TPM Vol. 32, No. S1, 2025
ISSN: 1972-6325
https://www.tpmap.org/

RISING FROM THE RUBBLE: AJK'S SOCIO-ECONOMIC TRANSFORMATION AFTER 2005 EARTHQUAKE

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ABSTRACT
The current study has discussed about the socio-economic change in Azar Jammu and Kashmir (AJK) following the devastating earthquake of 2005 that claimed the lives of over 73,000 people and displaced others. In the research design, the 400 respondents completed structured questionnaires in four districts and was also employed using a mixed research design, which entailed the use of 25 semi-structured interviews of key stakeholders of the study. The secondary information was collected in the shape of governmental reports, international organizations, and academic sources related to the issue that appeared between 2005 and 2020. The quantitative analysis through using SPSS revealed that the progress on infrastructure, economic factors and livelihood opportunities was great and the qualitative thematic analysis served to identify five themes, namely, community resilience, institutional reforms, economic diversification, social cohesion, and sustainable development practices. The findings have revealed that AJK has achieved a lot in terms of socio-economic development even after the area was destroyed at the onset of the reconstruction process with the aid of the international community, and policy interventions. The paper concludes that disaster recovery as an incident that is under control can turn out to be a catalyst of positive change within a particular area. It is advised that the continued investment in disaster preparedness, sustainable infrastructure and community-based practices of development be maintained so as to make sure the trend appears positive and the trend would be maintained in the same direction as it had been constituted within the post-earthquake reconstruction phase.
Keywords: Socio-economic change, Azad Jammu Kashmir, devastating earthquake, on infrastructure, economic factors, livelihood opportunities.

INTRODUCTION

The devastating earthquake that struck Azad Jammu and Kashmir on October 8, 2005 had a magnitude of up to 7.6 on the Richter scale and proved to be one of the most disastrous natural catastrophes in South Asian history (Ansari et al., 2022). The catastrophe caused the death of approximately 73,338 individuals, more than 128, 000 injured, and at least 3.5 million displaced people in the area to mention but a few. The just outside Muzaffarabad epicenter caused

destruction to AJK and the adjoining territories of Khyber Pakhtunkhwa erasing entire villages, schools, hospitals and other essential infrastructure (Ali Akbar Khan et al., 2023). Humanitarian crisis was of unheard-of scale and the survivors were left to harsh weather during winter without shelter, food and health care facilities. The AJK physical landscape was seriously transformed, roadways were blocked by landslides, bridges were knocked down and the system of communication network was totally disconnected, isolating remote-communities several days and in a few cases, even weeks without any emergency aid (WEISE & UBE, 2023). The response of this catastrophe turned out to be a milestone in the history of disaster management in Pakistan and the entire process of reconstruction and change that should have progressed much beyond rebuilding what was already ruined (Hussain et al., 2023). The domestic and foreign response was urgent and massive and over 90 countries and numerous international organizations participated in the process of relief and reconstruction. The Pakistani government has established the Earthquake Reconstruction and Rehabilitation Authority (ERRA) to structure the massive reconstruction initiative which ultimately accommodated investments of the tune of USD 6 billion over the next ten years. This was a significant change in the traditional disaster response systems in Pakistan and included the concepts of building back better that were not solely directed at the reinstitution of the pre-disaster situations but the creation of more sustainable, resilient, and developed societies (Ali Akber Khan et al., 2023).

