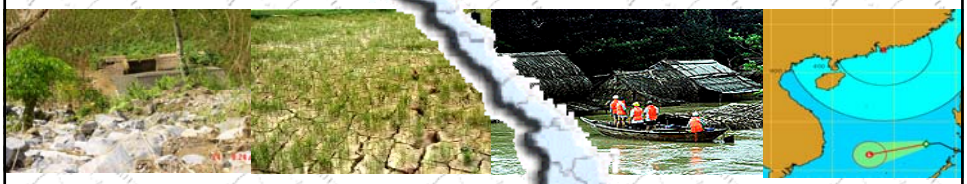
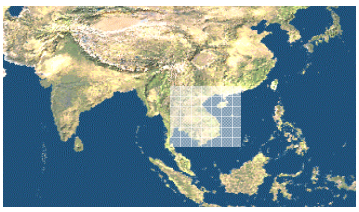
DISASTER MANAGEMENT & REDUCTION IN VIET NAM



IMLEMENTAION OF THE HYOGO FRAMEWORK FOR ACTION

VIET NAM

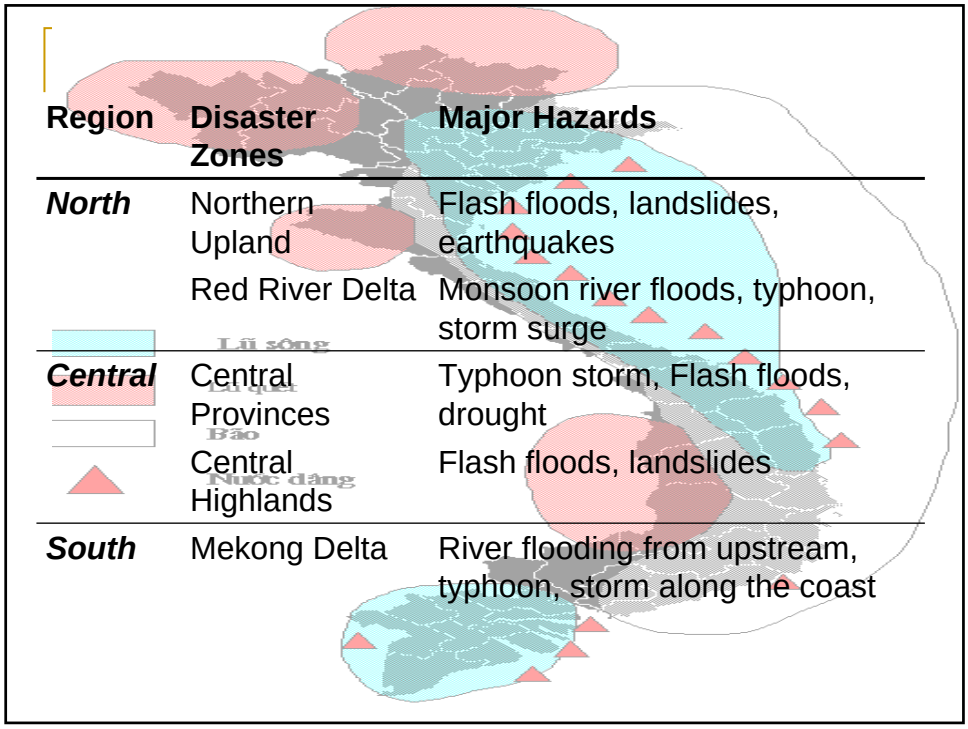


Việt Nam is located at the Southeast of Asia, with 333.000 km² of the total natural area and 3200km of coastline.

