

RAJIB SHAW

Curriculum Vitae

MAJOR FIELD

Environment and Disaster Management
(International Cooperation on Human Security, Sustainable Development,
Environment and Disaster Management)

EXPERIENCES

Work

2004 April – Onward

Kyoto University, Japan

International Environment and Disaster Management Research Field
Graduate School of Global Environmental Studies

Position: Associate Professor

International Environment and Disaster Management Research Field targets to reduce the gap between knowledge and practice through proactive field-level, community-based project implementation. The target areas are mainly developing countries in Asia, which have the highest population growth, and high vulnerability, due to different types of natural and man-made disasters. The focus of this research field is to learn lessons from the field experiences through effective environment and disaster related project management. Disaster issues are directly related to environmental degradation, and global climate change. Disasters hit poor people, affecting their lives, properties and livelihoods. Thus, disaster, environment, and development are closely linked to each other, under the broad umbrella of human security. The key of environment and disaster management is the end-user's participation, which are the communities, and its people. Added to this, is education and learning through formal/ non-formal education, and community/ family interactions. Working closely with the governments, non-governments (NGO/ NPO), international organizations (United Nations and other bilateral and multilateral development agencies) and regional bodies, this research field is developing a unique process-oriented participatory approach of environment and disaster management through direct involvement and ownership of the community.

Research Topics:

- Community based environment and disaster management: issues and practices
- Risk education on environment and disaster management
- Climate change adaptation at community level, and its policy implication to developing countries
- Urban risk management

Countries working on: Afghanistan, Cambodia, India, Indonesia, Japan, Malaysia, Nepal, Philippines, Sri Lanka, Vietnam

ADDRESS:

GRADUATE SCHOOL OF GLOBAL ENVIRONMENTAL STUDIES
KYOTO UNIVERSITY, YOSHIDA HONMACHI, SAKYO KU, KYOTO
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1999 – 2004 March

United Nations Centre for Regional Development (UNCRD), Kobe, Japan

Position: Researcher (April 2002-March 2004),

Associate Expert (November 1999 to March 2002)

Type of Work: Applied Research, Training and Project Management

Major activities: Disaster Management and Planning, Community Participation and Development; Risk Assessment and Management. The main responsibility includes formulation of new projects through consultation with the different stakeholders in the member countries, project management and implementation through research and training and enhancing local capacities in multi-stakeholder environment. Liaison and collaborative work with other international agencies (UNU, UN ISDR, UNESCO, UNDP and ADB), and government and non-government organizations in Japan and abroad.

Countries worked on: Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Japan, Mongolia, Nepal, Philippines, Tajikistan, Turkey, Uzbekistan, Vietnam

2000 August – 2002 March

Earthquake Disaster Mitigation Research Center (EDM)

National Research Center for Earth Sciences and Disaster Prevention (NIED), Miki, Japan

Position: Researcher

Type of Work: Applied Research and Research Coordination

Major activities: Coordination of a multi-lateral, multi-disciplinary research project for development of a Master Plan for Earthquake and Tsunami Mitigation in the Asia and Pacific region, funded by the Government of Japan. Research work related to the development of International Strategy for Earthquake Disaster Mitigation. Involved in the post-disaster reconstruction program in both research and training perspective.

Countries worked on: 14 countries and economies in the Asia and the Pacific region, with special focus on the East and Southeast Asia.

1997 – 1999

OYO Corporation, Tokyo, Japan

Position: Chief, Technical Department

Type of Work: Consultancy for Japanese ODA (Official Development Assistance) with prime emphasis on Japan International Cooperation Agency (JICA)

Major activities: Consulting work in the field of Disaster Prevention, Mitigation and Management; Geographic Information System (GIS); Environmental management; Geotechnical and Geological Survey. The major responsibilities include the project formulation for Japanese ODA through consultative interaction with the government officials in the developing countries, and consulting services for the international agencies (United Nations International Decade of Natural Disaster Reduction: UN IDNDR, UNESCO) and Japanese private enterprises

Countries worked on:

Azerbaijan (February-March 1998), China (February 1998 – August 1999), India (July – August 1997, April – August 1999), Indonesia (February 1998–August 1999), Nepal (February 1998, April – August, 1999), Philippines (February – August, 1999), Thailand (June 1997, December 1997, February 1998), Turkmenistan (January – February 1998), Uzbekistan (February 1998– August 1999)

Research

1991 – 1997

Osaka City University, Yokohama National University (1994-97), Japan

Jadavpur University (1992-94), India

Allahabad University (1991-92), India.

Teaching/ Lectures

Provided lectures to different groups, including high school students, citizens, NGOs, and government officials from Japan and abroad. Provided courses for Japan International Cooperation Agency (JICA) and United Nations University (UNU), and made keynote presentations in several public forums and symposium.

EDUCATION

Doctor of Science 1997 Earth and Environment Sciences (Applied Geology)
Osaka City University, Japan

Master of Education 1997 Earth and Environment Sciences (Geology)
Yokohama National University, Japan

Master of Science 1991 Earth and Environment Sciences (Applied Geology)
Allahabad University, India

Bachelor of Science 1989 Earth and Environment Sciences (Geology) Burdwan
University, India

PERSONAL INFORMATION

Citizenship & Residence: Indian & Japan

Sex: Male

Date of birth & age: July 07, 1968; 37 years

Languages: English, Japanese, Hindi, Bengali and Urdu

PUBLICATIONS

Edited Volumes and Books 16

Papers 70 (Referred Journals: 23/ National, international workshops 47)

■ Edited Volumes and Books (16)

1. Shaw R. and Badaoui R. (2005): Disaster management and human security: UNESCO-Kyoto University Publication
2. Shaw R. and Badaoui R. (2005): Education for sustainable development: UNESCO Publication
3. Srinivas H., Shaw R. and Nakagawa Y. (2004): Environmental management and disaster preparedness: lessons from the Tokage typhoon in Japan, UNEP Publication, 18 pages
4. Shaw R., Okazaki K. (2004): Sustainability of Community Based Disaster Management in Asia: A User's Guide, UNCRD Publication
5. Shaw R., Thiruppugazh V. and Okazaki K. (2004): Post-earthquake reconstruction experiences, 85 pages, GSDMA-UNCRD Publication.

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6. Shaw R. and Okazaki K. (2003): Sustainability in Grass-roots initiatives: focus on community based disaster management, 99 pages, UNCRD Publication
 7. Herath S. and Shaw R. (2003): Catastrophic Urban Flood, 160 pages, UNU Publication
 8. Shaw R. and Okazaki K. (2003): Guidelines for earthquake resistant design, construction and retrofitting of buildings in Afghanistan, 158 pages, UNCRD-MUDH Publication.
 9. Okazaki K., Shaw R. and Narita E. (2003): Rehabilitation of Afghanistan and Community Sustainability, 79 pages, UNCRD Publication
 10. Shaw R. et al. (2003): Community based disaster management: concept to reality, 47 pages, FES-SEEDS-UNCRD Publications
 11. Shaw R., Britton N., and Gupta M. (2003): PNY: Towards sustainable community recovery, 43 pages with CD-ROM, EDM-NCPDP-NGOs KOBE- NSET Nepal-SEEDS-UNCRD Publication.
 12. Tsunehiro Y., Goda K., Shaw R. (2003): From disaster to community development: The Kobe Experience, 95 pages, UNCRD Publication.
 13. Shaw R. and Okazaki K. (2002): The sustainable community rehabilitation handbook, 26 pages, UNCRD-SEEDS Publication.
 14. Okazaki K., Shaw R. and Thiruppugazh V. (2002): Role of non-government organizations: issues for sustainability, 63 pages, UNCRD-GSDMA-NGOs Kobe-SEEDS Publication.
 15. Shaw R., Tsunehiro Y. and Thiruppugazh V. (2002): Earthquake disaster mitigation: future needs and challenges, 89 pages, UNCRD-GSDMA Publication.
 16. Shaw R. K. et al. (2001): The Bhuj Earthquake of January 26, 2001: Consequences and Future Challenges, 252 pages, EdM-IIT Technical Report

