

COUNTRY ASSESSMENT

V. Closer look on the current state of L&D in Southeast Asia

Country: Vietnam

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i. Loss and Damage Assessment System

Loss and damage has been a part of the post-disaster assessment in every country. Vietnam establishes systems and tools for assessment and disaster management focusing on water-based disasters with more emphasis on the construction of sea dikes for disaster risk reduction (Nguyen Huu Phuc, 2011). It has also formally conducted post-disaster damage assessments to measure physical and financial losses to human life, property, infrastructure, production, and industry for over 25 years (GFDRR, 2010). Currently, disaster damage and loss data from center to provincial level is being collected, stored, and/or analyzed by the Vietnam Government through different national agencies such as The Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC)- the successor of the Central Committee for Flood and Storm Control (CCFSC) by applying Vietnam new law on Natural Disaster for Prevention and Control since 05/2014), Red Cross, and General Statistics Office (GSO). This data is collected from the local level. Published data for each disaster event and annual total damage per province used to be available in the Department of Dike Management, Flood, and Storm Control (DDMFSC) website (at the moment, DDMFSC is replaced by Department of Natural Disaster Prevention and Control (DNDPC)

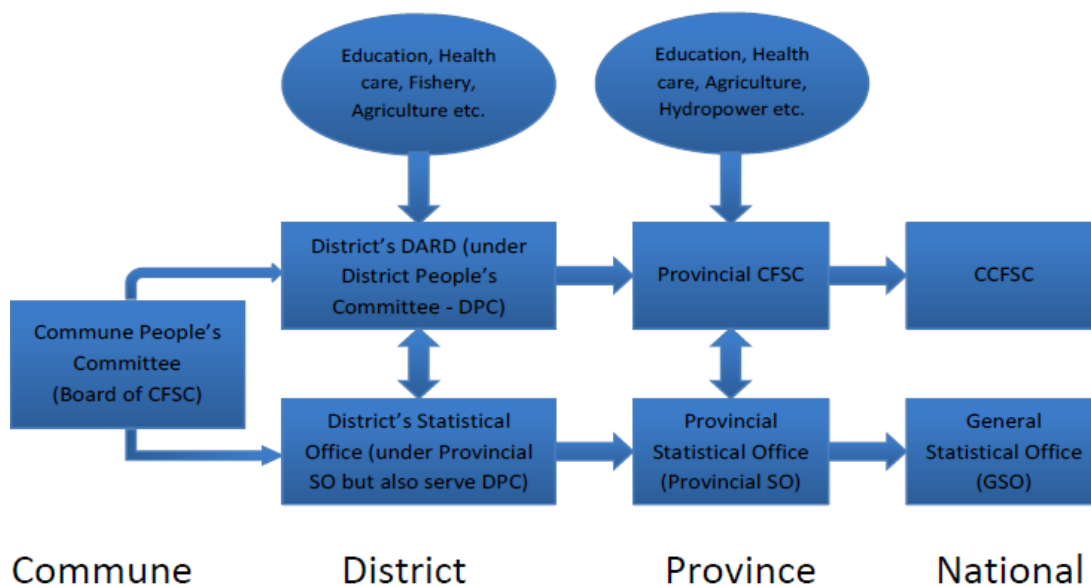


Figure 1. Process of data collection, collation and reporting by Vietnam national agencies (MARD, 2011)

Damage and Needs Assessment (DANA)

Following MARD (2011), the general process of the post-disaster assessment of national agencies is shown in figure 1. Authorities at local level contribute primary data including impact to various sectors such as agriculture health, and education for the loss and damage assessment report CCFSC and GSO collect primary data from the commune level (e.g. number of deaths, damaged infrastructure in each commune). From the commune level, data is consolidated at the district level then at provincial level by provincial Statistical Office (SO) and provincial Committee for Flood and Storm Control (CFSC). Finally, the damage assessment report of each affected province is submitted

to the Prime Minister Office by CCFSC/ MARD in Hanoi. The assessment report is used by the Vietnam Government for disaster management, planning and development. At the moment, this figure has just changed name of CCFSC system into NDPC system from centre to local since new law on Natural Disaster for Prevention and Control applied

CCFSC (Now- CSCNDPC)- has developed the DANA system (Box 1) which was used from 2006 with the support of United Nations Environment Programme (UNEP) project. It was also developed by DDMFSC (now- DNDPC) and Disaster Management Centre (DMC).

