

EARTHQUAKE MITIGATION MEASURES--- STRENGTHENING BUILDING AND FACILITIES & PLANNING FOR RECONSTRUCTION

Strengthening building and facilities: There are two general types of mitigation measures available for this purpose:

1. Seismic standards for construction of new building and facilities,
2. retrofitting design hazardous structures and facilities.

Building codes and seismic construction standards for new constructions reduce future vulnerability, but do not affect the condition and safety of existing one. For instance, Los Angeles in the USA has been implementing one of the largest seismic retrofit program, in terms of the number of buildings affected,⁷⁹ also, the retrofitting program is a mandatory one. Whereas in many other high-risk areas in the United States, fail to meet even the rudimentary building standard, because the retrofitting program requires enough financial support.

PLANNING FOR RECONSTRUCTION

To counter the balance of inevitable economics and political pressure to rebuild quickly after an earthquake and the inability to envision of different landuse outcome, require communities to prepare a reconstruction plan and policies in advance. Further considering reconstruction costs, existing development policies and projects need to be reevaluated.⁸⁰ It is appreciable if seismic provisions of building codes apply to new structures at the time of construction itself and may reduce the cost involved at relatively cheaper. In fact rehabilitation of existing structure is often more expensive, and in areas where earthquakes are not of major concern to the public, the legislators are often reluctant to impose an effective seismic rehabilitation measure.⁸¹ Therefore decision must be made as to what constitutes economically and politically justifiable seismic rehabilitation. Three question must be addressed in this respect: What building should be reinforced? What level of reinforcement should

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be required? ; and What reinforcement should be required? ⁸²

Local social and cultural values must be incorporated in the reconstruction and development programmes. For instance, many studies indicated that reason for recurrent failure of reconstruction and development plan implantation is basically because of lack of respect for the social and cultural values of the affected communities. The reconstruction process should be strengthened by the local community by using the resources and influence of the cultural values. ⁸³ Importantly many people participated in planning and implementation of reconstruction after an earthquake but the victims were often left out of the process notice. Thus in short time, reconstruction deprives of local skills, experience, labour and some time significant funds for rebuilding. In the long run, the community's life style may be changed beyond recognition. ⁸⁴

FIGURE 3.3: FACTORS INFLUECING EARTHQUAKE DISASTER MANAGEMENT ACTIVITIES

