Myanmar experience in the formulation of National Adaptation Plan

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Climate Change Issues

German Watch, 2016

- Global Climate Risk Index analysis 2016
- Myanmar ranked the 2nd among countries most affected by climate change (1995-2014).
- Based on weather-related disaster losses from 1995-2014.

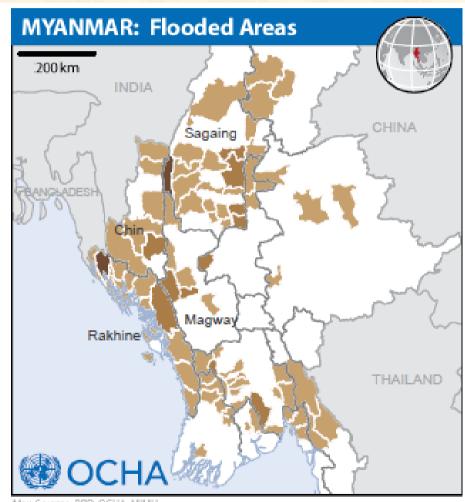
Recent Natural Disasters in Myanmar

- 2006 Apr Cyclone Mala
- 2008 May Cyclone Nargis
- 2010 Oct Cyclone GIRI
- 2011 Mar Tarlay Strong Earthquake
- 2011 JJA Heavy Rain & Floods
- 2011 Oct Pakokku Flash Flood
- 2012 JJA Lower/NE Myanmar Floods
- 2012 Nov Shwebo Strong Earthquake
- 2013 JJA Heavy rain triggered secondary hazards.
- 2015 July Cyclone Komen, Heavy Rain & Floods
- 2016 May Cyclone Roanu, Heavy Rain & Landslide



29 July to 4th August, 2015 Flood

Massive flood & strong wind have affected 12 states and regions



Map Sources: RRD, OCHA, MIMU

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Map greated on 5 Aug. 2015

Falam, 29 July — Landslides and flooding have caused significant damage in hilly areas of Chin State following nearly a week of heavy rains, local officials said.

LANDSLIDE IN CHIN STATE





Because of coincidence with Extreme Rainfall and Cyclone KOMEN



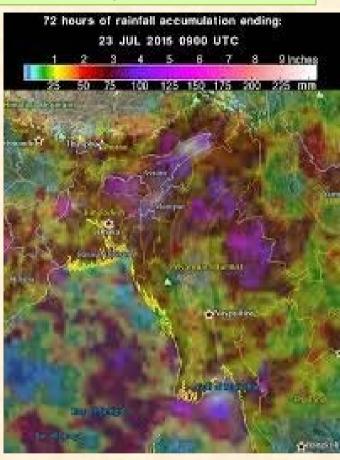














Impacts of Extreme Weather Events in April, May 2016

- Due to high temperature, cumulonimbus clouds formed in most parts of Upper Myanmar areas
- 28 casualties, destroyed more than 23000 houses, affected about 65000 populations by lighting, hail, strong wind and torrential rain







Water Scarcity





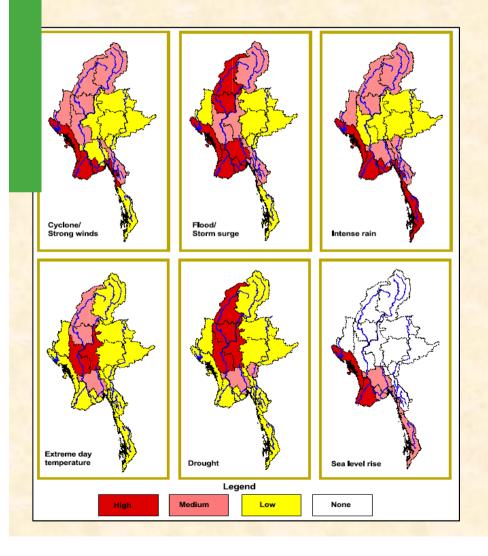
Shortage of water occurred in half of the total villages around the whole country due to the impact of El nino in April, May of 2016

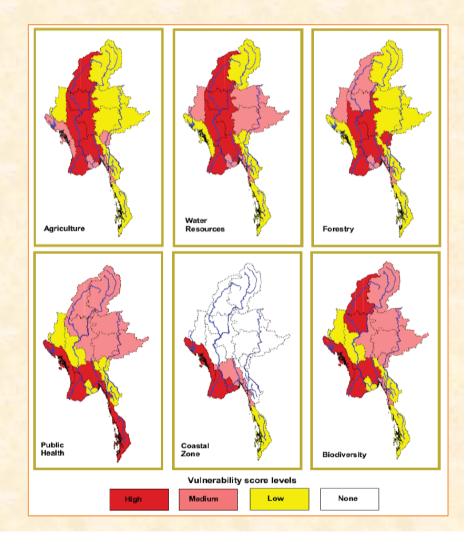


Myanmar's Vulnerability to Climate Change

Vulnerability of areas and Regions/States in intensity and severity of extreme weather events

