DIRECTORATE FOR DISASTER PREVENTION AND CONTROL

PRESENTATION

STATUS, CHALLENGES AND ORIENTATIONS FOR RISK MANAGEMENT IN DISASTER PREVENTION AND CONTROL IN VIETNAM

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PART I

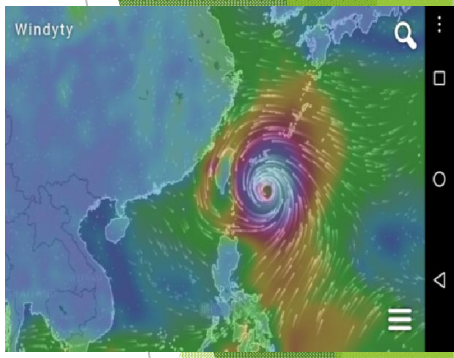
OVERVIEW OF NATURAL DISASTERS IN VIETNAM

OVERVIEW OF NATURAL DISASTERS

- Vietnam is one of the countries suffering most from many types of natural disasters with severe consequences;
- Type of disaster: **21+**, typical: storms, floods, thunderbolts, landslides, droughts.
- In the past 30 years, on average, natural disasters have caused enormous damages and detrimental impacts to the environment and socio-economic development:
  - Human losses: 300 deaths,
  - Economic losses: 450 million USD

+ 2016: 40,000 billion VND

+ 2017: (as of 15 Nov 2017) 375 people killed or missing, 636 people injured. Total damage is estimated at 51,590 billion VND (2.27 billion USD).



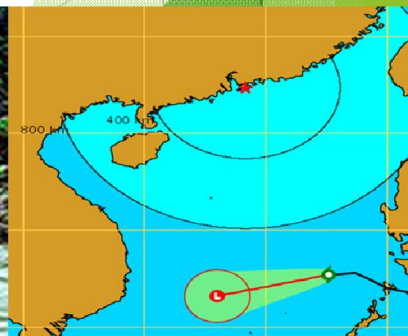
Typhoon 13 (Hải Yến) landed in in 11/2013

