

UNESCO Water Cooperation in Asia Pacific Region

TG1: GEOSS ASIAN WATER CYCLE INITIATIVE (AWCI)
UNESCO Introductions to the International Activities on Water
(WebEX)

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Common Challenges AP

Water quantity and quality

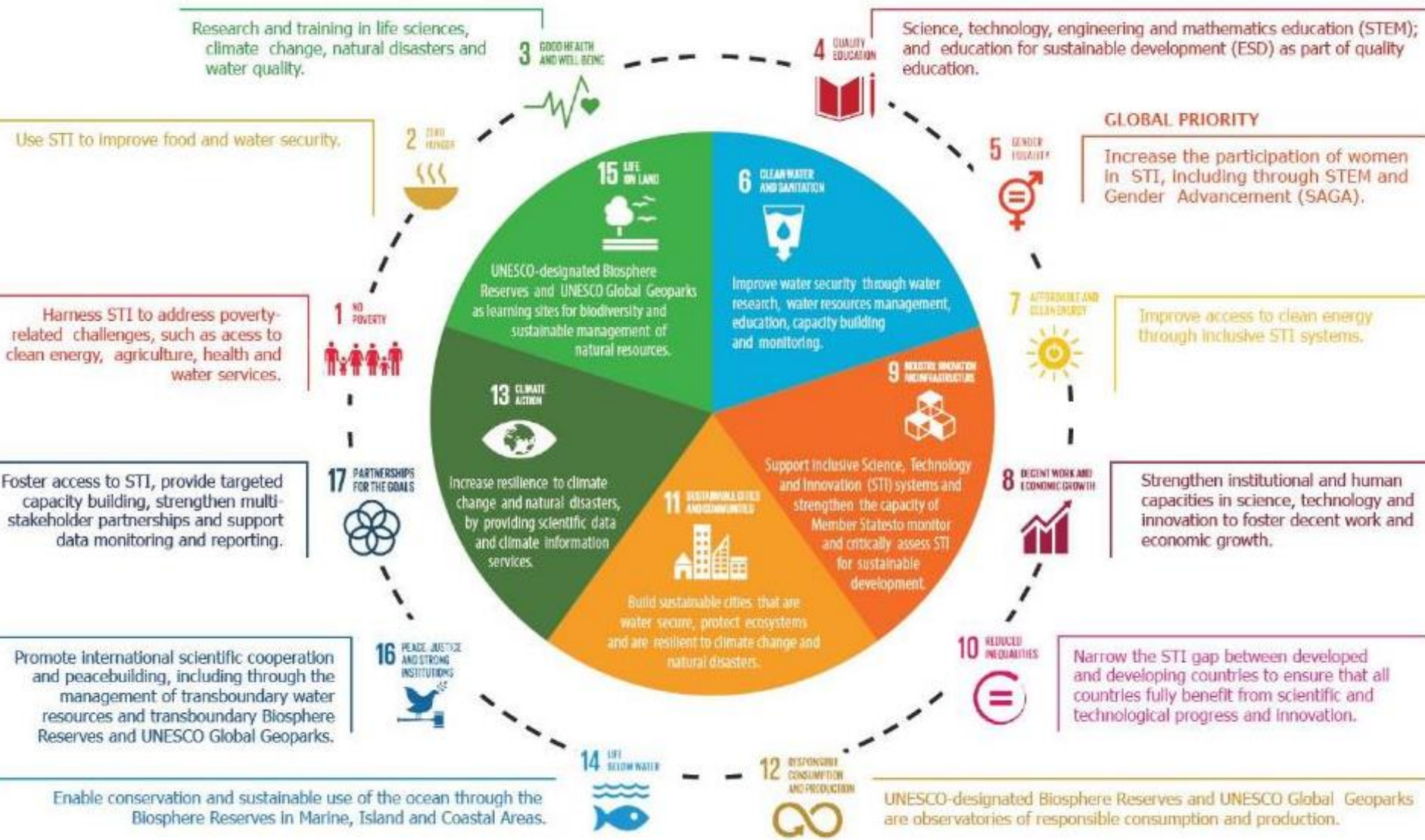
- **Sharp increase in water use**
- **Depletion of Groundwater sources**
- **Food security**
- **Climate change – extreme events**
- **Rapid urbanisation – water footprints**
- **Massive Pollution of Vital Water Resources**
- **Nitrogen, pesticides, endocrine disruptors**
- **Biodiversity loss**