Climate Change Vulnerability of the main socio-economic sectors due to extreme weather events





Climate Change adaptation

National Adaptation Plan of Action (NAPA)

- Priorities sectors for climate adaptation
 - Agriculture
 - Early warning
 - Forest
 - Public health
 - Water resources
 - Coastal Zone
 - Energy and Industry
 - Biodiversity











NAPA implementation: On going Projects funded by ADF, GEF 5

	Project title	GEF agency	GEF (US\$-M)
	Addressing Climate Change Risks on Water Resources and Food Security in the Dry Zone of Myanmar	UNDP	7.9
	Sustainable cropland and forest management in priority agro-ecosystems of Myanmar	FAO	5.5
•	Improvement of Industrial Energy Efficiency in Myanmar	UNIDO	3.1
•	Strengthening Sustainability of Protected Areas in Myanmar	UNDP	6.71
•	Adapting Community Forestry landscapes and associated community livelihoods to a changing climate, in particular an increase in the frequency and intensity of extreme weather events	UNDP	5.6
•	Strengthening the adaptive capacity and resilience of fisheries and aquaculture-dependent livelihoods in Myanmar	FAO	6.0

Proposed Projects for GEF-6

Project title	GEF agency	GEF
		(US\$-Million)
 Ride to Reef: Integrated Protected Area Land 	GEF-UNDP	5.9
and Seascape Management in Tanintharyi		
 Mitigation-Focused Rural Productivity and 	GEF-ADB	5.22
Ecosystem Services Enhanced in Central Dry		
Zone Forest Reserves		
Ecosystem-Based Conservation of	GEF-FAO	5.0
Myanmar's Southern Coastal Zone		
■ The Restoration Initiative (TRI): Fostering	GEF-IUCN	3.02
innovation and integration in Support of the		
Bonn		
 Leapfrogging the National Market to High 	GEF-UNEP	2.5
Efficiency Lighting and Appliances		

On-going GEF enabling projects

Project title	GEF agency	GEF (US\$-Million)
NBSAP update and 5 th National CBD report	UNEP	.2 million
2 nd National Communication under UNFCCC	UNEP	.5 million
Intended Nationally Determined Contribution (accomplished)	UNEP	.2 million

Proposed adaptation projects

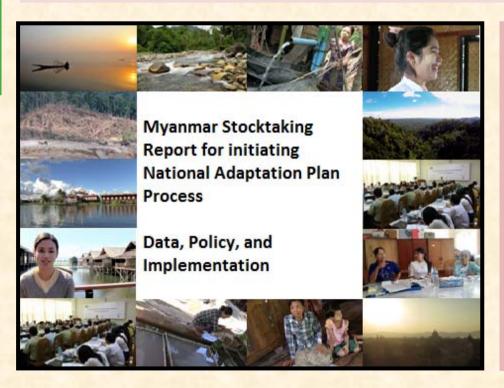
Project title	GEF agency	GEF (US\$-Million)
Fire Adapt: Climate-Smart Fire Management of Rural Landscapes of Myanmar	FAO	5.2
Reducing Climate Vulnerability of Coastal Communities of Myanmar through an Ecosystem- based approach	UNDP	7.0

Important Normative Instruments (2015-16)

- Intended National Determined Contribution INDC
- Second National Communication
- Climate Change Strategy and Action Plan
- Climate Change Policy
- NAPA (Implementation)
- National Green Economy Strategic Framework
- National Environmental Policy and Master Plan
- NCDP (National Comprehensive Development Plan)
- IWRM (Integrated Water Resources Management)
- Other instruments (EIAs, MAP-DRR, Community Disaster Resilience Frame work etc.)

NAP process initiatives

With the Financial assistance by the Ministry of Foreign Affairs of the Government of **Finland**, Technical assistance by SEI, and UNEP as an implementing agency, **Stock taking analysis** for NAP process was conducted from September 2015;



- ✓ To identify current information on Climate change Impacts, Risk, Vulnerability & Adaptation as well as Gaps and Barriers
- ✓ Roadmap for preparing the development of NAP process

D. Reporting, Monitoring and Review

- 1. Monitoring the NAP process
- Reviewing the NAP process to assess progress, effectiveness and gaps
- 3. Iteratively updating the national adaptation plans
- Outreach on the NAP process and reporting on progress

and effectiveness

A. Laying the groundwork and addressing gaps

- 1. Initiating and launching of the NAP process
- Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation
- and assessing gaps and needs of the enabling environment for the NAP process
- Addressing capacity gaps and weaknesses in undertaking the NAP process
- Comprehensively and iteratively assessing development needs and climate vulnerabilities

