



STATUS, GAPS AND POSSIBLE WAY FORWARD?

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STATUS



- IF NO PROBLEMS
- NO NEED FOR ACTION
- IF UNRESOLVED
ISSUES- POSSIBLE
STEPS FORWARD.

Yes we have work to do!



- Roles and responsibilities defined
- Invite stakeholders to partnership in development

GROUNDWATER: ROLES AND RESPONSIBILITIES										
ACTIVITY	MEW	AGS/MoM	MRRD	MAIL	MoPH	NEPA	University	AUWSSC/MUD	NGOs/DACAAR	Private Sector
Groundwater management										
Aquifer discharge plans	●									
Aquifer recharge assessment										
Groundwater regulation										
Issuing extraction permits/license										
Groundwater extraction for development										
Urban water supplies							●			
Rural water supplies								●	●	
Irrigation	●		●	●				●	●	
Other (incl. industry)	●						●		●	
Hydrogeological mapping capacity										
Hydrogeological surveys	●	●	●					●	●	
Geophysical investigations	●	●	●					●	●	
Hydrogeological reporting	●	●	●					●	●	
Making hydrogeo. maps										
• Paper maps	●	●	●					●		
• GIS maps	●	●	●	●				●		
• Web maps	●	●								
Monitoring groundwater resources										
Water quality (water analysis)	●	●	●		●		●	●	●	
Groundwater quantity /water level	●	●	●				●	●		
Groundwater pollution control										
Pollution control	●				●	●				
Training and capacity building										
Hydrogeological surveys	●	●	●				●	●		
IT – data processing and development of GIS maps	●	●	●				●	●		
Plan water supplies using hydrogeo. data			●				●	●	●	
Water quality – pollution assessment	●	●	●		●	●		●	●	

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STRENGTHS



- **Ministries agreeing on action**
- We have **some trained staff, equipment** and some data
- Developed survey methods, data screening system, hydrogeological map example, data base designs, GIS maps design. (**pilot provincial project / capacity building project**)
- We have **some local expertise** and experience from hydrogeological project in MRRD, Database and water monitoring expertise in DACAAR, labs and drilling expertise in MEW, and some MIS/ GIS expertise.

STRENGTHS

- DACAAR has provided more than **42000 data records** of water points covering 18 provinces! Data Available and DACAAR also monitor water facilities.
- MRRD has been implementing a capacity building **project for groundwater mapping** which has much to be used for expanding hydrogeological information from one province to the whole country.
- **MEW has the jurisdiction** for groundwater management which makes balancing of surface and groundwater resources more rational

POTENTIAL GAPS? 1

- Lack of **hydrological maps** and groundwater data
- Define long term groundwater **priority uses. Goals, Strategic plans, Development plans, Protection plans, Activities, Sustainable development plans for 2030?**
- Limited of **funding** for surveys, monitoring and management of groundwater resources?
- Limited **capacity** to undertake nationwide mapping.
- **Poor harmonisation of training** and capacity building

- Lack of **regular information flow** and ease of obtaining groundwater information.
- Lack of **data management skills and capacities.** (MIS, GIS, IT)
- Groundwater **regulation, and enforcement** of groundwater use.
- **Quality control systems** for securing trustworthy data lacking or poor.
- **Pollution protection** implementation plan for groundwaters

SUGGESTED NEEDS

- **Positive inclusive leadership** - by consensus where possible
- **Regular coordination meetings with clear targets** and work programs.
- **Transparent information system** for all sector actors to use interactively. Use Web and online Maps

WHAT NOW? - WAY FORWARD -1

- **Lets agree to establish a technical working group** to take groundwater planning and monitoring forward now.
- **Let MEW with GW jurisdiction chair and invite** all active stakeholders for a GTWG (groundwater technical working group) play an active part to plan, monitor and develop groundwater resources in accordance with national priorities. Let MRRD provide secretarial support from own projects.
- Let work in group start preparation of short term **action plan, urgent activities, collection of information of information , resources , equipment, training programs** etc on which work can be prepared.

- **Lets agree on a communiqué and action plan during this workshop.**