KEY NATURAL DISASTER LEVELS

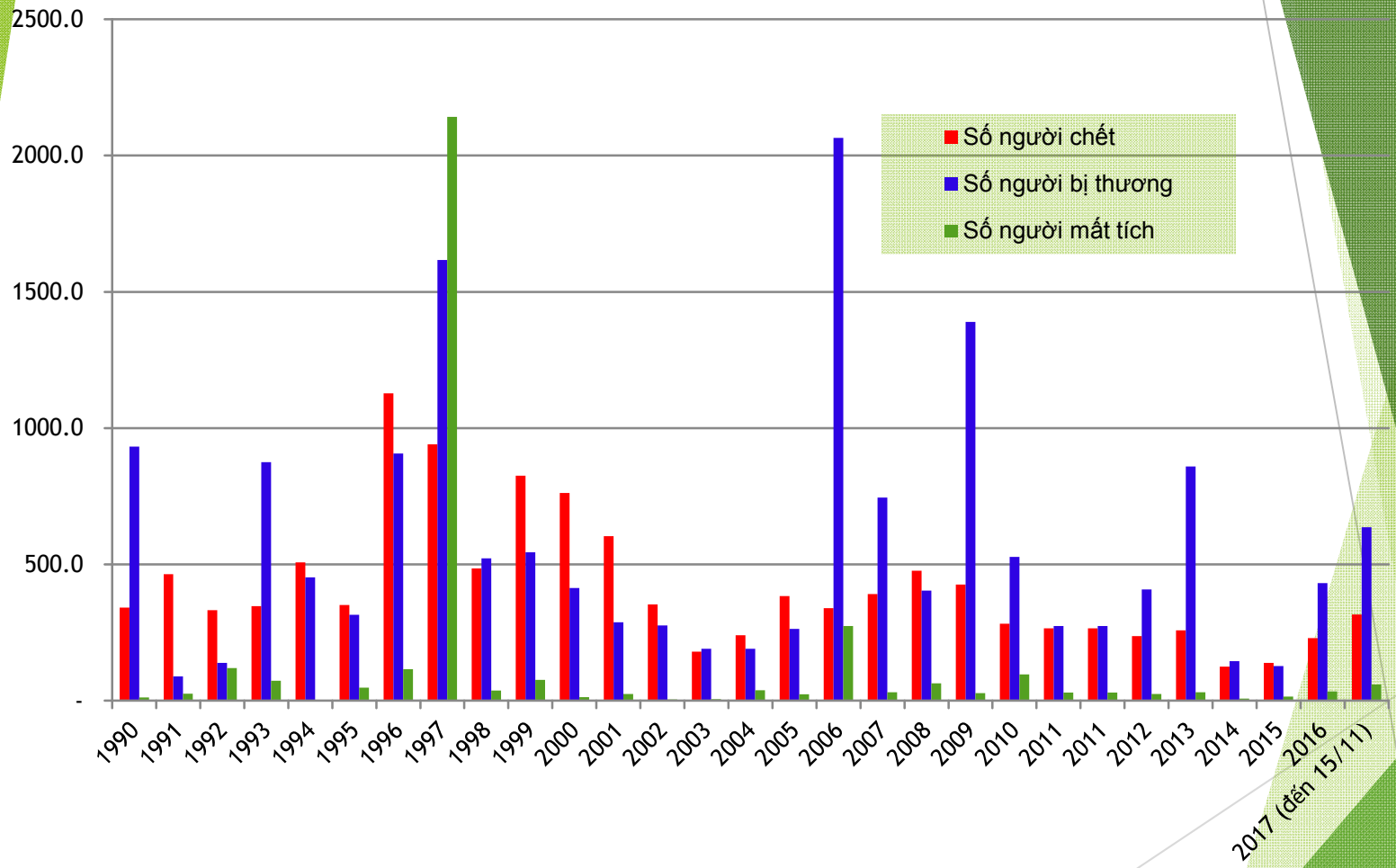
TT	Types of natural disasters	Risk level				
		1	2	3	4	5
1	Storm, Tropical Depression			X	X	X
2	Cyclone, lightning, hail	X	X			
3	Heavy rain	X	X	X		
4	Extreme heat	X	X	X		
5	Drought	X	X	X	X	
6	Extreme cold, salty dew	X	X	X		
7	Fog	X	X	X		
8	Flood, Innudation	X	X	X	X	X
9	Flash flood	X	X	X		
10	Landslide, land subsidence due to flood or water flow	X	X			
11	Salt intrusion	X	X			
12	Strong gust on sea	X	X	X		
13	Earthquake	X	X	X	X	X
14	Tsunami			X		X

LARGE FLOODS AND TYPHOONS DURING 1945 - 2017

- Historical flood in 1945 on the Red River system.
- Historical flood in 1971 on the Red River system
- Typhoon Linda in 1997
- Typhoon 2005 in Haiphong
- Xangsen typhoon in 2006
- Flash flood 1996 in Lai Chau in
- Flood 1999 in the Central region of Vietnam
- Floods in Mekong river in 2000, 2001, 2002, 2011
- Historical floods in central Vietnam in October 2010
- Typhoon 12 occurred on 17th November 2017

