



# 2<sup>nd</sup> Targeted Workshop for Asia and the Pacific

*Transforming Good Practices  
from Demonstration  
Projects into Scaled-Up  
Investments and Financing*

*Experiences from the  
GEF IW Groundwater Portfolio:  
KM strategies and replication potential*

---

Lucilla Minelli, UNESCO-IHP [l.minelli@unesco.org](mailto:l.minelli@unesco.org)



IW: LEARN Regional Workshop  
Manila, The Philippines  
10 – 12 March 2014



**Groundwater relevance  
and GEF/UNESCO-IHP  
actions**



**KM strategies (GW CoP,  
Integration Dialogues)**



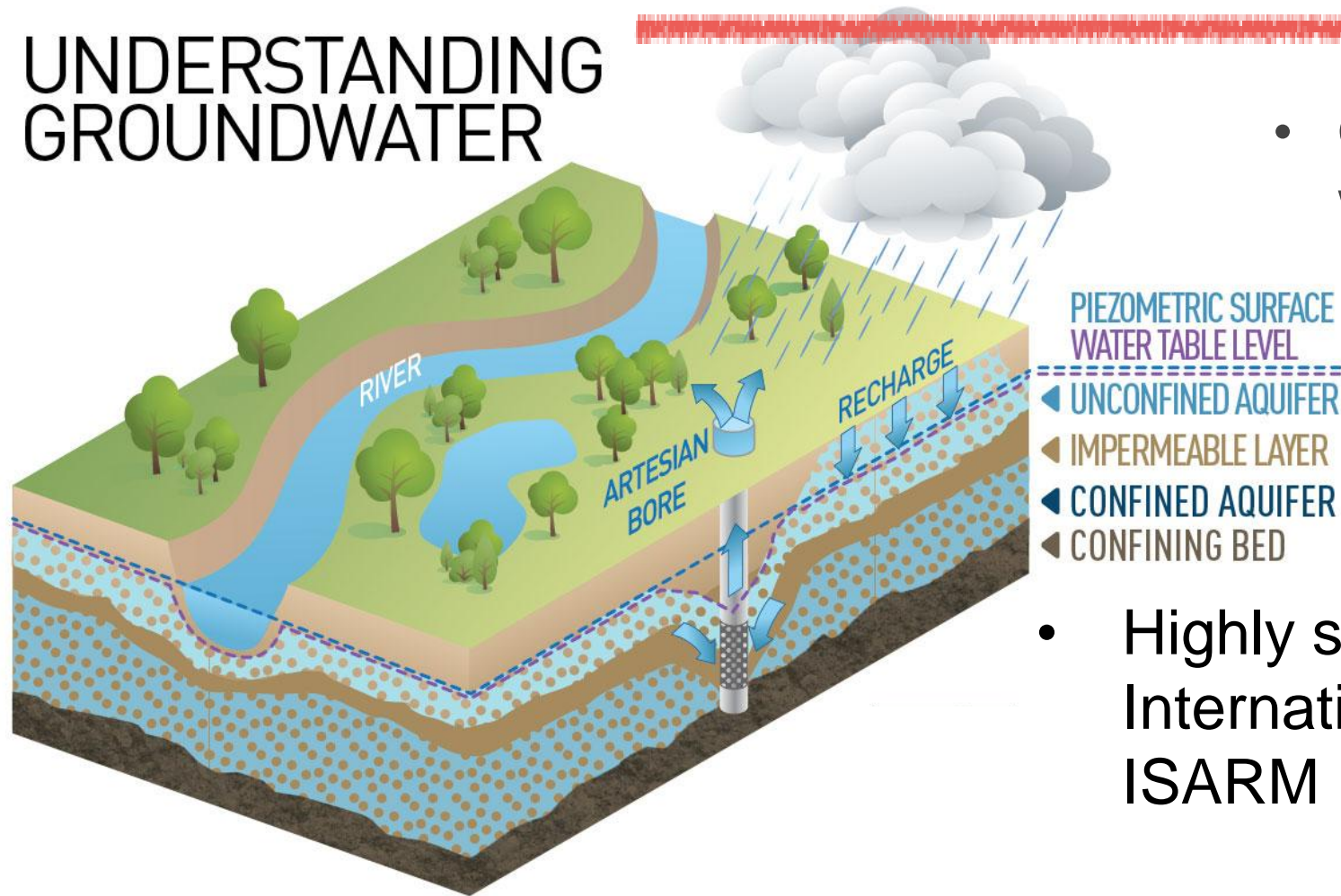
**Replication and  
experiences from  
the GEF GW  
portfolio**