Following the DANA, it takes three to ten days after a disaster to collect data for emergency relief, and about three months after the event to get data on physical costs for recovery and rehabilitation. Other agencies involved in natural peril risk monitoring and risk assessment include the agencies under the Vietnamese Academy of Science and Technology (i.e. Institute of Geophysics – for earthquake and geophysical disasters, other institutes under the Ministry of Science and Technologies [MOST], Ministry of Natural Resource and Environment [MONRE] and universities).

The entry of this data into the new adapted database for disaster management purposes is ongoing. This involves the government, a Government-Donor-NGO Natural Disaster Reduction Partnership (NDM-Partnership), and Disaster Management Working Group (DMWG), UN Programme Coordination Group for Natural Disasters, the DIPECHO Advocacy Network Initiative (DANI) and Emergencies in Vietnam.

Box 1. DANA (from 2006) - the hardware and software for data collection and reporting with more than 150 indicators and 21 year time period (1989 - 2010). It includes humanitarian relief data from Vietnam Red Cross (VNRC), and collected damage data from GSO and CCFSC's own system. The DANA system is divided into two parts:

1. Damage Assessment (physical and financial) – under 13 major headings or categories are recorded in a standardized form. The major sections comprise: human, housing, education, health care, construction, agroforestry, irrigation, transportation, fisheries, communications, industry, water, and environment. The damage unit value depends on each province. The damage assessment report of each affected province is submitted to the Prime Minister Office and CCFSC/ CSCNDPC.
2. Needs Assessment – includes the emergency needs, post-disaster, and recovery/rehabilitation.

DANA is available at: <http://www.gripweb.org/gripweb/?q=countries-risk-information/databases-information-systems/damage-and-needs-assessment-system-dana>.

However, in Vietnam DANA: Guideline is available only in Vietnamese

Other Tools

Besides DANA, Disaster Information Management System (DesInventar) is developed with support from the United Nations Development Programme's (UNDP) *Strengthening Institutional Capacity for Disaster Risk Management (SCDM)* Project. It has been implemented by DMC, DDMFSC (Now it is DNDPC), and the Standing Office of the CCFSC (CSCNDPC- now). It shows the disaster trend in a certain area. It is a software product with two main components:

1. Administration and Data Entry Module – a relational and structural databases through which the database is fed by filling in predefined fields (e.g. space and temporal data, types of events and causes, and sources) and by both direct and indirect effects (e.g. deaths, houses, infrastructure, and economic sectors).
2. Analysis Module – allows access to the database by queries that may include relations among the diverse variables of effects, types of events, causes, sites, dates, etc. This module allows at the same time to represent those queries with tables, graphics, and thematic maps.

It is based on existing DANA database (data at provincial level). It is also used by Provincial Committee for Natural Disaster Prevention and Control & Search and Secures (PNDPC and S&R), Red Cross, and provincial Department of Statistics Office (DSO) with support from the national team (DMC-UNV). It collects inputs from the public information office of their government and from their local partners.

It has piloted projects in three provinces and was supported by the UNDP regional office and United Nations International Strategy for Disaster Reduction (UNISDR). It was also used to contribute for the 2011 Global Assessment Report (GAR) entitled "Revealing Risk, Redefining Development" – GAR11 using the database from the 1989 – 2010 period. It is available at: <http://www.desinventar.net/DesInventar/profiletab.jsp?countrycode=vnm>. Compared to DANA, it needs more information to run the software.

Socio-economic Impact Assessment (SEIA) is also available in Vietnam but is just used by universities, research institutes, or other organizations.

ii. Key Actors and their Roles

Disaster damage and loss data from national to provincial level is being collected, stored and/or analysed by the Vietnam Government through different national agencies such as CCFSC (CSCNDPC – now), Red Cross, and GSO. Besides CSCNDPC/ CCFSC and GSO, Red Cross is also involved in collecting humanitarian relief data. It obtains data from local government when conducting research and assessing loss and damage.

CCFSC/ CSCNDPC collects data for DANA system with more than 150 indicators. Ministry of Planning and Investment (MPI) – GSO uses less and different indicators from that of DANA in the collection, collation, and reporting of loss and damage data.