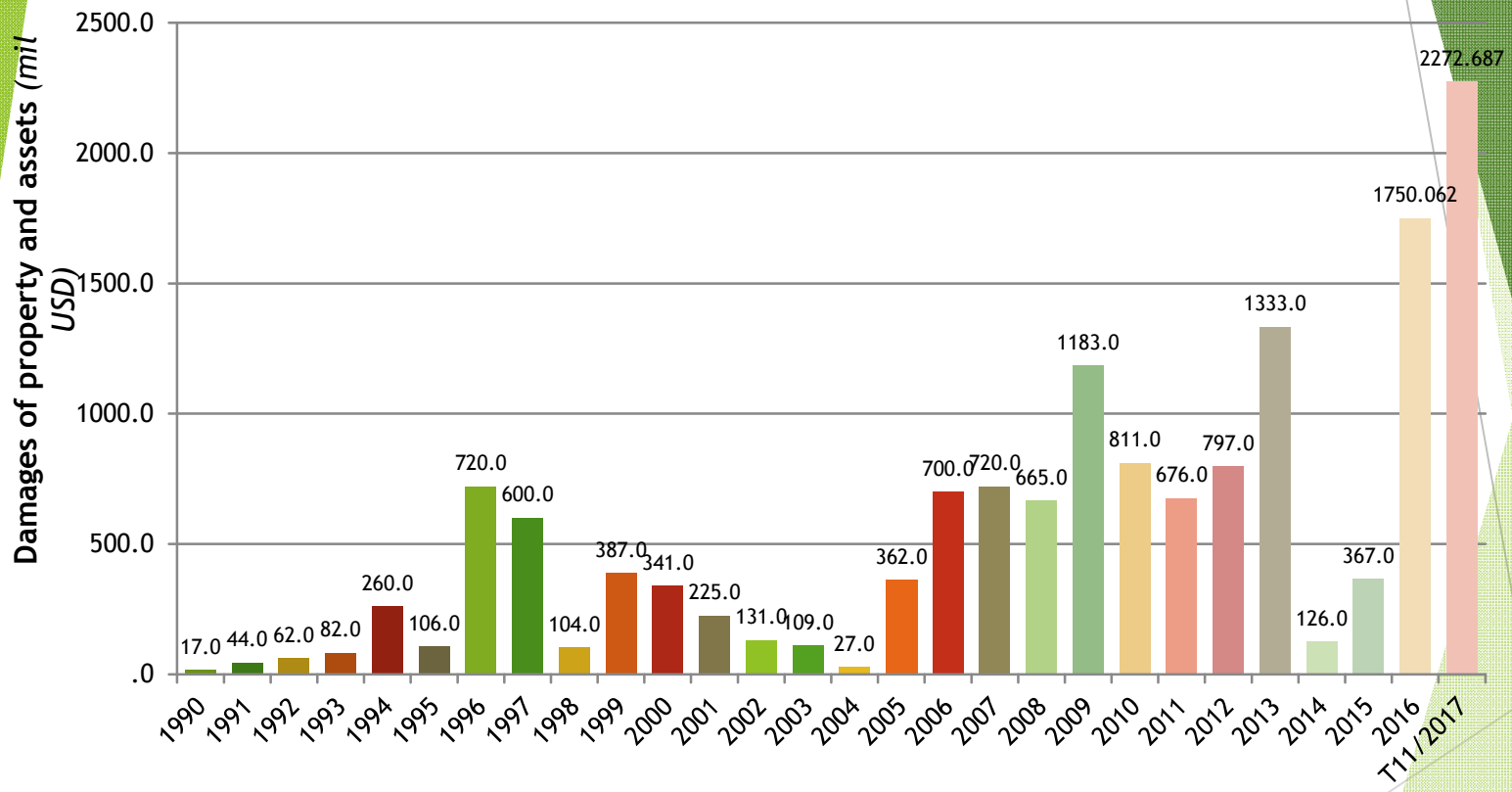


DAMAGE TO HUMANS



Note: Damage to humans in 1997 mainly caused by Typhoon Linda

ECONOMIC DAMAGE



Note:

- Damage in 1996 was caused by large floods in all three regions of North Central Vietnam.
- Damage in 2009 was mainly caused by Ketsana and Mirinae Typhoons
- Damage in 2010 was mainly caused by floods in the Central region in October
- Damage in 2012 was mainly caused by Son Tinh Typhoon
- Damage in the first 9 months of 2016 are due to drought and salt intrusion

TAKING INITIATIVES IN NATURAL DISASTER PREVENTION AND CONTROL

1. Complete the legal framework for disaster management

•Law on natural disaster prevention and control; National Strategy on Natural Disaster Prevention to 2020;

•Relevant Laws: Law on Water Resources; Law on Dyke; Law on Environmental Protection; Land Law; Law on Forest Protection.