■ Academic Research Papers (70)

Refereed Papers (23)

1. Honag V. H., Shaw R. and Kobayashi M. (2006): Flood risk management in RUA of Hanoi: importance of community perception in catastrophic flood risk in disaster risk planning, in Disaster Planning and Management, An International Journal.
2. Shaw R. (2006): Critical issues of community based flood mitigation: examples from Bangladesh and Vietnam, Journal of Science and Culture, Special Issue on Flood Disaster Risk Reduction in Asia, volume 72, No. 1-2.
3. Shaw R. (2006): Community base climate change adaptation in Vietnam: inter-linkage of environment, disaster and human security, In: Multiple dimension of global environmental changes, edited by S. Sonak, TERI publication, 521-547.
4. Shaw R. (2006): Indian Ocean tsunami and aftermath: need for environment-disaster synergy in the reconstruction process, Special volume in Disaster Prevention and Management, An International Journal, vol. 50, no.1, p 5-20.
5. Uitto J. and Shaw R. (2006): Adaptation to changing climate: promoting community based approaches to developing countries, Sansai, Vol.1, page 93-108.
6. Shaw R. (2006): Critical issues of community based flood mitigation: examples from Bangladesh and Vietnam, *In Japanese*: Journal of Natural Disaster Science, 24-3, page 234-246
7. ラジブ ショウ、塩飽孝一、小林広英、小林正美、「高等学校における地震防災教育のあり方に関する研究－高校生を対象としたアンケート調査による意識影響要因分析を通して－」、日本建築学会環境系論文集、NO.585、P.69、2004年11月
8. Nakagawa Y. and Shaw R. (2004): Social Capital: A missing link to disaster recovery, vol 22, no. 1, 5-34.
9. Shaw R., Shiwaku K., Kobayashi H. and Kobayashi M. (2004): Linking experience, knowledge, perception and earthquake preparedness, in Disaster Prevention and Management, Vol. 13. No.1, 39-49.
10. Shaw R. and Goda K. (2004): From disaster to sustainable community planning and development: the Kobe Experiences, in Disaster, 28 (1), 16-40.
11. Shaw R. (2003): Role of non-government organization sin earthquake disaster management: as Asian perspective, in Regional Disaster Dialogue, Volume 24, No. 1, 117-129.
12. Sharma A., Gupta M., Bajaj R. and Shaw R. (2003): From disaster to sustainable

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- community recovery: challenges and lessons learned, in *Regional Disaster Dialogue*, Volume 24, No. 1, 53-61.
13. Okazaki K. and Shaw R. (2003): Empowerment of local people for sustainable disaster mitigation: experiences from developing countries, in *Regional Development Dialogue*, Volume 24, No. 1, 3-14.
 14. Shaw R. K. and Sinha R. (2003): Towards sustainable recovery: future challenges after Gujarat earthquake, in *Risk Management: An International Journal*, Volume 5, No.2, 35-51.
 15. Shaw R., Gupta M., and Sharma A. (2003): Community recovery and its sustainability: lessons from Gujarat earthquake of India, in *Australian Journal of Emergency Management*, Volume 18, No. 2, 28-34.
 16. Shaw R. K. et al. (2002) International Cooperation in the post-disaster scenario: A case study from Gujarat, India. *Journal for Natural Disaster Science*, Volume 24, N. 2.
 17. Shaw R. K. and Sinha R. (2001): Preliminary observations and aftermath of Gujarat earthquake India, *GIS and Development*, vol. 3, pp 10-12.
 18. Shaw R. K. and Arima M. (1998): In *Journal of Metamorphic Geology*, Volume 16, No. 2, 189-196, Blackwell Science Inc.
 19. Shaw R. K. et al. (1997): In *Journal of Geology*, Volume 105, 645-656, Chicago University Press
 20. Shaw R. K. and Arima M. (1997): In *Journal of Mineralogy and Petrology*, Volume 60, 41-59, Springer Verlag
 21. Shaw R. K. and Arima M. (1996): In *Contribution to Mineralogy and Petrology*, Volume 126(1/2), 169-180, Springer Verlag
 22. Shaw R. K. and Arima M. (1996): In *Journal of South East Asian Earth Sciences*, Volume 14/4, 175-184, Elsevier Science Ltd.
 23. Shaw R. K. (1996): In *Journal of Mineralogy, Petrology and Economic Geology*, Sendai, Japan
 24. Shaw R. K. et al. (1993): In *National Academy of Science Letters*, Volume 16, 27-36, India

National and International Workshops/ Conferences (47)

1. Miyaguchi T. and Shaw R. (2006): Corporate community interface for environment and disaster management, ProVention Forum 2006, Bangkok, THAILAND
2. Shaw R. (2006): Post-disaster recovery: is there a real window of opportunity for reducing risk? ProVention Forum 2006, Bangkok, THAILAND
3. Shaw R. (2006): Integrated approach and actions in disaster management: lessons from Nepal and India, Japan Society of Civil Engineers Mini Symposium, Tokyo, JAPAN
4. Shaw R. (2006): Innovative approaches of disaster education: UNCRD Symposium on disaster education, Kobe, JAPAN
5. Shaw R. (2006): Environmental education towards proactive actions, APN Global change Research: International Symposium: Establishing Guidelines for Environmental Education based on Environmental Ethics, Kobe, JAPAN
6. Shaw R. (2005): Elements of environmental education: JSPS-VCC seminar, Penang, MALAYSIA.
7. Shaw R. (2005): Mason association of Gujarat, India: an innovative approach of linking knowledge and practice in non-engineered construction through government-non-government partnership, in APEC-Eqtap seminar, Jakarta, INDONESIA.
8. Shaw R. (2005): Lessons learned from community based climate change adaptation: case studies from India and Vietnam, in UNDP GEF Community based adaptation program: inception meeting, Bangkok, THAILAND
9. Shaw R. (2005): Enhancing the effectiveness of integrated disaster risk management; the role of case station and field campus, in 5th annual IIASA-DPRI forum, Beijing, CHINA
10. Shaw R. (2005): Education for natural disaster reduction in the Asia-Pacific context of sustainable development, in UNESOC workshop, Bangkok, THAILAND
11. Shaw R. (2005): Community Risk Assessment, in Provention Workshop, Cape Town, SOUTH AFRICA