**Food for Thought**

# Importance of Groundwater and GEF/UNESCO actions

## UNDERSTANDING GROUNDWATER



- **Groundwater** is an integral part of the water cycle

- Efforts in the GEF IW to address this gap

- Highly successful cooperation with UNESCO's International Hydrological Program (IHP) and ISARM Initiative

### **GEF IW 6<sup>th</sup> strategy (emphasis on groundwater):**

- Fostering multi-country cooperation in the management and protection of transboundary aquifers
- Supporting implementation of conjunctive surface and groundwater management in transboundary contexts.

**BUT:** slow pace of groundwater projects submissions → not adequate awareness? Need to target assistance and investments!



# GEF Groundwater Portfolio

PROJECTS UNDER IMPLEMENTATION					
Title of Project	Type	GEFTF Groundwater only	Status	IA	EA Groundwater only
Formulation of an Action Program for the Integrated Management of the Shared Nubian Aquifer	MSP	1.0	Nearing Completion	UNDP	AEIA
MENARID: Reducing Risks to the Sustainable Management of the North West Sahara Aquifer System (NWSAS)	MSP	1.0	Under Implementation	UNEP	OSS
Mainstreaming Groundwater Considerations into the Integrated Management of the Nile River Basin	MSP	1,0	Nearing completion	UNDP	AIEA
Protection and Sustainable Use of the Dinaric Karst Aquifer System	FSP	2.1	Under Implementation	UNDP	UNESCO
GLOBAL PROJECTS UNDER IMPLEMENTATION					
A Transboundary Waters Assessment Program: Aquifers, Lake/Reservoir Basins, River Basins, Large Marine Ecosystems, and Open Ocean to Catalyze Sound Environmental Management (p.p.)	FSP	1.7	Under Implementation		UNESCO
Groundwater Governance: A Global Framework for Country Action	FSP	2,7	Under Implementation	FAO	UNESCO, IAH
PROJECT UNDER PREPARATION					
Integrated Water Resources Management in the Puyango-Tumbes, Catamayo-Chira and Zarumilla Transboundary Aquifers and River Basins (FSP)	FSP	3,9	PPG	UNDP	National agencies
Sustainable Groundwater Management in SADC Member States (FSP)	FSP	8,1	PPG	WB	SADC (UNESCO)*

Enabling Country of the Transboundary Syr Darya Basin to Make Sustainable Use of their Ground Water Potential and Subsurface Space with Consideration to Climate Variability and Change	FSP	3,5	PPG	UNDP	UNESCO
PROJECTS INCLUDING GROUNDWATER ELEMENTS					
Strategic Partnership for the Mediterranean Large Marine Ecosystem-Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and Its Coastal Areas	FSP	1,6	Under Implementation	UNEP	UNESCO
Sustainable Management of the Water Resources of the la Plata Basin with Respect to the Effects of Climate Variability and Change	FSP	tbd	Under Implementation	UNEP	CIC
Improving Lake Chad management through building climate change resilience and reducing ecosystem stress through implementation of the SAP	FSP	?	PPG	AfDB	(UNESCO)*
Lake Chad Basin Regional Program for the Conservation and sustainable use of natural resources and energy efficiency	PDF	?	PPG	UNDP	(UNESCO)*
COMPLETED PROJECTS					
Integrated Natural Resources Management in the Baikal Basin Transboundary Ecosystem	FSP	0,5		UNDP	UNESCO
Protection of the NW Sahara Aquifer System (NWSAS) and related humid zones and ecosystems	MSP	0,6		UNEP	OSS, UNESCO
Groundwater and Drought Management in SADC	FSP	7,0		WB	SADC
Environmental Protection and Sustainable Management of the Guarani Aquifer System	FSP	13,4		WB	OAS
Developing Renewable Groundwater Resources in Arid Lands: A Pilot case – The Eastern Desert of Egypt	MSP	1,0		UNDP	National Agency
Managing Hydrogeological Risk in the Iullemenden Aquifer System	MSP	1,0		UNEP	OSS, UNESCO

