





# **SUMMARY REPORT**

Study Tour to Nepal 31 Jan to 4 Feb 2007



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### 1. Organization of the Workshop

Organizers:

- 1. United Nation Development Program, Iran
- 2. Management and Planning Organization of Iran

Technical Assistant provided by:

1. Asian Disaster Preparedness Center (ADPC)

Contact persons:

N.M.S.I. Arambepola (UDRM Director). E-mail: arambepola@adpc.net

Sara Ahrari (Project Manager). Email: <a href="mailto:sahrari@adpc.net">sahrari@adpc.net</a>

Established in 1986, ADPC is a leading regional resource center dedicated to disaster reduction. ADPC works with governments, NGOs and communities of the Asia and Pacific regions to strengthen their capacities in disaster preparedness, mitigation and response through training, technical assistance, regional program management, country project demonstration, information sharing and research.

2. National Society for Earthquake Technology-Nepal

Contact person:

Ramesh Guragain (Director of Earthquake Engineering and Research Division): Email: rguragain@nset.org.np, nset@nset.org.np

Programme Development & Supervision by:

United Nation Development Programme

Dr. Victoria Kianpour Atabaki (Program Analyst)

Energy, Environment and Disaster Management Cluster

Email: Victoria.kianpour@undp.org

## 2. Starting date and duration of the Study Tour

The period of the study tour was from Jan 30 to Feb 04, 2007.

### 3. Study Tour participants

The total number of the participants in the study tour was 33. There were 4 female participants and 29 male participants.

The study tour participants were from different actors and stakeholders active in Disaster Risk Management at national and local provincial level. The list of Participants is provided in the Annex III of this report.

### 4. Study Tour Introduction

In the aftermath of the Bam earthquake, there has been a renewed commitment on behalf of various Government and UN agencies in Iran to intensify efforts towards securing Iran against future disaster risks. The Government-UNDP Five-year National Joint Programme is the flag-ship programme of UN/UNDP in Iran for reducing disaster risks. The programme objectives are aligned with the broad outcomes identified by the UNDAF/UNDP Country Programme for the Islamic Republic of Iran (2005-2009) in the area of disaster risk management. The latter's emphasis on building strong disaster risk management capacities, especially through garnering community awareness and participation; enhancing coordination mechanisms amongst stakeholders at the local and national levels; and developing systems for effective disaster risk management at all levels to develop a strategy for reducing disaster risk in Iran.

Effective and efficient disaster risk management needs multi-disciplinary and multi-sectorial approaches which are not only limited to ensuring structures, but approaches, in which effective, efficient and result-oriented integration; cooperation and coordination with wide range of actors and stakeholders are prerequisites.

To support achieving the programme outcomes, UNDP has contracted the Asian Disaster Preparedness Center (ADPC) to develop and conduct the workshops to strengthen National and Regional Capacities and to improve the knowledge networking in the area of Urban Earthquake Disaster Risk Management in the Central and Southwest Asian region, as well as developing in participants advanced skills in facilitation, communication and networking for integrated and participatory disaster risk management with actors, partners, clients, stakeholders and beneficiaries.

A study tour to Nepal was scheduled to visit different component of Earthquake Vulnerability Reduction activities performed by NSET and other government/non-government organizations in Nepal.

### 5. Objectives of the Study Tour

The main objective of the study tour was to visit different components of Earthquake Vulnerability Reduction for cities in different sectors as follows:

- Project, scenarios, action plans and the process for developing them for earthquake risk management,
- Earthquake emergency response plans,
- Risk analysis of key public utilities, and prioritization of the same in terms of need for retrofitting and resource need plan,
- Specific earthquake mitigation activities in public, education and medical infrastructures including reinforcing,
- Methodology for undertaking urban earthquake risk management assessment and mitigation measures,

- Practical use of tools like RADIUS for earthquake risk assessment in urban areas,
- Community- based earthquake preparedness education,
- Improvement of building permit process and city level institutional arrangements for enforcing building codes,
- How capacity building needs of strategic actors (across horizontal and vertical levels) for earthquake risk management was assessed,
- Information dissemination strategy across the programme period and communication of information for earthquake risk reduction in the cities,
- Public education and awareness generation campaigns, which are a combination of information outreach (dissemination) and in-reach,
- Community Information Centres as clearing house of information on different aspects of earthquake risk reduction.

