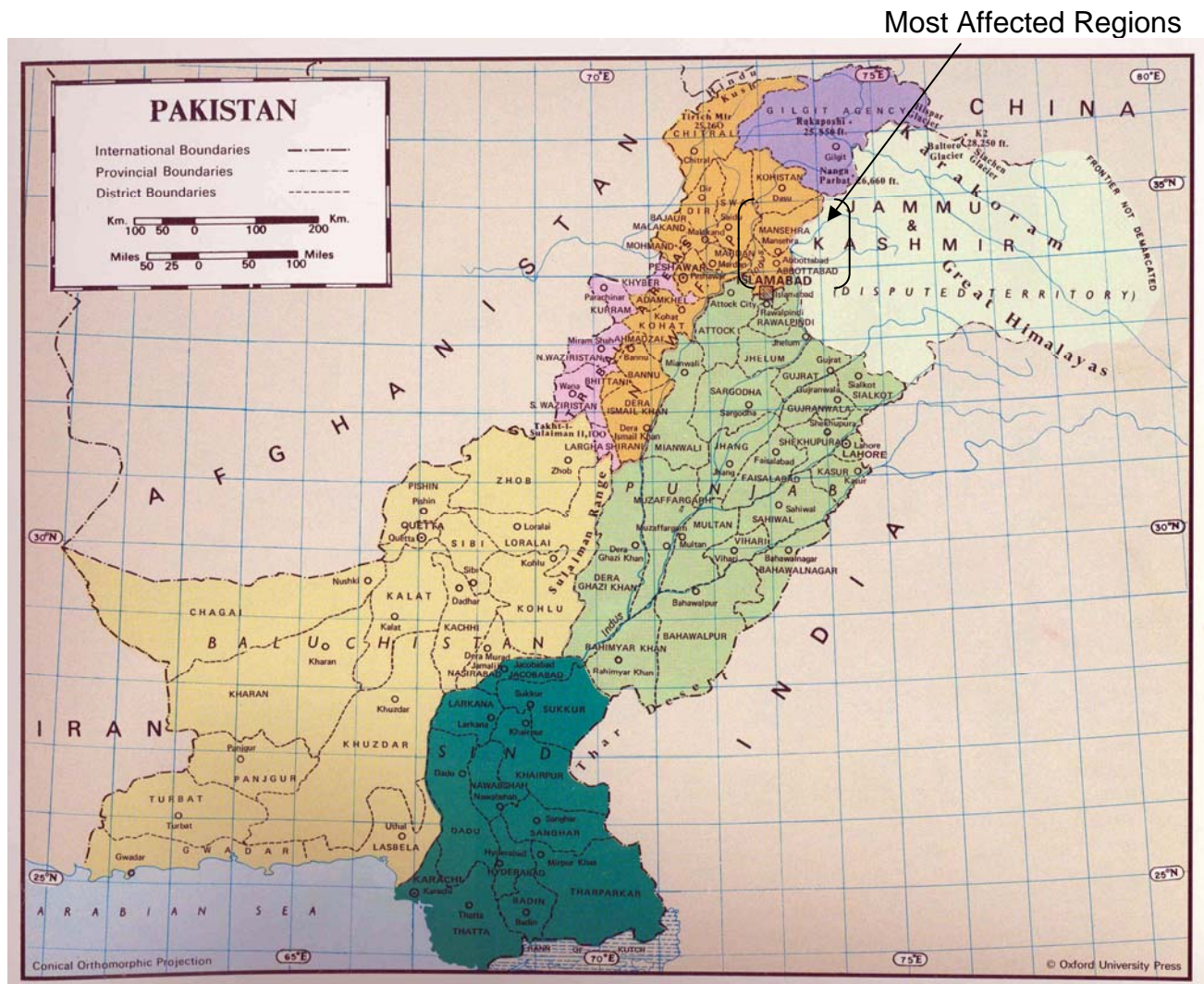
How well the Strategy has been implemented and whether the higher aims of bottom-up participation and empowerment have been achieved will be examined through PhD research.