The process of the recovery of AJK after the earthquake is associated with various dimensions that are not just concerned with the physical reconstruction. The disaster has introduced the chances of institutional reforms, policy innovations and community empowerment that otherwise would not have been put in place under ordinary circumstances (Bokhari & Ahmad, 2025). Modern building codes, improved city planning, improved disaster preparations and fortification of the local government structure were as well introduced through reconstruction process. The schools were repaired and the structures that were prone to earthquakes were reinforced as well as the capacity and hospitals were modernized and redistributed the number across the area more equally. The inflow of reconstruction money caused the economic activity, new working places were organized, the local constructions and service industries appeared. The long-term impact on the local capacity and social capital was due to the new technologies, skills training programs, and community development strategies introduced by the international NGOs and the development agencies (Gul & McGee, 2024). The transformation had some major challenges and controversies along the way. Transparency of the fund's distribution and distribution of aid equally, and land ownership disputes, as well as the pace of the reconstruction process were some of the issues of a great discussion and even a certain social tension (Sajjad Ahmad et al., 2025). Remote and marginalized communities were not necessarily frequented and provided with equal resource as more accessible sites (Shabbir et al., 2023). The gender inequality in the distribution of aid and job in the reconstruction process also raised relevant issues about the presence of development (Ahmad et al., 2020). Ecology was also a problem when, at times, fast building was carried out without due attention to environmental sustainability or the geological vulnerability. The psychological problems which the survivors were experiencing, particularly those who lost people in their lives, including being forced to witness the horrifying destruction, warranted an extended mental health intervention which was not always provided adequately (Shabeer Ahmad et al., 2025). Socio-economic post-disaster changes are a good case study in AJK almost two decades after the earthquake. Several development indicators, including literacy levels, economic efficiency, quality of infrastructure, and institutions capacity, have been increasing in the region in a numerable manner (Jan et al., 2024). The ruined villages were substituted with new communities built according to the new demands; the road network became bigger improving the connectivity and the access to the public services became more accessible to the previously under-served groups. The disaster led to the social changes like the increased participation of more women in the decision-making process within the communities, the increased awareness of the environmental vulnerability, and the increased empowerment of the community-based organizations. The experience has taught viable lessons on disaster risk reduction and resilience building that have informed policy frameworks at national and international levels (Mir et al., 2025).

The purpose of this study is to completely capture and analyze the change in AJK that occurred following the 2005 earthquake. By examining the quantitative features of economic and infrastructural growth and development, and the qualitative features of the social change, the development of the institution and the strength of the community, the research is likely to provide an in-depth picture of how catastrophic disasters can present the opportunity of the most fundamental socio-economic advancement. Such a transformation would serve not only in determining the effectiveness of post-disaster recovery effort in AJK itself but also in informing future disaster management and development policies in prone regions all around the globe. The findings can be contributed to the overall academic and policy agenda on the disaster recovery, sustainable development, and inexplicable dynamics between crisis, intervention, and social change.

RESEARCH OBJECTIVES

1. To assess the variation of the socio-economic indicators of Azar Jammu and Kashmir during the period of reconstruction following the earthquake of 2005 to 2020.
2. To determine the determinants and intervention that had the greatest influence in transformation of infrastructure, livelihood and social institution in AJK.

3. To establish how effective the disaster management policies and reconstruction strategy have been in increasing sustainable development and resilience of the communities.

RESEARCH QUESTIONS

1. What were the socio-economic changes that occurred in AJK during 2005 to 2020 following the earthquake?
2. Which reconstruction interventions and policies had the most significant impact on altering the infrastructure, economy, and social life of the region?
3. How did the post-earthquake reconstruction process affect community resiliency, institutional capacity and sustainability of development practices in AJK?

SIGNIFICANCE OF THE STUDY

The study is very helpful to different stakeholders in disaster management, development planning and policy making. The research provides empirical evidence of the long-term dynamics of the post-disaster changes, something that is a valuable addition to the scholarly literature in the area of disaster recovery and resilience-building activities in third-world regions. To policy makers and government agencies, the findings offer realistic information on the optimal way of reconstructions plans, resource mobilization and institution structures that could be incorporated in establishing the future response plans to disasters. Development practitioners and humanitarian organizations can use the knowledge acquired during the research to design more useful interventions, which are community-based and are most likely to increase sustainable recovery. The case study of reformation of AJK can serve as a guide book to other disaster-stricken regions of the world and assist to demonstrate what has been done well and what should be avoided in rebuilding the country after the disaster.