2. Develop management mechanisms for disaster management and directions from central to local levels;

3. Develop disaster prevention and control plans

•Integrated disaster prevention and control activities into sectoral development planning and socio-economic development plans of localities;

4. Promote international cooperation, step by step apply advanced science and technologies in natural disaster prevention and control

•Use information technology, remote sensing and satellite in the monitoring, collecting, synthesizing and analyzing natural disasters data.

•Collaborate and coordinate with other countries in the world (Japan, Netherlands, ...) international organizations, the United Nations, financial institutions, regional organizations of ASEAN, APEC, The Mekong Delta GMS, the Delta Coalition, NGOs, etc. to receive and update new knowledge and trends relating to natural disaster prevention and control in terms of finance, science and technology, etc.

MANAGEMENT, EXECUTION AND DIRECTION MECHANISM FOR DISASTER PREVENTION AND CONTROL FROM CENTRAL TO LOCA LEVELS

Ảnh: Thủ tướng Chính phủ Nguyễn Xuân Phúc chủ trì cuộc họp.

CHÍNH PHỦ

BAN CHỈ ĐẠO TWPCTT

- **Trưởng ban:** Bộ trưởng Bộ NN&PTNT
- **Phó Trưởng ban thường trực:** Thứ trưởng Bộ NN&PTNT
- **Phó Trưởng ban:**
Phó chủ nhiệm Văn phòng Chính phủ
Phó chủ tịch tt Ủy ban QGTKCN
- **Các ủy viên:** đại diện lãnh đạo các Bộ, ngành, đoàn thể liên quan

ỦY BAN QUỐC GIA TÌM KIẾM CỨU NẠN

- **Trưởng ban:** Phó Thủ tướng CP
- **Phó Trưởng ban thường trực:** Phó Tổng tham mưu trưởng Quân đội
- **Phó Trưởng ban:**
Phó chủ nhiệm Văn phòng Chính phủ, Thứ trưởng các Bộ:Công An, GTVT,NN&PTNT
- **Các ủy viên:** đại diện lãnh đạo các Bộ, ngành, đoàn thể liên quan

- **CQ thường trực:**
Bộ NN&PTNT
- **VP Th. trực:**
Cục Phòng chống thiên tai

- **CQ thường trực:**
Bộ Quốc phòng
- **VP Th. trực:**
Cục Cứu hộ Cứu nạn

BAN CHỈ HUY PCTT&TKCN CẤP TỈNH

- **Trưởng ban:** Chủ tịch UBND tỉnh
- **Phó Trưởng ban thường trực:** Phó Chủ tịch UBND tỉnh
- **Phó Trưởng ban:**
Giám đốc Sở NN và PTNT
Chỉ huy trưởng Bộ chỉ huy quân sự tỉnh
- **Các ủy viên:** đại diện lãnh đạo các sở, ban ngành, đoàn thể liên quan

BAN CHỈ HUY PCTT&TKCN CÁC BỘ, NGÀNH

Trưởng ban: Lãnh đạo các Bộ, Ngành liên quan

CQ thường trực:
Sở NN&PTNT

BAN CHỈ HUY PCTT&TKCN CẤP HUYỆN

- **Trưởng ban:** Chủ tịch UBND huyện
- **Phó TBTT:** Phó CT UBND cấp huyện.
- **Phó Trưởng ban:** Trưởng công an huyện.
Chỉ huy trưởng Ban chỉ huy quân sự.
- **Các ủy viên:** đại diện lãnh đạo các phòng, ban đoàn thể liên quan

