

Data for effective water management in Myanmar

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1. Groundwater data

MOALI - IWUMD - Groundwater Division

IWMI

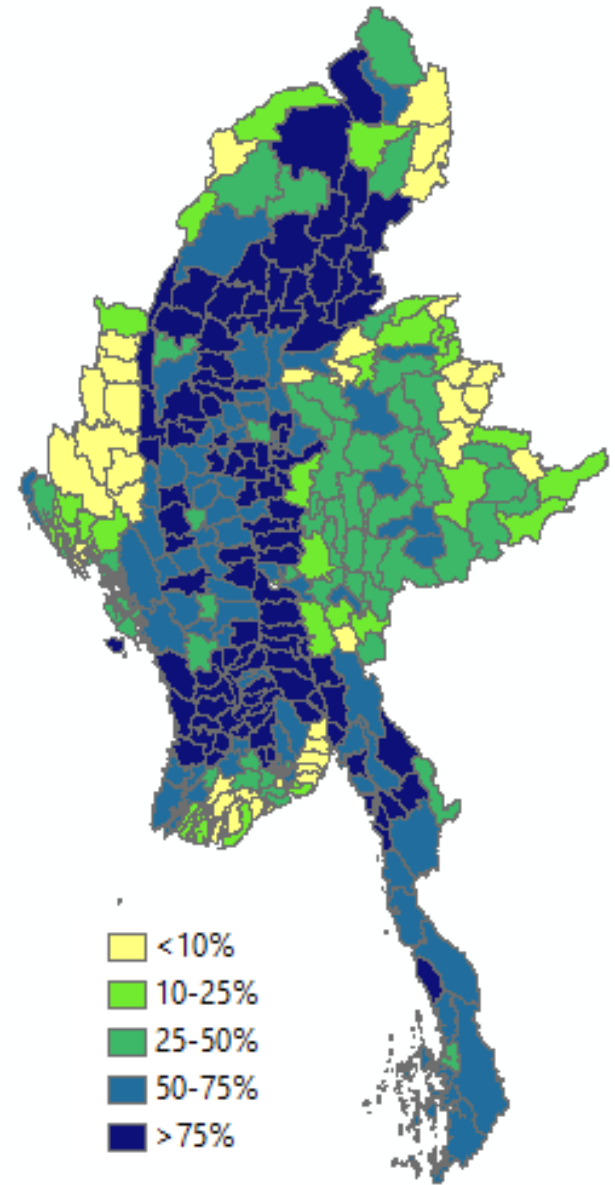
Dr Len Drury

U Myint Thein

+ multiple partners



Households using groundwater as source of drinking water (2014 census)



Affordable small pumps are changing irrigation



In South Asia, over 55% of irrigation is from groundwater



India's Food Security Threatened by Groundwater Depletion

If You Think the Water Crisis Can't Get Worse, Wait Until the Aquifers Are Drained



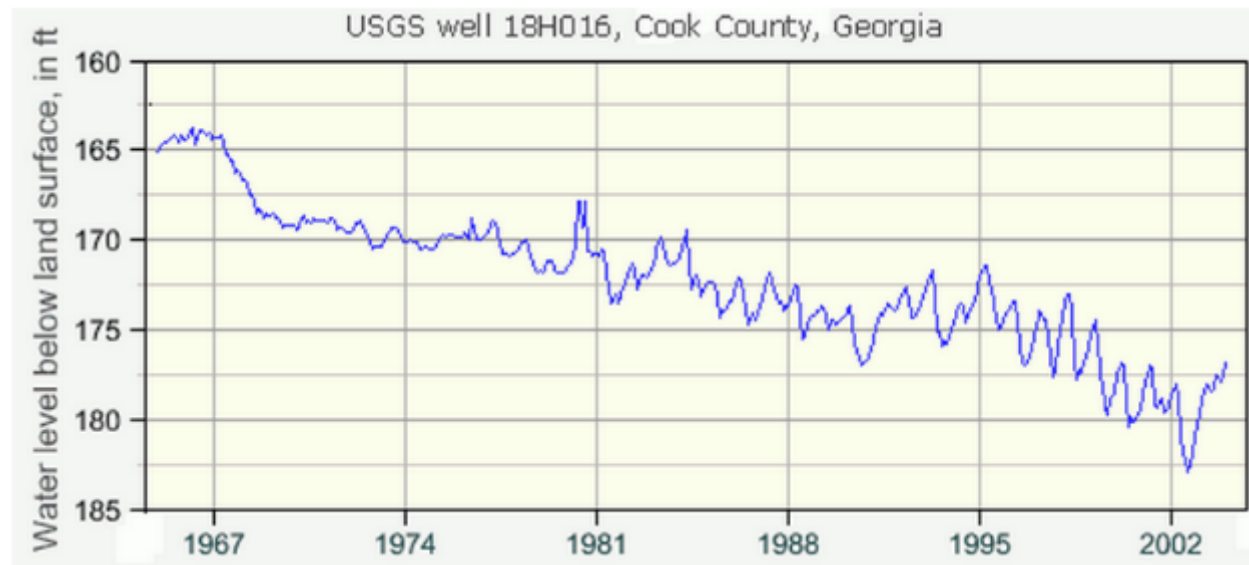
India's Groundwater Disappearing at Alarming Rate



