付属資料

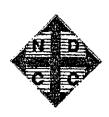
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1. 防災セミナー

(1) 式次第



Seminar on Disaster Management in the Philippines JICA Auditorium • March 7, 2008



PROGRAMME

'	·
9:00- 9:30 am	Registration
	Philippine National Anthem
9:30 – 9:40	Welcome Remarks Norio Matsuda, JICA Resident Representative
9: 40 – 9:50	Opening Remarks Mr. Koichi Sakai Second Secretary, Embassy of Japan
9:50 – 10:00	Keynote Address Gen. Glen Rabonza Administrator, NDCC- OCD
10:00 -10:20	NDCC Strategy for Disaster Risk Reduction Gen. Glen Rabonza, Administrator, NDCC
10:20 -10:40	UNDP Disaster Risk Management Program Amelia Supetran, Portfolio Manager, Environment
10:40 — 11:00	Break
11:00 — 11: 40	Japan's Future Program on Disaster Management in the Philippines: Messrs. Mikio Ishiwatari, Takashi Fukuwatari, Masaki Ishii, Ryuichi Hara, and Ms. Michiru Hanzawa
11:40 12:30	Open Forum
12: 30 – 12:40	Closing Remarks Takashi Fukuwatari, JBIC Officer
12:40 -	Lunch

Moderator: Ms. Minnie Dacanay, JICA In-house Consultant



Japan's Future Program on Disaster Management in the Philippines

Manila, Philippines, 7 March 2008 Embassy of Japan, JBIC, JICA

1

Presentation Outline

- Background of Program Formulation in Disaster Management
 Ms. Michiru Hanzawa, JICA
- 2. Review of Accomplishments and Major Issues for Flood control
- Mr. Masaki Ishii, Consultant

3.Review of Accomplishments and Major Issues for Earthquake and Volcano Risks Management

Mr. Ryuichi Hara, Consultant

- 4. Lesson Learned and Approach To The New program
- 5. Description of New Program

Mr. Mikio Ishiwatari , JICA

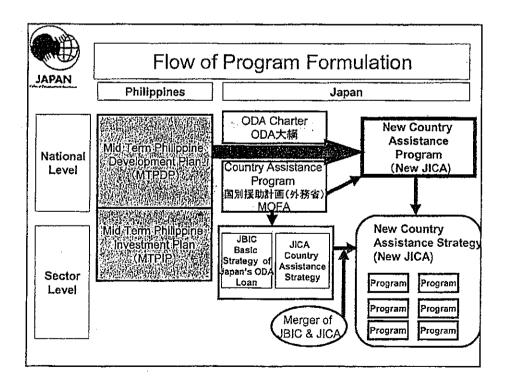


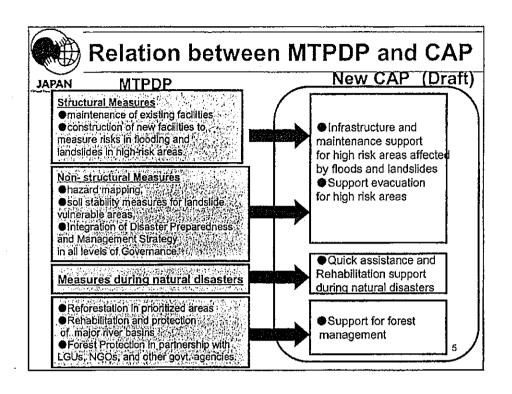
1.Background of Program Formulation in Disaster Management

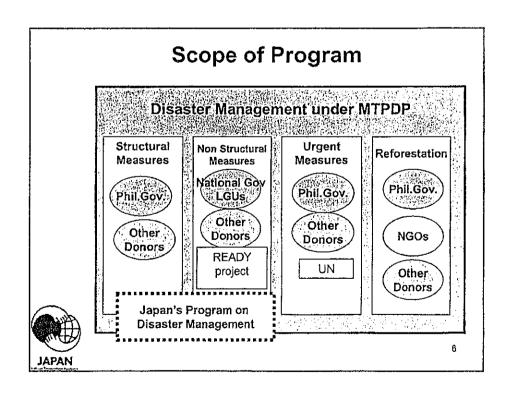
- (1) Flow of Program Formulation
- (2) Relation between MTPDP and new CAP
- (3) Scope and stand of program
- (4) Draft of New Country Assistance Program
- (5) GoJ Structure of Cooperation in the Philippines



(6) Outline of Program Formulation Study for Disaster Management



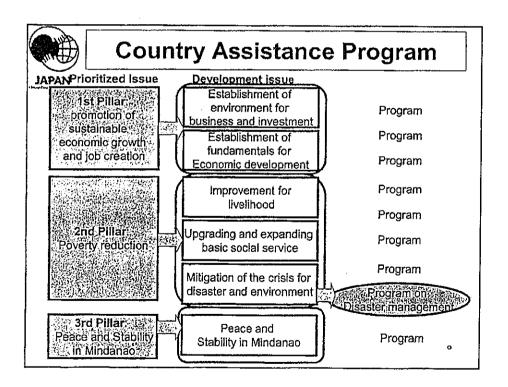


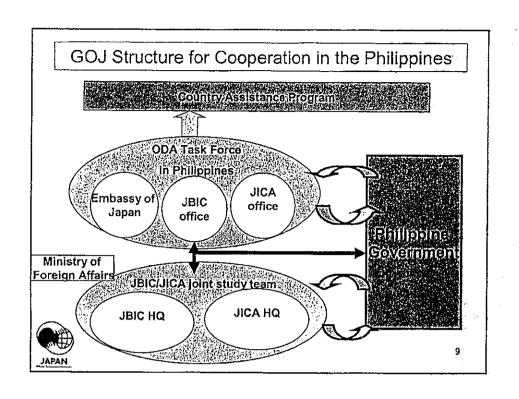


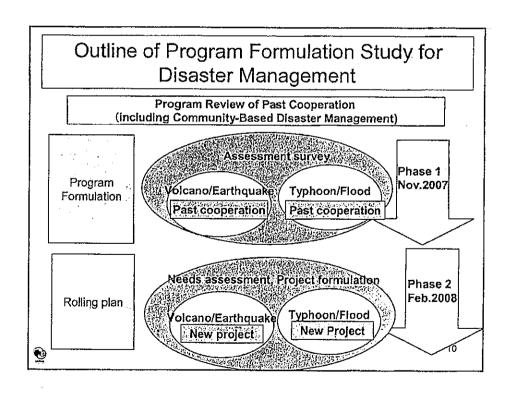
Basic Stand of the Program

- (1)Program will be formulated based on the MTPDP to support its ownership by the Philippine government.
- (2)Program will require the involvement of Philippine government agencies.
- (3)Program description will serve as a guideline to select new projects.
- (4)Project proposals will be subjected to a review process, but there is no assurance of project implementation.