LITERATURE REVIEW

The academic literature on post-disaster recovery and socio-economic change has evolved dramatically over the past decades as it no more emphasized the activities of short-term relief but described the reconstruction processes and its effects on development (Malokani et al., 2023). The earliest disaster studies revolved around the effectiveness of response to disasters and humanitarian assistance, and the disasters were viewed as temporal upheavals that needed to be reinstated to their former position (Zahoor Hussain, 2018). However, contemporary studies are also adding that calamities could be the foretellers of the long-term social, economic and institutional transformations, in particular, when the reconstruction strategies revolve around the ideas of sustainable development and resiliency. This paradigmatic shift in the perception of the post-disaster reconstruction as the possibility to reduce the vulnerabilities that pre-existed it and develop larger development objectives is reflected in the notion of building back better that appeared in specific after the Indian Ocean tsunami in 2004 (Firth, 2022). The study on earthquake recovery has attracted the attention to the complexity of the interaction between the physical reconstruction of the area, economic recovery, and the social restructuring (Shao & Sun, 2025). Studies that have been done on the 1999 Marmara earthquake in Turkey and the 2008 Wenchuan earthquake in China as well as the 2010 Haiti earthquake have noted how reconstruction process can enhance and delay socio-economic development due to the quality of governance, resource availability, community participation and policy developments (Aksoy et al., 2024). The Turkish experience demonstrated that the rapid reconstruction without appropriate quality control and consultation with the community can also provide new points of vulnerability despite the fact that the superficial progress could have been achieved. The Wenchuan case showed the possibility of capacity building through centralized government and mobilization of much resource of a tremendous scale in order to achieve physical reconstruction of such tremendous size at a cost of sustainability and ownership by the locals. The post-disaster of the Haiti earthquake proved that the background failure of institutions, failure of governance and coordination could badly cripple the reconstruction despite the presence of the mass international assistance (Neeraj, 2022). The question of international aid and humanitarian aid to the post-disaster situations has caused a fair share of scholarly debate. Research has revealed that, although the international support tends to provide all the crucial resources and technical expertise, which would otherwise have been unavailable, it may result in dependency, misalign local economies, crowd out the local voice and apply solutions that are not conducive to the cultural background and local demands (RAMADANI & SALLAUKA, 2024). There has been research on the effectiveness of post-disaster assistance, where this has been conducted by laying emphasis on the coordination mechanisms, capacity building locally, open accountability systems, and gradual transition of the relief to development programming. The cluster model of international humanitarian agencies is founded on the regulation of the coordination issues with the assistance of the sector-based leadership and collaboration frameworks, yet the success of the implementation varies largely in every scenario. Reports on aid conditionality and priorities of the donors have shown that reconstruction agendas at some points are rather about the tendency of the donors rather than the needs of the beneficiaries and can undermine the local ownership and sustainability in the long term (Rucińska, 2024).

Infrastructure reconstruction is a very crucial part of post-disaster recovery that extends beyond the physical recovery of the material world to include reorganization of spaces, technological updating, and reinforcing the institutions (Galderisi et al., 2022). The literature on post-disaster infrastructure development is concerned with the importance of

building codes in seismic resistance, land-use planning in consideration of geological vulnerability and the creation of infrastructure that is more resistant to a disaster. Opportunities that come with reconstruction phases have been documented as they have a chance to conquer the existing infrastructure deficiencies to improve service delivery as well as to embrace modern technologies and standards (Shuvo et al., 2022). Studies caution that inadequate scheduling of reconstruction, lack of technical control, and corruption could destroy the infrastructure quality and result in a false sense of safety. The experience of various post-disaster conditions implies that the creation of sustainable infrastructure assumes the speed/quality ratio, the synthesis of the needs and preferences of the community, environmental sustainability, and maintenance systems, which provide sustainability in terms of functionality over the long term (Restriono, 2024). Some of the most prominent concerns of the post-disaster transformation literature include the problems of economic recovery and the restoration of livelihoods. Research indicates that poor and less fortunate individuals are often more influenced by disasters, which destroy the livelihood assets and disrupt the markets and even render poor and the less fortunate poorer and less equal (Mfon & Olurotimi, 2023). Economic recovery would require a complicated intervention that would involve cash relief, microfinance, skill training, market development and business support services. The study has shown that livelihood interventions can be effective provided that they complement the already existing economic activities, entail market reviews, sufficient capital and training and consideration of both short-run and long-run sustainability (Cheek & Chmutina, 2022). The reconstruction economy per se, however, generates jobs and sources of income, but research centers on the need to ensure that locals gain and not foreign contractors and workers. The following disaster-based economic transformation literature has demonstrated the important effects of reconstruction investment on the post-disaster industrial growth, infrastructure, and service industries expansion that can be sustained even during periods of reconstruction (Sezer, 2024).