**Keywords:** Sustainable Livelihoods, earthquake, disaster management, Pakistan

# 1. Introduction

Pakistan suffered the worst earthquake of its history since 1947 on October 8, 2005, having a magnitude of 7.6 on the Richter scale. About 80,000 (Direct Relief, 2005; UNDP, 2006, p. 4) to 90,000 (Bhutto, 2008, p. 303) people were killed in the earthquake and more than 70,000 were reported severely injured (ERRA, 2006b, p. 6). The calamity destroyed 203,600 houses and caused damage to another 197,000 homes (ERRA, 2006b). The most affected areas were five districts of the North West Frontier Province (NWFP) and four districts of Azad Jammu and Kashmir (AJK). On the whole, 84 percent of the total houses were destroyed or damaged in the AJK, whereas 36 percent of the total houses were destroyed or damaged in the NWFP (ERRA, 2006b).

Figure 1: Political map of Pakistan showing the most earthquake affected areas



Source: MOFA (2005)

The earthquake severely damaged or completely destroyed the communication and commerce infrastructure, the health and educational institutions, and private properties in these districts. Collectively, the loss of public and private assets, direct damage at book value, in both the areas accounted to Rs. 135.2 billion (US\$ 2.3 billion) (ERRA, 2006b, p.

6). The indirect loss in income is Rs. 34.2 billion (US\$ 576 million). About 300,000 people were left homeless (ERRA, 2006b, p. 6).

This single event has had an immense economic and social impact upon the national life of Pakistanis. While the nation extended unprecedented moral and economic support to the earthquake-hit areas (Jillani, 2007; Khalid, 2006), how the government fights this huge multi-faceted development crisis becomes a challenging question. The earthquake has left behind different types of vulnerabilities. In many instances, women with dependent children make up households where the single income earner died. There are children who lost both parents and are now orphans. There are also a number of elderly whose adult children passed away and they have no income coming into the household. Numerous survivors have long-term physical injuries or disabilities, for example many had limbs amputated and it is expected that many survivors have post-traumatic stress disorders and may be unable to contribute fully in their communities.

It was reported that the central government had neither any action plan nor strategy to deal with such a huge disaster (Khan, 2007). It was only after the earthquake that ERRA was established with the express purpose of rehabilitation and reconstruction. The ERRA released their Livelihood Rehabilitation Strategy (LRS) in March 2006 with the slogan 'Build Back Better'.

Before suggesting an implementation process, the Strategy gives an overview of the livelihood situation before the earthquake. It takes into account the employment profiles of the affected people, showing that the majority of the affected population, 33.6 percent of AJK and 46.6 percent of NWFP, was employed in the agriculture sector. The second largest employment providing sector was the services sector, having 35.2 percent of AJK and 24.5 percent of NWFP (ERRA, 2006a, p. 10). These sectors were low paid and had no safety nets. On the whole, about 1.4 million people were involved in agriculture and about 40 percent of them became jobless after the earthquake (ERRA, 2006a, p. 18). The overall loss in main employment sectors of both the affected regions is shown in Table 1.

**Table 1:** NWFP and AJK: Estimated employment baseline and change/loss pre and post-earthquake scenario

<b>Employment by sector</b>	<b>Employment 2005 Pre-earthquake</b>	<b>Employment loss due to earthquake</b>	<b>Percent Change</b>
Agriculture and livestock	1,380,000	580,000	-42%
Industry (mining, manufacturing & construction)	230,000	150,000	-65%
Services (mainly informal)	730,000	380,000	-52%
Other	40,000	20,000	-50%
<b>Total</b>	<b>2,380,000</b>	<b>1,130,000</b>	<b>-47%</b>

Source: ERRA (2006a, p. 11)

Prior to the earthquake the area was impoverished and its per capita income was US\$ 150-200 as compared to US\$ 480 in rest of the country (ERRA, 2006a, p. 7). This leads to another debate of structural isolation and underdevelopment of particular segments of a society which serves to amplify the effects of a disaster. Quoting a recent example from a developed country, in the case of Hurricane Katrina in the United States of America, the African-Americans were already marginalized on the basis of race before the actual disaster arrived (Powell, 2002). The Strategy paper does not go beyond identifying the backwardness of the region; rather it just indicates the problem and does not suggest any long-term development policy recommendations for disaster reduction and poverty alleviation.