JAPAN







2. Accomplishment review and Major Issues for Flood Control

- (1)List of Past Cooperation
- (2)Outcome of Past Cooperation
- (3)On-going Flood Control Project
- (4)Best practices in Ormoc city
- (5)Past Cooperation in Flood Forecasting and Warning System
- (6)Major Issues in Flood Control and Sabo projects



(7)Current status of Disaster Management system

11

Flood Control and Sabo Projects in the Philippines by Japan's ODA

Type of Projects

- Grant Aid
- Yen Loan
- Technical Cooperation





Outcome of Japan's ODA to the Flood Control and Sabo Sector

- 1. Structural Measures:
 - Area Protected

4,000km²

■ People Protected

8 mil. People (inclusive of 1 million under poverty line)

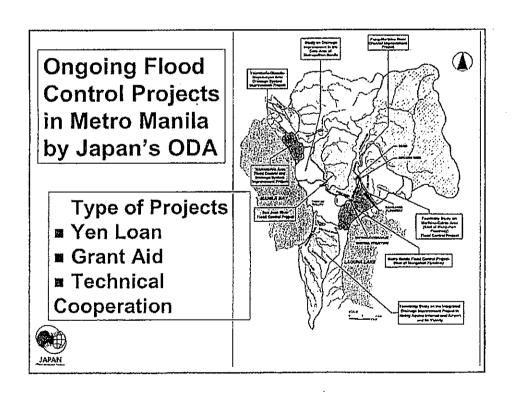
2. Non-structural Approach: Capacity Building of Concerned Agencies

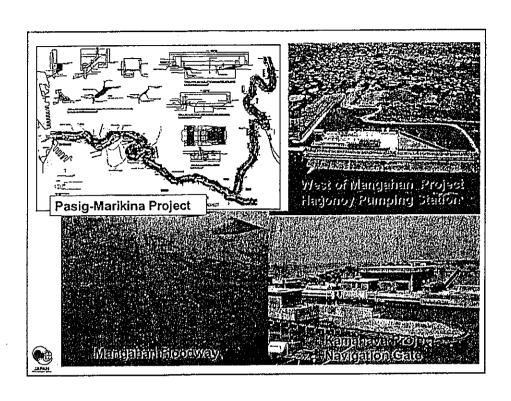
■ Engineers Trained

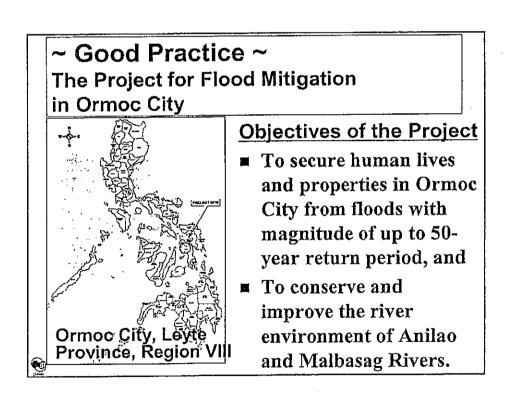
630 people by FESEC and PAGASA

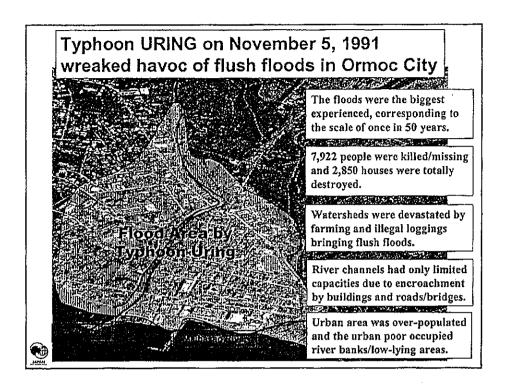
3. Flood Forecasting and Warning System of Metro Manila and River Basins of Pampanga, Agno, Cagayan and Bicol