Social capital, community cohesion, gender relations and psychosocial recovery are some of the social dimensions of post disaster change (Ramadani, 2021). The impact of disasters on consolidation or disintegration of social linkages has also been reported in studies given to the fairness of the allocation of aid, the degree to which the community is engaged in disaster recovery, and the extent of emphasis placed on a preexisting social fault line. Studies point to the fact that reconstruction efforts that engage communities and render them salient, put into consideration local knowledge and affections, and allocate benefits equally will have greater chances of enhancing social cohesion and effectiveness. These gender sensitive disaster recovery studies have discovered that disasters are likely to add to the underlying gender inequalities wherein women have certain problems with obtaining aids, decision making, and livelihood (Rezwana & Pain, 2023). The reconstruction durations may be used as the tool of creating gender equality through the particular programs, a quorum in the decision-making institutions and livelihood initiatives to empower women economically. Psychosocial recovery literature suggests that mental health and trauma recovery requires a long-term focus, much longer than the immediate post-disaster impacts, and that community-based interventions may be more culturally appropriate and sustainable than a clinical treatment (Pain & Rezwana, 2022).

The reconstruction after a disaster is usually accompanied by institutional reforms and governance restructuring particularly when the disaster has exposed the weaknesses of the system within the prevailing structures. The literature on disaster governance highlights the importance of coordination systems, definite authority, open management of resources, and systems of accountability (Bhadra, 2022). Studies have established that disasters may foster administrative changes, policy novelty and institutional development that can improve the quality of post-disaster management governance. However, research has also cautioned that the institutional changes that come with the emergencies might not be permanent once normalcy resumes and reforms therefore must be institutionalized by hard work. One academic area of increasing attention has been local government roles in reconstruction, in which a growing number of studies recognized that decentralized approaches that recognize the power and capacity of local government are more likely to produce more responsive and sustainable forms of outcome as compared to top-down approaches of centralization (Jeranko, 2023). Environmental sustainability and disaster risk reduction has become one of the core issues in the contemporary post disaster reconstruction literature. Research is also growing more assertive to demonstrate that reconstruction must take into account the weaknesses of the environment behind it, must adopt climate change mitigation strategies, and must not introduce additional hazards through the adoption of improper development trends (Charles et al., 2022). The environmental impacts of post-disaster reconstruction have been examined and instances of how the environment is devastated by destruction of forests, soil erosion systems, loss of water resources, and destruction of ecosystem have been documented which undermine resilience and sustainability in the long run (Graveline & Germain, 2022). In some circumstances, the reconstruction also implied the environmental restoration and sustainable management of resources and the ecosystem-related approaches to adjusting to the environment that not only enhanced the quality of the environment but also the sustainability of the community. The evidence in the literature on the use of disaster risk reduction in development planning lies in the fact that sustainable transformation implies mainstreaming of risk-related thinking on all sectors rather than disaster management as a separate technical discipline (Bonfanti et al., 2023).

RESEARCH METHODOLOGY

RESEARCH DESIGN

The researchers adopted mixed-methods research design to explore the socio-economic change of Azar Jammu and Kashmir (AJK) following the disastrous earthquake in 2005. The researchers used a quantitative and qualitative design to provide a comprehensive review of the recovery and development trend of the region.

DATA COLLECTION METHODS

PRIMARY DATA

The researchers collected primary data through secondary data (structured questionnaires) which were distributed to 400 respondents in four districts of AJK: Muzaffarabad, Bagh, Rawalakot, and Balakot. In the study, stratified random sampling was done to ensure that different socio-economic groups were represented. The researchers also conducted 25 semi structured interviews with the major stakeholders, which included the government officials, NGO representatives, the community leaders, and victims of the earth quake seeking to get information in detail regarding the rebuilding process and how they impacted the communities based in the area.