The Strategy paper provides comprehensive details of private and public sector infrastructure losses in the affected areas. The affected areas rely heavily on public infrastructure such as bunds, irrigation diversions, water channels, water spillways and water lifting devices, many of which were destroyed in the earthquake. Fields in steep valleys were destroyed owing to land slides during the earthquake. Public infrastructure like veterinary dispensaries, hospitals and agricultural research centres, which were already in short supply, were often destroyed in the earthquake as well. This has had an immense negative effect on local livelihoods.

Non-agriculture livelihoods have also been considered by the Rehabilitation Strategy. The destruction of banks, hotels, restaurants, petrol pumps, small scale food and agricultural processing, handicrafts and many industrial activities had negative repercussions on livelihoods. To quote an example, in the capital of AJK, Muzaffarabad, 80 percent of shops in the main bazaar were destroyed. In view of the above, the Strategy emphasizes the immediate recovery of public infrastructure.

The Rehabilitation Strategy designed by ERRA carries great significance in formulating the disaster management interface of Pakistan. The sustainable livelihood approach followed by ERRA towards rehabilitation is a manifestation of a bottom-up policy towards development. The sustainable livelihoods framework has been identified in the

development literature as a valuable tool for poverty alleviation by integrating poverty reduction in disaster management (Yodmani, 2001). There is increasing emphasis on integrating poverty reduction in disaster management strategies in order to address vulnerabilities on a long-term basis (P Blaikie, 2002).

## **2. Research question**

The objective of this research paper is to conduct a desktop study to critically analyse the Rehabilitation Strategy document of ERRA in comparison to principles of the standard sustainable livelihood framework to be discussed below.

The focus will be on analysis of institutional arrangements and mechanisms of community partnership for addressing poverty and vulnerability which are provided for in the Rehabilitation Strategy. This analysis provides the basis of future PhD research to examine the implementation phase of the Strategy. This paper begins by discussing how dominant approaches to disaster management have changed overtime, and shows the influence of the sustainable livelihoods framework for development of disaster policy. The main part of this paper then provides discussion and analysis of ERRA's Rehabilitation Strategy.

## **3. Shifting approaches to disaster management**

Approaches to disaster management have been changing overtime. The study of disaster management has gained significant importance owing to the increase in frequency of disasters in the last decade and of resultant losses (FAO, 2004). Around the 1950s, disasters were taken as one-off events triggered by acts of nature and therefore responded to by governments and agencies. Resultantly, the focus of preparation was on stockpiling of goods. A contingency approach was adopted towards disaster readiness (Yodmani, 2001). Later, a more technocratic paradigm took over with the advancement in technology which offered geographical and engineering interpretations of disaster processes. During this time, the dominant approach did not take social and economic factors into consideration. In the 1980s, an alternative view of interpreting disasters started to challenge the dominant view. The alternative view offered social and economic interpretations of disasters and it was argued that disasters cannot be solely attributed to nature (Hewitt, 1983, p. 7). In the 1980s, discussion on the role of vulnerability in disasters came into the arena, was lead by Cuny (1983). So vulnerability emerged as a key theme in disaster management and later vulnerability analysis was used as a tool for assessing disaster risk.

It is the lack of coping capacity in developing countries which makes their populations vulnerable. The relationship between vulnerability and poverty is two way. Poverty leads to vulnerability and vulnerability reinforces poverty. One of the ways through which vulnerability leads to poverty is the effect of disasters. The link between poverty and vulnerability becomes quite clear when observing that 98 percent of those killed and affected by disasters come from developing countries (Tearfund, 2005). Blaikie (2002) maintains the importance of integrating vulnerability-mitigating strategies into long-term development policy. He observes that vulnerability in disasters will not be addressed through the usual short term technocratic measures; rather it requires attacking the root causes, which in turn requires long-term engagement. He notices that short term relief

efforts are usually designed regardless of the root causes of vulnerability. Kumar (2000) also places emphasis on the long-term role of rehabilitation strategy. The author argues that natural hazards may appear for a short time but have deep repercussions. He suggests 'insulation of communities', both rural and urban, against the hazards. It is pointed out that only those who have access to resources can benefit from recovery and relief operations. Therefore, 'composite vulnerability analyses' may be conducted for earthquake prone areas (Kumar, 2000). He suggests that disaster research should focus on effectively handling preventive and post-disaster situations.