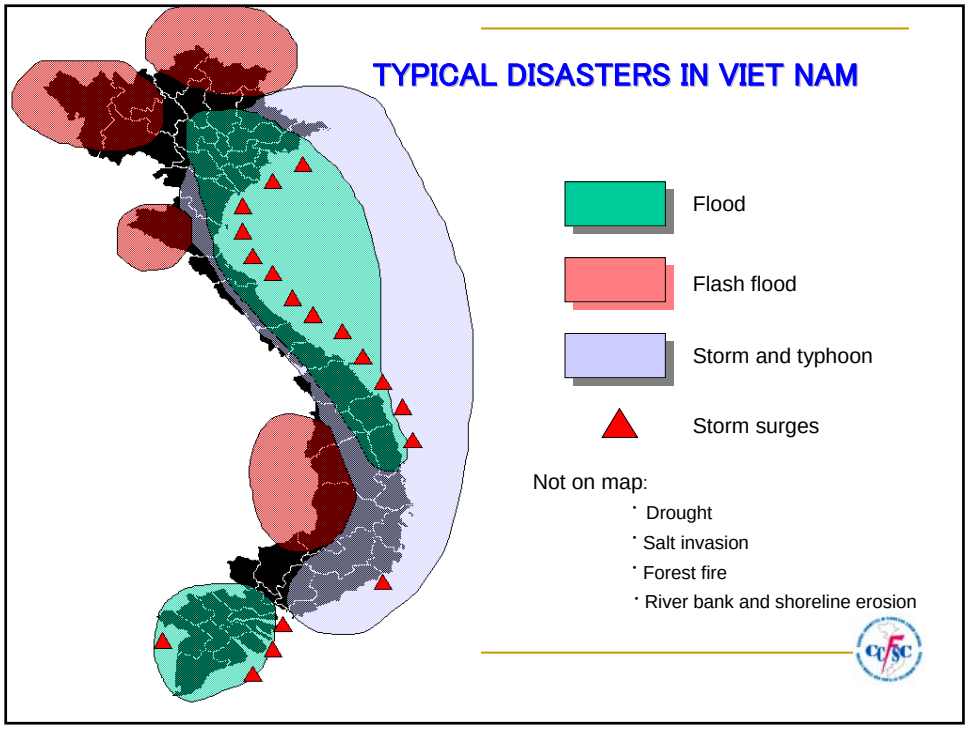
Population: 84 million (2004's statistics)

Population density: 226 capitas/km2

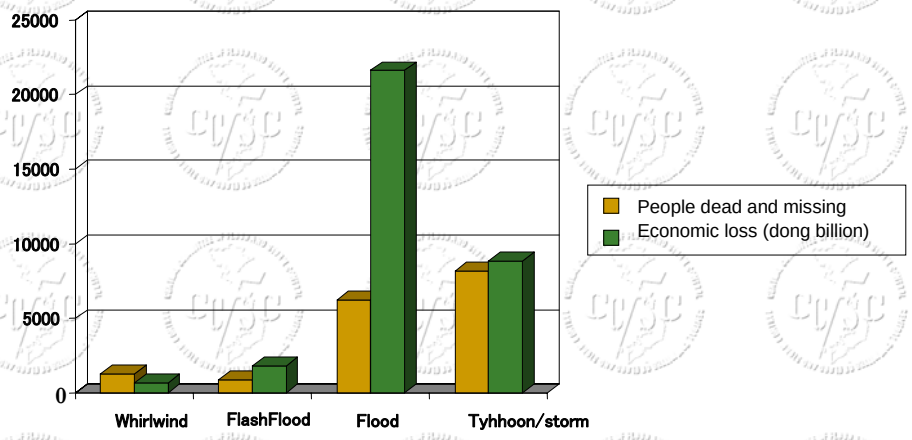
Urban population: 20 %
Rural population: 80 %