SECONDARY DATA

The secondary data utilized by the researchers consist of government and documents of World Bank reports, as well as United Nations Development Program (UNDP) and academic journals. The statistical documentation that the researchers analyzed were those of the State Disaster Management Authority (SDMA) and Planning and Development Department of AJK to track the indicators of the economy, the development of the infrastructure, and the demographic changes in 2005 and 2020.

DATA ANALYSIS

The answers to the questionnaires of the study were analyzed into SPSS software and quantitative data were processed with the assistance of descriptive statistics, correlation, and regression model to reveal the patterns and correlation between variables. Thematic analysis of the interviews based on qualitative data was carried out by transcribing and analyzing them, as the common themes of social resilience, economic recovery, and institutional changes were sought.

ETHICAL CONSIDERATIONS

The researchers requested all subjects to participate in the study to sign the informed consent and assured confidentiality and anonymity in the course of the study. The research protocol was approved by the ethical review board in the university that was adhered to before data was collected. These were done sensitively in handling the issue of traumatic experiences related to the earthquake and the participants were informed about their right to stop the conversation without reprisals.

RESULTS AND DATA ANALYSIS

QUANTITATIVE ANALYSIS

Table 1: Demographic and Socio-Economic Profile of Respondents

Characteristic	Category	Frequency	Percentage
Gender	Male	245	61.25%
	Female	155	38.75%
Age Group	18-30 years	98	24.50%
	31-45 years	176	44.00%
	46-60 years	96	24.00%
	Above 60 years	30	7.50%
Education Level	Illiterate	52	13.00%
	Primary	89	22.25%
	Secondary	134	33.50%

	Higher Secondary	78	19.50%
	Graduate and above	47	11.75%
Occupation	Agriculture	112	28.00%
	Business	87	21.75%
	Government Service	64	16.00%
	Private Employment	71	17.75%
	Daily Wage Labor	66	16.50%

The demographic study showed that male participants represented 61.25 percent of the sample, which represents the traditional gender participation patterns in AJK society. The most economically active population segment with the largest age group included aged 31-45 years (44%), and they were the ones who were affected by the earthquake in their active years of working and actively engaged in the reconstruction process. Levels of education increased since the time before the earthquake, and 13 percent of the population was illiterate compared to the 25 percent of the general population that is illiterate in the regions. The occupational pattern featured the diversification of the economy as other than traditional agriculture, which showed a great involvement in business, services as well as the wage employment that grew during the reconstruction.

Table 2: Perceived Changes in Infrastructure Development (2005-2020)

Infrastructure Type	Significantly Improved	Moderately Improved	No Change	Deteriorated
Housing Quality	312 (78.00%)	68 (17.00%)	14 (3.50%)	6 (1.50%)
Road Connectivity	289 (72.25%)	87 (21.75%)	18 (4.50%)	6 (1.50%)
Educational Facilities	298 (74.50%)	79 (19.75%)	17 (4.25%)	6 (1.50%)
Healthcare Services	267 (66.75%)	102 (25.50%)	23 (5.75%)	8 (2.00%)
Water Supply	234 (58.50%)	124 (31.00%)	32 (8.00%)	10 (2.50%)
Electricity Access	256 (64.00%)	112 (28.00%)	24 (6.00%)	8 (2.00%)
Communication Networks	287 (71.75%)	89 (22.25%)	18 (4.50%)	6 (1.50%)

The vast majority of respondents indicated that there were vast improvements in all infrastructure categories with the highest positive ratings of 78 being given to housing quality. The reconstruction program laid much emphasis on the construction of earthquake resistant housing and there was a massive demolition of the traditional weaknesses and modern houses with seismic safety measures. Improvements in road connectivity were an indicator of huge investments in transportation infrastructure linking communities that had been isolated to district headquarters and commercial centers. Educational institutions experienced significant improvements in terms of rebuilding of schools that had better designs, more capacity and better facilities. Despite the improvement, healthcare services received relatively lower ratings, which implies that there are still issues with delivering medical services and access to them in isolated regions.