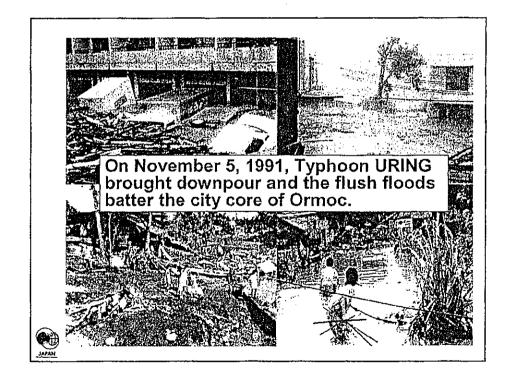


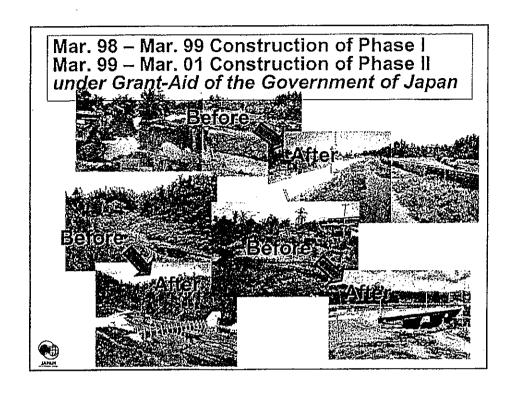


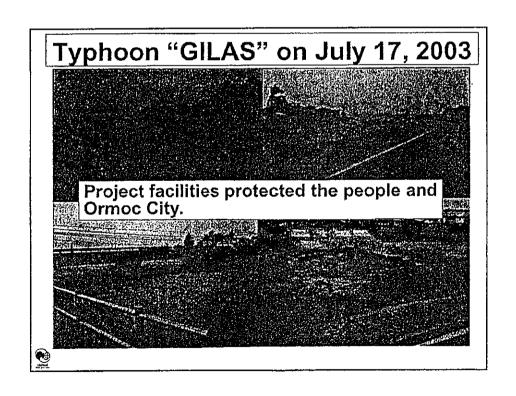


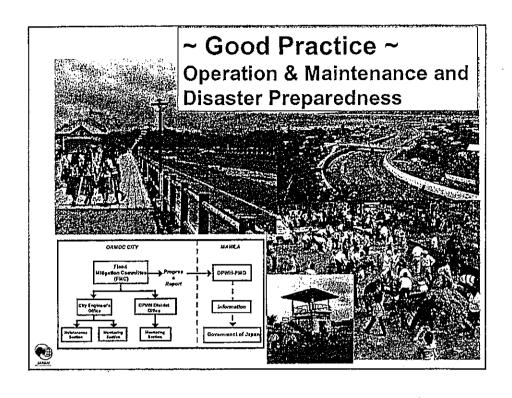


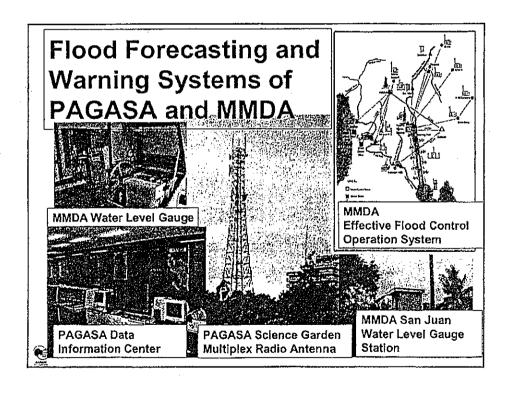












Current Status of DM System, and Achievement under JPN's ODA I

Flood Mitigation and Sabo

- ●DPWH: Construction of river dikes, facilities and sabo facilities

 (JPN's ODA): M/P, F/S, Yen loan, grant aid and capacity development
 - Good practice: Ormoc City

 - Before and during construction
 - Unclear right-of-way and prolonged land acquisition
 - After construction
- Low O&M of facilities and less involvement of LGUs & communities

 PAGASA! Flood forecasting and warning system

 (JPN's ODA). Yen loan, grant aid and capacity development
- - Organization
 - Low O&M of facilities and low awareness for helpful information
 - Recipients of information
 - Weak linkage with CBDM and evacuation judgment
- LGUs: O&M of river dikes, facilities and sabo facilities
 - Issues: Limited financial & technical capacity and less cooperation for resettlement action plan



3. Accomplishment Review and Major Issues for the Disaster Management of Earthquakes and Volcano Eruptions

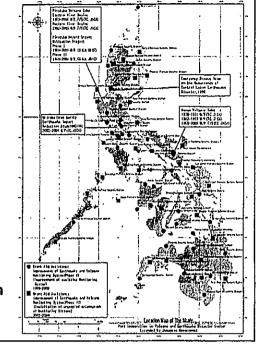
- (1)List of past cooperation
- (2)Outcome of past cooperation
- (3)On-going sabo project (Mt.Pinatubo)
- (4) Current status of Disaster Management system and achievements made through the assistance of GoJ



Volcano and
Earthquake
Disaster
Management
Projects in the
Philippines
assisted by
Japan's ODA

- ·Yen Loan
- Development Study
- ·Technical Cooperation

· Grant Aid



Improvement of Earthquake and Volcano Monitoring System

Shortened time for issuing earthquake/volcano information

Before: 177.4min → Present: 11-15min

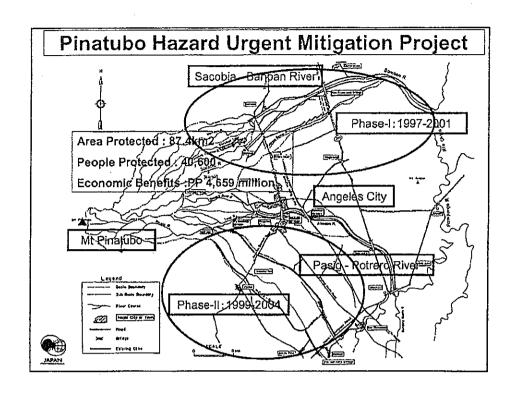
· Shortened the period of evacuation

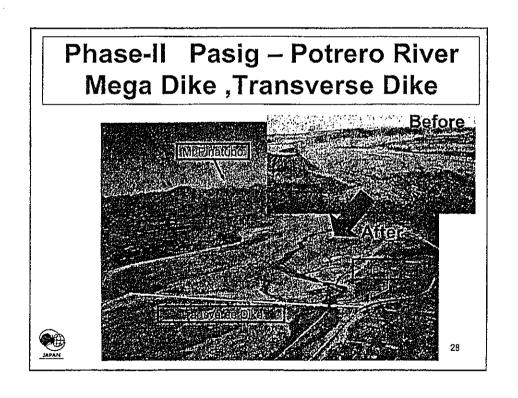
Before: 3months → Present: 1month(Mt.Mayon)

Present: No evacuation needed (Mt.Bulusan)



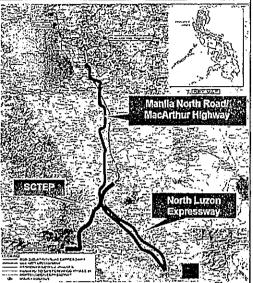






Pinatubo Hazard Urgent Mitigation Project

Pinatubo Hazard
Mitigation Project
enabled the
implementation of
the Subic-ClarkTarlac Expressway
Project
and the Manila North
Road/MacArthur
Highway





Comprehensive and Integrated Infrastructure Program (CIIP): NEDA, 2007

Current Status of Disaster Management System, and Achievements under JPN Assistance II

Earthquake and Volcano Monitoring

PHIVOLCS: observation and warning systems
(JPN assistance) grant assistance and capacity development
Good practice: shortened time for issuing earthquake information
(e.g.shortened evacuation period for Mt. Mayon)

MMDA: earthquake preparedness (JPN assistance) Study on risk assessment and formulation of action plan

Issue: implementation of action plan



4. Lessons Learned and Recommendations

- (1) Lesson1 Full-Range Assistance, and Longer Implementation
- (2) Lesson2 Limited Contribution to Poverty Reduction
- (3) Lesson3 Limited Support to Communities
- (4) Lesson4 Limited Involvement of Communities and LGUs
- (5) Lesson5 Insufficient Coordination with Other Sectors



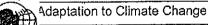
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Lesson 1