Key Areas of Concern for Water Security in AP

- Limited knowledge of climate shift of agro-ecological zones
- Misinformed decisions resulting in unsatisfactory project output
- Inadequate resources (human, financial and material)
- Economic crisis and limited donor support
- Conflicting needs of funding agencies and communities
- Lack of communities involvement in regional projects, need to involve the main decision-makers at appropriate levels

Harness science, technology, innovation and knowledge for sustainable development goals





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2030 Agenda and Water





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Water SDG Links to other SDGs

Goal 15:
15.8 Introduce
measure to prevent the
introduction and
significantly reduce the
impact of invasive alien
species on land and
water ecosystem

Goal 3:
3.3 End water
borne disease

Goal 3:
3.9 Reduce the
number of
deaths and
illnesses from
water

Goal 6
related other
target

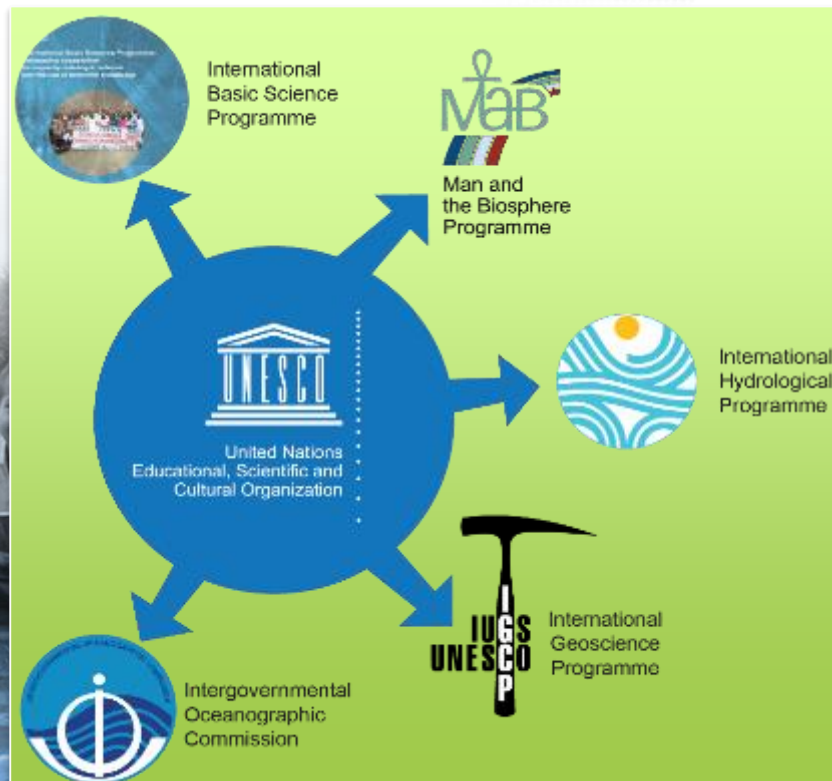
Goal 15:
15.1 Ensure
conservation,
restoration and
sustainable use of
terrestrial and inland
freshwater
ecosystem and their
service

Goal 12:
12.4 Sound
management of
waste to reduce
release in to
water

Goal 11:
11.4 Significantly
reduce the
number of deaths
and the number of
affected people
and economic
losses due to
water related
disasters

Contribution to International Research and Capacity Building on Natural Sciences

Promote the 5 UNESCO's intergovernmental and international programmes



Support 10 UNESCO's major Programmes, Initiatives and Bodies





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International
Hydrological
Programme

International Hydrological Programme (IHP)

UNESCO IHP is the only intergovernmental programme of the UN system devoted to water research, water resources management, and education and capacity building.