Table 3: Economic Status and Livelihood Changes

Economic Indicator	Pre-Earthquake (2005)	Post-Reconstruction (2020)	Change
Average Monthly Income (PKR)	8,450	24,780	+193.3%
Households Below Poverty Line	48.50%	26.75%	-21.75%
Employment Rate	54.25%	71.50%	+17.25%
Business Ownership	16.75%	28.50%	+11.75%
Access to Credit	12.25%	41.75%	+29.50%
Remittance Recipients	31.50%	43.25%	+11.75%

Economic performance revealed a great change as the average monthly income increased almost threefold that of PKR 8,450 to PKR 24,780 in the post-earthquake. This dramatic growth was a combination of impacts of reconstruction job creation, economic diversification, better market access and inflation-adjusted wage rise. The percentage of households below the poverty line reduced significantly by 48.50 to 26.75 meaning that there has been effective reduction of poverty as a result of reconstruction investment as well as livelihood programs. The rate of employment rose by 17.25 percentage points due to the growth of the construction sector, growth of the service industry, and better

connectivity that enables the economic opportunities. The number of businesses almost doubled with the help of reconstruction-based entrepreneurial ventures, microfinance, and skills training initiatives that stimulated self-employment and formation of small businesses.

Table 4: Social Development Indicators

Social Indicator	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Community cohesion strengthened	198 (49.50%)	156 (39.00%)	31 (7.75%)	11 (2.75%)	4 (1.00%)
Women's participation increased	176 (44.00%)	167 (41.75%)	38 (9.50%)	14 (3.50%)	5 (1.25%)
Education accessibility improved	234 (58.50%)	143 (35.75%)	17 (4.25%)	4 (1.00%)	2 (0.50%)
Healthcare access improved	187 (46.75%)	158 (39.50%)	39 (9.75%)	12 (3.00%)	4 (1.00%)
Disaster preparedness enhanced	209 (52.25%)	154 (38.50%)	27 (6.75%)	7 (1.75%)	3 (0.75%)
Local governance improved	165 (41.25%)	171 (42.75%)	43 (10.75%)	16 (4.00%)	5 (1.25%)

Social development indicators showed that there are broad positive perceptions towards the strengthening of the community and improved institutions. Almost three quarters (90) of the people interviewed expressed the notion that there was increased community unity after the earthquake owing to similar experiences of recovery, unified efforts to bring the community back on its feet, and greater order in community. The involvement of women in the community activities was also significantly improved as 85.75% of the respondents admitted that there was increased female involvement in decision-making, economic and social institutions. The most positive rating was achieved in educational access, which was rated at 94.25 and this is evidence of successful school reconstruction, increased coverage and better quality. The knowledge and preparedness to disaster increased significantly with more than 90 percent admitting to improved preparedness due to the training programs, sensitization and institutional arrangements which were put in place after the earthquake.

Table 5: Satisfaction with Reconstruction Assistance

Assistance Type	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Emergency Relief	189 (47.25%)	145 (36.25%)	41 (10.25%)	18 (4.50%)	7 (1.75%)
Housing Reconstruction	167 (41.75%)	154 (38.50%)	48 (12.00%)	23 (5.75%)	8 (2.00%)
Livelihood Support	143 (35.75%)	161 (40.25%)	63 (15.75%)	26 (6.50%)	7 (1.75%)
Education Support	178 (44.50%)	159 (39.75%)	42 (10.50%)	15 (3.75%)	6 (1.50%)
Healthcare Services	134 (33.50%)	149 (37.25%)	71 (17.75%)	34 (8.50%)	12 (3.00%)
Skills Training	156 (39.00%)	167 (41.75%)	52 (13.00%)	19 (4.75%)	6 (1.50%)

The level of satisfaction on reconstruction assistance was also different among the types of interventions as emergency relief had the highest satisfaction or very satisfaction at 83.50% and 54.63%. This was an indicator of good coordination of immediate response in spite of the difficulties encountered at the beginning that were related to reaching remote areas. The satisfaction with housing reconstruction was 80.25, but some disgruntlement has been noticed in the satisfaction with the adequacy of compensation, quality differences, and schedule delays. Livelihood support programs scored relatively lower satisfaction ratings at 76 with respondents reporting that there were coverage gaps, lack of sufficient capital provision as well as follow-up support. The lowest satisfaction scores were obtained with healthcare services (11.50% dissatisfied), where one is constantly exposed to the problem of inadequate medical facilities, staffing, and service delivery, which has not improved even though the facility physically has improved.