At the provincial level, the CCFSC/ CSCNDPC and VINASARCOM member agencies are represented under a single combined PNDPC and S&R (chaired by the PPC); this is repeated at district and commune levels.

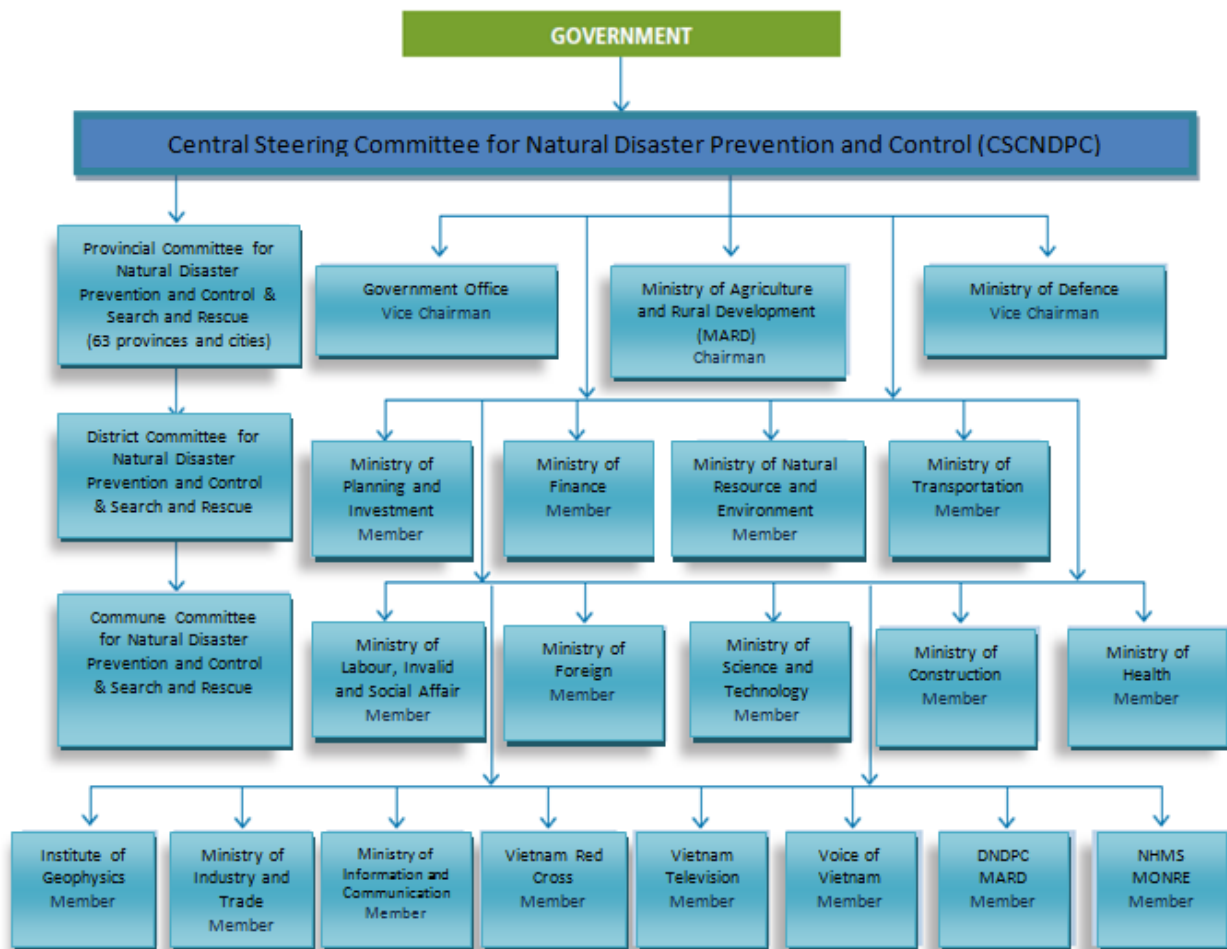
In the past The CCFSC is the chief coordinating body that is responsible for disaster management in the country. Since new DRM law applied, the CSCNDPC is established with a wider mandate than the current standing CCFSC; this Committee had not yet been established at the time of the preparation

of this report. According to the law, the new CSCNDPC will be responsible for disaster response in coordination with the National Committee for Search and Rescue, and natural disaster prevention with relevant ministries and localities. At the province and commune level there will be commanding committees for natural disaster prevention and control and search and rescue. These committees are to decide on disaster response and short-term prevention measures, such as early warning, evacuation, “rationally operating reservoirs and water supply works”, and preventing salt intrusion.