NAP process in 17 steps

C. Implementation Strategy

- Prioritizing climate change adaptation in national planning
- Developing a (long-term) national adaptation implementation strategy
- Enhancing capacity for planning and implementing adaptation
- Promoting coordination and synergy at the regional level and with other multilateral environmental agreements

B. Preparatory Elements

- Analysing current climate and future climate change scenarios
- Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels
- 3. Reviewing and appraising adaptation options
- Compiling and communicating national adaptation plans
- Integrating climate change adaptation into national and subnational development and sectoral planning

National Adaptation Plan

- To reduce the vulnerability to the impact of climate change, by building adaptive capacity and resilience
- To facilitate the integration of climate change adaptation, in a coherent manner, into relevant policies, strategies and development planning.

Initial Guidelines for the formulation of NAPs

A. Laying the groundwork and addressing gaps

- Initiating and launching of the NAP process
- Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation
 - and assessing gaps and needs of the enabling environment for the NAP process
- Addressing capacity gaps and weaknesses in undertaking the NAP process
- Comprehensively and iteratively assessing development needs and climate vulnerabilities

The progress of NAP initiatives

- Conducted Stocktaking analysis for NAP process with technical support of SEI in cooperation with UNEP
- Developed a stocktaking report and Roadmap and enhanced understanding including the review, analysis, and validation of relevant policies and legal framework, institutional mechanisms, capacity and technology needs, data systems and information, and barriers to policy mainstreaming
- Covered the Key Activities and the Expected Outputs and Outcomes, Risk Analysis, Work Plan and Conclusions and Recommendations
- Provided a clear and progressive strategic action plan to address capacity, institutional, and data information gaps and other relevant cross-cutting issues.
- Improved constructive policy dialogues between relevant climate change stakeholders for the formulation of more effective national policy and strategy to address long-term adaptation challenges.

Outcomes of Stocktaking (key messages and recommendations)

- Key message 1: The NAP process will provide a basis for Myanmar's formal adaptation contributions to global collective action on climate change.
- Key message 2: The institutional coordination structure for NAP with two governance bodies (A supra-policy body and A technical support and coordination unit) is formally established in 2016 with the mandate to mainstream climate change adaptation vertically and horizontally.
- Key message 3: Initiate **strategic capacity development**, targeted to address prevailing capacity gaps for technical capacities, planning and implementation in climate change adaptation within the national and local government structure in 2016.
- Key message 4: A **short-term and medium-term adaptation planning** process should be set in motion by **2016**, with the **long-term adaptation responses** to be initiated by **2018**.

	Time Frame	Activities
An indicative General	Short term (2016)	 Set in motion processes leading to the establishment of the Climate Change Strategy and Action Plan. Continue ongoing work on the Climate Change Simultaneously identify institutional roles and responsibilities of pertinent supra-policy and
time frame and		technical bodies to respond to coordination and technical needs for climate change adaptation mainstreaming to start the NAP process and formulate work plans.
Roadmap for Activities in NAP Process		 Begin capacity building for NAP using tools and guidelines. Begin capacity building for integrating/mainstreaming climate change adaptation with other ministries development planning at various levels, and DRR management. Begin capacity building for technical assessments. Funding support and their sources duly identified.

Time Frame	Activities	
Medium term (2017-2018)	 Continue capacity building for NAP using tools and guidelines. Continue capacity building for integration/mainstreaming needs through a few joint pilot projects to test and activate integration. Continue capacity building for technical assessments. Begin integrating climate change adaptation with development planning at various levels, and DRR management. Begin the NAP process using existing tools and guidelines. Begin integrating climate change adaptation with development planning at various levels, and DRR 	
Long term (2018 onwards)	 management. □ Implementation of adaptation projects. □ Continued integration and mainstreaming efforts. 	

Risks and Barriers to Implementation of NAP

Limitations in current institutional arrangements

No coordinating body was created and tasked to follow up priority projects, no body or unit that could act as a broker for external funding, the absence of a supra- or legal center

- Limitations in generating assessments and managing relevant climate data
- Financial resources to support adaptation initiatives and projects

An institutional body principally responsible to raise awareness for resource mobilization and liaise with external and internal funding bodies remains absent. This poses barriers to planning, integration, implementation and learning from adaptation efforts.

Needs for Development of NAP & its full implementation

- Political support
- Strengthening Capacity building
- Promoting Coordination across sectors
- Mainstreaming NAP into National Development Planning
- Enhancing advance Technology
- Sustaining Financial support

