

BLUF - Implications for PACOM

- Myanmar is one of the world's most natural disaster prone countries; vulnerability is compounded by poverty and poor infrastructure.
- Ranks 10th out of 191 countries in INFORM index for risk management model; highest vulnerability and lowest coping capacity among ASEAN nations.
- Ongoing armed conflict with multiple ethnic groups, to include Rohingya Muslims in Rakhine State.
- After a week's delay, accepted U.S. assistance following Cyclone Nargis in May 2008.

Cyclone risk:

Location: Northeast corner of the Bay of Bengal

Monsoon / cyclone season: April to December (with peaks in May and November)

Exposure: Nearly 2,000 km of coastline

Fast Facts

- **Capital:** Nay Pyi Taw
- **Area:** 676,578 sq. km (approx. the size of Texas)
- **Total population:** 53 million (2017)
- **Burma:** previous name, changed to Myanmar in 1989

Yangon: former capital, most populous city and largest seaport in Myanmar (historically known as Rangoon)
Other major seaports include: Sittwe, Patheingyi, Mawlamyine and Dawei

CFE-DM's **DM Reference Handbook** provides basic country information, in addition to a detailed breakdown of Myanmar's DM structure, legal framework, and roles and responsibilities.

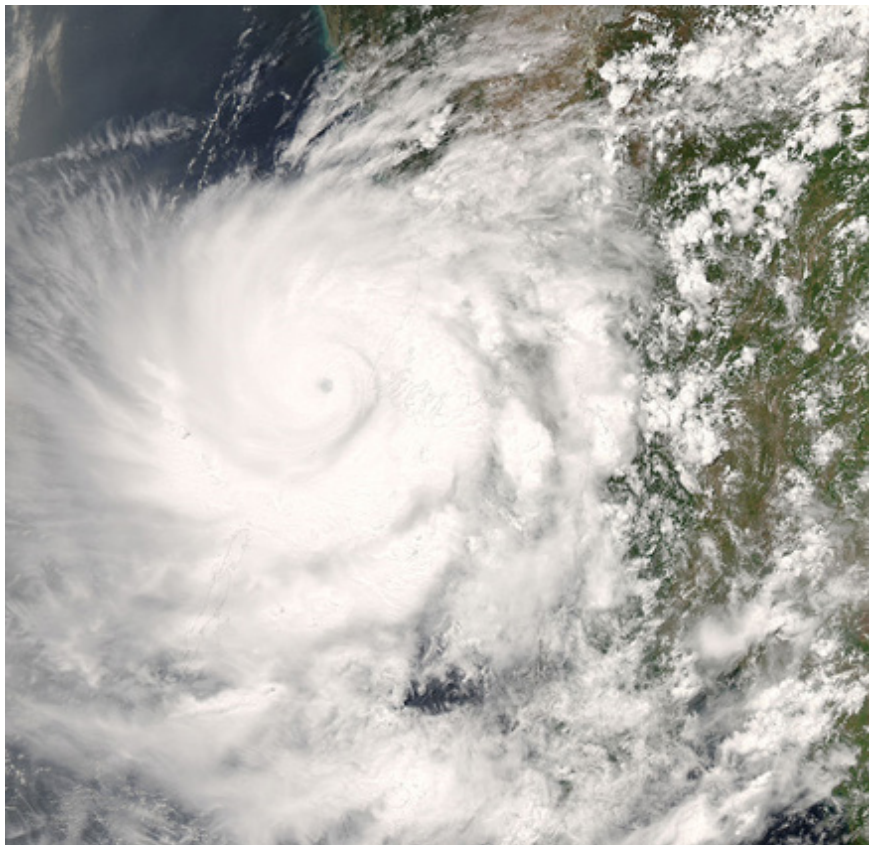
Major Actors in Natural Disaster Response in Myanmar:

- Ministries of: Social Welfare, Relief and Resettlement (MSWRR); Foreign Affairs (MoFA); Defence (MoD); Home Affairs (MoHA); Health (MoH); Myanmar military (aka Tatmadaw); Myanmar Red Cross Society
- IOs: United Nations agencies, ICRC, World Bank, ADB
- International NGOs: MSF, World Vision, Save the Children
- Bilateral donors: USA, UK, European Commission, Japan
- Regional organizations: ASEAN, ARF, BIMSTEC