BAN CHỈ HUY PCTT&TKCN CẤP XÃ

- **Trưởng ban:** Chủ tịch UBND cấp xã
- **Phó TBTT:** Phó CT UBND cấp xã.
- **Phó Trưởng ban:** Trưởng công an xã, Xã đội trưởng.
- **Các ủy viên:** cán bộ chuyên môn phụ trách các lĩnh vực liên quan

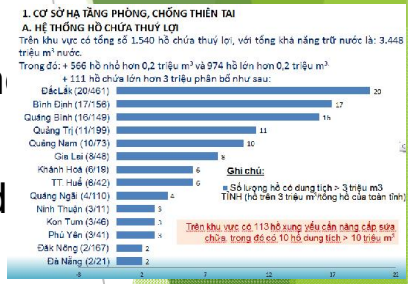
Phó Thủ tướng thị sát lũ, sạt lở ở Quảng Nam

TAKING INITIATIVES IN NATURAL DISASTER PREVENTION AND CONTROL

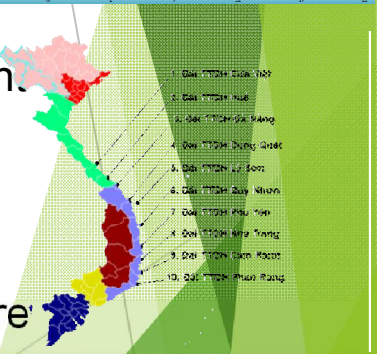
5. Develop a synchronous system of technical infrastructure and works for natural disaster prevention and control

•More than 5,200 km of river dykes, nearly 2,700 km of sea dykes, nearly 6,700 medium and large reservoirs with the capacity of 12.5 billion m3,

•Nearly 60 cascade hydropower reservoirs: total flood control capacity is 9.35 billion m^3, 42 storm shelters to ensure safe anchorage for nearly 32,000 boats, embankments and culverts; nearly 26,000 km of dykes an embankments to prevent floods and salinity intrusion.



•Relocate more than 35,000 households in areas prone to flood, landslid and flash floods to safe areas; Support to flood resistant house construction for nearly 13,000 households in the Central region; gathering 191,000 households in the low-lying Mekong River delta into flood resistant areas/sites



6. Organize propaganda and community awareness raising activities and community-based disaster risk management.

•Implement CBDRM in 1,900 communes out of 6,000 communes which are regularly affected by natural disasters; nearly 1,500 provincial trainers have been trained.

•Develop disaster risk maps and propaganda on TV channels; develop rural criteria for natural disaster prevention and control; review the condition of safe houses before disasters

PART II

CHALLENGES IN NATURAL DISASTER PREVENTION AND CONTROL

II. CHALLENGES IN DISASTER PREVENTION AND CONTROL

1. Climate change and its impacts:

- Sea level rise;
- Average intensity of disasters tends to increase,
- Higher frequency of severe disasters
- Increased coastal and river bank erosions, salinity intrusion, and so on.

Impacts: Stagnation of production and business activities, great impacts are found on socio-economic development, national defense and security, public health and ecological environment.

2. Deltas:

- Exploitation and use of natural resources: There should be planning for proper uses.
- Reduce the level of ecosystems: It is necessary to renovate the development model, restore ecosystems (forests, mangrove forests, wetlands).
- Coastal and shore landslide: It is necessary to restrict sand mining, protect canal systems, and train rivers;
- Water and environment pollution: it is necessary to reduce the discharge of waste water into water sources to protect water environment.

3. Mountainous areas:

- Frequently affected by flash flood and landslide.
- Mountainous people have shifting cultivation culture and nomadic life. They burn forest for cultivation which is difficult to control.
- Mountainous people live sparsely with limited infrastructure and poor communication, thus more efforts are needed in the direction of disaster prevention and management in the area.