It has been just in the decade of the 1990s that an integrative approach to disaster management has started to emerge. This offers a comprehensive approach towards disaster management which includes hazard assessment, vulnerability analysis and enhancement of management capacity.

Recent research has revealed both strengths and weaknesses of different approaches to disaster management in specific contexts. Ozerdem & Sultan (2004) have analyzed the post-earthquake scenario of Marmara 1997, Turkey. In doing so, the authors discuss the shortcomings of disaster mitigation and preparedness measures in Turkey with regards to the relationship between disaster and development. They point out that the state (General Directorate of Civil Defence of Turkey) had an acute shortage of capabilities required to respond the earthquake-affected people in comparison to civil society organizations which proved to be effective. Telford (2007) has criticized the simplistic responses to complex realities after the tsunami of December 26, 2004 in Banda Aceh, Indonesia. The author points out that boats were distributed to everyone, whether appropriate or not. In many cases, the fishermen had died but the families received boats. Christoplos & Treena (2007) have analyzed the strong and weak areas of performance of the Rehabilitation and Construction Executing Agency for Aceh and Nias (BRR), Banda Aceh, Indonesia after the tsunami. They observe that the usual gap between relief and rehabilitation was not there but the attention towards land rights remained unaddressed and the affectees were still living in makeshift tents even one year after the disaster.

#### **4. Significance of the sustainable livelihoods framework in designing disaster management policy**

Owing to increasing focus on poverty alleviation in disaster management studies and the interest in integrative approach, the sustainable livelihoods framework has been used in a number of post-disaster rehabilitation situations like that of the 2004 Asian tsunami (Alexander, Catherine, & Wilmar, 2006). By definition, 'a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living' (DFID, 1997). The sustainable livelihood framework helps to understand vulnerability and poverty in their complex reality. The sustainable livelihood framework allows analysis the development process in an all encompassing way by integrating economic, social and cultural factors (Ellis, 1999; Farrington, Carney, Ashley, & Turton, 1999).

The sustainable livelihoods framework also encourages identification of institutional factors which influence the development process. According to North (1991, p. 97) 'Institutions consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)'. Developing countries sometimes lack administrative, organizational, financial and political

competence to manage disasters (Ahrens & Patrick, 2006, p. 208). Where institutions are supportive of risk reduction and development policy addresses disaster management, the whole environment is likely to reinforce efforts for poverty alleviation and development. Recognizing this fact, ERRA's Livelihood Rehabilitation Strategy has adopted a bottom up approach to develop dynamic participative institutions at local level.

## **5. The Livelihood Rehabilitation Strategy of ERRA**

### **5.1 Aims of the Livelihood Rehabilitation Strategy**

As noted earlier, the Rehabilitation Strategy designed and followed by ERRA has drawn on the principles of sustainable livelihoods. These principles which inform the vision, strategy and objectives are:

- People-centred
- Holistic/interdisciplinary
- Sustainability
- Micro-macro links
- Builds on strengths
- Committed to poverty reduction
- Flexible/dynamic
- Encourages partnerships

(ERRAa, 2006, p. 5)

Supposedly the above principles have been embedded into the whole Strategy. The above principles are in conformity with the Hyogo declaration of 2005 made by the international community at the World Conference of Disaster Reduction (UN, 2005). In the light of above principles, the Livelihood Rehabilitation Strategy aims to achieve the following objectives (ERRA, 2006a, p. 17):

- To restore the livelihoods of the earthquake-affected population to, at least, pre-earthquake conditions.
- To effectively coordinate the livelihood rehabilitation activities in the earthquake-affected areas, preventing duplication of activities and ensuring equitable coverage by implementing agencies.
- To strengthen community based organizations (CBOs) and committee in planning, implementing, monitoring and evaluating community livelihood rehabilitation plans.
- To restore and enhance the capacities and capabilities of livelihood-related line departments.

