



5th General Meeting
Network of Asian River Basin Organizations

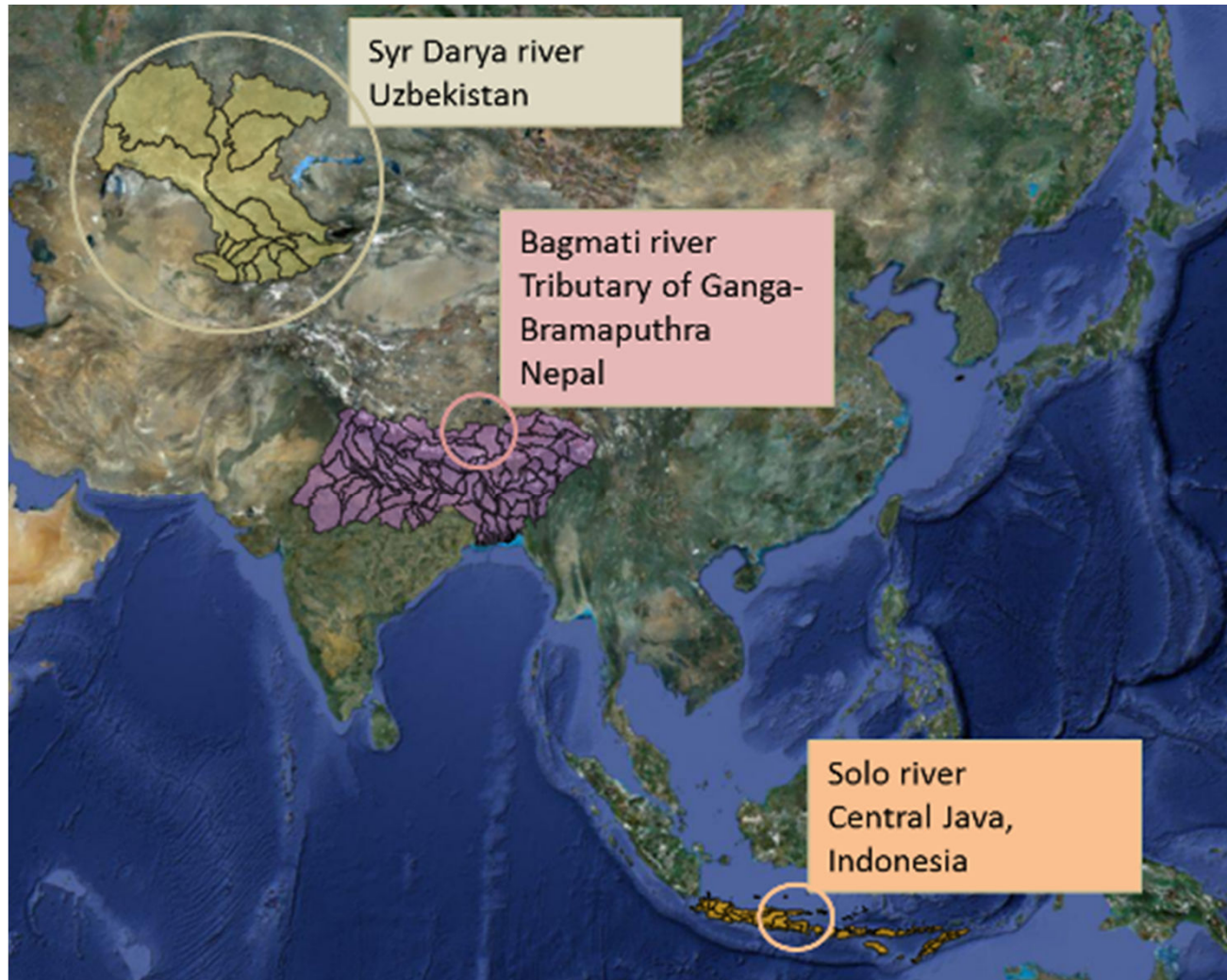
Chiang Mai, Thailand • 15–18 May 2013

**TA 7547-REG:
Supporting Investments in
Water Security in River Basins
(Financed by the Japan Special Fund)**

TA Support for improving Key Factors of
Success when Water Security in River
Basins



The 3 River Basins



Water Security Areas



Water Scarcity



Flood Risks



Water Quality

Water Security – Different Issues

Bagmati

- Water availability cannot cover the needs of the rapid growing population of Kathmandu
- Groundwater use is not sustainable
- The Bagmati River is a “dead river” due to nearly no water treatment facilities and nearly no environmental flow during the dry season
- Severe Floods affect the lower-Bagmati River section (Terai)

Solo

- The use of water for irrigation canal is poorly efficient causing unbalance sharing of water and potential conflicts
- Weaknesses in efficient operation and safety management of dams and
- Flash Flood risks have increased recently due to degradation of upper-parts of watersheds (deforestation and soil degradation)

Syr Darya

- Uncertainty of water availability as the consequence of water restitution rules with the upstream country (transboundary issue)
- The economy and incomes for the habitants is highly depending on water availability for irrigation
- Still in transition process of agricultural system efficient water management for irrigation is not ensured. Deteriorated distribution facilities can not secure reliable operation.

