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Evaluation of Post Disaster Mitigation Strategy of Bhuj Earthquake

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Abstract: The Bhuj earthquake 2001 caused many property losses and life losses.so the re-construction and re-habitation work to be carried out.in this paper carry out studies about what is the evaluating strategy conducted in Bhuj earthquake. A number of new activities and initiatives have been possible due to an enhanced level of awareness and interest caused by this earthquake. After this earthquake, the earthquake codes are developed and the construction of earthquake proof building comes into existence.in the evaluation of post disaster mitigation collect the data about the seismic hazards, exposer to hazards in terms of life loss, property loss, and business and vulnerability assessment. For finding out the solution follow the method like structural, locational, operational and risk transfer. Then carry out the estimation of potential losses in particular area and examining alternative loss reduction techniques, which involves identifying the effectiveness of each alternative in reducing losses and the associated cost. There is the different strategy and methods are used in reconstruction work of Bhuj earthquake. The awareness in the people about the disaster mitigation is developed by the awareness programs by the government and different authority.

Keywords: Earthquake, Mitigation Work, Agencies Involved.

INTRODUCTION

Bhuj earthquake occurs in Gujarat on 26 January 2001.that day is republic day of our nation. The epi-center of the earthquake is 20 km from the Bhuj at Bhachao. The magnitude intensity of the earthquake is 7.9. In Bhuj earthquake, many losses occur like a live loss, infrastructure loss etc. The relief and response by the government and different NGOs are quick and the UN system also includes the assessment in terms of money. After the earthquake post disaster mitigation work is started and the different strategy for evaluating the mitigation works is applied. The national and international frame works and plans are come in to action. In Bhuj earthquake apply the different strategy for estimating the losses due to disaster in different areas. It also includes the different house policies for the people who are lost their houses. The civil engineering works are developing faster in those days for re-habitation and re-construction works. The Development the new design technics for the construction of earthquake proof buildings. Developing the different earthquake codes for the construction of earthquake resistance building. The physical planning is carried to locate important facilities away from hazards. After the earthquake the different government and on- government agencies are involved in the evaluation of the earthquake. The NDMA, GSDMA, UN system etc. authorities are also involved in the reconstruction and re-habitation work of the Bhuj earthquake.

AIM AND OBJECTIVES

Aim

To evaluate the post disaster mitigation work in Bhuj earthquake and analyze the type of methodology adopted in the reconstruction and re-habitation work in Bhuj earthquake.

Objectives

- To analyze the evaluation strategy plans for Bhuj earthquake.
- To analyze the post disaster mitigation work in Bhuj earthquake.

METHODOLOGY

- In post disaster mitigation work of Bhuj earthquake different strategies are used:
- In Bhuj earthquake mitigation work there are different government agencies and NGOs are involved:

1. Work by NDMA

The national disaster management frame works are implemented in relief and rescue work. The national disaster polices are implemented for the reconstruction and re-habitation work in Bhuj earthquake. The NDMA also arrange the awareness programme for the people who are affected by the disasters.

Polices of NDMA

- Community-based disaster management, including last mile integration of the policy, plans, and execution.
- Capacity development in all related areas.
- Consolidation of past initiatives and best practices.
- Cooperation with agencies at the national, regional and international levels.
- Compliance and coordination to generate a multi-sectoral synergy.

2. Work by government and NGOs

- After the initial relief phase, Government of Gujarat launched a massive reconstruction and rehabilitation program in the affected areas.

- within a very short period government announced a comprehensive reconstruction and rehabilitation policy which included assistance for restoration of private houses, economic rehabilitation, and reconstruction of public infrastructure, prepare the people to face disasters through community participation and multi hazard preparedness programs; human resource development; and livelihood support, based on sustainable economy and ecology. Gujarat State Disaster Management Authority was created as the nodal agency to implement the massive reconstruction program.

Change after the earthquake

*	Number of Pucca houses	66%	100%
*	Beneficiaries living in homes with separate toilets	32%	53%
*	Insurance of reconstructed houses	6%	49%
*	People knowing what to do before, during and after a disaster	0%	80%
*	Employment level among women	42%	92%
*	Water supply through pipelines at home	30%	34%
*	Quality of life index	1.00%	1.143%

- **Key activities are done by Planning Department**
  - Mapping and property database.
  - Preparation of a city-level development plan.
  - The development of urban infrastructure.
  - Town planning schemes to redevelop the walled city.
  - Experiments in community planning, institution building and supporting civil society initiatives.

Post-disaster reconstruction is a complex process that involves the interaction of social, technological and economic factors. The most important goal of any post-disaster reconstruction program must be to reduce the long-term vulnerability of affected communities through the construction of multi-hazard proof housing and appropriate knowledge transfer. Post-disaster reconstruction is an ever-evolving process and there is by no means a perfect solution that will apply to every disaster.
It is essential that academics, governments, and humanitarian agencies learn from previous applications of this process in order to not only implement programs that reduce the current vulnerability but also to establish a legacy of disaster-risk reduction. Two models were adopted for housing reconstruction. One was owner driven housing in which the reconstruction was carried out by the home-owners with financial, technical and material assistance provided by the government. The other model was a public private partnership program, wherein 50% of the cost of reconstruction was borne by non-government agencies (NGOs) and 50% by the government.

CONCLUSION

The earthquake is the sudden occur in any region so the warning system for the occurrence of the earthquake can be developed properly. The public awareness programs are organized about the earthquake. After the earthquake occurred the re-habitation and re-construction work can be carried out. Financial assessment is provided to the people who are affected by the earthquake.

REFERENCES

1. WHAT HAS CHANGED AFTER GUJARAT EARTHQUAKE 2001? V. Thiruppugazh, Joint Chief Executive Officer, Gujarat State Disaster Management Authority, India
2. Lessons from Bhuj earthquake, U.H. Varyani
3. The Bhuj Earthquake District of Kutch, State of Gujarat (India) January 26, 2001, A Reconnaissance Report Identification of Priority Issues, Krishna S. Vatsa March 16, 2001.
4. Earthquake Disaster Mitigation Policy in Japan, by Koji Ikeuchi1 and Nobuharu Isago2