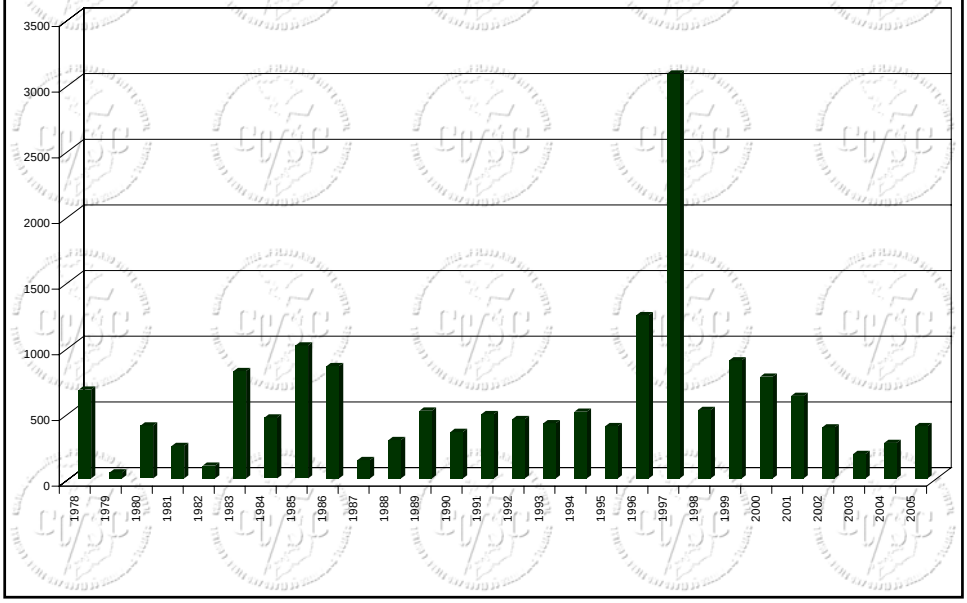
Region	Disaster Zones	Major Hazards
North	Northern Upland	Flash floods, landslides, earthquakes
	Red River Delta	Monsoon river floods, typhoon, storm surge
Central	Central Provinces	Typhoon storm, Flash floods, drought
	Central Highlands	Flash floods, landslides
South	Mekong Delta	River flooding from upstream, typhoon, storm along the coast



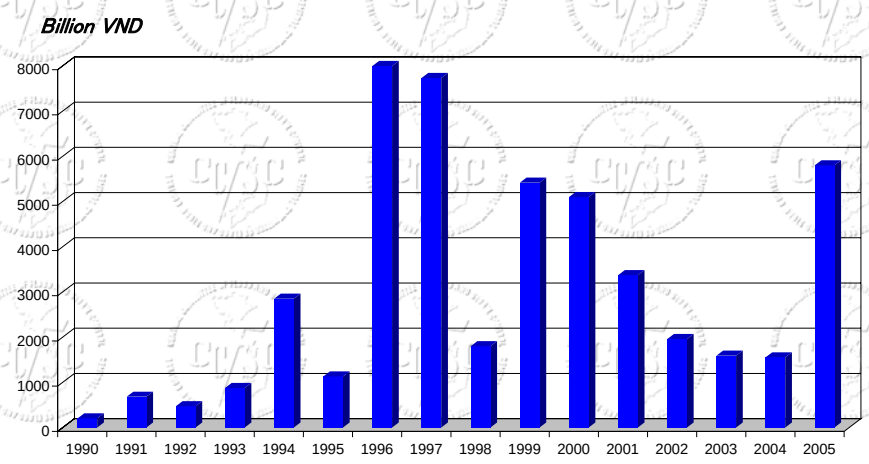
LOSSES CAUSED BY TYPICAL DISASTERS FROM 1978 TO 2005