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IHP-VIII 2014-2021

Axis 1

Mobilizing International cooperation to Improve knowledge and innovation to address water security challenges

Axis 3
Developing institutional and human capacities for water security and sustainability



1
Water
Related
Disasters and
Hydrological
Changes



2
Groundwater
in a Changing
Environment



3
Addressing
Water
Scarcity and
Quality



4
Water and
Human
Settlements
of the Future



5
Ecohydrology
Engineering
Harmony for
a Sustainable
World



6
Education,
Key to Water
Security

Axis 2

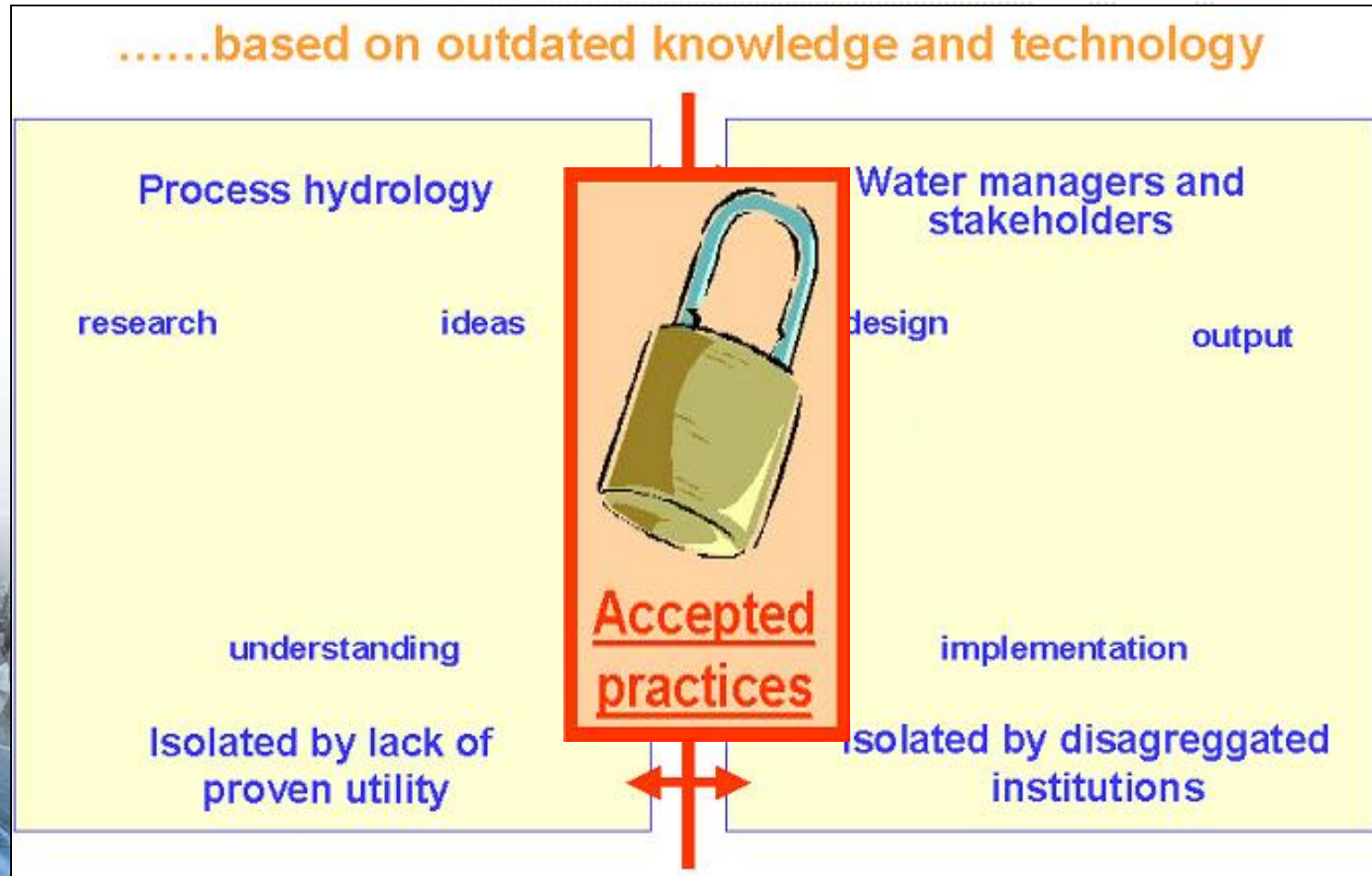
Strengthening the Science-Policy interface to reach water security at local, national, regional, and global levels