## 6. Implementation of the Study Tour

Annex I contains the Study Tour schedule as planned. In summary, the Study Tour was implemented as follows:

31/01/07 – First day of the Study Tour: Arrival, Opening Ceremony and Interaction Program with key Government Officials from Nepal



Fig 1. Exchange of information among Iranian and Nepalese authorities

The delegates arrived in the morning of the first day. The program started in the afternoon and it featured key speakers from Governmental authority from Nepal and Iran, ADPC and NSET. About 10 key senior government officials from Nepal were presented in the program. There were different presentations on the status of the different component of the disaster risk management in the two countries and in the region. The delegates were then invited in a formal dinner hosted by ADPC and NSET after the interaction program.

01/02/07 – Second day of the Study Tour: Visiting Lalitpur Sub-Metropolitan City & Visiting Nateshwori primary school

The day started by an overview of the schedule of the day and review of the previous day. Afterwards, the delegates visited Lalitpur Sub-Metropolitan City to observe the process of improving building permit process and city level institutional arrangements for enforcing building codes.



Fig 2. Participants discussing at Lalitpur Sub-Metropolitan City

The experiences of building code implementation were shared by Mr. Niyam Maharzan, Head, Earthquake Safety Section, Lalitpur Sub-Metropolitan City. A presentation by Dr. Hamid Badiei, Representative, Engineering Association of Iran, Kerman Province, Iran on "Implementation of National Building Code: Challenges" was made to start the interaction. The discussion was focused on the opportunities and constraints of enforcing building code from the city level. The inspection mechanism, public awareness activities, importance of mason trainings etc. were discussed in the meeting. The acting Mayor of the Sub-Metropolitan city had welcomed the delegation to Lalitpur.



Fig 3. Discussion on Appropriate Technology used in School

In the afternoon, the delegation visited Nateshwori primary school at Bhaktapur. The main points of observation were the use of appropriate technology; interactions with masons trained under school earthquake safety program and see the replication sites. Two presentations, one by Mr. Reza Nozaem, DRM Expert, Disaster Risk Management Section, Ministry of Education, Iran on "Irans' National Program for School Earthquake Safety" and another by Mr. Ramesh Guragain, Director, Earthquake Engineering and Research, NSET on "School Earthquake Safety Program: An Experience from Nepal" were made for discussion.

The delegates, then, visited the historical city of Bhaktapur and observed different earthquake resistant features in the traditional/historical buildings in the city.

02/02/07 –Third day of the Study Tour: Visiting Banepa Municipality & Discussion on Health Sector Preparedness

After the daily review of the schedule and lessons learnt from the previous day, the delegates were

taken to Banepa a city about 20km east of Katmandu to visit the municipality.

Banepa Municipality is one of the four municipalities that have implemented the municipal earthquake risk management program. The municipality has used RADIUS tool to create earthquake scenarios, earthquake risk management action planning was done by participatory process and demonstration project for earthquake vulnerability reduction was implemented. Mason training and earthquake safety awareness activities were other main components of the program. Detail on how the Banepa Earthquake Risk Management Program was implemented had discussed by Mr. Suresh Shrestha, Senior Engineer, Banepa Municipality.



Fig 4. Participants at Banepa Municipality

Another presentation on "Using Hazard and Risk Maps for Earthquake Risk Management" was made by Mr. Akbar Alavi, Head of Kerman Disaster Management Center of Municipality of Kerman, Iran. Use of simple technology for earthquake scenario preparation was the main focus of the discussion.

After visiting the Banepa Municipality the delegation meet with the resident representative of UNDP Nepal.

In the evening, a discussion and interaction program was organized with the representatives from WHO/EHA had presented the Health Sector Preparedness for Disaster in Nepal at Radissan Hotel.



Fig 5. Daily discussion on the observations and lessons learned from the study tour

Discussion was based more on three presentations two from Nepal and one from Iran. Seismic assessment of hospitals in Nepal and HOPE course and emergency preparedness of Tribhuvan University Teaching Hospital were discussed from Nepal side and Ms. Azadeh Hassani, Secretariat, Health and Risk management, DRM and ESM Management, Tehran, Iran had made presentation on "Health and Emergency Preparedness".