\* UNESCO mentioned in PIF/PFD as co-funding and executing partner, but no definition yet

# Groundwater CoP



New initiative of the GEF IW: creation of Communities of Practice formed by water practitioners, project country representatives and other stakeholders that meet, virtually and face-to-face, and keep alive the legacy of the projects, share best practices, exchange knowledge and inform the design of new projects

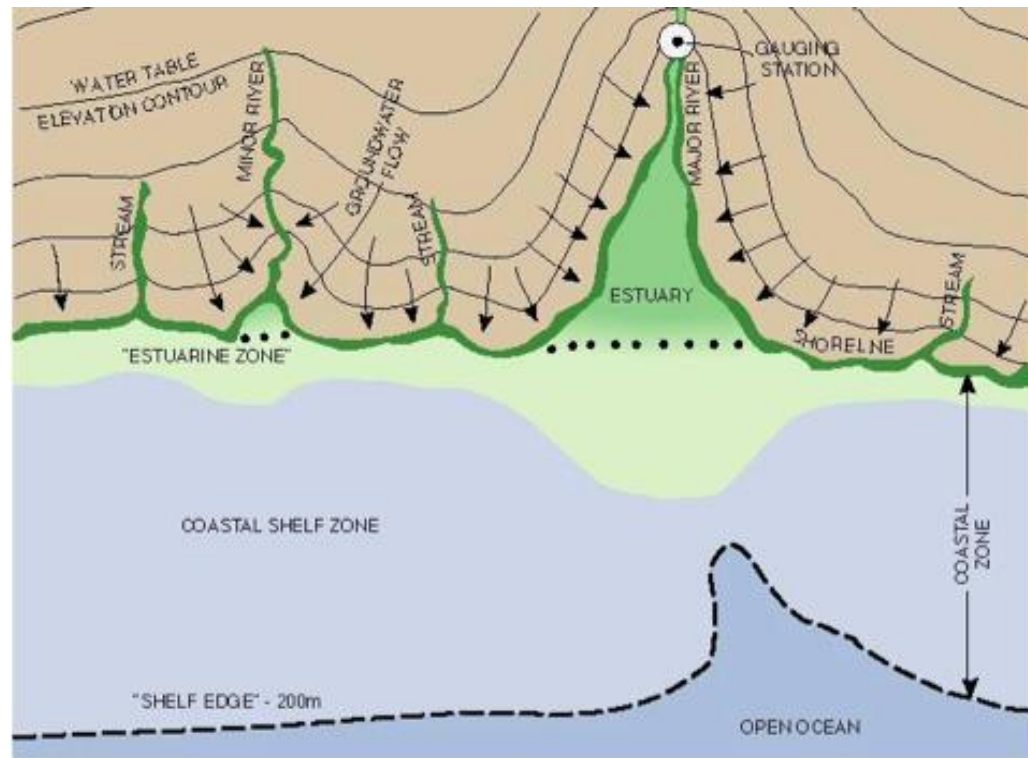
[www.groundwatercop.iwlearn.net](http://www.groundwatercop.iwlearn.net)

- **Facilitate** exchanges of experiences among practitioners involved in the execution of existing GEF IW groundwater projects
- **Distil** from these experiences those deserving broader dissemination
- **Create** links between projects and all relevant groundwater networks and regional/global expertise