This Strategy aims to build upon the best international practices of sustainable livelihoods. The lessons such as 'needs assessments and working with communities; targeting, monitoring, gender equality and protection, and coordination and partnerships' from the previous earthquakes of Afghanistan, Turkey, Gujrat and Bam have been taken into consideration, the Strategy explains (ERRA, 2006a, p. 6). The ERRA post-disaster rehabilitation principles are shown on the right side of Table 2, in relation to established sustainable livelihood principles on the left side.

**Table 2:** Relation between ERRA post-disaster livelihood rehabilitation principles and established sustainable livelihood principles

<b>Established sustainable livelihood principles</b>	<b>Key post-disaster livelihood rehabilitation principles of ERRA</b>
Commitment to poverty reduction sustainability holistic/interdisciplinary (Anderson & Woodrow, 1998)	Focus on poverty reduction and sustainable livelihoods
People-centred participation/ ownership encouraging partnerships Develop/use micro macro linkages (Piers Blaikie, Cannon, Davis, & Winsor, 1994)	Create a leading role for local people and their organizations
Develop/use micro macro linkages Encouraging partnerships (Mitchell, 2003)	Allow markets to lead recovery
Sustainability (DFID, 1999)	Environmental sustainability
Building on strengths Flexible/dynamic (UNDP, 2006)	Build on past and ongoing projects and programme

Source: Adopted from ERRA (2006a, p. 13)

To make the Strategy practicable, pragmatic and rational, a wide range of discussions were undertaken with stakeholders during the process of its preparation. The aim of the Strategy is to achieve development which evolves from community plans thus making community participation a foundation stone of the whole rehabilitation drive.

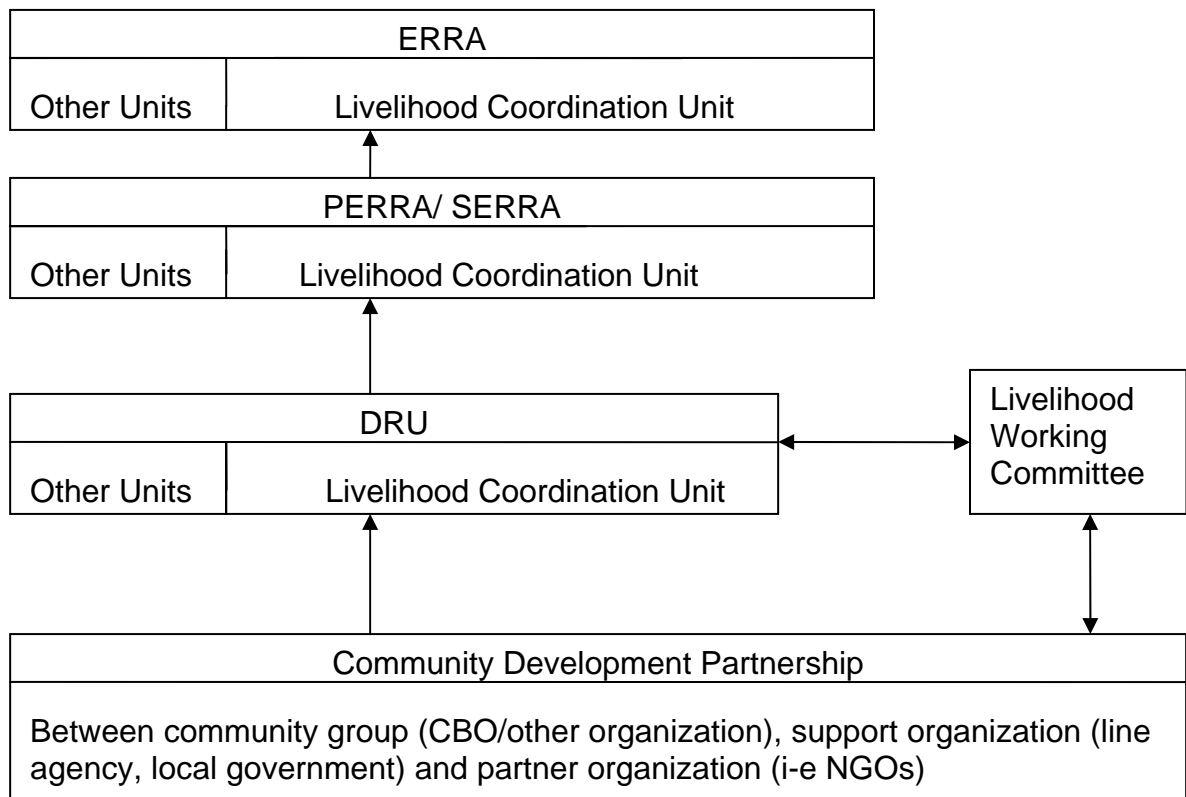
### **5.2 The Strategy’s focus on a community-driven process**