Full-Range Assistance, and Longer Implementation

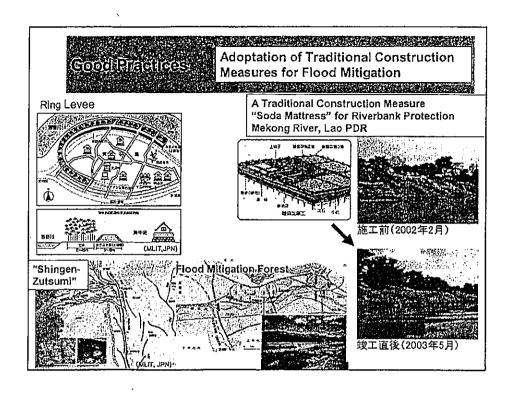
/அவர்வைக்க Selection and Concentration, then Integration

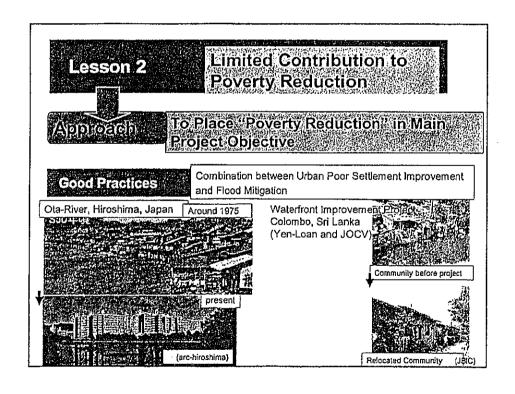
- Priority to water related disasters: floods, sediment disasters, lahar
- Integrated Approach
 - ●Institutional Reform & Policy-Making
 - Communities
 - O&M, Management
 - +
 - Conventional large structure measures
- Efficient & Rapid Outcome: Strategic Area Protection

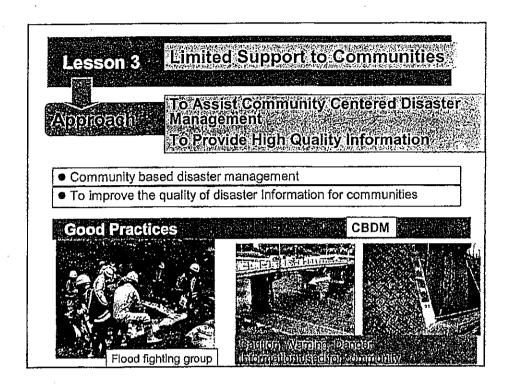


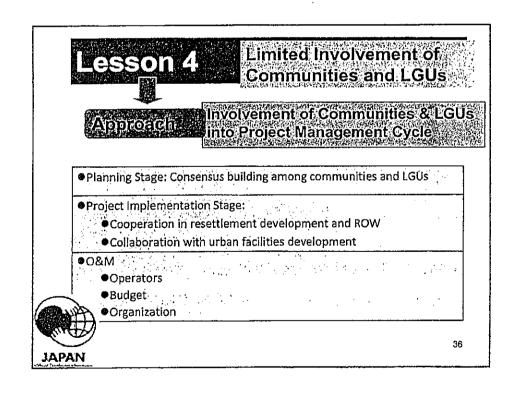
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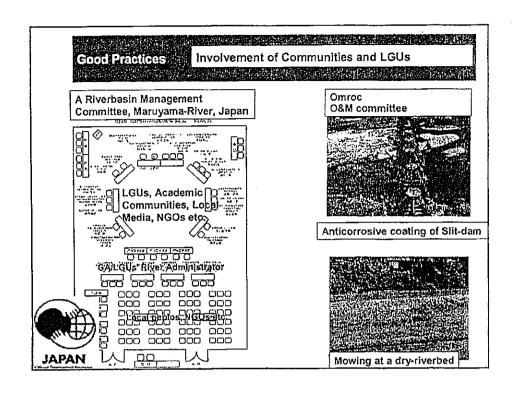
JAPAN

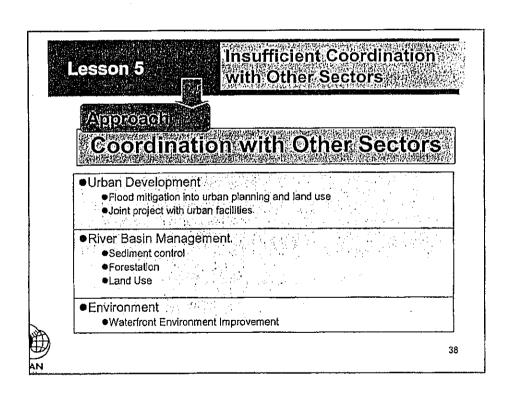


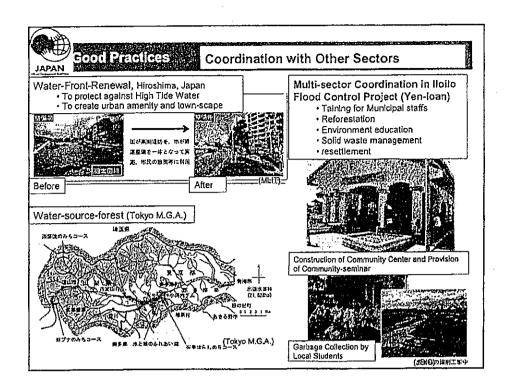












5. Contents of New Program

- (1)Objectives
- (2)Four basic layers of program
- (3)Outline for program in disaster management
- (4)Project formulation in program

Platform for discussions of joint efforts, not commitment



Objectives

- 1. Objective
 - Building strong community, society, and nation against disaster: Halving disaster damages
 - Adapting climate change effects
- Period
 - From 2008 Until 2017
- Vision
 - i. Human security: securely assisting communities on downside risks, and empowering communities
 - De-linking veracious circle between disaster and poverty, and ij, assisting socioeconomic development
 - iii. Utilizing and managing resources accumulated under long history of various Japanese ODA
 - Utilizing lessons learned and best practices in Philippines, Japan, and Japanese ODA to other countries



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Four Basic Layers of Program

vew Area

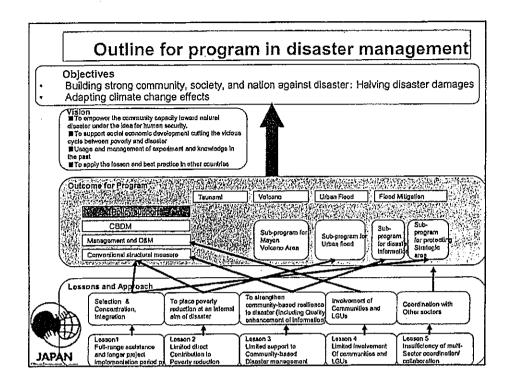
Polloyand Institutional support

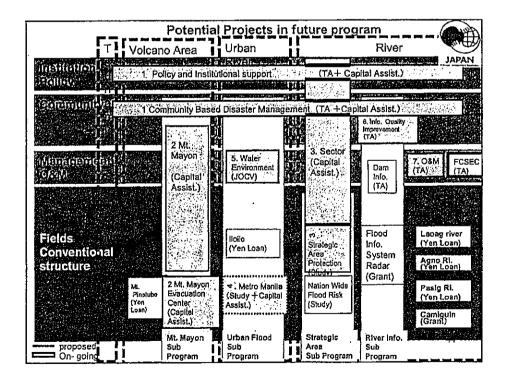
- - - Improvement of information quality in
- Management and O&W:

 Environmental Improvement or water from
 O&W: or river facilities
- Conventional Structural measure
 - Counter part: Central Government Agencies



Large flood control structure and monitoring equipment Technical training of structure and equipment for GA staff





Background	[Central GovLevel]
Backgroom	-Establishment of "Dister Risk Management Bill",
	-Insufficient capacity of disaster management agencles
	[LGUs/Communities-Level]
	-Limited capacities of LGUs and communities;
	-Isolated good practices of CBDM
Objective	[Central GovLevel] Capacity development for agencies
	[LGUs & Communities-Level] Development of Model CBDM and of framework for dssemination throughout the nation
Activities	[Central GovLevel]
	1.To examine current status
	2.To recommend institutional & policy improvement on structural measures, early warning, coordination mechanism
	3.To formulate action plan
	4.to support to implementation
1	[LGUs/Communities-Level]
747	1.To conduct CBDM on pilot basis
M (1)	2.To establish framework of dissemination

	Mayon Volcano is a disaster prone area because of frequent eruptions and debris flows induced by heavy rains.		
Objective	Enhancement of disaster management capacity around Mayon Volcano		
Activities	1.To formulate comprehensive Sabo Master Plan covering structure and non-structure measures		
	2.To establish a series of warning and evacuation systems		
	3. To enhance capacity of CBDM and LGUs		
	4. To prepare implementation plan for Sabo facilities		
•	5.To cooperate with TA Project to expand practices		
	throughout the country		

3.	Protection of Strategic Areas
Background	Conventional structural measures need huge costs and long implementation periods, which are often times delayed. It is necessary to develop efficient and effective approaches to protect strategic areas.
Objective	Development of efficient and effective counter measures against floods in (a)major cities with major river basins, and (b)important medium- and small- river basins.
Activities	 To update master plans in prioritized rivers To formulate implementation plans by stages and identity basis for protection To prepare implementation plans



4	. Urban Flood Management
Background	Urban areas in low lands are frequently suffer from floods. Such risks increase due to climate change
Objective	Development of pilot model
•	(a) to decrease extent of flood damage,
	(b) to coordinate with urban sector, and
	(c) to adapt to climate change
Activities	To formulate master plans integrating urban planning, land use, and urban facilities development
	To plan adaptation measures against climate change
	3. To conduct feasibility studies
	4. To formulate action plans to improve the quality of life of urban poor communities
r ia	5. To prepare implementation plans

	rement of Quality of Disaster Information to Communities
Background	Current disaster information provides limited support for LGUs and communities to take early warning and evacuation actions.
Objective	- Capacity development of providing disaster information of PAGASA and other organizations concerned to communities, and - Improvement of quality of disaster information useful for CBDM.
Activities	1.To examine necessary disaster information by reviewing the community's coping mechanisms. 2. To revise criteria of information to match with actual disaster management activities. 3. To improve information flow routes and procedures of concerne organizations for them to issue effective and timely disaster information. 4. To provide real-time information of river basin, water levels, and rain fall through Web GIS and SMS 5. To conduct public awareness programs. 6. To develop community-based early warning and evacuation systems.

6. Improvement of O&M of River Facility

Background	Limited involvement of LGUs and communities into O&M of flood control and sabo facilities
Objective	Appropriate operation and better maintenance of facilities by LGUs and communities, through awareness-raising and involvement as facility users
Activities	 To develop capacity of LGUs and communities To produce materials such technical manuals for reference
	To conduct seminars, workshops and on-the- job training (OJT) in the field on disaster preparedness



7. Improvement of Waterfront Environment

Background	Drainage facilities and pumping stations cannot fully function because of improper solid waste disposal, which leads to the deterioration of waterfront environment
Objective	Clean-up activities for rivers and drainages will improve surrounding environment.
Activities	To mobilize community organizations. To come up with action plans, financial resources and management solutions. To implement cleanup activities.

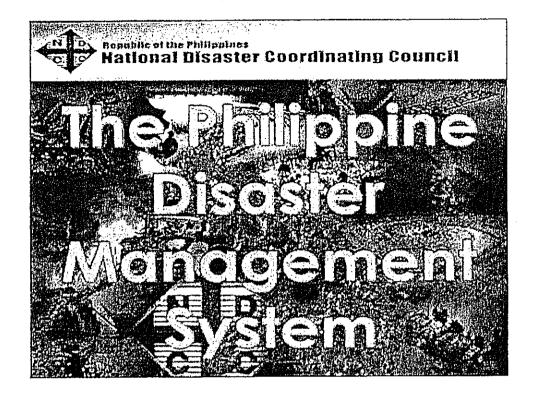


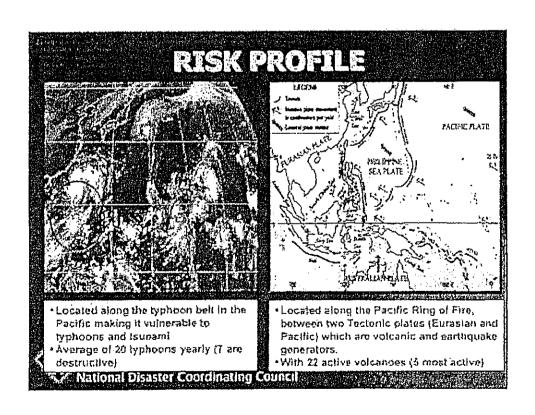
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Thank you!