Cyclone Nargis (May 2008)

- 2.4 million affected; 1M homeless; 140,000 dead.
- Category 4 cyclone with winds in excess of 135 mph; 12 ft. storm surge.
- Floodwaters penetrated 50 km inland.
- 90%+ buildings destroyed in Irrawaddy Delta.
- Livestock lost, farmland and fisheries destroyed.
- 50,000 acres of farmland abandoned due to salinity.
- \$10 billion (2008 USD) in damage; costliest cyclone in the history of the Bay of Bengal.
- India first to respond; Bangladesh, Thailand, Malaysia also provided relief supplies.
- JTF Caring Response, USPACOM's disaster response effort.
- First deployment of ASEAN Emergency Response and Assistance Team (ERAT).

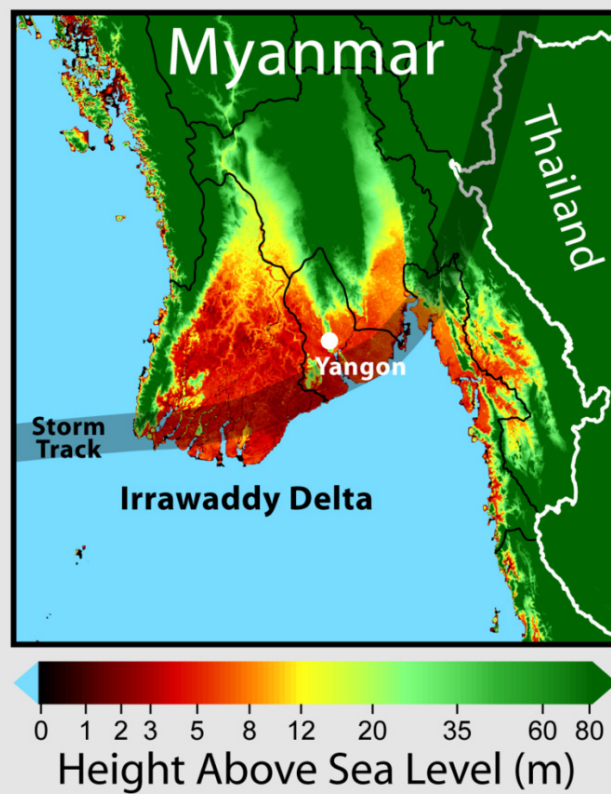


Cyclone Nargis, 2 May 2008 (NASA)

Sources:

- CFE-DM's Myanmar Disaster Management Reference Handbook (2017)
- <https://www.cfe-dmha.org/DMHA-Resources/Disaster-Management-Reference-Handbooks>
- Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model, pgs. 67-86 on Myanmar https://docs.unocha.org/sites/dms/ROAP/Civil%20Military%20Coordination/images/RCG_05042017_Final_electronic.pdf
- Cyclone Sidr Lessons Learned: <https://www.cfe-dmha.org/Resources/Lessons-Learned/Cyclone-Sidr>
- Cyclone Marian Lessons Learned: <https://www.cfe-dmha.org/Resources/Lessons-Learned/Cyclone-Marian>
- Webster, P.J. 2008. Myanmar's deadly daffodil. Nature Geoscience. 488-490.
- USAID / OFDA Fact Sheet, 2 July 2008: https://web.archive.org/web/20080709030105/http://www.usaid.gov/locations/asia/countries/burma/cyclone_nargis/documents/070208BurmaCycloneNargis_fs23.pdf

Disaster Area Topography



JTF Caring Response (12 May – 22 June, 2008)

- PACOM completed 185 airlifts of emergency relief supplies to Myanmar. In addition, the 36th CRG helped open and operate airfields to facilitate additional relief operations.
- Myanmar refused U.S. assistance from the USS Essex ARG and embarked 31st MEU.
- Operations Sea Angel I (Cyclone Marian, Bangladesh, April 1991) and Sea Angel II (Cyclone Sidr, Bangladesh, November 2007) demonstrate how U.S. military amphibious forces might respond to a similar event in coastal Myanmar.
- Total U.S. assistance to Myanmar in FY 2008 totaled \$43 million.