II. CHALLENGES IN DISASTER PREVENTION AND CONTROL

4. Urban areas:

- Rapid urbanization, rapid economic development;
- High tides leading to severe flooding.
- The expansion of urban areas, industrial parks, services, leveling depressed lands, ponds and lakes are reducing temporary water storage space.
- Safety is not guaranteed before natural disasters (storms, floods, thunderstorms, cyclones).
- The direction and management of natural disaster prevention and control activities in the urban areas are significant dealing with large quantity of affected objects on a limited scale and in a short time of natural disaster etc.

5. Other Challenges in the Development:

- Higher demand for natural disaster prevention and control, with an important task of protecting a society with a large population
- Socio-economic development is increasing the risk of new disasters.
- Protection forests as well as mangroves are being curtailed; reservoirs are booming, sand is randomly exploited etc., causing reduced water storage capacity, sediment imbalance and lowered river bed ...
- Floods, droughts, saline intrusion, river bank and coastal erosion are incrementing
- Development activities using lowlands and depressed lands where water storage and drainage capacity is not ensured; overexploitation of groundwater is causing land subsidence and inundation
- The use of water resources in upstream of Mekong river and Red River are exacerbating floods, droughts, saline intrusion, riverbank and coastal erosion situation and so on.

PART III

III. ORIENTATION FOR DISASTER RISK MITIGATION MEASURES IN THE FORTHCOMING TIME

III. ORIENTATION FOR DISASTER RISK MITIGATION MEASURES

1. Management approach with focus on risk mitigation

- Sendai Global Action Framework for disaster risk reduction in March 2015 has 7 objectives with one of the focuses on the reduction of deaths and physical damages caused by natural disasters;
- Disaster management activities should focus on minimizing risks.
- Reduce exposure to natural disasters for people and properties.
- Minimize economic, social, health, cultural and environmental risks in the short, medium and long term, especially at community level.

2. Develop an overall plan for natural disaster prevention on the basis of a multidimensional information system

- As the economy grows, natural disasters risk scale will be larger, especially in countries with asynchronous development.
- Natural disaster prevention and control plan at all levels should be developed in accordance with the Law on Natural Disaster Prevention and Control; the plan is of five-year period corresponding to socio-economic development plans at respective levels and need to be adjusted annually;
- It is necessary to integrate natural disaster prevention and control activities in socio-economic development plans.
- The implementation of disaster mitigation activities cannot be implemented separately, yet it should be integrated into its own context to ensure sustainable development.

III. ORIENTATION FOR DISASTER RISK MITIGATION MEASURES

3. Development must ensure no new risks

- Development activities must be followed by solutions to prevent or minimize new risks, mitigate existing risks and enhance resilience to disasters of economy, society, health and environment.
- Develop a disaster safety control program for development activities, investments in new infrastructures or activities with potential risks.

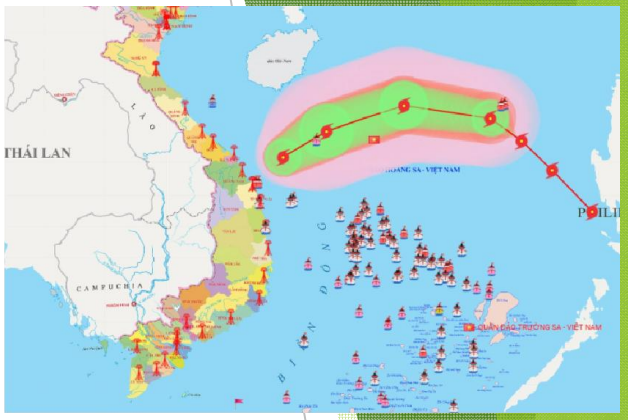
4. Promote science and technology development