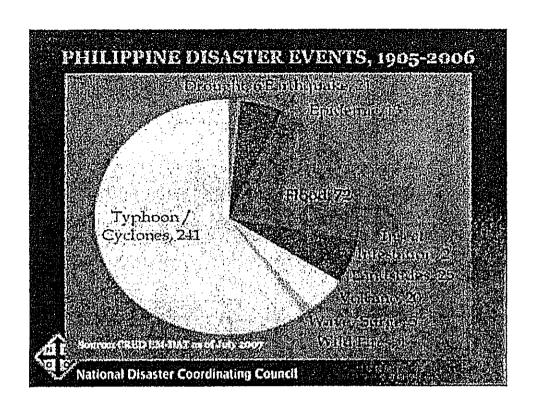
Philippine Disaster Risk Management System





No. of people killed		No. killed / 100,000 inhabitants	
Indonesia	7,511	Belgium	9.02
Philippines 💮	2,984	Netherlands	6.14
China	2,109	Philippines	3.59
India	1,611	Indonesia	3.37
France	1,402	France	2.25
Netherlands	1,000	Burundi	1.88
Ethiopia	951	Latvia	1473
Relgium	940	Ukraine	173
Ukraine	803	Afglianistan	1.28
Vietnam	579	Somalia	1.24
Source: CRED	EM-DAT		

No. of people affected (millions)		No. affected in % of country population	
China	88.74	Malawi	40.1%
Philippines	8.61	Burundi	28.7%
India	7.38	Niger	21.8%
Malawi	5.16	Djibouti	18.9%
Kenya	4.28	Kenya	12.5%
Indonesia	3.95	Philippines	10.4%
Vietnam	8-85	Mali	7.6%
Thailand	3.26	Afghanistan	7.5%
Niger	2.05	Mozambique	7.2%
Ethiopia	3.03	China	0.0%
Source: CRED	TENTANTA		1100 医基础电流



Summary of	Bitects
AFFECTED FÁMILIES	2.38 Million
AFFECTED PERSONS	11.193 Million
DISPLACED FAMILIES	.678 Million
DISPLACED PERSONS	3.398 Million
DEAD	1,15
INJURED	3,23
MISSING	89
DAMAGED HOUSES	820,12
DAMAGE TO AGRICULTURE AND INFRASTRUCTURE	PhP 19.989 Billion

PD 1566 JUNE 11, 1978

(Strengthening the Philippine Disaster Control Capability and Establishing the National Program on Community Disaster Preparedness)

NDCC's LEGAL BASIS



National Disaster Coordinating Council

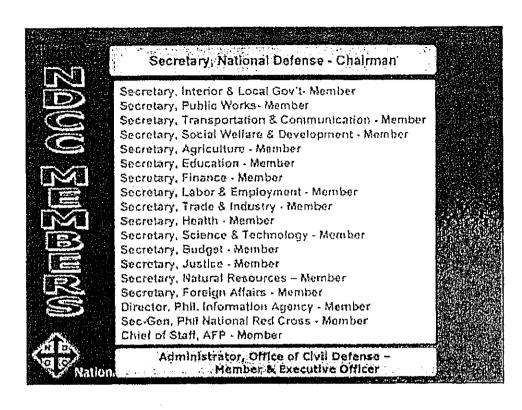
PD No. 1566, Section 1

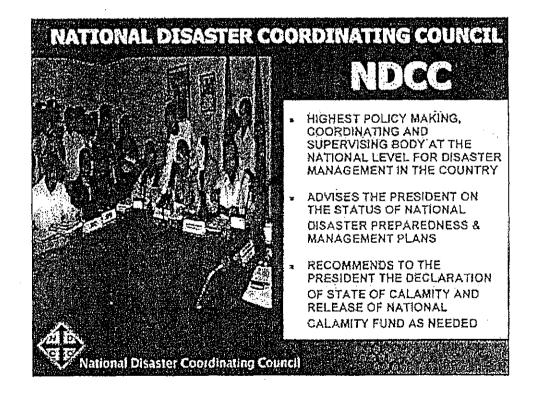
LANGUA HOUR OUR PARTIES

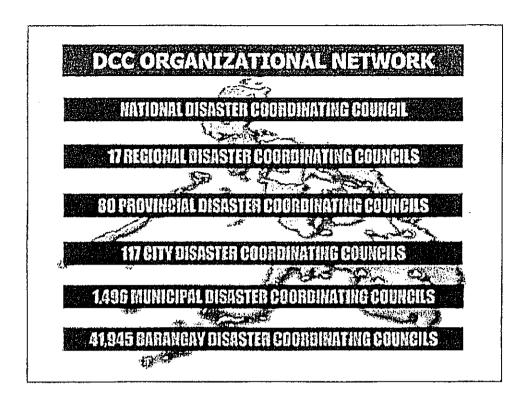
- RESPONSIBILITY FOR LEADERSHIP RESTS ON LOCAL CHIEF EXECUTIVES
- . SELF RELIANCE, SELF HELP AND MUTUAL ASSISTANCE

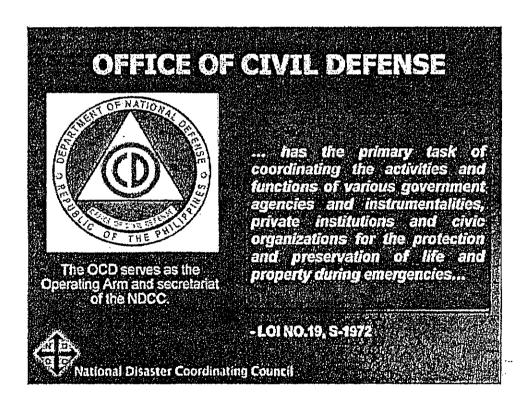
(EACH POLITICAL AND ADMINISTRATIVE SUBDIVISION OF THE COUNTRY SHALL UTILIZE ALL AVAILABLE RESOURCES IN THE AREA BEFORE ASKING FOR ASSISTANCE FROM NEIGHBORING ENTITIES OF HIGHER AUTHORITY.)

- PRIMARY RESPONSIBILITY RESTS ON THE GOVERNMENT AGENCIES IN THE AFFECTED AREAS IN COORDINATION WITH THE PEOPLE THEMSELVES
- ALL GOVERNMENT DEPARTMENTS, BUREAUS, AGENCIES, AND INSTRUMENTALITIES TO HAVE DOCUMENTED OM PLANS
- NATIONAL GOVERNMENT EXISTS TO <u>SUPPORT</u> THE LOCAL GOVERNMENTS









OFFICE OF CIVIL DEFENSE

Vision

A service-oriented organization

A prepared nation

A safe population

Mission

To administer a comprehensive national civil defense and civil assistance program by providing leadership in the continuous development of measures to reduce risk to communities and manage the consequence of disasters.