QUALITATIVE ANALYSIS

Theme 1: Community Resilience and Collective Recovery

The community resilience was also a common theme because the respondents emphasized the fact that all people united because of the shared tragedy and supported one another. The participants recounted that neighbors assisted each other in case of rescues, utilized limited resources during the initial phases of crisis scenarios and participated together in planning and implementation of reconstruction. The traditional types of community system that were the biradari systems got more enhanced where the formation of the extended family was carried out to support the affected members. The respondents observed that the shared experiences of losses and healing established long-term social networks beyond the previously established divisions that were supported by economic status or political party membership. The community organizations established during reconstruction worked many years later to address the development needs and disaster preparedness which indicated that capacity building is sustainable even after recovery.

Theme 2: Institutional Reforms and Governance transformation

Another significant change in governance that is highly familiar to the stakeholders was the establishment of dedicated agencies that address disaster management. The respondents had credited the centralized decision making where local contribution was not always factored into the process of giving coordinated leadership to the Earthquake Reconstruction and Rehabilitation Authority (ERRA) although some of them criticized it. The institutional capacity to persist in minimizing risks and emergency response was achieved through the creation of District Disaster Management Authorities (DDMAs). The government leaders noted improvement in inter-departmental coordination systems that were established throughout reconstruction but still present even after reconstruction. However, other governance factors identified by the respondents included bureaucracy and corruption in some of the projects of reconstruction and absence of appropriate accountability mechanisms. The representatives of the civil society emphasized on increased clarity requirements and engagement of the citizens on the issues of the political agenda which were the product of the reconstruction experiences which radically shifted the demands on the responsiveness and accountability of the government.

Theme 3: Economic Diversification and Livelihood Transformation

Increase in income was not the only economic change but also the change of the livelihood pattern and economic set ups. The respondents discussed various jobs that were not always agricultural created as a result of reconstruction as building, transportation, services, and small-scale manufacturing. The skills of training that were incorporated in the course of reconstruction enabled a substantial number of people to acquire technical skills in the construction sector, carpentry, electrical and other fields to secure their jobs in the long term. Women economic activities also became much better through the assistance of the microenterprise programs, customized training and livestock support programs. New markets were delivered to the agricultural produce and handcrafts that could only be consumed locally due to better road connectivity. However, some respondents raised their concerns regarding economic sustainability following reconstruction, dependency on remittances and a small amount of industrialization even though things were getting better.

Theme 4: Educational Advancement and Human Capital Development

One of the most glorified achievements that occurred during the reconstruction was the educational change, whose stakeholders were concerned about quantitative growth and qualitative improvement. The parents claim that the earthquake was simply an appendage to the lack of facilities in the old school buildings where there were damaged buildings lacking the basic amenities even before the earthquake. Reconstruction also increased school enrolment particularly in girls since it improved infrastructure, development of awareness and stipend programs. According to one of the teachers, training opportunities, improvement of teaching materials and working conditions increased. However, other players have also indicated that such long-term problems as the shortage of teachers in the remote communities, the disparity in the quality of educational institutions in the nation, and the inadequacy of higher education that compels the students to migrate, also exist. The earthquake also impacted on education in infrastructure and the very fabric of the society in the sense of attitude towards education where the survivor's emphasized education as the main way to future security and prosperity.