03/02/07 –Fourth day of the Study Tour: Visiting Ward 17 Disaster Risk Management Committee
The first visit of the 4th day was to Ward 17 of Kathmandu Metropolitan City where a community based initiative for disaster risk management is going on at ward level. The delegation had a look to the community rescue stores and also had discussion on how the ward level disaster management committee is working in their own initiative. Different activities of WDMC were discussed. The importance of community for immediate response after a disaster was highlighted by the Iranian delegates based on the experience of Bam Earthquake.



Fig 6. Discussion at Ward 17 on CBDRM



Fig 7. Participants visit community based disaster preparedness activities

The delegates were given some free time to in the afternoon to visit the Katmandu city and a wrap up meeting was organized for later in the evening at 21:00hr. Dr. Victoria Kianpour chaired the meeting. Delegates from different governmental sectors were asked to express their points of view and lessons learnt from the study tour. A summary of some of the discussions is as follows:



Fig 8. Wrap up meeting

• Comparison between Major Construction Policies between Iran and Nepal:

Iranian authorities know about the governing policies on construction procedures in Iran. They also are fully aware of the technical, legal and contractual procedures in Iran. As for Nepal their information is as much as they were able to learn from NSET in this short time. They are expecting to get the information from Mr. Ramesh on a CD. When they receive the CD they would be able to compare in detail these policies and standards. Of course what matters mostly are technical specifications since the legal policies depend on each country's specific laws and regulations.

#### • *Housing Section*:

In Iran major plans are considered for activities which need to be done in rural areas, during the 5 year development plan. The plan is to retrofit all the rural housing by the end of the five year plan. In Nepal it was observed that rural housing was constructed with a better quality than urban housing. In Iran the required budget has been received to retrofit several major cities by 2008.

It was also noticed that there is not that much of control over construction in Nepal, on the other hand in Iran there are very restricted binding procedures over construction and without observing those regulations, the municipality would not allow any construction.

#### • The rule of NGOs in Risk Reduction:

It has been very interesting to observe that NSET has been able to achieve outstanding results with minimum facilities/resources and optimum cost. They have been also able to gain the trust of the people and government. They have been very successful in creating a culture of risk awareness among public. This can be well transferred and learnt from by the NGOs active in Iran. It was also observed that the head of schools were involved in filling the forms related to risk assessment and the students who are the main target group are also involved in the process. This gives the sense of ownership to all the players and makes it more sustainable. In Nepal it was understood that there are two drills in preparation for earthquake in each education institute, based on their situation. The other useful aspect was holding different exhibition and competitions related to National Day of Disaster Risk Reduction.

#### • *Resistant Earthquake Hospitals:*

Both countries have had plans for retrofitting hospitals to make them earthquakes resistance. At this stage only assessment has been done in both countries. The methodologies used have been different in two countries, In Iran field check was done and in Nepal relevant forms were filled. In Nepal the assessment has shown that by spending \$150,000.00 they can retrofit all the assessed hospitals, but in Iran it was understood that retrofitting would not be cost effective. It has been very useful to share the experiences despite.

#### • *Education System:*

In Iran, so far 9 annual national "Earthquake Preparedness" maneuvers have taken place. It has been approved that the anniversary day of Bam earthquake will be considered for this purpose. In Nepal, NSET has had very close cooperation with public and have been able to achieve a lot of outstanding results with optimum cost. In Iran, a "School Safety Council", has been considered for schools. These councils could only be successful, if they can get active participation from students and parents as well as teachers. Any plan to build the capacity of these councils would be very useful. It would have been more useful if people from education sector were also present during the study tour, so that the exchange of experiences could have been easier.





Figures 9 & 10. Wrap up meeting

The wrap up meeting ended by the closing mark from Mr. Mahesh Nakarami, Director of Emergency Preparedness & Response of NSET.

04/02/07 –Return of the Delegation to Iran

#### 7. Recommendations

The visit overall was a successful one, providing many opportunities for both countries to exchange experience and to learn from one another. The following recommendations can be made for the future similar activities:

- Having simultaneous translation would have saved time during presentations and would have allowed for discussions and interaction.
- Limiting the number of delegations to 15-20 would assist in having everyone fully participate in the discussions and also exchange of ideas.