National Disaster Coordinating Council

NDCC Four Point Plan of Action for Disaster Preparedness

a in the second

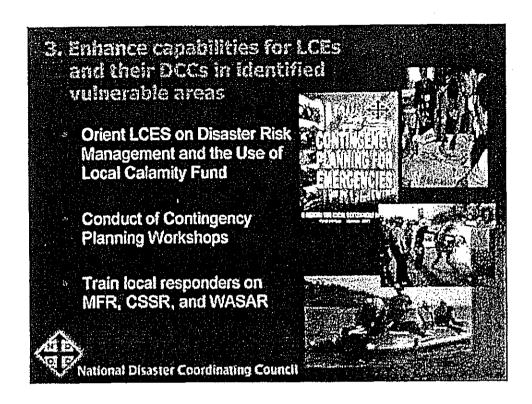
- 1. Upgrade forecasting capability of PAGASA and PHIVOLCS
 - Improve equipment and staff development
 - Establish linkages and networking with foreign forecasting institutions covering the Pacific Rim and South China Sea
 - Install rainfall and water level gauges

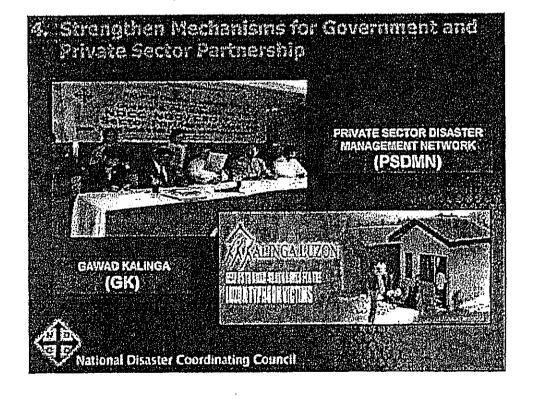


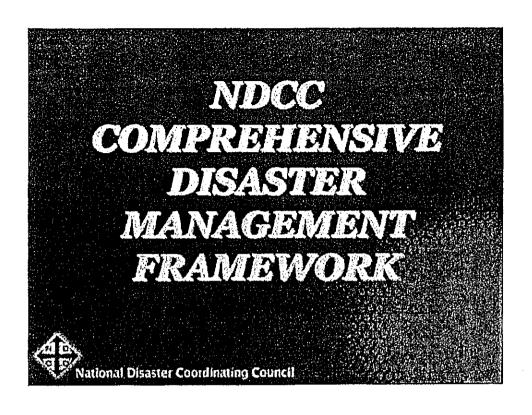


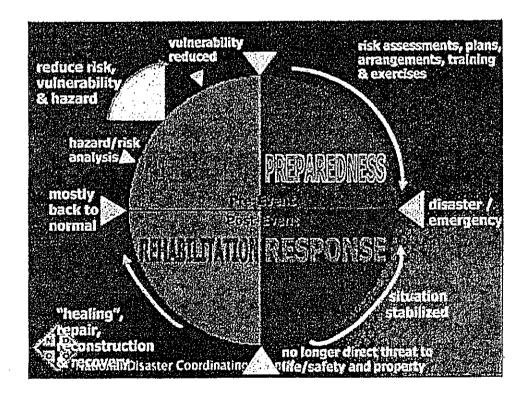
- 2. Intensify Public Information Campaign on Disaster Preparedness
 - Conduct of Nationwide
 Synchronized Building
 Emergency Evacuation Plan
 (B.E.E.P.) Drills, Tsunami
 Drills, and Earthquake Drills
 - Airing of "Safe Ka Ba?"
 Disaster Management Schoolon-Air
 - Production and distribution of posters and flyers on related hazards

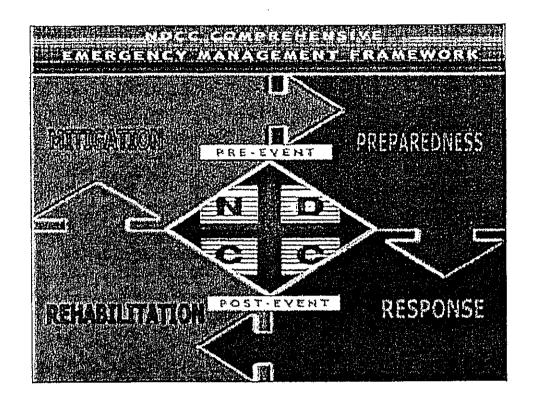










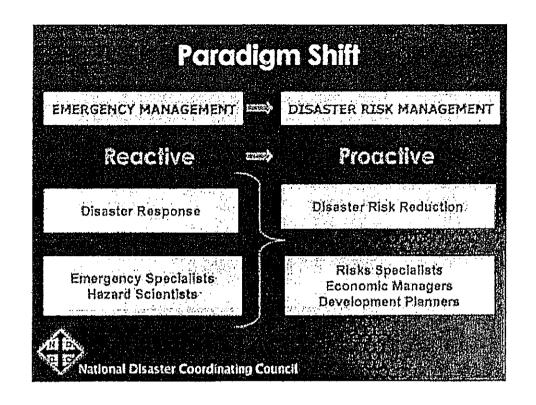


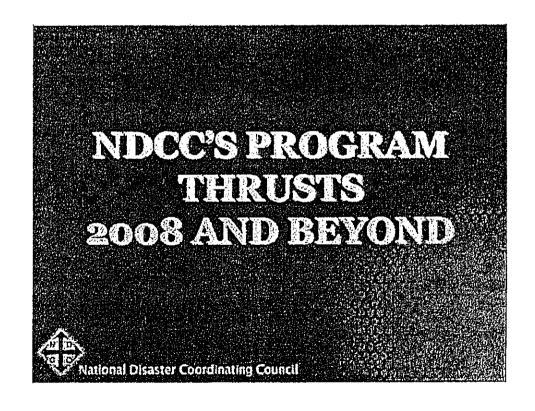
Hyogo Framework for Action (HFA) 2005-2015:

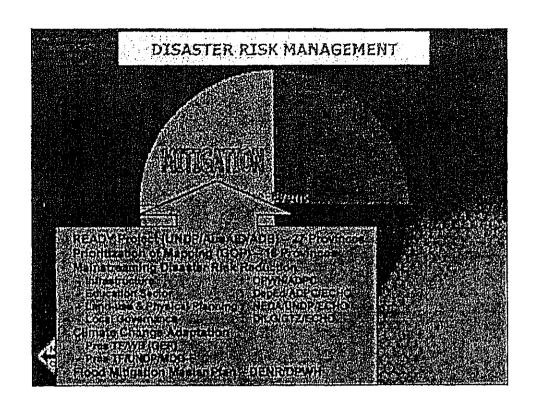
Building the Resilience of Nations and Communities to Disasters