The Strategy is built on the principle of demand-driven management which provides a leading role to the stakeholders. Thus, for example, an investment fund of Rs. 750,000 (US\$ 12,500), called the Community Investment Fund (CIF), has been placed at the disposal of the communities to prioritize, decide and spend in accordance with their needs and circumstances.

An institutional framework has also been provided to implement the idea of strong community participation. The structure of the framework is shown in Figure 1:

**Figure 2:** Operational structure of livelihood coordination units within ERRA, PERRA and the DRUs





Source: Adopted from ERA (2006a, p. 34)

Key: ERA= Earthquake Rehabilitation and Reconstruction Authority, PERRA= Provincial Earthquake Reconstruction and Rehabilitation Authority, SERRA= State Earthquake Reconstruction and Rehabilitation Authority, DRU= District Reconstruction Unit, LWC= Livelihood Working Committee, CBO= Community Based Organization

As per the structure shown in Figure 1, Livelihood Working Committees (LWCs) were to be established at each District Reconstruction Unit (DRU). These committees will be comprised of Community Based Organization (CBOs), line agencies, Non-Governmental Organizations and local government. Such committees form the basis of the reconstruction, rehabilitation and development process. These committees will formulate the Community Livelihood Rehabilitation Plans (CLRP) with mutual discussion and then feed these plans into the DRU. Clear guidelines have been set for the effective working of the LWCs. Essentially, the working process will ensure that local partners are chosen, the policies reflect peoples' priorities in the short and long-term, a community partnership is developed, and the existing capacities of communities are further built and strengthened. Besides, the long-term plans would reflect concerns for environmental sustainability and thus stand in agreement with national level planning. It was planned that the community development needs regarding health and education would be part and parcel of the local plans.

Each DRU is supposed to compile community development plans at a district level and then send a district development plan to the provincial rehabilitation authority, PERRA or SERRA as the case may be. The provincial rehabilitation agency then compiles each district development plan into a provincial development plan and sends it to ERA. ERA will then formulate a national development plan. Overall, the government's high level of commitment to bottom-up planning is overwhelming. Through this process, the

Livelihood Rehabilitation Strategy establishes the micro-macro links of the whole development drive.

The Strategy thus purportedly aims to empower the communities by giving them a lead role in the development process. Table 3 explains the roles of various stakeholders in the development process.

**Table 3:** Key players and their roles

<b>Community group (i-e., village level community organization)</b>	<b>Support organization (i-e central govt. agency, line agencies, local govt., DRU, PERRA/SERRA)</b>	<b>Partner organizations (i-s NGO's, consultants)</b>
Forms a collective group to prepare CLPR. Ensures at least 60 percent participation of village members in this collective group. Ensures equitable participation and inclusion of women's and vulnerable groups' perspective in planning process.	Provides technical support to community throughout community rehabilitation planning process. Also would be responsible for providing key material inputs. Role shifts from being implementer to facilitator.	Would be contracted by the DRU to facilitate communities and provide planning support. Will maintain a database, which would outline respective CBO's capacity development needs, types of interventions and track the course of the CBO towards meeting their planned rehabilitation objective.

Source: ERRA (2006a, p. 38)

Children, women, elderly and marginalized groups have been identified as vulnerable entities. The dependency ratio in the affected areas was more than two. In this way, 2.4 million people have become vulnerable with half of them under the age of 15, thus further exacerbating the situation of those children who have lost both of their parents. The Strategy advances unequivocal support for the vulnerable. The orphaned children have been separately covered in a social protection policy. The role of women has been streamlined throughout the Strategy. Special interventions and programmes are to be designed for them for their empowerment. Besides, the Strategy overtly aims to preserve traditional safety nets which have been affected during the relief activities .