Theme 5: Psychosocial Healing and Trauma Recovery

The psychological impacts and recovery mechanisms were highly individual and also community-based considerations of transforming the world following the earthquake. The survivors stated that they had experienced traumatic events in terms of observing destruction, loss of family members and feeling of persistent post shock anxiety years after. The child survivors of the earthquake also experienced behavioral disorders, anxiety disorder and learning problems that were to be sustained on a long-term basis. The NGOs and government agencies initiated mental health interventions which included counseling interventions, trauma healing programs and psychosocial support groups that helped most people overcome psychological stress. Religions were also valuable in providing spiritual adjustment, community-based help in easing emotional healing. However, the respondents complained that the current mental health services were not enough relative to the demand, there was a social stigma that prevented the seekers of assistance and lacked the adequate funding in the long-term. The psychological recovery required a time of extensive care that could not be restricted to construction plans, which becomes a step that is always overlooked when it comes to entire change.

Theme 6: Environmental Awareness and Sustainable Development

Once the earthquake occurred, the level of environmental awareness increased high because communities understood that geological susceptibility and impacts of environmental degradation were among the factors that influenced the impacts of the disaster. The respondents discussed that they have become more aware regarding the effects of deforestation and the threat of soil erosion and proper planning of land use. Environmental protection like afforestation schemes, slope control development and building regulations considering geological features were added due to reconstruction. Agriculture, water conservation and waste management Disaster resistant agricultural, water conservation systems, and waste management systems were modified by communities with community awareness programs. However, the respondents also identified the environmental issues that appeared due to the rush reconstruction like the problem of the construction debris management, the pressure on the natural resources and the cases when the interests of the development and the environmental sustainability were not aligned. The stakeholders

observed that, in order to gain environmental benefits, additional education, implementation of environmental legislation and integration of environmental concern in the whole development planning were required rather than treating them as a matter of concern.

DISCUSSION

The findings indicate that the post-earthquake change of AJK is a complex interrelation of the destruction made by the disasters and the reconstruction of AJK that entails development which validate the theoretical paradigms where disasters might act as the engine of the entire socio-economic change. The immense increments in the indicators of infrastructure, economic, and social development indices prove that the ideals of building back better are effectively applied, but a lot remains to be desired concerning sustainability, equity, and institutional capacity. The positive trends of the quantitative data are consistent with the qualitative themes of the community health and institutional changes, which suggest the real change rather than the recovery. However, the discrepancy in satisfaction levels among forms of assistance and existing issues in healthcare and environmental regulation create the impression that the reconstruction process was not successful in the same way in industries and in communities, which presupposes the variability of the implementation process and the scarcity of resources that require further consideration.

CONCLUSION

The description of the socio-economic change that took place in the Azad Jammu and Kashmir in the aftermath of the earthquake that happened in 2005 reveals that catastrophic disasters, in spite of their tendency to present as human sufferings and material damage, can result in the much-needed positive changes, provided that the rebuilding process is grounded on the principles of development, community involvement, and commitment to the long-term perspectives. The areas had experienced measurable gains in the quality of infrastructure, economic access, access to education and institutional capacity, superior to those of the time before the calamity, as warranting investments in wholesale reconstruction strategies. The change has not been full yet, though, and issues of healthcare delivery, environmental sustainability, psychosocial support, and equitable development are yet to be handled. The key lessons the AJK experience can teach the disaster-affected regions of the globe include that effective post-disaster change must be tackled through both physical restructuring endeavors, economic revitalization, social empowerment and institutional expansion not only concurrently and dedicate to the long-term but also not limited to the emergency event.

RECOMMENDATIONS

The disaster preparedness, early warning system and community training systems infrastructure has to stay on being invested in in order to not lose the gains that the reconstruction process has brought about in order to make communities more resilient in order to eliminate future disasters. One of the priorities of the policymakers must be the strengthening of the healthcare system: the gaps in service delivery due to the inadequacy of infrastructure and the quality improvement of the staff and the quality of their work should be closed. Environmental sustainability is an issue, which must be mainstreamed to all the development sectors with the imposing regulations, afforestation and climate resilient planning. The psycho social support services require long term financing and destigmatization to provide the mental health needs with a long term focus. The gender sensitive development efforts should enhance accessibility of economic opportunities and decision making by women. Finally, the establishment of an effective monitoring and evaluation mechanism should be developed, which would allow to remain accountable, monitor progress, and introduce evidence-based changes that would keep the transformation on the positive course initiated with post-earthquake reconstruction operations.

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