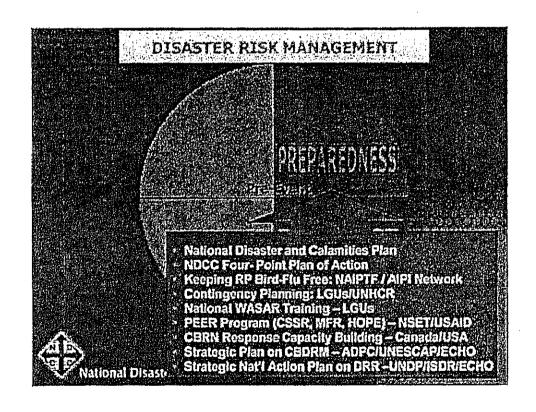
- Ensure that disaster risk reduction is a national priority with a strong institutional basis for implementation.
- 2. Identify, assess, and monitor disaster risk and enhance early warning.
- 3. Use knowledge, innovation, and education to build culture of safety and resilience at all levels.
- 4. Reduce the underlying risk factors.
- Strengthen disaster preparedness for effective response.

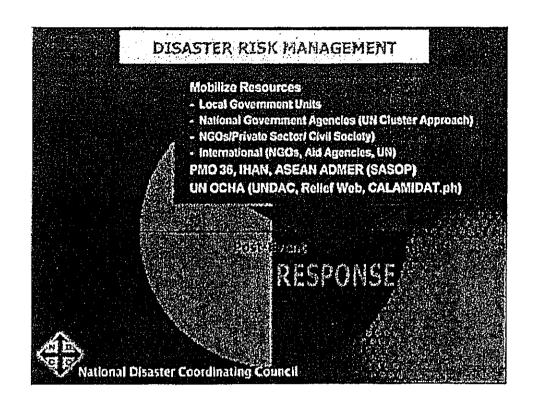
World Conference on Disaster Reduction (WCDR), Kobe, Japan (January 2005)

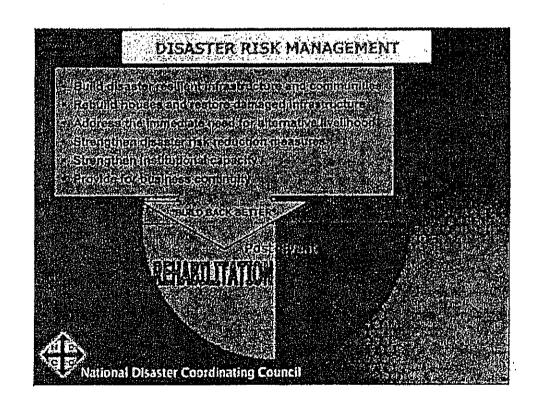


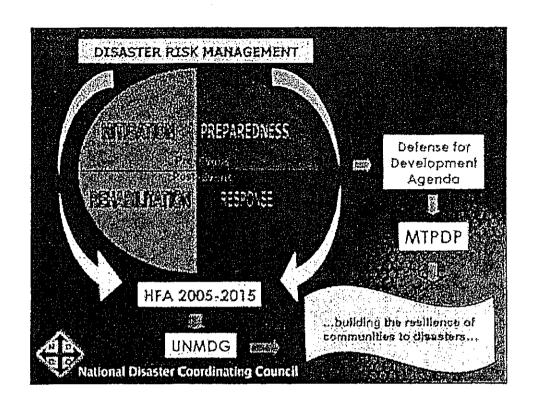












Way Forward: Priority Orientations

- GOVERNANCE

 - Advocate for the enactment of DRM law
 Advance the development of national & local platforms on Disaster Risk Reduction
- RISK ASSESSMENT AND EARLY WARNING
 - Upscale existing projects on DRM (e.g. READY, CBDRM)
 - Mainstream DRR in other sectors (e.g. health, environment, tourism)
 - Introduce climate change adaptation strategies

KNOWLEDGE MANAGEMENT AND EDUCATION

- Improve content and update modules on DRM-related trainings including web-based/online courses
- Promote good practices in DRM through improved documentation process

Way Forward: Priority Orientations

- RISK ASSESSMENT AND VULNERABILITY REDUCTION
 - Upscale implementation of National Flood Mitigation Master Plan
 - Sustain multi-hazard mapping activities
- DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE
 - Roll-out the cluster approach at the provincial level
 Elevate LGUs Search and Rescue (SAR) capability

 - Upgrade the capability of Disaster/Emergency Operation Centers
 - Develop standards to evaluate the operational readiness of critical facilities



National Disaster Coordinating Council

Thankyou

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UNDP'S SUPPORT TO THE PHILIPPINES ON DISASTER RISK MANAGEMENT

Amelia Duice D. Supetran United Nations Development Programme



THE CONTEXT



- Philippines is one of the most disaster prone countries of the world.
- Changing patterns in risk factors such as climate change requires hastened DRR implementation.
- Despite many DRM efforts, significant gaps in DRM efforts remain, especially in the areas of policy, tools and financing.



UNDP's Focus

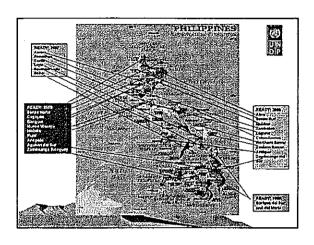
- Hazard characterization & risk estimation
- Framework/plan/programme development
- Mitigation e.g. contingency planning & community-based early warning systems

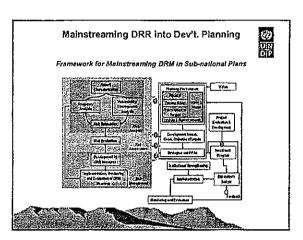


UNDP'S Assistance to the Philippines on DRR

- Strengthen country's capacity to assess and plan for disaster risks through multi-hazard mapping and quantitative risk assessment in physical/land use and development planning.
- Supports dev't. of a comprehensive multiyear DRM framework & strategic national action plan (SNAP) to systematically guide DRM efforts in the Phil.







Disaster Management



- Facilitating flow of resources to affected areas
- Delivering relief provisions to affected communities
- Instituting risk-based recovery
 - * Damage assessments
 - * Risk-based recovery planning
 - * Initiating early recovery projects