The Strategy has a strong emphasis on capacity building. This capacity building includes that of staff of ERRA, PERRA, SERRA, DRU and CBOs, and is considered essential to ensure participation in the development drive. It is through this capacity building that empowerment of local communities will supposedly take place.

It can be inferred from the above institutional framework (Figure 2) that the community is the driver of the whole rehabilitation and development process, while the state appears to be a facilitator. The development objectives will not be determined by the policy makers in isolation from the first line stakeholders, rather the primary stakeholders appear to be the leaders of the process. If this process is followed in letter and spirit, the Strategy expects

that it will help in community empowerment. In addition, the voices of the poor and vulnerable should also find their place in the development policy.

### ***5.3 Rhetoric versus Reality***

Despite building the Strategy on the best international principles of sustainable livelihoods, and attempting to promote a community-driven process, the actual implementation appears to be falling short of expectations. There are socio-economic realities and inherent power structures which largely determine who gets what. Dawn (2007) reports at the third anniversary of the earthquake that thousands of survivors are still homeless, are bound to spend a third winter in tents. It further indicates protests by the affected about widespread disparities in the compensation offered to them where the influential receive more than the others, owing to officials' involvement in corruption.

Under the influence of donors, a ready made Strategy was put in place to guide the whole reconstruction and rehabilitation activity. This is the first time in the case of an earthquake that a formal reconstruction and rehabilitation effort has been made. Otherwise, affected communities were left to their own fate after rescue and relief, which is provided by the Pakistan Army. Civil institutions such as civil defence which are meant for relief and rescue tasks, had become dormant over the years (Khan, 2007). Even ERRA which was established just after the earthquake is primarily staffed and run by the Pakistan Army.

Civil institutions have not been able to develop their skills to cope with such situations. Now as per the Rehabilitation Strategy, civil institutions along with local communities are expected to assume such an effective role that they can hold donors accountable. In the current scenario in Pakistan where serving military officials have been ordered to go back to barracks in order to depoliticize the Army; it would be challenging for civil institutions to take over and run the affairs of ERRA professionally. On ground, empowerment may not take place as rapidly as suggested in the Strategy. A gradual process in which civil institutions could take over from the Army and then carry it forward to local communities may have been a more realistic approach.

The strategy document seems to ignore the external elements affecting livelihoods such as the socio-political situation in the society. APP (2008) reports that four members of an international non-governmental organization (NGO) were killed while working in 'Mansehra', one of the earthquake affected districts. Dawn (2008) comments that there are factions of society which deem NGOs as promoting the 'West's agenda' and therefore want to eliminate them. Being no check, it is also reported that there exist false NGOs which create mistrust among the people of the area, (Dawn, 2008).

Similarly, the Strategy appears to follow a simplistic blueprint approach to rehabilitation while overlooking complex social reality. The hatred against NGOs and government agencies shown through 12 suicide bombings at various places in the country including the NWFP is associated with socio-economic condition of peoples' life (News, 2008). The Strategy document is silent about provision of a safe environment which is fundamental to the working of the government departments, NGOs, and other stakeholders. The complex links of extremism with that poverty and vulnerability have not been explored in the Strategy.

## 6. Future research

This desktop study of the Rehabilitation Strategy has been conducted as the first phase of a PhD. Despite having the Strategy built on the best international practices, the study has shown that the actual implementation is falling short of expectations. The Strategy appears to be installed over the rehabilitation process rather than grounded in the local realities. Future research will involve evaluation of the effectiveness of the Livelihood Rehabilitation Strategy on the ground, particularly probing the appropriateness of the sustainable livelihoods approach and the community-focused nature of the Strategy. It is important to consider whether the Strategy was well suited to the needs of the marginalised, impoverished, communities in the effected areas. Analysis will be undertaken in order to help to understand and assess the process of integration of participatory and bottom-up development principles, which are fundamentals of the sustainable livelihood framework.

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