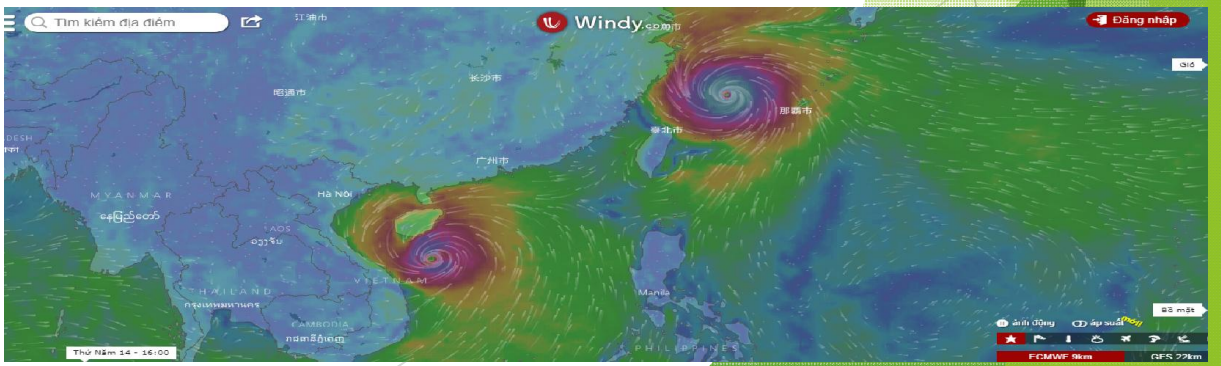
- Scientific and technological activities should contribute to the clarifying and highlighting of natural disaster risks in order to increase awareness on natural disaster risks;
- Apply ecosystem-based disaster risk reduction solutions and integrated disaster risk management.
- Apply science and technology, develop disaster information sharing system at national level which are updated at community level; enhance the application of technologies, raise early warning capacity, apply information technology and upgrade forecast and early warning communication systems for populations, organizations and enterprises;

III. ORIENTATION FOR DISASTER RISK MITIGATION MEASURES

Promote science and technology development *(cont)*

- Build capacity for the application of geo-spatial technology in the assessment of natural disaster realted damaged, flood management, coastal erosion prevention...;
- Develop disaster risk maps based on geospatial technology, v ...
- Apply appropriate software into disaster management
- Develop mechanisms for the transfer of advanced technology, th application of research results





III. ORIENTATION FOR DISASTER RISK MITIGATION MEASURES

5. Complete the sustainable financial policy, increase investments, promote and enhance the role of business community in natural disaster prevention and control.

- Strengthen investments and budget reserves, mobilize the participation of businesses and communities, promote socialization; establish mechanisms to ensure budget for regular maintenance and better reconstruction after natural disasters.
- Ensure financial security, mobilize funding from governmental and non-governmental organizations, participate in disaster risk insurance; further investments in natural disaster preparedness activities and effective restoration;
- Encourage participation of stakeholders and investments of both private sector and community.
- Improve and develop infrastructure in a comprehensive manner, protect properties and reduce economic losses;
- Make plans to ensure continuity in production and business in order to protect the operation of enterprises in all situations; sharing and transferring disaster risks.

6. Strengthen governance institutions and maintain the participation of political system

- On July 3, 2017, the Prime Minister issued decision on the establishment of the Directorate for Natural Disaster Prevention and Control
- Complete the legislation systems, policies, strategies and plans;
- Strengthen capacity of state management and direction of natural disasters at different levels; improve the effectiveness of inspection, examination and monitoring activities;
- Enhance the participation of political organizations, enterprises and communities.
- There should be specific activities so that all capable organizations and individuals can respond effectively natural disasters.

Khuyến khích doanh nghiệp và cộng đồng tham gia phòng và giảm thiểu rủi ro thiên tai

Phó Thủ tướng Chính phủ Trịnh Đình Dũng tham dự và phát biểu chỉ đạo tại

THANKS FOR YOUR ATTENTION,

WISH THE CONFERENCE TO BE A SUCCESS!