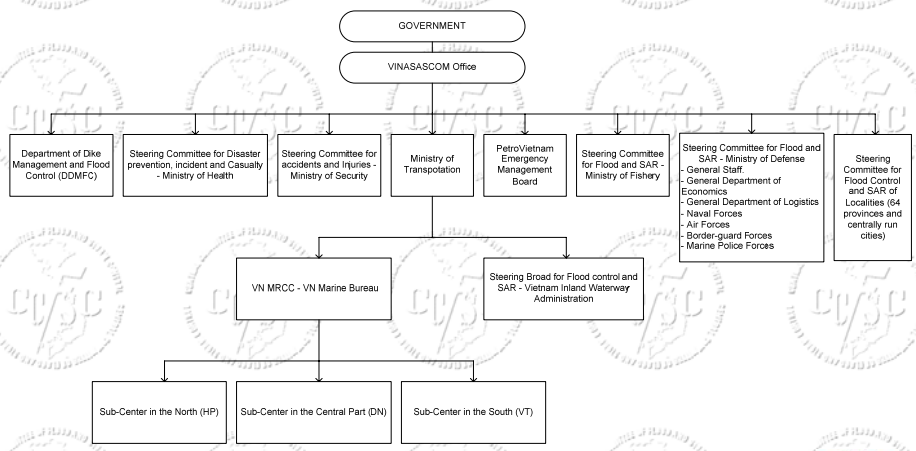
HUMAN LOSS RECORDED FROM 1978 TO 2005



ECONOMIC LOSS RECORDED FROM 1990 – 2005



ORGANIZATION CHART OF THE NATIONAL COMMITTEE FOR SEARCH AND RESCUE



IMPLEMENTATION OF THE HFA IN VIETNAM

1. STRATEGY FOR DISASTER RISK PREVENTION AND MITIGATION HAS BEEN DEVELOPED AND APPROVED

FOR THE RED RIVER DELTA AND THE NORTHERN CENTRAL VIET NAM

RADICAL FLOOD PREVENTION

1. Afforestation and protection of upstream forests.
2. Construction of reservoirs for flood mitigation in upstream areas.
3. Construction areasfor flood divergence and retardation.
4. Flood resistant dyke systems.
5. River channel dredging for increasing flood drainability.
6. Dyke supporting systems against flood.

Non-structure measures:

1. Strengthening of disaster early warning and forecasting capacities.
2. Strengthening of the dyke systems and community awareness on disaster mitigation and management.
3. Appropriate land use and residential planning to avoid disasters

FOR THE MIDDLE AND SOUTHERN CENTRAL, VIETNAM

DISASTER AVOIDANCE, MITIGATION AND ADAPTATION

1. Constructing the large reservois
2. Upgrading the rural infrastructure works.
3. Agricultural crops restructured and crop season shifted
4. Dredging river channels for flood drainage
5. Strengthening forecast and warning systems.
6. Community resilience improved
7. Relocation planned and setting up the safety area against diasater.
8. Search and rescue planned and organized

For coastline areas:

1. Coastal residential areas replanned
2. Sea dyke systems upgraded
3. Land use planning improved
4. Evacuation plan prepared
5. Mangrove forests established
6. Early warning and forecasting systems improved
7. Storm safety shelters constructed for boats and shi
8. Search and rescue planned and organized
9. Community awareness strengthened

FOR THE SOUTHERN VIET NAM

Clearing ground for a residential cluster in Tân Hồng district, Đồng Nai provicne

A child care center in Hồng Ngự district, An Giang province

LIVING AND DEVELOPING WITH FLOOD

1. Establish embankments in highly populated and production focused areas
2. Restructure agricultural crops and improve land use planning
3. Prepare evacuation plans
4. Construct flood resistant housing
5. Establish daily child care centers during flood season
6. Establish residential clusters avoiding flooding
7. Improve early flood warning and forecasting capacity
8. Improve flood drainability
9. Establish seadyke systems
10. Organize swimming courses for children

2. ACTION PLAN

- National action plan has been developing;
- To be completed by end 2008;
- The priority actions identified;

PRIORITY ACTIONS

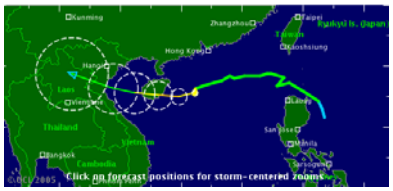
- Capacity building at community;
- Capacity buiding to the key officials of DRR at all levels;
- Up-grate and strengthern the disaster protection structures;
- Up-grate and amend institution on DRR at all levels;
- Identify and mornitor the disaster risks;
- Early warning and dissemination system.

CHALLENGES

- Lack of resources (human and financing);
- Clear institution and policy on DRR;
- Need stronger cooperation among resposisble agencies;
- A comprehensive disaster risks study;
- Understanding of community;
- Linkage between poverty reduction and disaster reduction.