Recharge is the critical factor

Annual recharge \geq annual withdrawal = sustainable

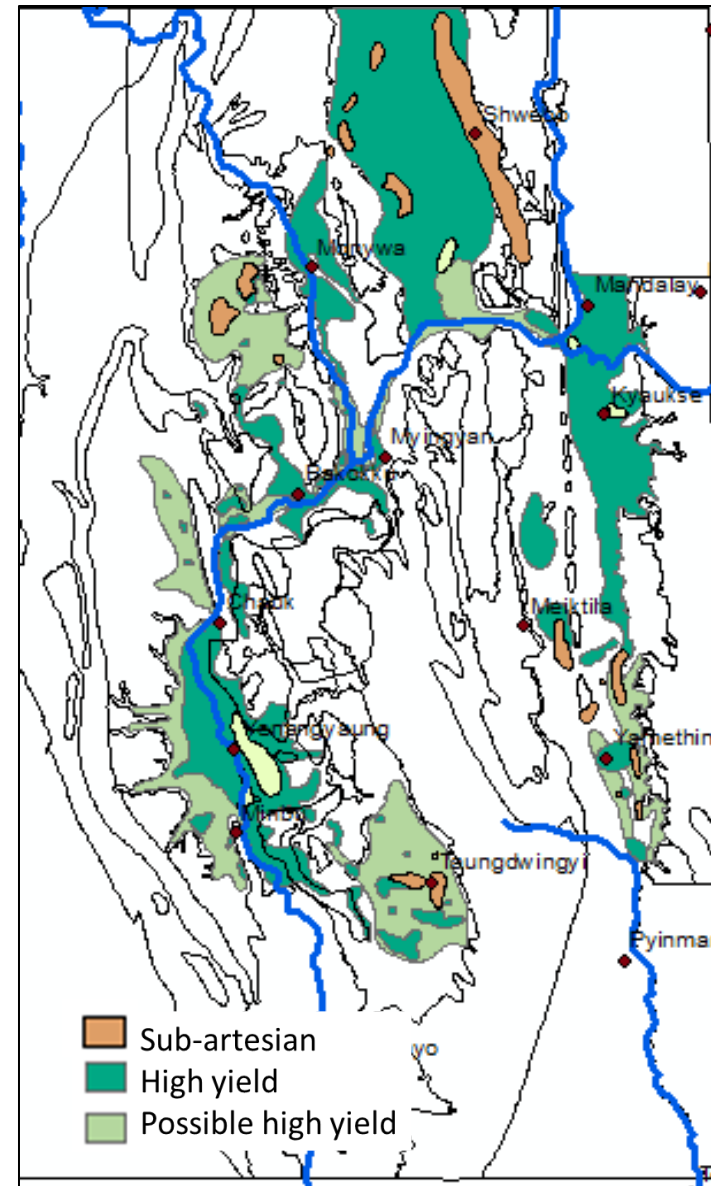
Annual recharge $<$ annual withdrawal = eventual disaster



Recharge dynamics depend on geology, climate, depth to water table, vegetation, etc