The CSCNDPC will have the task of interdisciplinary coordination and support to the Prime Minister in organising and directing natural disaster prevention and response nationwide. Members of the CSCNDPC include representatives of leadership from related ministries and agencies working on a part-time basis MARD acts as the standing body of the CSCNDPC.

Each province or city has its own CFSC/NDPC system and rescue teams at all levels (province, city and commune/ward levels). It has its own loss and damage assessment system using the DANA and DesInventar tools. In the past It had a Standing Office of the Central Committee for Storm and Flood Control (SOCCSFC) of which has operated a disaster communications system since 1995, disaster communication system is an emergency electronic mail network that links provincial dike department offices with the SOCCSFC. The system operates 24 hours per day, 365 days per year and is used to transmit disaster damage and needs data to SOCCSFC. It issues disaster prevention and mitigation directives to field staff and coordinates disaster relief activities between the SOCCSFC and disaster-affected provinces (GFDRR, 2010). From the new law on DRM applied SOCCSFC change into Standing Office of Centre Steering Committee for Natural Disaster Prevention and Control.

CSCNDPC has a structure as depicted below:



1. National Committee for Search and Rescue (VINASARCOM)

- a. VINASARCOM is situated under the Department of Research and Rescues (belong to Ministry of Defence) as a standing office and chaired by a Deputy Prime Minister with a deputy commander of Vietnamese people's Army - Ministry of Defence as the permanent vice-chair.
- b. Other vice-chairs are Deputy Minister of Ministry of Public Security, the Ministry of Transport and Ministry of Agriculture and Rural Development.
- c. Other members include Deputy Head of relevant ministries and Viet Nam Television and Voice of Viet Nam.
- d. Tasks include:
 - i. Assume the prime responsibility for, and coordinate with ministries, ministerial-level agencies, and government - attached agencies and provincial-level People's Committees in, training search and rescue forces nationwide to participate in natural disaster response. (Article 23- new law).
 - ii. Direct and organize coordination in search and rescue activities nationwide; assume the prime responsibility for, and coordinate with international and regional relief forces in, search and rescue activities (Article 29).

2. Authorities at local level

- a. Link their development plant with natural disaster prevention and control strategies and plan.
- b. Link with the local office of NCSR, CSCNDPC and local associations such as The Women's Union, Farmers Association, Youth Association and Veteran's Association.
- c. Play a crucial role in disaster reduction management

- d. Have three main tasks with four on-the-spot mottos (i.e. leadership on-the-spot, human resources on-the-spot, materials on-the-spot and logistics on-the-spot)
 - i. Prevention
 - ii. Response
 - iii. Recovery

Currently, almost all ministries including those represented in the CSCNDPC and all 63 provinces in the country have developed Action Plans for the integration of disaster risk management within their sectors.

The loss and damage data are also being used by different organizations such as the NDM-Partnership, Disaster Management Working Group (DMWG) consisting of NGOs, Secretariat of CCFSC and some research organizations. They have been actively promoting coordination, sharing of experiences and lessons in DRR, CBDRM, gender mainstreaming and other important issues in Disaster Risk Management in Vietnam (Nguyen Thanh Phuong, 2007).

Moreover, The Viet Nam Government has signed and ratified the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) which provide effective mechanisms to achieve substantial reduction of disaster losses in the social, economic, and environmental assets of the Parties, and to jointly respond to disaster emergencies through concerted national efforts and intensified regional and international cooperation. Following ADDMER, by the link between the National Focal Point

(NFP) and AHA centre (ASEAN Coordinating Centre for Humanitarian Assistance on disaster management) the information of catastrophic which affected country can't stand and recover will send to other country for regional arrangements for disaster relief and emergency respond...each party response to (SASOP, 2008):

- Developing and implementing legislative and other regulatory measures, as well as policies, plans, programmes and strategies;
- Strengthening local and national disaster management capability and co-ordination;
- Promoting public awareness and education and strengthening community participation, and
- Promoting and utilising indigenous knowledge and practice;

iii. Gaps, Issues and Needs

The following are the identified problems in the loss and damage system in Vietnam:

1. Information mostly comes from the government. CSCNDPC database does not obtain data or information with other independent institutes and organizations.
2. These systems focus on water-based disasters such as flood and storm and do not cover losses from perils such as drought and frost. Since the data are limited to water-based disasters, there is a tendency to obtain an underestimated total value of the damage. The losses from drought and frost also have major impact in production.
3. These systems do not also cover re-evaluation, relocation, and evacuation.
4. DANA and DesInventar use database from local agencies. However, there are some problems with local data collection system: To specify:
 - a. The unit cost tables used by the 63 provinces to value damage do not seem to be standardized or consistent across provinces;
 - b. The extent to which the total provincial-level cost estimates of damages may under- or over-estimate the true value of losses is unknown;
 - c. Non-economic loss and damage such as livelihood, cultural, and community issues is not covered;

- d. The financial estimation of damage is often reported as a single event value and no breakdown is given by sub-sector;
 - e. Database on historical disaster is not included; and
 - f. Update information in provinces and information on evaluation, relocation, etc. are lacking.
5. There is a lack of training in using the DANA and DesInventar systems.
 6. There is a lack of clear guidelines, tools, monitoring indicators, and level of integration and implementation (from Centre to local).
 7. There is lack of data analysis (CERD, 2010).
 8. There is a lack of GIS and socioeconomic information (CERD, 2010).
 9. The role of independent stakeholders (e.g. business, civil society organizations, etc.) is not clear especially on loss and damage assessment.
 10. There is a lack of financial resource and financial regime or mechanism to invest in developing loss and damage assessment system.
 11. The inter-sectoral coordination in planning is still weak. Each sector or province develops own plans without much consultation and coordination or sharing with others.
 12. The role of local level is very important to make these linkages. However, there is an enormous knowledge gap, lack of skilled experts, low awareness, lack of expertise and negotiation skills on climate change issues, limited methodologies, lack of tools and also commitment for the implementation or integration of climate change at provincial levels (UNFCCC, 2008).

iv. Opportunities and Recommendations

Vietnam has been strengthening technological development strategy through activities such as launching of VinaSAT 1 in April 2008 to assist with the improvement of the accuracy of weather forecasting and the country's ability to prepare for major storm events, and developing mapping system to support CCA and DRR activities, and loss and damage assessment and monitoring.

By developing and using appropriate technologies (e.g. GIS, ICT, etc.) and strengthening international cooperation, there is high potential to have an improved estimation of loss and damage (in particular) and developing linkages among CCA, DRR and L&D (in general). There are opportunities to link with international agencies (e.g. World Bank, ADB, USAID, EC, and Rockefeller Foundation, among others), get additional funding and engage other NGOs and IGOs such as CARE and OXFAM in the operations.

Moreover, Vietnam becoming a middle income country also means that future governmental fund and Overseas Development Assistance (ODA) to the country is likely to be dominated by climate change.

To improve the loss and damage system in Vietnam, it is recommended to:

1. Obtain accurate and integrated information on loss and damage including scientific data and local/indigenous/traditional knowledge. The integration of knowledge from a variety of sources can enhance the ability of climate change adaptation measures to respond to extreme events.
2. Conduct more research on livelihood and culture damage.
3. Develop different scenarios for each damaged regions in terms of post-disaster assessment.
4. Re-evaluate local information on loss and damage.
5. Establish GIS system for integrated management.
6. Develop scenarios for post-disaster management.
7. Extend the framework by including other stakeholders (e.g. independent institutes, NGOs, associations, and especially the most vulnerable ones such as communities, businesses, etc.)

8. Enhance policy system for the effective implementation of the new assessment system.
9. Approach the topic of linkages among CCA, DRR, and L&D in terms of integrated management for establishing resilience systems.
10. Continuously research on related fields and develop pilot studies (e.g. assessment system, resilience system, etc.) to improve the feasibility of new systems and address the impacts of climate change.

Other opportunities that can help in integrating CCA, DRR and L&D are: increasing quality of human resource; availability and access to international funding to develop early warning systems; pursue scientific researches; and attain resilient communities; collaboration with scientific and technological organizations.

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