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12. Shaw T. (2005): Essential elements of recovery process, in International Recovery Seminar, Kobe, JAPAN
 13. Shaw R., Gupta M. and Sharma A. (2005): Mason association in India: an innovative approach in linking knowledge and practice in non-engineered construction through government-non-government partnership, in ISEE, Awaji, JAPAN
 14. Shaw R. (2005): Bridging the gap between knowledge and practice: towards a culture of safety and disaster resilience in Asia, in Minpaku Forum, Osaka, JAPAN
 15. Shaw R. (2005): Lessons learned from community based climate change adaptation: case studies from India and Vietnam, in IGES consultation, Tokyo, JAPAN
 16. Shaw R. (2004): Sustainability of community based flood risk management, in IIASA-DPRI Forum, Ravello, ITALY
 17. Shaw R. (2004): Bridging the gap between knowledge and practice, in JSPS-VCC workshop, KL, MALAYSIA
 18. Shaw R. (2004): Partnership of community based disaster management in Asia, in UNCRD Prevent for WCDR, Delhi, INDIA
 19. Shaw R. (2004): Community based disaster management: challenges of sustainability: in ADPC-UN ESCAP- IFRC workshop on PDRSEA, Thailand, BANGKOK
 20. Shaw R. (2004): Earthquake risk perception, community interactions, and reconstruction experiences, January, Taipei, TAIWAN
 21. Shaw R., Okazaki K., and Narita E. (2004): Earthquake safer non-engineered construction practices: problems and prospects: in 13th World Conference of Earthquake Engineering, August, Vancouver, CANADA
 22. Shaw T., Kaneko F., and Shaw R. (2004): Enhancing community's perception towards promoting actions: an essential feature of earthquake preparedness: in 13th World Conference of Earthquake Engineering, August, Vancouver, CANADA
 23. Nakagawa Y. and Shaw R. (2004): Social capital and disaster recovery: A comparative case study of Kobe and Gujarat Earthquakes: in 13th World Conference of Earthquake Engineering, August, Vancouver, CANADA
 24. Shaw R. (2004): Partnership of community based disaster management in Asia, in UNCRD Prevent for WCDR, Delhi, INDIA
 25. Shaw R. (2003): Attitudinal change for risk reduction, in WSSI Regional Workshop, December, Bangkok, THAILAND
 26. Shaw R. (2003): Community Participation and Empowerment for Sustainable Future, In UNU-UNCRD Workshop on Ensuring Flood Security for Sustainable Urbanization, July, Bangkok, THAILAND
 27. Shaw R. (2003): Disaster, Vulnerability and Sustainable Community Initiatives, In Third World Water Forum, March, Kyoto, JAPAN
 28. Shaw R. K. (2003): Rehabilitation of Afghanistan: Issues and Challenges, in International Workshop on People, Communities and Disasters, February, Kobe, JAPAN
 29. Shaw R. K. (2002): Sustainable recovery of Afghanistan: focus on community-based initiative, Annual Meeting of JASID
 30. Shaw R. K. et al. (2002): Earthquake safer non-engineered construction: problems and prospects, in 11th JEES
 31. Shaw R. K. and Okazaki K. (2002): Disaster and sustainable regional development: role of UNCRD, in 21st JSNDS
 32. Shaw R. K. (2001): Metro Manila Case Study: Development and Realization of EQTAP Master Plan, In: 4th Multi-lateral Workshop on Development of Earthquake and Tsunami Disaster Mitigation Technologies and their Integration for the Asia-Pacific Region, December, Kamakura, JAPAN
 33. Shaw R. K. (2001): Safer Building Practices: Problems and Prospects. In Earthquake Disaster Mitigation Research Center Workshop, December, Kobe, JAPAN
 34. Shaw R. and Kobayashi M. (2001): The role of schools in creating earthquake-safer environment, OECD Workshop, Thessaloniki, GREECE
 35. Kobayashi M. and Shaw R. K. (2001): Disaster management tools for local capacity building: focus on self-help and cooperation through community development,
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- Interregional Symposium on Water-related Disaster Reduction and Response, United Nations, Bangkok, THAILAND
36. Shaw R. K. (2001): Construction Practices of Non-engineered Housing in India, EQTAP Workshop on Disaster and Ethnology, September, Bali, INDONESIA
 37. Shaw R. K. (2001): Field Investigation in Metro Manila, in the Proceedings, 3rd EQTAP Workshop, Manila, PHILIPPINES
 38. Shaw R. K. and Kobayashi M. (2000): The role of schools in disaster reduction and awareness-raising. In RISK 2000, Paris, FRANCE
 39. Shaw R. K. (2000): What RADIUS has achieved. In EQTAP Workshop on Disaster and Ethnology, August, Bandung, INDONESIA
 40. Shaw R. K. (2000): RADIUS Evaluation for Asian Cities: Bandung, Tashkent and Zigong. In United Nations International Strategy for Disaster Reduction (UN ISDR) RADIUS Year-later Evaluation, Geneva, SWITZERLAND
 41. Shaw R. K. et al. (2000): A new approach to the earthquake risk reduction in the developing countries; examples from RADIUS case studies in Asian region. In 12th World Conference of Earthquake Engineering, Auckland, NEW ZEALAND
 42. Khakimov K., Rashidov T., Shaw R., Sudo K (2000): Implementation of RADIUS project in Tashkent, Uzbekistan. In 12th World Conference of Earthquake Engineering, Auckland, NEW ZEALAND
 43. Shaw R. K. et al. (1999): RADIUS case studies in Asia. In United Nations IDNDR-ESCAP Meeting, Bangkok, THAILAND
 44. Shaw R. K. et al. (1999): Earthquake risk reduction in developing countries. In United Nations Paris Conference, Paris, FRANCE
 45. Shaw R. K. et al. (1999): RADIUS Case Studies in Asian Region. In United Nations IDNDR Workshop, Tijuana, MEXICO
 46. Shaw R. K. (1998): RADIUS case studies in Asian region. In The JICA Seminar on Seismology and Earthquake Engineering, Tsukuba, JAPAN
 47. Shaw R. K. et al (1998): General methodology of RADIUS case study in Asian cities. In Second International Conference on Earthquake Hazard and Seismic Risk Reduction, Yerevan, ARMENIA.

CURRENT PROJECTS (2004 ONWARDS)

Project principles are:

- 1) To bring people in the process of decision-making,
- 2) To transfer the ownership of the problems and solutions to the local stakeholders,
- 3) To engage a diverse group of professionals and decision-makers to make a collective decision based on the local needs,
- 4) To ensure the sustainability of the initiatives at local level, and
- 5) To promote a culture of preparedness.

I. Enhancing Human Security, Environment and Disaster Management: *Focus on Central Viet Nam*

1. Supported by: Asian Development Bank Poverty and Environment Fund (Project Partner: Canadian Centre of International Development and Cooperation (CECI))

2. Time Frame: August 2005 to August 2006

3. Location: Phu Loc District, Thua Thien Hue Province, Vietnam

4. Background and Rational: Situated in the tropical monsoon zone close to the typhoon centre of the western pacific, Viet Nam is one of the most disaster prone countries in the Mekong region. Currently, 70% of the 73 million people in Viet Nam live in disaster-prone areas, with the majority of the people in the Central region. Losing crops and homes in floods and storms keeps many rural Vietnamese trapped in a cycle of poverty. This has been intensified in the recent years with major floods occurring more frequently, and thereby leaving the communities unprepared. Thua Thien Hue province is located in Central Viet Nam, with a variant geography of mountains and coastal

plains. The proposed project is intended to study the impacts of environmental changes (in form of climate change impacts) to the community, in the form of natural disasters, like flood and cyclone. Specific impacts on the livelihoods (mainly agriculture and aquaculture) and living conditions (housing, health, and education) will be studied. The project will analyze the community adaptation strategies and coping mechanism, and thus, therefore the main emphasis of the project is to focus on *human security* and *environmental dimension of poverty*.