(4th phase of IW LEARN 2014-2018, along the lines of the 6th GEF strategy new attention placed on groundwater)

# Integration Dialogues & GEF Groundwater Portfolio Analysis



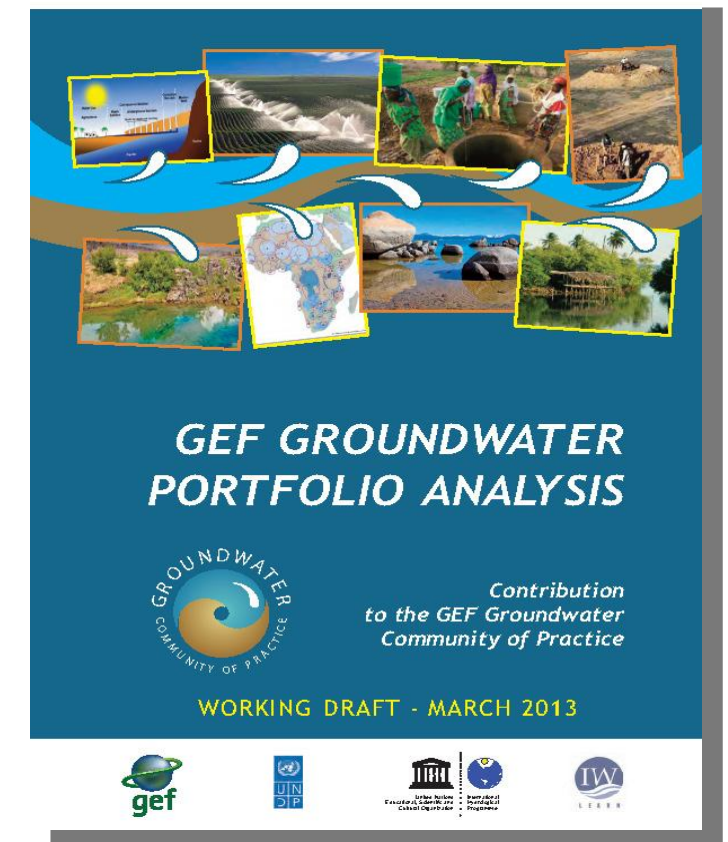
## 3rd GEF IW LEARN – UNESCO INTEGRATION DIALOGUE

(MedPartnership, UNESCO IHP, PAPRAC, GWP-Med)

### “Groundwater in Coastal Areas and SIDS: Sharing of Experiences from GEF IW Projects”

Athens, 13-14 May 2014 (tbc)

Attempt to analyze the GEF IW portfolio of groundwater projects with a view to **identify lessons learnt and replicable practices**, and to promote a structured exchange of experiences among projects





# The Guarani Aquifer Project: example for replication

- Shared by Brazil, Argentina, Uruguay and Paraguay
- One of the largest reservoirs of the world
- Stands as an example for management and protection of all transboundary aquifers
- Paradigm of how “things should be done”, from topographic maps to communication
- After the project closure, the four countries have entered a binding agreement for the protection of the aquifer system

→ **Major merit:** communication and awareness raising to draw attention and educate large public



# Groundwater Governance Project: findings from the Asia/Pacific regional consultation

- Addressing concerns over depletion of groundwater
- Series of regional consultations to prepare regional diagnostics → vision and global FforA
- Common issue to solve: the unplanned and massive use of groundwater
- Vulnerability of costal areas and SIDS



## Key recommendations (selection):

- Countries in the Asia-Pacific region need to deploy **more resources** to further develop groundwater governance structures
- There is scope for **increased assistance** to fragile and vulnerable SIDS and small islands.
- National policies are needed to **encourage conjunctive use** and **managed aquifer recharge (MAR)**.
- Groundwater institutional structures, legal frameworks and regulatory mechanisms should be designed to respond to changed knowledge and conditions, including climate change. **Groundwater risk assessments** and risk reduction measures are needed, including protective groundwater reserves.



