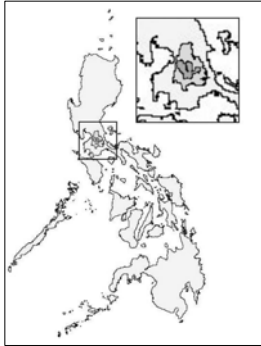


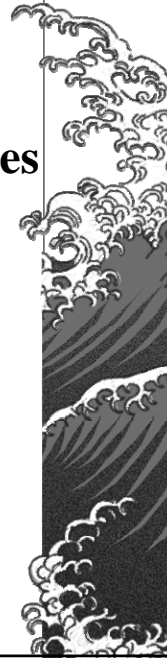


# Drought Management in the Philippines

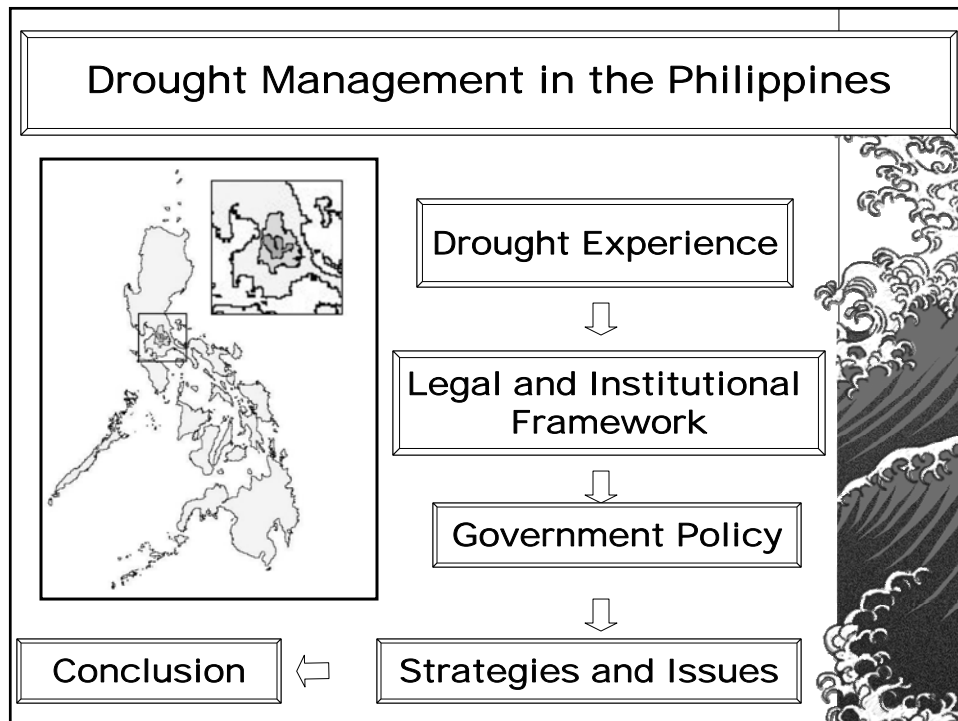


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## Drought Experience

1997-1998- occurrence of “El Nino”

Low rainfall amount



excessive drawdown of  
different reservoirs water level



Reduction of water allocation for domestic water supply,  
Irrigation and hydropower uses

*Massive crop failures (lowest of 43% in rice and 27% in corn  
Production in the last 20 years  
Damage to fisheries sector (loss of Php 7.24 B when  
Freshwater ponds dried-up  
Widespread hunger due to the drop in production of staple food  
Forest fires (damage of Php 150 M)  
Water Shortages in Metro Manila*

## Legal and Institutional Framework

**No law or provision in the Water Code (PD 1067) and in  
the RA 4850 (LLDA) which specifically provides for  
water utilization in case of drought**

**Drought = times of emergency= water shortage**

**Article 22 PD 1067 – domestic water supply has priority  
over other uses in times of emergency**

*During the El Nino Phenomenon- releases of water from Angat Dam  
reservoir for irrigation was temporarily suspended for 11 months  
(December 1997 to October 1998)in favor of providing water supply for  
Metro Manila*

## Water Crisis Committee

- **monitors the actual water allocation among the water users.**
- **composed of various water resources concerned agencies in the Philippines with NWRB as the Secretariat**

### Government Policy

#### Policy for optimum water resources utilization

**The water releases for irrigation and domestic uses are first routed through the reservoir hydroelectric turbine generators. Whatever water is released for irrigation and domestic water supply constitute the water releases for hydroelectric power**

**LLDA - With regards to the management of the lake, there is no policy on water allocation during drought but water abstractors are required to automatically cease abstraction of lake water at 10.5 meter elevation as stipulated in the Memorandum of Understanding**

## Strategies and Measures

- Provide emergency income to affected farmers
- Rehabilitate irrigation networks to improve irrigation efficiency
- Planting of early maturing varieties and other alternative crops that consume less water
- Massive information campaign
- Water rationing
- Intensification of leak repair programs
- Water quality monitoring
- Cloud seeding operation
- Hydropower generation shall be kept to their respective minimum allowable generating capacities
  - Adopt rainwater harvesting and catchment's measures
- Lake water level monitoring

## Issues

Absence of comprehensive and integrated drought management plan

- Drought mitigation measures are lodged independently in various agencies and institutions

## Conclusion

Need for a comprehensive drought management plan based on the drought planning initiatives and measures by Government Agencies and other institutions/organizations in the country.

Need for anticipatory measures and strategies that will further facilitate the Philippines shift from a culture that concentrate on response during actual situation to one that pays attention to equally significant considerations like **PREPAREDNESS, MITIGATION AND REHABILITATION.**

thank you!