5.Objectives: The project aim is to develop a Community Based Climate Change Adaptation Model, which can be applied to different socio-economic condition. The goal of the proposed project is to enhance human security in Central Viet Nam to cope with the climate change impacts in the form of natural disasters like flood and cyclone. To achieve the above-mentioned aim and goal, specific objectives are as follow:

- 1) To study and analyze climate change impacts on communities and its livelihoods in the case study district in Thua Thien Hue province in Central Viet Nam,
- 2) To undertake training and awareness raising programs in the village, commune and district
- 3) To initiate participatory planning process in the village, commune and district level,
- 4) To implement demonstration sub-projects under the safer village/ commune/ district plans, and
- 5) To monitor and analyze the implementation process, and development of Community Based Climate Change Adaptation Model,

6. Activities: Project activities include: Stakeholder and Resource Mapping, Vulnerability, Capacity and Need Assessment, Training Program for the Change Agents, Simplified Climate Change Scenario Creation, Awareness Raising Campaign, Identify specific needs in the village and communes, Safer Village and Commune-level planning process, Implementation of selected demonstration sub-projects, Training and awareness raising process, Development of Community Based Climate Change Adaptation Model, Information dissemination

7. Output: The expected outputs are: Stakeholder and Resource Map, Vulnerability, Capacity and Need Assessment Report, Trained personnel and work force, Simplified Climate Change Scenario, Raised awareness of the people and communities regarding the climate change impacts., Specific village and commune level need assessment, Safer village and commune plans and district level plan and framework of action and aware villagers and commune members., Demonstration sub-projects, Raised awareness of people and communities, Community Based Climate Change Adaptation Model, Reports, publications and information dissemination.

II. Development of Country-Specific Educational Materials

1. Supported by: The World Bank Institute

2. Time Frame: 1 year (January/ 2005 – March /2006)

3. Location: Applicability to different parts of the vulnerable countries, with specific focus on the Philippines.

4. Background and Rational: The objective of the World Bank Institute (WBI) Natural Disaster Risk Management Program is to develop a broader understanding of disaster risk management practices and enhance their effectiveness. The current program is comprised of five courses. A general overview course is offered to development practitioners and four so-called “specialization” courses are offered to specific target groups. The most important sector for students are Local Government Unit (LGU) officials, including their CEOs.

5. Objectives: The objectives are:

- To develop the specialized technical content of three Disaster Risk Management on-line courses.
- To facilitate the delivery of the first round of on-line courses.

6. Activities: Three courses developed as the part of the projects are:

- Earthquake Risk Management
- Risk Communication, and
- Environment and Disaster Management

7. Course Contents: Environmental degradation is a major contributor, and cause, of natural disasters. Better care of the environment, locally and globally, reduces the number and severity of disasters. Sound practices for both natural and built environment will reduce the risk of disaster

impacts, and a sound disaster plan will reduce the effect of disasters on environment. This course consists of:

- **Introduction:** purpose of the course, overview of environmental management.
- **Session 1:** Environment and Disaster Linkages: This part will focus on interdependency of environment and disaster management with specific case studies and examples of recent typhoons and tsunami disasters.
- **Session 2:** Climate Change Adaptation and Development: The impacts of climate change are seen as natural disasters in many parts of the world. This module will focus on the climate change adaptation as a possible tool to reduce the impacts of disasters and enhance sustainable development.
- **Session 3:** Environment Disaster Planning: Local government planning and environment-disaster management system will be focused in this module. Specific emphasize will be given on how to integrate the environment and disaster issues in the local development plans.

Upon completion of the course, the participants will have enhanced understanding on the issues of environment-disaster linkages, and will have know-how to integrate these issues in the local development planning.

III. Community Based Financial Risk Management

1. **Supported by:** The World Bank Institute

2. **Time Frame:** 1 year (July/ 2005 – June /2006)

3. **Location:** Philippines

4. **Background and Rational:** In recent years, various international institutions have closely investigated the role financial services (including banking services and insurance) could play in managing disaster risk. Financial services can help absorb and redistribute the cost of hazard-related losses. They may also shape incentives, which encourage disaster risk reduction. While these has been several work done on the insurance scheme, not much work has been done on the community based financial risk management, which, in the developing countries is considered to be one of the key instruments for effective risk management. Philippines is one of the most disaster prone countries in the world. Community based disaster risk management is very much developed in the Philippines, with incorporation of government, civil society and the business sectors.

5. **Objectives:** The objectives of the project are:

- To analyze the community based financial risk management issues
- To identify possible future directions

6. **Activities:** Project activities include:

- To study possible options of community based financial risk management
- To identify key stakeholders
- To conduct a workshop in the Philippines, and
- To finalize a report summarizing major findings.

7. **Outputs:** Expected outputs are:

- Framework of community based financial risk management
- Development of possible future interventions in the field of micro-insurance

IV. Post Disaster Reconstruction Learning of Indian Ocean Tsunami: *Towards its Application to Pre Disaster Preparedness in Vulnerable Developing Countries*

1. **Supported by:** Force of Nature Aid Foundation (FON), Malaysia. (Project Partners: Asian Disaster Reduction and Response Network (ADRRN), Sustainable Environment and Ecological Development Society (SEEDS), Sarvodaya, and Mercy Malaysia)

2. **Time Frame:** November 2005 to October 2007

3. **Location:** Port Blair (India), Aceh (Indonesia), and Kaluthara (Sri Lanka)

4. **Background and Rational:** The Indian Ocean Tsunami is a special case of **multi-country disaster**, with major damages to the coastal regions. The recovery and reconstruction process will very much depend on the administrative, political, social, economic and cultural context. These, coupled with many other unforeseen factors will affect the speed and coverage of the recovery

programs. However, in spite of these differences, when it comes to the **community level recovery**, there are many aspects, which can be shared across the borders of these affected countries. Moreover, past reconstruction experiences should be shared as per the local requirements. Thus, it is required to provide a **platform of experience sharing**.

5. Objectives: The goal is to ensure effective participation of different stakeholders, and utilize already available expertise and knowledge in the recovery process. To achieve this goal, the objectives of the current project are:

- To enhance **co-learning** among the affected countries
- To facilitate **experience sharing** from other reconstruction programs

6. Activities: Following are the project activities:

- Experience sharing through regular **video conference** (once in 3 months)
- **Exchange visits** among the affected countries (once in 6 months)
- **On-site workshops** and **group discussions** (once in 6 months)
- **Pilot demonstration** projects in **three** countries
- Process **documentation** and reporting (regular monthly reporting)

7. Expected outputs: The expected outputs are:

- A well-implemented **community based** recovery program
- A **well-documented** recovery process
- **Trained** local government disaster managers, NGOs and community leaders
- Lessons learned for **future disasters**, and
- **International workshops**, and
- **Compendium of reconstruction process**, which will include newsletter, web-documents, workshop proceedings, reports, country reports, thematic reports, voices from the field and case study repository.

V. Community Participation in Enhancing Actions on Environment and Disaster Management: *Japanese Experiences*

1. Supported by: The City of Saijo, Japan

2. Time Frame: December 2005 to March 2008

3. Location: Saijo City, Ehime Prefecture, Japan

4. Background and Rational: Typhoon 21 and 23 which hit Japan in 2004 caused tremendous damage in Saijo city. It also revealed the vulnerability for disaster risk that the city faces. Based on the lessons learnt from Typhoon 21 and 23, Saijo city is embarking on a programme to strengthen its disaster preparedness capacity. Among planned disaster preparedness activities, a key urgent issue is how to ensure the safety of the city's residents during natural disasters. For this purpose, the city is planning to establish an emergency network in the community so that during crisis, the community can cope with and help each other, especially when official relief/help cannot be provided on time due to unavoidable circumstances.