LESSONS LEANED AND SUCCESSES ACHIEVED

APPROPRIATE POLICY AND CLOSE DIRECTION OF THE GOVERNMENT, GOOD COORDINATION OF RELEVANT AGENCIES AND SECTORS AND ACTIVE PARTICIPATION AND SUPPORT OF THE PEOPLE



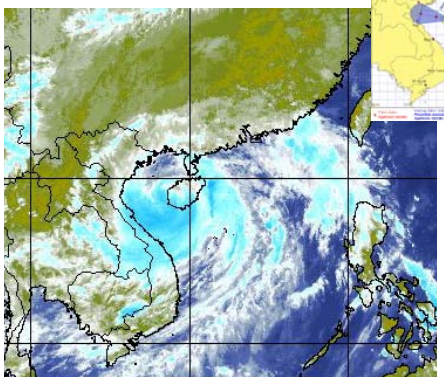
STORM No. 7 (DAMRAY Storm)

Sept. 2005

Damrey storm attached in Vietnam with the 12 storm level, to combine with high tide and storm surge and long time (12 hour)

Local authorities evacuated 338.144 people, called 39.735 boats back to shelters. This was the largest evacuation in a short time in history. The dyke protection work mobilized 135.000 people including the army, militias, youths, over 3.500 vehicles, 17.800 lifebuoys. The work also mobilized a large amount of materials including 663.000m^2 of wave-proof fabric, 2.210.000 bags, nearly 116.000m^2 of rock, over 25.000 iron cages, over 25.000m^2 of geotextile, nealy 300.000m^2 of soil, and lots of other materials.

SOME PICTURES OF DAMEY STORM



Grounds for achieved results:

– Timely directions from the Prime Minister, the Government, the CCFSC as well as the active, urgent operation of and close coordination between ministries, related agencies.

– The active preparedness was supported by timely and exact forecasts and warnings

– Mobilizations of the army, and vehicles (boats, helicopters) to call fishing boats

– Local authorities evacuated 338.144 people, called 39.735 boats back to shelters

– Local people had more experience and more aware of disaster preparedness measures

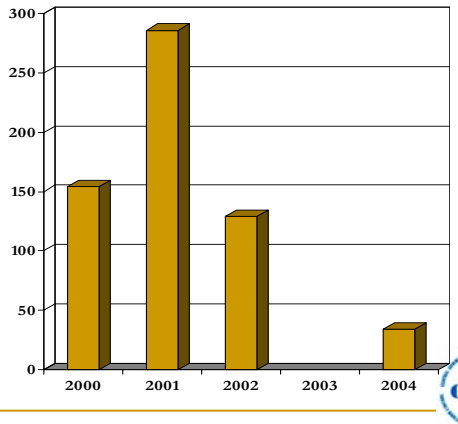
Central part, people of the central provinces take initiative in storage of necessary goods for emergency cases.

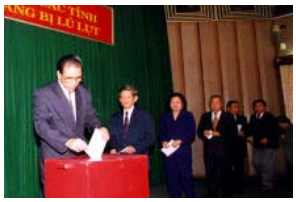
Villagers are involved in establishing commune flood hazard maps and emergency evaluation plans with commune staff to respond to flood.

Canoes were supplied to people in the Mekong river delta. In the meantime, all sectors, organizations and authority levels are mobilized to help people to build housing in accordance with the policy on establishment of residential clusters against flooding.

Child care centers are widely supported and adopted by residents in the Mekong river delta, proving an appropriate policy of the Government and a close coordination of all levels from the central to the local.

HUMAN LOSS (MOSTLY CHILDREN) IN FLOOD SEASON IN THE MEKONG RIVER DELTA





When a disaster happened, tradition of consolidation and mutual support of the Vietnamese is sparkled, mobilizing huge resources in terms of materials and manpower from the whole society to ensure a timely rescue and relief for affected people.

PREPARENESS AND ACTIVE RESPONDS

Drill on dyke support against flood

4 on-scene policy:

On-scene command, on-scene manpower, on-scene materials and on-scene logistics

Response options are made ready for actively coping with disaster happens at any time.