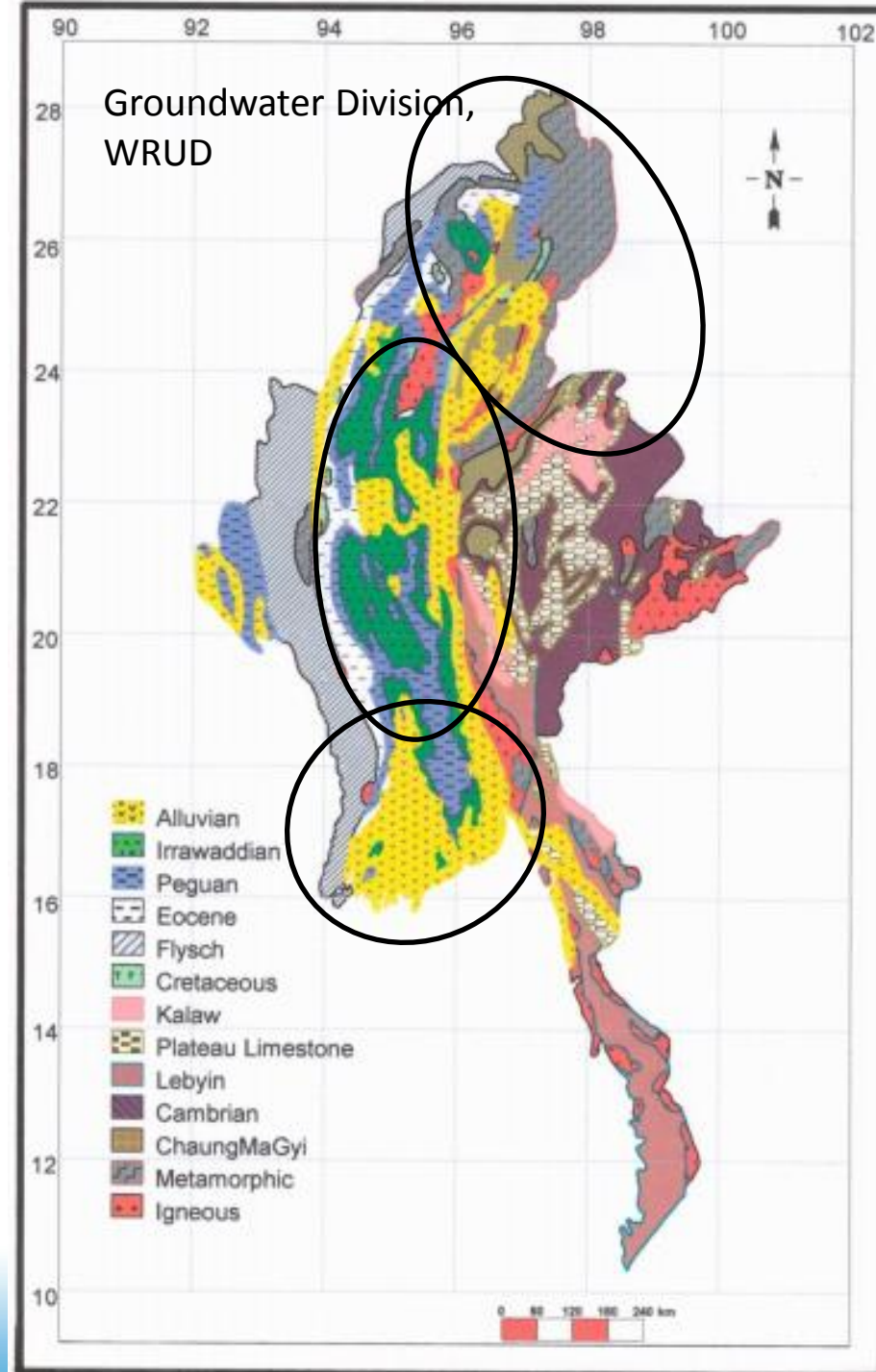
a. Hydrogeology of the Dry Zone

- 1980s - Joint study by Rural Water Service and Coffey and Partners (Dr Len Drury)
 - not published
- Revision and update of report with new data
 - Project supported by AWP
 - Publication Sept. 2017
- Detailed analysis and maps for 11 sub-regions
 - Including information on yield, water quality and recharge patterns



b. Groundwater in Ayeyarwady Basin

- Review for AIRBM SOBA
 - Based on available information
- Different geological contexts
 - Uplands - complex older geological terrains including limestones, local recharge
 - Ayeyarwady River Corridor - alluvial system connected to river
 - Delta - saline intrusion, subsidence, arsenic
- Conjunctive use of surface and groundwater
- Sustainable management



2. WISDM

Water Information System for Data Management

Ayeyarwady Integrated River Basin Management Program
National Water Resources Committee
+ multiple partners



Myanmar WISDM

NATIONAL WATER RESOURCES COMMITTEE

MYANMAR WATER INFORMATION SYSTEM

HOME

DATASET

DOCUMENT HUB

PARTNERS

MAPPING PORTAL



Welcome to Myanmar Water Information System for Data Management

The Myanmar WISDM is being developed by the International Water Management Institute (IWMI) under the auspices of the Myanmar National Water Resources Committee (NWRC). The data portal will provide access to a wide range of spatial data and other information relevant to water management in Myanmar.

Myanmar WISDM will include

- Database of water-related, spatial & non-spatial, datasets, including time series data
- An online visualization/mapping tool to view and query data
- Facilities for partner organizations to upload and download datasets (subject to permission of the owner of the data)
- Knowledgebase repository for easy access to relevant literature.

Search Database

Search

User Login

WISDM - Data portal

- **Database** of water-related, spatial & non-spatial, datasets, including time series data **to support AIRBM State of Basin Assessment** -
 - shared information base for planning and management for diverse stakeholders and sectors
- Facilities for **partner organizations** to upload and download datasets (subject to permission of the owner of the data)
- Standards and formats for shared data
- An online visualization / **mapping tool** to view and query data
- Knowledge base (**document hub**) for easy access to relevant literature.
- NWRC is owner and custodian
- IWMI provides technical support to construct and maintain
- WISDM will merge into AIRBM Hydroinformatics Center when it comes online



Please join us as a WISDM partner

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