5. Objectives: The objectives of the project are:

- To enhance community resilience in upland mountain
- To establish community communication system and community network
- To promote the linkage and communication between the mountain and city community

6. Activities: Project Activities include:

- Questionnaire survey, DIG (disaster imagination game), community hazard map and community network development
- Enhance community based education programs
- Develop hazard maps in the city areas

7. Expected outputs: The expected outputs are:

- Enhanced understanding of environment and disaster issues for mountain and city community
- Enhanced and effective communication system
- Hazard maps, networks and enhanced perception

8. Beneficiaries: Direct beneficiaries are the mountain upland communities and urban communities. Indirect beneficiaries are citizens of surrounding regions and local governments.

VI. Orissa Urban Safety Initiative

1. Supported by: Kyoto University Graduate School of Global Environmental Studies. Project Partner: Sustainable Environment and Ecological Development Society (SEEDS)

2. Time Frame: 2 years (November/ 2005~October /2007)

3. Location: Five major cities in the coastal region of Orissa state, India (Balasore, Berhampore, Bhubaneswar, Cuttack and Puri).

4. Background and Rational: Urban populations are growing rapidly the world over, but their growth in developing nations such as India is most alarming since it is taking place in the absence of well-planned and structured settlements. The civic services and the general quality of the settlements is of a low standard, as a result of which the urban communities are being subjected to an ever increasing risk of natural as well as technological disasters. In such a situation, the only viable way to a safer living is through preparedness to face disasters, since hazards cannot be controlled. This requires concerted efforts on part of the government agencies, voluntary organizations, and most importantly the community itself. Risk awareness has to be created, and preparedness plans formulated, so that the urban populace may live a safer life.

The project aims to strengthen local capacity to prepare for and respond to future disasters by assessing the disaster risk, response preparedness, and most effective mitigation options for five of Orissa's most important and vulnerable cities and launching mitigation activities in two cities.

5. Objectives: The aim of this project is to reduce the consequences of natural disasters on Orissa's major urban communities by strengthening the local capacity to prepare and respond to natural disasters. It will accomplish this by preparing mitigation action plans at community level and building support for plan implementation. The objectives of the project are to:

- Assess the urban risk and response preparedness of five urban communities and identify the communities
- Identify the activities that would be most effective to reduce risk in the five project communities.
- Launch the implementation of sustainable mitigation activities in two urban communities, and
- Strengthen the capacity of the local governments, NGOs and other organizations in the selected communities to prepare for and respond to future disasters

6. Activities: The activities include: organization of community resources, assessment of hazard, risk and local capacity, development of a mitigation plan with advisory group, and adopting entity, facilitate implementation of mitigation plan, and establish resource center.

VII. Environment and Disaster Management Education for Sustainable Development: *Through Action Research in Japan and Nepal*

1. Supported by: Nihon Shoken Foundation (Project partner: National Society for Earthquake Technology, NSET-Nepal)

2. Time Frame: December 2004 to December 2005

3. Location: Japan (Kobe and Shizuoka) and Nepal (Kathmandu)

4. Background and Rational: "Environment and Disaster Management" (hereinafter called as "EDM") is the concept how people face the impacts of environment change, and prepare for disaster reduction. In this study, the EDM is aimed at *capacity building of student, people, and communities to disasters (with implication to environmental change in long and short term)*. The major concern of EDM is how to promote action individually and collectively. It is often observed that in spite of exiting knowledge about the risk, people are not taking actions. To take action, the first step is development of knowledge base, followed by realization and deepening. From deepening to action, it needs to develop a culture, which will enable individual and community to implement the knowledge base. Over a period of time, this will lead to sustainable development. Thus, education is critical vehicle to sustainable development.

5. Goal and Objectives: The goals of this study are the following.

- To enhance awareness to environment and disaster of high school students
- Promoting actions to reduce earthquake risks through pre-disaster preparedness and community participation

-
- To enhance community ties for EDM to achieve sustainable development
- Objectives are:
- To understand and recognize the educational factors which enhance awareness to EDM through questionnaire survey
 - To identify the essential of EDM education through experience sharing between Japan and Nepal
 - To identify the ways of communication between students and their family for build community
 - To identify the practicable education in community and family level
 - To develop the methodology to transfer effective EDM education to different countries
- 6. Activities:** Activities include: preliminary survey, data collection, preparation of survey, implementation of survey, analysis, workshop and report preparation.
- 7. Outputs:** The expected outputs are:
- Essentials of environment and disaster management education, and its linkages to sustainable development
 - Practicable ways of family and community education to enhance actions
 - Tools of questionnaire survey
 - Methodology for implementing questionnaire survey

VIII. Investigation on Community Resilience in Monsoon Affected Central Vietnam -*Towards innovative disaster management process-*

1. Supported by: The Ministry of Education, Sports, Culture, Science and Technology (MEXT), Government of Japan. Project Partner: Hue University of Agriculture and Forestry (HUAF)

2. Time Frame: 3 years (April/2005~March/2008)

3. Location: Thua Thien Hue and Quang Tri province in Central Viet Nam

4. Background and Rational: Recently the impact of climate change is getting worse. It causes natural disaster and environmental change, especially in developing countries. This situation makes the solution of poverty or environmental problems difficult. Viet Nam is no exception to that. Up to now, fundamental measure to climatic disaster was to respond after the disaster events. It is, of course, important but insufficient. Therefore, it is required to undertake appropriate preparedness measures, incorporating local social network, policy framework and integration of disaster and environmental issues. The current research project will investigate existing system of disaster mitigation in Central provinces, will analyze social and policy environment, and will propose affordable solutions applicable to local socio-economic and cultural context.

5.Objectives:

- To investigate the relationship between local characteristic and occurrence pattern of monsoon climatic disaster
- To reevaluate the existing system in terms of local disaster management
- To investigate the disaster preparedness and community resilience focusing on social aspects
- To propose innovative approach of disaster management applicable to the local context

6.Expected outcomes: Policy framework incorporating local social dynamics, analysis of local governance system and inter-linkage of environment and disaster issues.

7.Study Plan:

2005- Investigation of the relations between local characteristic and occurrence pattern of monsoon climatic disaster (Collecting information and field survey)

- Collecting and analyzing the relevant fundamental information (background data on social, economic and policy issues)
- Grasping geographical village structure and ecological environment condition
- Grasping built environment
- Grasping livelihood structure and economy situation of household
- Classifying occurrence pattern of climatic disaster
- Grasping correspondence to climatic disaster
- Analyzing the relation between local characteristic and climatic disaster

Development of sustainable livelihood framework in Huong Van Commune, Huong Tra District of TT Hue Province.

2006- Re-evaluation of the existing system in terms of local disaster management (Field survey)

2007- To investigate disaster preparedness and the mechanism of the power of local restoration
- To propose innovative approach of disaster management applicable to the local context

IX. Climate change adaptation to drought and its implication to disaster management: *Focus on the Mekong region*

1. Supported by: Kyoto University (Project Partner: OXFAM GB)

2. Time Frame: December 2005 to November 2006

3. Location: Vietnam, Laos and Cambodia

4. Background and Rational: Mekong countries are vulnerable to hydro-meteorological natural disasters like flood, drought and cyclones. Significant focus has been given on flood and cyclone in these countries, however, the slow on-set disaster like drought has become neglected, although it has a deep-rooted impact on the communities. For natural reasons, the communities have traditional coping capacities, developed over decades of experiences. However, the nature of the natural disasters is changing drastically in recent past, and this has often been linked to the effect of climate change.

Prolonged dry days have caused significant damages to agriculture and changes in the salinity of water, thus causing damages to aquaculture. There has been no systematic study to correlate these natural disaster events with the climate change.

5. Objectives: The goal of this project is study the interrelationship of environmental impacts in form of drought, and suggests possible mitigation measures as local government policy options, and prepare a community adaptation model. For the environmental impacts, climate change issues are considered, and its effects on slow-onset disasters like drought will be studied. This study is regarded as the baseline study to **identify future focus areas** in the field of climate change and drought management.

To achieve this goal, specific objectives are:

- To analyze the **current government policies** on drought management in the case study countries,
- To revisit the **climate change adaptation issues** in the case study countries,
- To study the **coping mechanism at community level**, focusing on livelihoods,
- To suggest possible community adaptation schemes, and **integrate these schemes in the policy options**

6. Activities: Each of the above objectives are linked to specific activities:

- Analyze the current policies on disaster management in the case study countries
- Revisit the climate change adaptation issues in the case study countries
- Study the current issues at community level, focusing on livelihoods
- Suggest possible community adaptation schemes and integrate these schemes in the policy options

7. Expected outputs: The project will create a base of a larger project on community based drought management. The expected outcomes of the project will include:

- Survey and analysis on **current practices of drought management** in the study area
- **Policy recommendations** and a model for climate change adaptation for drought management at community level
- **Framework for community based drought management project** in the region.

X. International Framework for Development of Disaster Reduction Technology List on Implementation Strategies

1. Supported by: Ministry of Education, Sports, Culture, Science and Technology of Government of Japan (Project partners: National Research Institute for Earth Science and Disaster Prevention (NIED), and UN International Strategies for Disaster Reduction (ISDR))

2. Time Frame: April 2005 to March 2006

3. Location: Asian Region

4. Background and Rational: Based on the outcomes of the UN World Conference on Disaster

Reduction (WCDR), this project is aimed at establishing an international framework of collaboration for the development of an International Disaster Reduction Technology List on Implementation Strategies ("Disaster Reduction Hyperbase"). The ultimate goal of the project is to realize a web-based facility disseminating disaster reduction technologies with a solid notion of implementation strategies (DRIST). Its basis was laid by the "Disaster Reduction Technology List on Implementation Strategies" which was submitted to UN-WCDR as a contribution from Japan.

5.Objectives: Under the above-mentioned framework, the project tries to achieve the following:

- Clarify the criteria for the selection of technologies and tools
- Recognize the users' profiles and needs
- Illustrate with specific examples selected implementation technologies and tools
- Develop common understanding on the implementation technologies and tools
- Illustrate researcher-stakeholder partnership
- Define the characteristic hazards to include in the Disaster Reduction Hyperbase with Asia-Pacific perspective
- Identify potential resources of the region for future follow-up, and
- Define a framework of regional cooperation for "Disaster Reduction Hyperbase" development

6.Project Activities: The first workshop for Europe and Africa took place in Geneva on 16-17 August. A second workshop for Asia will take place in Nepal on 14-15 November and a third one for the Americas will be organised in San José, Costa Rica on 1-2 December. A final international workshop will be held in Tsukuba, Japan on 27-28 February 2006.

Following this organizational phase, the development of the Disaster Reduction Hyperbase and the implementation of the project are expected in subsequent years. The project constitutes part of the "Portfolio of Disaster Reduction", or information sharing mechanism for disaster reduction, that was proposed by the Government of Japan.

XI. International Cooperation on Education and Research: *Focusing on Environment and Disaster Management, Sustainable Development and Human Security in Asia*

1. Supported by: Kyoto University Graduate School of Global Environmental Studies. Project Partner: Hue University of Agriculture and Forestry (HUAF)

2. Time Frame: 5 years (April/ 2005~March/2010)

3. Location: The immediate target country of the project is Viet Nam (North, Central and Southern part). However, the project aims to disseminate its experiences to the neighboring countries of the Mekong region.

4. Background and Rational: For effective constitution of international education-research base and implementation of various development projects, it is required to explore new research themes through collaborative partnership with different stakeholders. The key issues are: Synergy of research and education, Field base practical research and education, Meeting local needs and priorities, considering local socio-economic and cultural context, Proactive Collaboration and partnership, Innovation in research and education, Implementation oriented research and education, Long-term commitments.

5.Objectives: To develop innovative research and education system, international exchange and practical project at the education-research base of GSGES (Graduate School of Global Environmental Studies) of Kyoto University.

<Academic objectives>

- To investigate the relation between local characteristic and occurrence pattern of monsoon climatic disaster
- To reevaluate the existing system in terms of local disaster management
- To propose innovative approach of disaster management applicable to the local context
- To evaluate environment/disaster management actions at the level

<Implementation objectives>

- To construct the system of environment/disaster management education and comprehensive local disaster management by local people, and improve their lives and security
- To search for adaptation method toward sustainability development and human security in Asia monsoon area.

6. Activities: FY 2005: TT Hue with possible experience sharing among other regions (north and central) of Vietnam, Development of research framework, identify partner organizations, site selection, dissemination, and seminar

- **FY 2006-2007:** Implementation of research project, dissemination, educational framework, seminar, training, student exchange
- **FY 2008-2009:** Regional experience sharing in Mekong

7. Expected outcome:

- Enhanced education and research framework
- Capacity development of local communities, local governments
- New innovations on linkage of environment, development, disaster
- Awareness raising among different sectors

XII. Community-level Climate Change Adaptation and Policy Issues: *Inter-linkages of environment, poverty and livelihood*

1. Supported by: United Nations University

2. Time Frame: July 2004 to March 2005

3. Location: Gujarat, India

4. Background and Rational: Since one of the worst sufferers of climate change are the rural communities, depending on agriculture as their livelihoods, it is important to focus on the impacts of climate change on livelihoods, and re-establish the links among poverty, livelihood and environment. However, focusing on the communities are not enough, and so long the community initiatives do not become part of the government policies, it is difficult to sustain the efforts. Perhaps the most important prerequisite for creating sustainable livelihoods, and for achieving sustainable development, is good and accessible government. Thus, the link between local, state, and national governments to the community is of utmost importance.

Therefore, the case study has been undertaken in the western part of India, in the state of Gujarat, which is prone to drought. The purpose is to find the sustaining elements from the case study, and apply it to other areas in form of a adaptation model.

5. Objectives: The goal of this project is study the interrelationship of environmental impacts, and suggests possible mitigation measures as policy options, and prepare a community adaptation model. For the environmental impacts, climate change issues are considered, and its effects as a drought in the arid to semi-arid climate will be studied. To achieve this goal, specific objectives are:

- To analyze the current policies on drought management in the case study country
- To study the current issues at community level, focusing on livelihoods, and
- To suggest possible community adaptation schemes, and integrate these schemes in the policy options

6. Activities: Project Activities include:

- Analyze the current policies on drought management in the case study country:
- Study the current issues at community level, focusing on livelihoods
- Suggest possible community adaptation schemes and integrate these schemes in the policy options

7. Expected outputs: The expected outputs are:

- Survey and analysis on current practices of drought mitigation measures in the study area
- Policy recommendations and a model for climate change adaptation for drought mitigation at community level
- Project report (in the form of a publication)

8. Beneficiaries: Direct beneficiaries of the study will be the community, the local governments and the state government. Indirect beneficiaries will include the state and national government, and international organizations.

XIII. Education for Sustainable Development: *Disaster Reduction and Human Security*

1. Supported by: United Nations Educational Scientific and Cultural Organization (UNESCO)

2. Time Frame: October 2004 to March 2006

3. Location: General, with application to vulnerable countries

4. Background and Rational: The United Nations General Assembly proclaimed the ten-year period from 2005 to 2014 as the United Nations Decade of Education for Sustainable Development (DESD). Governments around the world are invited to use the Decade to integrate education for sustainable development into their national educational strategies and action plans at all appropriate levels.

UNESCO is designated as the Lead Agency in the promotion of the Decade, and is required to consult with the United Nations and other relevant international organizations, governments, non-governmental organizations and other stakeholders to develop a draft international implementation scheme for the Decade, bearing in mind the relationships between education for sustainable development and current international educational priorities. ESD had gone through a long path of several major conferences and declaration.

5.Objectives: The project objectives are:

- To enhance the understanding of education for sustainable development
- To facilitate proactive risk education in different countries

6. Activities: Project Activities include:

- Study the current practices of the disaster education and human security
- Organize a thematic session in the UN World Conference on Disaster reduction (WCDR) in Kobe
- To summarize major findings of the WCDR in the form of recommendations
- To develop a strategy paper of future work of UNESCO in the field of disaster education

7. Expected outputs: Expected outcome of the project are:

- Book on best practices of disaster reduction
- Thematic session proceedings
- Strategy paper

XIV. Catastrophic Flood Risk Assessment: *Demonstration Project in Hanoi, Vietnam*

1. Supported by: United Nations University and Kyoto University (Partner: Asian Institute of Technology, Bangkok, Thailand)

2. Time Frame: October 2004 to March 2006

3. Location: Hanoi, Vietnam

4. Background and Rational: Although the probability of occurrence of catastrophic flood is low at any given location, a number of such events take place each year in different parts of the world highlighting the need for a global or regional preparedness to deal with them. The flood risk would lead to very high human and economic losses. A prior risk assessment and a basic framework for response can mitigate the losses to a great extent and is a prudent investment considering the mitigation benefits. To reduce the vulnerability against a catastrophic flood, capacities of the institutions that can effectively deal with these issues should be enhanced. The other important target group is the end user; the communities. Raising awareness, enhancing communities coping capacities are essential to mitigate flood risk. Within the above context, there are two specific needs: one, to develop a methodology for risk mitigation for catastrophic flood, and two, to involve the stakeholders to use the methodology.

These needs were identified in a consultation workshop in July 2003 in Bangkok, Thailand, with participation from high-level government officers from 15 countries of the Asia-Pacific region. The catastrophic flood risk assessment is a demonstration project of this regional program applied to risk assessment in Hanoi City, Viet Nam.

5.Objectives: The project will carry out a prior risk assessment for a catastrophic flood scenario in Hanoi to develop a basic framework for response and integrate these results in to development and planning process of Hanoi.

6. Activities: Project Activities include:

- Estimate potential losses for a catastrophic flood
- Investigate how these findings can be incorporated in the future development of Hanoi

7. Expected outputs: Expected outcome of the project are:

- Catastrophic flood scenario
- Action plan
- Sensitization of different groups of stakeholders through workshops and seminar

8. Beneficiaries: Direct beneficiaries of the study will be the community, the local governments and the state government. Indirect beneficiaries will include the state and national government, and international organizations.

XV. Case Station and Field Campus: *For Implementation Research and Innovation*

1. Supported by: The Ministry of Education, Sports, Culture, Science and Technology (MEXT), Government of Japan. Project Partner: Disaster Prevention Research Institute (DPRI), Kyoto University and other regional partners in each countries.

2. Time Frame: April 2005 to March 2008

3. Location: India and Nepal

4. Background and Rational: There is still a large gap between what is known (science and technology as well as people's own self protective knowledge) and what is successfully applied and implemented. This is the challenge of implementation. Disaster risk reduction requires more than scientific advance and even good policy. It requires concrete implementation. Not enough attention has been given to actual, down-to-earth implementation of in the context of daily life and the routine work on institutions. A multi-hazard, multi-level and interdisciplinary approach is necessary for this purpose. Actions should be taken at individual, community, city, province and country level.

5. Concept of Case Station and Field Campus: For effective monitoring of disaster management practices on a continuing basis, it is proposed to establish a few **Case Stations**. This approach is quite different from the conventional case studies, and will document of what has been accomplished during a given period in a given setting with provision for monitoring and assessing the reliability of the findings on a sustained basis. The characteristics of Case Stations are: 1) cross learning, 2) spatial crossing (on geographic locations and exchange programs), 3) learning on adaptive management, and 4) time crossing (in a sustained way). The Case Stations will be connected through global networks, for its effective expansion, as well as in-country (or region) effectiveness. These Case Stations will act as knowledge resources, as well as examples of best practices in the country or region, with specific focus on Implementation. Young professionals and students will explore these Case Stations for their research and development studies (*learning by doing*), and thereby will form a **Field Campus**.

6. Activities: Project Activities include:

- Year 1: Establishing the context, brainstorming workshop, overall framework development, establishing case station and field campus, and publication
- Year 2: Implementing research, exchange visit, internet forum, workshop and publication
- Year 3: Implementing research, exchange visit, internet forum, workshop and publication, evaluation and future steps

7. Possible areas of interventions: Following are the possible areas of interventions: Pre-disaster mitigation, Local community capacities, Indigenous knowledge, Local policy interventions, Receptiveness, Actual actions, Changes in the local policies, Changes in the local academic agencies.

XVI. NDMP (National Disaster Management Plan): *Dissemination for Community Based Disaster Management*

1. Supported by: United Nations Assistance Mission to Afghanistan (UNAMA) (Project partner: Sustainable Environment and Ecological Development Society (SEEDS))

2. Time Frame: March 2005 to February 2006

3. Location: Afghanistan (disaster prone provinces)

4. Background and Rational: The National Disaster Management Plan (NDMP) focuses on streamlining disaster management systems at the national level through reorganization of the DDP and laying down of operating procedures for major stakeholders. It operates within the framework laid down under the Law on disaster response, management and preparedness in the Islamic State of Afghanistan. The NDMP covers the range of changing requirements in four stages of the disaster cycle as described in the plan: non-disaster stage, before disaster, during disaster and after disaster. It lays out principles, structures and procedures for mitigation, preparedness, impact assessment, rescue and relief, recovery activities. The NDMP aims at building national level DM systems. Various ministries have been assigned roles in the document, with the DDP as the

coordinator. The plan also outlines the province level organizational systems required to operationalize the national plan.

As Afghanistan is currently going through a large-scale exercise of nation rebuilding, it needs to address its management capacities and gear up as a disaster resilient society for a safer future.

Community based disaster management is the most viable means for this.

5. Objectives: The objectives of this study are the following.

- To promote the NDMP among various line ministries at national level, national NGOs and International Organizations in Afghanistan
- To promote the NDMP at Provincial Level for effective coordination with national level agencies and promote disaster management at community level
- To create awareness on roles and responsibilities of District Level governments, community representatives in disaster management.

6. Activities: The above objectives will be achieved through a series of workshops at different levels (national and province), and training programs of government officers at different levels. Through these consultative meetings, provincial level disaster management plans will be produced. Community level consultative meetings will be conducted to socialize the disaster management plan, and to enhance the linkage of community and local governments. Training programs will be conducted for the school teachers and children.

7. Outputs: The expected outputs are:

- Orientation Handbook with explanation of NDMP structure and its functioning.
- Guiding Principles for Provincial Level Plans based on the NDMP.
- Field Operators Guide for Disaster Situations
- Community Training & Awareness Kits
- School Teachers & Student Awareness Kits

COMPLETED PROJECTS (1997 - 2004)

I. Project Name: RADIUS (Risk Assessment Tools for Diagnosis of Urban Areas for Seismic Disasters)

Project Sites: Bandung (Indonesia), Tashkent (Uzbekistan), and Ziging (China)

Time Frame: 1998-1999

Project Fund: 200,000 US\$

Fund Source: United Nations IDNDR Secretariat

Description: The project focused on mitigating urban seismic risk at city level in the developing countries. The project was more like a process to engage different stakeholders; a process to enhance confidence and capacities in the local people; and a process to catalyze local actions. It had two major parts: to prepare a seismic scenario, and to develop a participatory action plan. The important part of RADIUS is that the project still continues, even after the official completion of funding in 1999. The whole process has a wider application to different other sectors, including environment and natural resource management in both developed and developing countries. RADIUS has been used widely by many organizations as a training tool. Project partners were the city governments and local universities.

II. Project Name: Global Earthquake Safety Initiative (GESI)

Project Sites: 21 major cities in the world, including Manila of the Philippines

Time Frame: 2000-2001

Project Fund: 250,000 US\$

Fund Source: United Nations Centre for Regional Development

Description: The project aimed to promote actions at local level, and prioritize the resources for saving human lives from earthquake disasters. The project was implemented in 21 cities of various size, economic status, and risk preparedness around the world. The method estimates the life loss from earthquakes using a model that is based on a simplified loss estimation model and is similar to models used by insurance companies to estimate risk. The results include: comparative life loss in the cities, city specific risk mitigation option, and lethality potential of school children. The

methodology is widely used as the training tool for the local disaster managers. Main project partners were the city governments, and the local academic institutions.

III. Project Name: Gujarat School Earthquake Safety Program

Project Site: Gujarat, India

Time Frame: 2001-2003

Project Fund: 1.5 million US\$

Fund Source: Hyogo- Gujarat Friendship Fund

Description: At the aftermath of the Gujarat Earthquake of 2001, the project aimed to reconstruct and retrofit 11 damaged school building through training of the local masons and engineers in different construction practices. The project also developed several education materials for local schools. The project was implemented in close cooperation with the Gujarat State Disaster Management Authority (GSDMA).

IV. Project Name: Patanka New Life Plan

Project Sites: Gujarat, India

Time Frame: 2001-2002

Project Fund: 150,000 US\$

Fund Source: The Great Hanshin-Awaji Memorial Research Institute

Description: After the Gujarat earthquake of 2001, the project started a unique reconstruction project in cooperation with wider stakeholders in India and Japan. The project had two components: to rehabilitate a model village (reconstruction of houses, infrastructures, and develop livelihood options), and to provide training to local masons and engineers through on-site shake table testing on different construction types. The project focused on the ownership transfer to the local communities, and incorporated traditional knowledge and know-how in the reconstruction process.

V. Project Name: School Earthquake Safety Initiative (SESI)

Project Sites: Bengkulu (Indonesia), Kathmandu (Nepal), Chamoli (India) and Tashkent (Uzbekistan)

Time Frame: 2000-2003

Project Fund: 100,000 US\$

Fund Source: United Nations Centre for Regional Development

Description: The project aimed to promote the safety of vital infrastructure like schools through participatory training and capacity building programs. The project targets the local masons and communities through on-site retrofit of schools. The other component was the development of the school educational programs for the students. The project was implemented in cooperation with the city governments, local academics and NGOs.

VI. Project Name: Afghanistan Livelihood and Training Initiative (ALTI)

Project Sites: Kabul, Nahrin and other provinces of Afghanistan

Time Frame: 2002-2003

Project Fund: 90,000 US\$

Fund Source: United Nations Centre for Regional Development

Description: During the reconstruction of Afghanistan, the project focused on two aspects: reconstruction of houses, and improve livelihood through cooperative mechanism. The first part was to develop as et of guidelines for different construction types, and provide training to the local engineers and masons. The second part aimed to work with the local communities to improve their livelihood through grape plantation and develop cooperative scheme. The project was implemented with the Ministry of Urban Development and Housing (MUDH), in close cooperation with UNAMA (United Nations Assistance Mission to Afghanistan) and local NGO.

VII. Project Name: Sustainability of Community Based Disaster Management (CBDM)

Project Sites: Bangladesh, Cambodia, India, Indonesia, Nepal, Philippines, and Vietnam

Time Frame: 2002-2003

Project Fund: 300,000 US\$

Fund Source: United Nations Centre for Regional Development

Description: The project aimed to develop a set of guidelines and tools for the sustainability of CBDM in different Asian countries through studying and analyzing best practices. The study focused on cyclone, earthquake and flood in seven Asian countries. Best practices were identified, and the causes of sustainability were identified to develop a framework of sustainability. The guidelines and tools include generic guidelines, and a set of specific tools for policy makers, national disaster managers, local disaster managers, community based organizers and trainers. The guidelines and tools were tested in Philippines, Vietnam and Bangladesh.

VIII. Project Name: Indian Earthquake Safety Initiative (INDESI)

Project Sites: Major earthquake prone cities in India

Time Frame: 2003-2004

Project Fund: 50,000 US\$

Fund Source: United Nations Centre for Regional Development

Description: The project was conducted in cooperation with the national and city governments and the local NGO. The project targeted to analyze the city's risk and provide risk mitigation options of the selected cities. Working closely with the local government, the project provides training to the local disaster managers, and raise the awareness of the local people and communities.

IX. Project Name: Sustainable Community Initiative in Gujarat

Project Sites: 20 villages in Porbander district of Gujarat, India

Time Frame: 2003-2004

Project Fund: 65,000 US\$

Fund Source: Gujarat State Disaster Management Authority

Description: The project objectives are to enable the local communities to develop the safer village plans, provide training to the local village and local government leaders and change agents, and to strengthen link between the local government and the community. The project conducted different training in different levels, district, village and community.

X. Project Name: Community Based Disaster Management in Afghanistan

Project Sites: 19 provinces in Afghanistan

Time Frame: 2003-2004

Project Fund: 250,000 US\$

Fund Source: United Nations Assistance Mission to Afghanistan (UNAMA)

Description: During the reconstruction of Afghanistan, the project focused on two aspects: reconstruction of houses, and improve livelihood through cooperative mechanism. The first part was to develop a set of guidelines for different construction types, and provide training to the local engineers and masons. The second part aimed to work with the local communities to improve their livelihood through grape plantation and develop cooperative scheme. The project was implemented with the Ministry of Urban Development and Housing (MUDH), in close cooperation with UNAMA (United Nations Assistance Mission to Afghanistan) and local NGO.

I certify that the above statements made by me are true, complete, and correct to the best of my knowledge and belief.



Rajib Shaw

17th February 2006

(<http://www.iedm.ges.kyoto-u.ac.jp/>).