# Groundwater Governance Project: findings from the Asia/Pacific regional consultation (II)

---

- **Investments in groundwater infrastructure** including managed aquifer storage and recharge are needed to improve the security of water supplies.
- Groundwater governance arrangements should be designed and implemented with the active **participation of public and private water users and other stakeholders**, taking account of other policies, including land-use planning. Implementation should be devolved to the lowest feasible level.
- **Education and training programs and pilot demonstration projects** are needed to improve the awareness and capacity of groundwater managers and consumers.

*Full regional Report available*

[www.groundwatergovernance.org](http://www.groundwatergovernance.org)



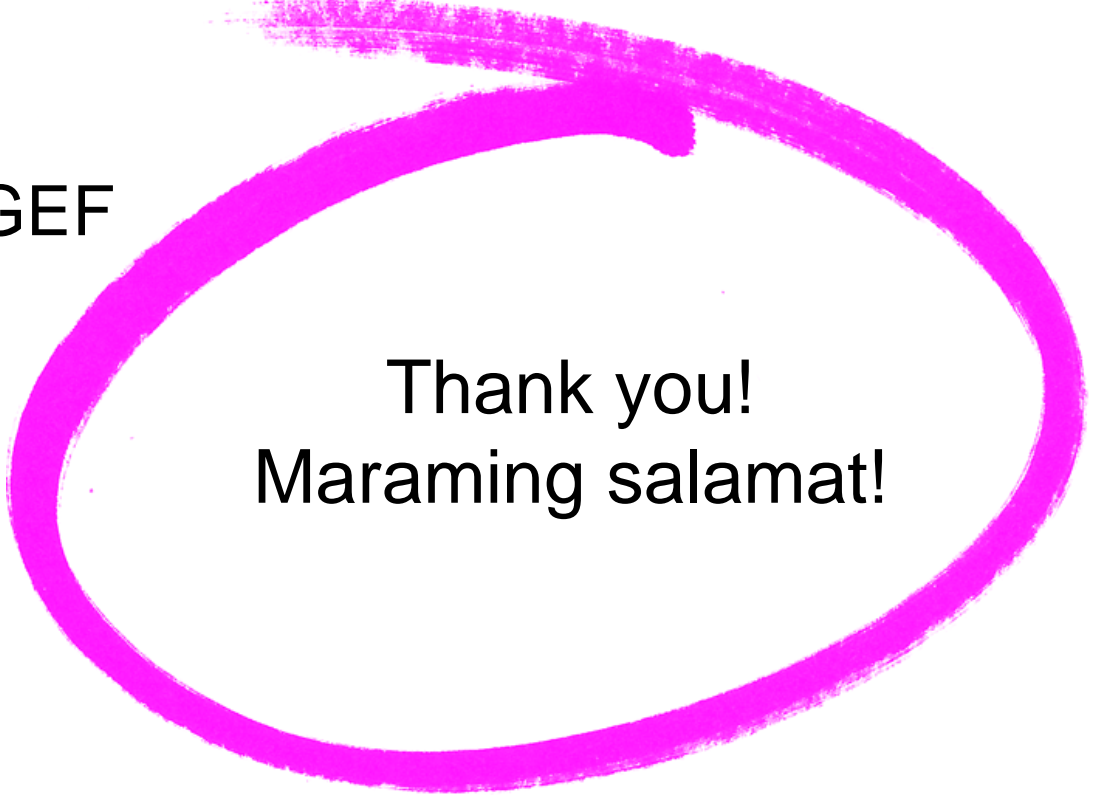
# Food for Thought...

---

What is your experience in addressing or implementing conjunctive management within your projects?

What the GEF can do to further enhance its capacity to address groundwater issues?

Is there any action that you would recommend to GEF Implementing and Executing Agencies?



Thank you!  
Maraming salamat!