## Annex I: Study Tour Schedule

09:30

Leave from Hotel

## 31 Jan 2007 to 4 Feb 2007

Wednesday, 31 January, 2007 09:40 Arrival		
13:30	Lunch	
17:00-17:15	Opening Ceremony	
	- Program Chair by Shiva Bahadur Pradhanang, President NSET	
17:15-17:30	Earthquake Risk Management in Nepal: Experiences of NSET - Mr. Amod Mani Dixit, Executive Director, NSET	
17:30-17:45	Disaster Risk Management in Nepal: A Policy Overview - Mr. Pratap Kumar Pathak, Joint Secretary, Ministry of Home and Affairs	
17:45-18:00	Evolution of Nepal National Building Code and Policy Strategy for its Implementation - Mr. Purna Kadariya, Joint Secretary, Ministry of Physical Planning and Works	
18:00-18:15	Implementation of Nepal National Building Code: Efforts of DUDBC  - Mr. Kishor Kumar Thapa, Director General, Department of Urban Development and Building Construction	
18:15-18:30	Methodology for Reducing Risks and Initiatives for Disaster Risk Reduction - Mr. Mohammad Hossein Yazdany, DRM Expert, Disaster Risk Management Task Force, Ministry of Interior, Iran	
18:30-18:45	Housing Foundation Initiatives for Implementation of Reconstruction and Recovery Programs in Rural Area	
	- Mr. Azizollah Mehdian, Deputy of Reconstruction Affairs, Housing and Foundation Organization of Islamic Republic of Iran	
18:45-19:00	Efforts of ADPC towards Disaster Risk Reduction in the Region - Dr.Luis Jorge Perez-Calderon, Deputy Executive Director, ADPC	
	Closing by Chair Person	
19:00-21:00	Dinner	
Thursday, Feb 07:30	oruary 1, 2007 Breakfast	
08:30	Brief discussion on the program schedule of the day, learnings from yesterday, and expectation for today to be facilitated by VK UNDP Iran	

10:00 10:00-10:20	Lalitpur Sub-metropolitan City (LSMC) Implementation of Building Code at City level, Experience of LSMC
10.00-10.20	- Niyam Maharzan, Head, Earthquake Safety Section, Lalitpur Sub-Metropolitan City,  Lalitpur
10:20-10:35	Implementation of National Building Code: Challenges
	- Mr. Hamid Badiei, Representative, Engineering Association of Iran, Kerman Province
10:35-10:50	Discussion
10:50-11:05	Irans' National Program for School Earthquake Safety
	- Mr. Reza Nozaem, DRM Expert, Disaster Risk Management Section, Ministry of Education, Iran
11:05-11:20	School Earthquake Safety Program: An Experience from Nepal - Mr. Ramesh Guragain, Director, Earthquake Engineering and Research Division, NSET
11:20-11:35	Discussion
11:35	Site Visit at LSMC
12:30	Lunch at Lalitpur
13:30	Depart to Nateshwori School
14:30	Visit Nateshwori School
15:30	Depart from Nateshwori School
16:00-18:00	Visit of Bhaktapur City
18:00	Return to Hotel
<u>Friday, Febri</u>	<del></del>
07:00	Breakfast
08:00	Brief discussion on the program schedule of the day learnings from yesterday, expectation
	for today to be facilitated by VK UNDP Iran
08:30	Leave from Hotel
10:00	Visit Banepa Municipality (20 km East from Kathmandu) which has used the RADIUS Tool
	for earthquake scenario development and action planning
10:00-10:15	Welcome by Executive Officer, Banepa Municipality
10:15-10:30	Municipal Earthquake Risk Management Program
	- Mr. Ramesh Guragain, Director, Earthquake Engineering and Research Division, NSET
10:30-10:45	Banepa Earthquake Risk Management Program
	- Mr. Suresh Shrestha, Senior Engineer, Banepa Municipality
10:45-11:00	Using Hazard and Risk Maps for Earthquake Risk Management
	- Mr. Akbar Alavi, Private Consultant, Kerman Province, Iran
11:00-11:30	Discussion
12:00-13:00	Lunch at Dhulikhel
15:00	Meet with Resident Representative UNDP
16:30	Meet with Disaster Health Working Group (DHWG) and briefing on Health Sector
	Preparedness
16:30-16:45	Health Sector Preparedness for Disaster
	- WHO/EHA Representative
16:45-17:00	Seismic Assessment of Hospitals in Nepal
	- Mr. Ramesh Guragain, Director, Earthquake Engineering and Research Division, NSET
17:00-17:15	HOPE Course and Emergency Preparedness of Tribhuvan University Teaching Hospital
	- Dr. Pradeep Vaidya, Professor, Tribhuvan University Teaching Hospital