Water Security - Similar Risks and Similar Areas of Actions

RISKS

Global Social
and Economic
development

Population and
Assets

Water conflicts

Loss of
Ecosystems and
Biodiversity

Areas of Actions

Improve Infrastructures
(*Water Distribution,
Water Quality, Flood
Protection*)

Improve Water Use
Efficiency (*awareness,
stakeholders
involvement*)

Improve Water
Resource Development
(*reduce run off, increase
infiltration*)

Maintain and restore
Ecosystem Services

Framework for addressing Water Security in an ideal world...



Framework for addressing Water Security in the real world...

What can be the real world...

- Lack of Multi-Sectors Cooperation
- RBO mandate unclear
- Stakeholders have limited Knowledge/Awareness
- Hard getting shared vision... (different interests)
- Lack of data, information, monitoring
- Data and Information not shared between sectors and stakeholders
- Water issues are identified but not quantified
- Prioritizations and trade offs hard to achieve
- Actions and Investments for Water Security planned in a short term vision but making sometimes the situation even worse in a long term perspective
- Lack of funds for ensuring sustainability for maintaining IWRM mechanisms running

Going from the real world to the ideal one...

- Improve knowledge (Basin Profile)
- Analyse Strengths and Weaknesses, Threats and Opportunities (from Basin Profile)
- RBO formulation/Strengthen capacity of RBO
- Define priority/demonstrative Actions that can be implementable immediately (Case-Studies – learning by doing)
- Build implementable steps for addressing the most urgent issues and take profit of the opportunities for their implementation (e.g. provisional informal multi-sector-platforms) (Investments plans and capacity building)
- Strategic Road Map for improving the Water Governance Tools and IWRM planning mechanisms (IWRM spirale)

TA Support for making Steps Forward...

Steps	Bagamati River Basin	Solo River Basin	Syr Darya River Basin
Improve knowledge (e.g. Basin Profile)	-Detailed basin profile -Supplementary Studies (Groundwater, Surface Water Development)	Updating of the former Basin Profile	Formulate Basin profile in Namangan oblast
Analyse Strengths and Weaknesses, Threats and Opportunities (from Basin Profile)	SWOT analysis of the Water Issues, Water Governance Tools and IWRM implementation mechanisms	(Analysis, conceptualization set up in POLA) - -Proposal of investment plan (economic efficiency)	Focus on water use efficiency. improve operation and maintenance of water facilities and water saving
Define urgent and/or demonstrative Actions that can be implementable immediately (Pilot area activities)	-Suggestions for formulation of basin level RBO -Suggestions for river environmental plan -Suggestions for holistic ground water management plan -Pilot Waste Water Treatment	-Pilot irrigation scheme : Improve water distribution efficiency -Pilot dam : improve operation and safety management -Pilot upper Watershed : conservation management through stakeholder coordination	-Improvement of the water management -Improvement of the safety management of the Hydro technical facilities
Build implementable steps for addressing the most urgent issues. Take profit of strengths and opportunities for implementation	(Support to PPTAs : Waste Water Treatment and Restoration of River Environment)	Investments and Capacity Building Plans	-Proposal of investment plan (economic efficiency)
Strategic Road Map for improving the Water Governance Tools and IWRM planning mechanisms (IWRM spirale)	Strategic Road Map covering the full steps	(Strategic steps defined in POLA, RBO set up and IWRM mechanisms implementation on going) Focus on specific themes with necessary investment and capacity development planning	Pre-feasibility study and investment planning

TA Support for making Steps Forward...

Improve
knowledge
(e.g. Basin
Profile)

- Bagmati
 - Detailed basin profile
 - Supplementary Studies (Groundwater, Surface Water Development)
- Solo
 - Updating of the former Basin Profile
- Syr Darya
 - Formulate Basin profile in Namangan oblast

TA Support for making Steps Forward...

Analyse
Strengths
and
Weakness
es, Threats
and
Opportunit
ies (from
Basin
Profile)

- Bagmati
 - SWOT analysis of the Water Issues, Water Governance Tools and IWRM implementation mechanisms
- Solo
 - (Analysis, conceptualization set up in POLA) -
 - Proposal of investment plan (economic efficiency)
- Syr Darya
 - Focus on water use efficiency. improve operation and maintenance of water facilities and water saving

TA Support for making Steps Forward...

Define urgent
and/or
demonstrative
Actions that
can be
implementable
immediately
(Pilot area
activities)

- Bagmati
 - Suggestions for formulation of basin level RBO
 - Suggestions for river environmental plan
 - Suggestions for holistic ground water management plan
 - Pilot Waste Water Treatment
- Solo
 - Pilot irrigation scheme : Improve water distribution efficiency
 - Pilot dam : improve operation and safety management
 - Pilot upper Watershed : conservation management through stakeholder coordination
- Syr Darya
 - Improvement of the water management
 - Improvement of the safety management of the Hydro technical facilities

TA Support for making Steps Forward...

Build implementable steps for addressing the most urgent issues. Take profit of strengths and opportunities for implementation

- Bagmati
 - (Support to PPTAs : Waste Water Treatment and Restoration of River Environment)
- Solo
 - Investments and Capacity Building Plans
- Syr Darya
 - Proposal of investment plan (economic efficiency)

TA Support for making Steps Forward...

Strategic Road
Map for
improving the
Water
Governance Tools
and IWRM
planning
mechanisms
(IWRM spirale)

- Bagmati
 - Strategic Road Map covering the full steps
- Solo
 - (Strategic steps defined in POLA, RBO set up and IWRM mechanisms implementation on going)
 - Focus on specific themes
 - with necessary investment and capacity development planning
- Syr Darya
 - Pre-feasibility study and investment planning

Thank You...