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The Challenge of Implementation

Due to Lack of Common Understanding there is a “Paradigm Lock”



Integrated Water Resources Management (IWRM)

❖ Integrated water resources management (IWRM) is a step-by-step process of managing water resources in a harmonious and environmentally sustainable manner by gradually uniting stakeholders while accounting for changing social demands due to such changes as population growth, rising demand for environmental conservation, changes in sense of water value, and climate change.

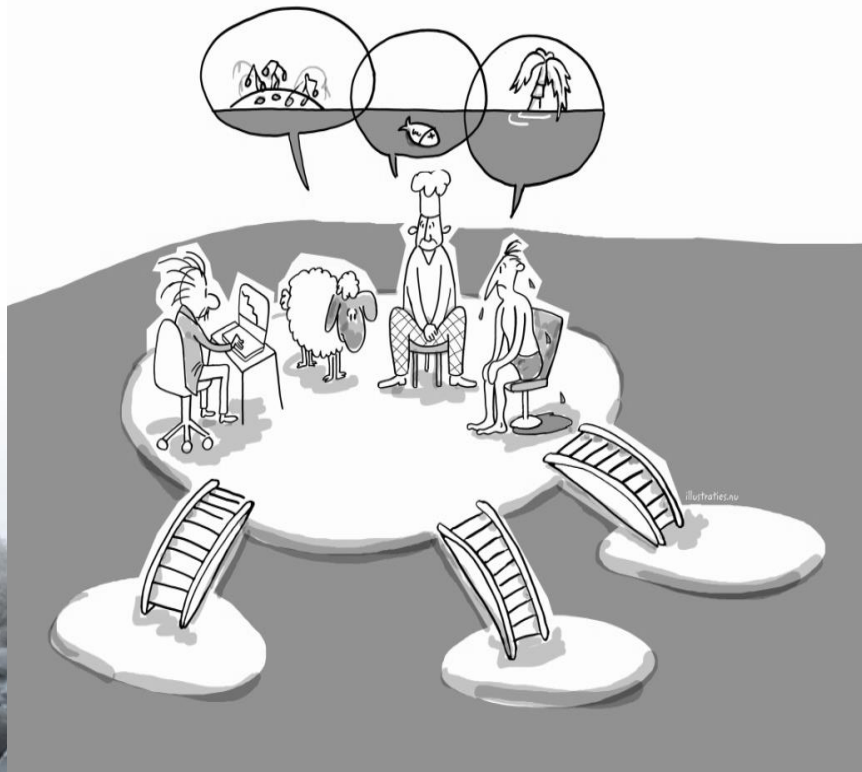
❖ **It is an open-ended process that evolves in a spiral manner over time as once moves towards more coordinated water resources management.**

IWRM is a "process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner, without compromising the sustainability of vital ecosystems." (GWP, 2000)



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Bridge Gaps Between Sectoral Approaches



Different Sectors



Different Groups



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