17:15-17:30	Health and Emergency Preparedness
	- Ms. Azadeh Hassani, Secretariat, Health and Risk Management, DRM and ESM
	Management, Tehran, Iran
17:30-18:00	Discussion
18:00	Return to Hotel

## Saturday, February 3, 2007

07:30	Breakfast
08:30	Brief discussion on the program schedule of the day learnings from yesterday, expectation
	for today to be facilitated by VK UNDP Iran
09:30	Leave from Hotel
10:00	Visit Ward 17, a ward of Kathmandu Metropolitan City where community based disaster
	risk management activities are carried out
11:00	Visit NSET Office
12:30	Visit of Building Construction Site at Lalitpur
13:30	Return to Hotel
14:00	Lunch at Hotel Radisson
15:00-21:00	Free time
21:00-23:00	Wrap up Meeting

## Annex II: List of Participants

Name of the Participant

	runte of the furticipunt	
1	Dr Victoria Kianpour Atabaki	Programme Officer, DRM Dep UNDP
2	Ms Shaghayegh Shafieyan	Admin/Finance Assistant-UNDP
3.	Mr Rabi Narayan Gaudo	IUNV DRM Expert, UNDP - Tehran
4.	Mr Reza Nozaem	DRM Expert, Disaster Risk Management
	IVII Neza Nozaem	Section, Ministry of Education - Tehran
5.	Mr Mohammad Hossein Yazdany	DRM Expert, Disaster Risk Management Task Force, Ministry of Interior - Tehran
6.		Director Relief & Rescue Operation Dep,
0.	Mr Saeed Matany	Red Crescent - Tehran
7.	Mr Enr. Seyed Akbar Hashemi	NPD 5yr Prog Project, Management & Planning Organization (MPO-Tehran)
8.	Mr Enr. Hassan Ahmadian	Senior Expert, Fire Department - Tehran
9.	Mr Gholam Hossein Seyed Ali Askari	DRM Expert, Association of Enginnering - Tehran
10.	Mr Azizollah Mehdian	Deputy of Reconstruction Affairs, Housing & Foundation Org. of I.R. of Iran
11.	Mr Majid Joodi	Director General of Reconstruction Affairs, Housing & Foundation Organization
12.	Mr Mohammad Reza Alimirzaei	DRM Expert, Reconstruction Section, CIRI, Tehran
13.	Ms Azadeh Hassani	Secretariat, Health & Risk Management in DRM & EMS Management Center - Tehran
14.	Mr Enr. Bijan Ani	Secretariat Member - Kerman Province
15.	Dr Pejman Ghazanfari Pour	Representative of Health Center - Kerman
	Di i ejinan Ghazaman i Gui	Province
16.	Dr Amir Ahmad Shojaei	Representative of Red Crescent - Kerman Province
17.	Mr Hamid Badiei	Representative of Engineering Association - Kerman Province
18.	Mr Ahmad Sam	Replacement of the NPD - Kerman Province
19.	Ms Maryam Motamedi Mirhosseini	Representative IRIB - Kerman Province
20.	Mr Mohsen Salehi Kermani	Representative of Housing & Construction
21		Committee - Kerman Province
21.	Mr. Sohrab Karimzadeh	Education Department, Kerman Province Director, Housing & Reconstruction -
22.	Mr Enr Seyed Mehdi Mahayaei	Golestan Province
23.	Mr Ali Asghar Jabbari	Head of Education Department - Golestan Province
24.	Mr Hossein Soufi	Secretariat - Golestan Province
25.	Mr Ali Mohammad Zanganeh	Deputy Head of Health Dep., University of Medical Sciences - Golestan Province
26.	Mr. Gholam Hossein Mohebi	Deputy, IRIB, Golestan
27.	Mr Hojatollah Ameri	Director, Engineering Association - Golestan Province

Organization

28.	Mr Ebrahim Karimi	Mayor - Golestan Province
29.	Mr Mohammad Ebrahim Naeimi Tabiei	Director, Re Crescent - Golestan Province
30.	Mr. Ali Asghar Pasandi	Operation Head, Basij, Golestan Province
31.	Mr. Akbar Alavi	Kerman
32.	Mr. Darham Janfeshan	Golestan
33.	Mr. Ardeshi Sayah	Tehran