Thematic Process 4.5: Enhancing Education and Capacity Building

4.5.4 “Facing the changes in due time: Specific training for basin organizations”

Water Sector Capacity Development System in Central Asia

Mr Dinara ZIGANSHINA, PhD
Deputy Director, Scientific Information Centre of Interstate Commission for Water Coordination in Central Asia

Thursday 16 April, 14h40-16h40  Daegu EXCO, DEC_307 – 3F – Room 321
Water Sector Capacity Development System in Central Asia

Dinara Ziganshina, PhD
Deputy Director, Scientific Information Centre of Interstate Commission for Water Coordination in Central Asia
Key water challenges in ASB

- **Diminishing supply**: water quality & climate change
- **Increasing demand**: population growth, economic development, Afghanistan
- **Conflicting interests**: agriculture/hydropower/ecosystem; upstream/downstream

Ensuring water for all

Paramount importance of education & capacity development
Key challenges for capacity development

- **Lack of support from governments** to ensure a systemic and long-term approach to professional development in the water sector
- **Over-dependence on donors’ assistance**
- **Poor coordination** between national, regional & international organizations that leads to duplication of efforts in one fields and their shortage in other
- **Lack of clear standards** on CD programs
- **Disconnection** of professional development activities in the water sector from a national system of professional development
- **Lack of incentives** for water professionals in improving their skills and knowledge
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<tr>
<th>Key Projects</th>
<th>CD elements</th>
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<tr>
<td>Capacity Building through Project Management Enhancement (CIDA, 2001-2005)</td>
<td>– Regional Training Center established</td>
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<td>– 1st step to regenerate water sector PDS – training of trainers</td>
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<td>Integrated Water Resources Management in the Fergana Valley (SDC, 2001-2012)</td>
<td>– Field work &amp; practical trainings</td>
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<td>– Strengthening institutional &amp; legal framework for IWRM</td>
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<td>– Evidence &amp; research driven training</td>
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<td>– Social mobilization</td>
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<td>Water and Land Productivity Improvement in Plot Level (SDC, 2008-2012)</td>
<td>– Focus on end water users (farmers)</td>
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<td>– Innovative cycle of knowledge transfer to farmers</td>
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<td>– Practical trainings</td>
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<td>Central Asia Regional Water Information Base (SDC, 2003-2012)</td>
<td>– Database</td>
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<td>– Knowledge Base</td>
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<td>– Models</td>
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<td>Water and Education Project for Uzbekistan (OSCE)</td>
<td>– Water in school curricula</td>
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<td>– Training for teachers</td>
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<td>RETA 6163: Improvement of Shared Water Resources Management in Central Asia (ADB, 2005-2008)</td>
<td>– High-level officials and cross sectoral approach</td>
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<td>– Themes: transboundary waters, international water law, conflict resolution</td>
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<td>Capacity Building for Integrated Water Resources Planning and Management in Central Asia (The Netherlands, 2009-2011)</td>
<td>– Systematization and testing of teaching materials (curricula on 4 training themes)</td>
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<td>– Training of trainers (19 national trainers, 212 specialists trained)</td>
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<td>– Close partnership with educational institutions</td>
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<td>– ASBmm model</td>
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Capacity development in ICWC

Partnerships with educational institutions:
McGill University, UNESCO-IHE, Bonn University, Stuttgart University, Montpellier University, Kazakh National Technical University after K.I. Satpaev, Kyrgyz National Agricultural University, Kyrgyz National Agrarian University after K.I. Skryabin, Tashkent Institute of Irrigation and Mitigation, Kazakh-German University, etc

Regional Training Center

- Development of teaching and methodological materials
- Information and knowledge generation
- Training of trainers and coordination of regional efforts
- Conducting trainings and training needs assessment

Information System,
models, future scenario and analytics:
BWOs, WMOs, hydromets

Knowledge Generation and Sharing
joint projects, research & networking:
WMOs, research institutions, regional organisations, int'l partners (IWMI, ICARDA, GWP, WWC, GIZ, SDC), professional networks (ICID, IWRA, INBO)

Target Audience

**Higher level:** National water agencies, regional organisations, other relevant national ministries and agencies such as environmental protection, energy, economy, education, justice

**Middle level:** Divisions of water management organizations at basin and system levels, NGOs, project and scientific research institutions, individual students etc

**Lower level:** Extension services, WUAs, farmers

2014 ICWC’s capacity development strategy
What lessons can we learn?

- **Lesson 1. Demand-driven institutions & tailor-made approaches** for all levels of water hierarchy
  - Innovative cycle of knowledge transfer to farmers
  - Special support program for WUA in Uzbekistan
  - Capacity development courses for water professionals (now gains momentum in Uzbekistan)
  - E-learning course for Eurasian Center of Food Security under the Moscow State University

- **Lesson 2. Partnerships** are crucial
  - National agencies: water authorities, educational institutions, technical experts, etc
  - Regional organisations: EC-IFAS, BVOs, ISDC
  - International partners: IWMI, UNESCO-IHE, ICARDA, GWP, WWC, ICID, IWRA, INBO
  - