



**KOBE REPORT draft**  
**Report of Session 4.10, Thematic Cluster 4**

**Disaster prevention functions in rural areas  
and disaster resistant sustainable livelihoods**

**1. Summary of the session's presentations and discussions**

In the rural areas of the Asian monsoon region, there have emerged communities bound by ties of proximity where the production, living, and ecological environments are all organically integrated. Here are carried out such multifunctional roles as transmitting cultural values and conserving the environment.

In terms of disaster prevention, many rural areas have long been plagued by disasters such as floods, drought, landslides, soil erosion, earthquakes, and tsunami. On the other hand, under these hazards, rural people have accumulated experiences in and technologies for coexisting with nature through the production activities of agriculture, forestry and fisheries. For example, paddy fields, upland fields and forestlands reduce flood runoff through their water retention capability. They also play an important role in preventing soil erosion and the occurrence of landslides in hilly and mountainous areas for the conservation of national lands.

As seen after the Hanshin-Awaji Earthquake and Hokkaido Nansei-oki Earthquake, meanwhile, rural communities have tackled earthquakes, tsunami and other disasters promptly through collective action, and have made efforts for reconstruction.

However, in many countries, owing to the pursuit of economic efficiency in many industries, forest and farmland management have been insufficient recently, leading to devastation of forests and mangroves, haphazard conversion of farmland and diminution of multifunctionality. This has not only reduced the vitality of rural areas, but has also tended to increase disaster damage in rural areas. In addition, this has an adverse impact on urban areas in the form of flooding and other disasters.

In view of these facts, it is important that we appropriately evaluate the multifunctionality served by forests, farmland, and rural areas in preventing floods, landslides, tsunami, and other disasters. Experiences and Technologies for coexisting with nature that has been cultivated to date needs to be applied to aspects of disaster prevention; disaster prevention measures that draw on the functions of "mutual aid" between rural communities need to be devised. To this end, agriculture, forestry and fisheries must be practiced as sustainable industries.

Within the context of South Asia there are linkages and intricate dynamics between three main issue areas; namely disasters- livelihoods – poverty. The framework 'Disaster Resistant Sustainable Livelihoods' captures these dynamic relationships, and presents a way forward towards achieving improved disaster risk management.

The crucial link between the natural resources and natural hazards was highlighted in the case of South Asia. Evidence from the sub continent point out that the two factors act in a mutually reinforcing relationship. The fast track of development over the last decades have led to the over exploitation and destruction of the natural resources, leading to the increase of hazards and disasters as evident from many examples from South Asia. Risk reduction and risk management therefore cannot be divorced from the overall development, natural resource management and governance issues.

## 2. Primary Issues

In order to build disaster-resistant national land and communities in the countries of the Asian monsoon region:

- It is important that the multifunctionality of agriculture, forestry and fisheries, rural communities and forests are evaluated appropriately, and that conservation measures by means of the sustainable development of agriculture, forestry and fisheries are devised for these functions. Concerning new land use needs accompanying economic growth, in particular, we need to consider land use plans in rural areas, including measures to conserve these functions.

- To sustain experiences and technologies for coexisting with nature in agriculture, forestry and fisheries, as well as “mutual aid” schemes manifested by rural communities in the event of a disaster, and to encourage positive participation in disaster prevention activities by people involved in agriculture, forestry and fisheries, it is important that we improve the economic and living environments of rural areas, and devise measures enabling sustainable agriculture, forestry and fisheries to be practiced.

- Disaster resistant communities and infrastructure can only be reached through sustainable development and vice versa. The common element which sits between the two is livelihoods, which needs to be supported by a strong asset base; natural, physical, social, financial. Livelihood asset base of the poor is a reflection of the systems of governance. The weaker the asset base of the people, they are more vulnerable to hazards. Enabling governance structures are a pre-requisite for creating conditions for asset enhancement. The current decentralized governance structures in most South Asian countries offer an entry point in this direction.

- Disaster Resistant Sustainable Livelihoods (DRSL) framework takes a holistic view towards addressing the issues of disaster risk and poverty. It has the potential to meet the challenges of the present by applying within the current governance, institutional and policy frameworks in the sub continent, and to meet the challenges of the future. Re- building of the damages resulting from recent tsunami, which is right now high priority in Asia, is an opportunity to apply a long-term vision towards disaster risk and poverty reduction. DRSL in this sense is extremely relevant and timely.

We urge the national governments and international donors, international development organizations to apply the DRSL framework in the policy decisions, development planning and in investment decisions.

### 3a) Suggested targets and indicators to measure accomplishments

In many countries, forest and farmland management have been insufficient recently owing to the pursuit of economic efficiency in many industries for example, leading to devastation of forests, haphazard conversion of farmland and loss of multifunctionality. This has not only reduced the vitality of rural areas, but has also tended to increase the damage caused by disasters in rural areas.

In order to build disaster-resistant national land and communities, one of the primary targets of this session is to ensure that the multifunctionality of agriculture, forestry and fisheries, rural communities and forests, including disaster prevention functions, are evaluated appropriately in the countries of the Asian monsoon region.

The main strength of this discussion lies with the application of the DRSL policy framework in South Asia, and elsewhere. The DRSL framework and its application modalities are documented in a publication by ITDG South Asia and RDPI - ‘Livelihood Centered Disaster Risk Management: A Policy Framework for South Asia’. The publication will be distributed to the key target audiences and followed up with further discussions, in order to promote its application.

### 3b) Existing indicators with reference

Nine out of the ten ASEAN nations has been spreading the concept of multifunctionality of agriculture by :

- a) implementing National Information Seminars opened not only to experts and government officials in the Ministry of Agriculture, but also to people outside the agricultural sector;
- b) presenting the results of country case studies to agricultural-related and non-agricultural national agencies.

As a result, the concept of multifunctionality of agriculture will be well reflected in their respective long-term national agricultural policies.

#### 4. Name, Affiliation and contacts of presenters

##### a) Name, affiliation and contacts of presenters and titles of presentations

1. Dr. Yohei Sato, Chairman, PAWEES, Tokyo University of Agriculture, "Disaster Prevention Functions and Conservation Measures in Rural Areas"
2. The Hon. Sumedha G. Jayasena, Minister of Women Empowerment and Social Services, Government of Sri Lanka, "Effective disaster management towards reaching poverty reduction goals"
3. Mr. Taizo Homma, Director-General, Niigata Prefecture, "Improvement of Local Disaster Prevention Functions by Enhanced Drainage Control in Rural Communities"
4. Dr. Takeshi Hata, Professor, Kobe University, "Effective Role of Rural Community in Preventing from Natural Disasters"
5. Dr. Rogelio N. Concepcion, Director (Director, Bureau of Soils and Water Management, Department of Agriculture of Philippine, "Multi-Functionality of IFUGAO Rice Terraces in the Philippines"
6. Dr. Fahmuddin Agus, Head of Soil Research Institute, Center for Soil and Agroclimate Research and Development, Agency for Agricultural Research and Development, Ministry of Agriculture of Indonesia, "Flood Reduction Function of Agriculture in Indonesia"
7. Dr. Wu Bin, Professor, General of university committee, Beijing Forestry University, "Countermeasures and It's Evaluation on Soil and Water Conservation in Loess Platrau , China "
8. Ms. Madhavi Malalgoda Ariyabandu, Programme Team Leader, ITDG South Asia, "Disaster Resistant Sustainable Livelihoods (DRSL), a policy framework for integrating disaster risk reduction with sustainable livelihoods"
9. Mr. Amjad Bhatti, Development Journalist, Rural Development Policy Institute, Pakistan, "Decentralised Disaster Management in South Asia: a new dimension to Community-based Disaster Management (CBDM) "

##### b) Name, affiliation and contact of person filling in the form

###### a) With regard to No.1, 3, 4, 5, 6, 7

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###### b) With regard to No. 2, 8, 9

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