For the dyke system: focus options, entire line options, flood divergent and retardation options and are prepared… Exercises on dyke protection, people evacuation, search and rescue in emergency are frequently organized.

Mine explosion in a drill on flood retardation

Materials used for flood and storm control are stored at focus locations

INTEGRATING DISASTER MANAGEMENT ACTIVITIES WITH POVERTY REDUCTION AND RURAL DEVELOPMENT

Upgrading and construction of sea dyke are combined with promotion of aquaculture production and other livelihoods

Flood wall built in combination with environment beautification and protection

Dyke body reinforced, dyke toe greened and dyke surface hardened

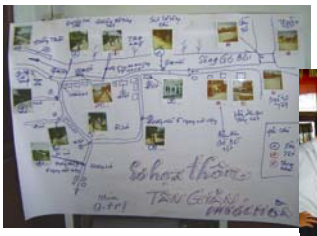
Bamboo plantation against waves

Dyke surface hardened is used for rural traffic, contributing to rural development and environment protection

Dyke body is reinforced by concrete

PROMOTION OF COMMUNITY AWARENESS AND EDUCATION ON DISASTER MITIGATION AND REDUCTION

Contest organized for children on knowledge of disaster prevention



Commune staff and villagers did exercises on assessment of possible disaster impacts

Increase the community awareness on :

1. Basic knowledge on typical disasters like flood, storm, flash flood and prevention and mitigation measures.
2. Requirements of safety facilities at sea for fishermen.
3. Procedures of storm warning and forecast through Voice of Viet Nam, Vietnam Television and cracker opening.
4. Locations of storm shelters for fishing boats.

STRENGTHENING DISASTER WARNING AND FORECASTING CAPACITY

A gauging station on the Huong river (the data automatically are transmitted to the base station in Hue city)

Storm early warning stations were built in provinces of Hai Phong, Thanh Hoa, Nam Dinh)

Forecast: responsed by Vietnam Hydro-meteorology Services

- Storm forecasted on storm track, magnification, timing
- Flood forecasted on flood water level and time at major gauging stations

(Disaster forecast produced by international organizations and agencies are exploited through Internet)

Warning: responsed by the Central Committee for Flood and Storm Control

provides:

+ Updated information
+ Directions for response

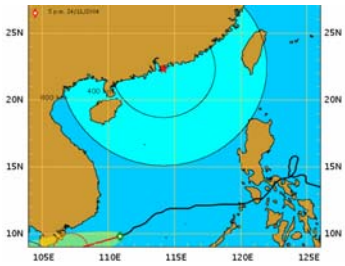
Flood benchmarks and monuments were erected at flood sites (near to rice field, commune people's committee, schools, hospitals and residential areas)

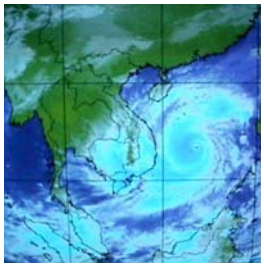
Storm warning provided in:

- remote storm bulletin.
- nearby storm bulletin.
- Emergency storm bulletin.
- Landing storm bulletin

on

- storm track
- directions to respond to the storm





+ Informing boat owners offshore of the storm position to find a safety shelter or escape from the storm coverage. Keeping boats not go offshore. Preparing storm response options.

+ Ensuring safety for people living in lowlands, coastal areas and aquaculture production zones.

+ Ensuring safety for dyke systems and structures under construction.

+ Evacuating people living in high risk areas of flash flood and landslide.

GREAT SUPPORT FROM UN ORGANIZATIONS, FOREIGN GOVERNMENTS, BANKS, NGOS AND DONORS

PROMOTION OF INTERNATIONAL COOPERATION, ESPECIALLY IN THE REGION, ACTIVE CONTRIBUTION TO ACTIVITIES OF THE ASIAN COMMITTEE ON DISASTER MANAGEMENT

World Conference on Disaster Reduction
18-22 January 2005, Kobe, Hyogo, Japan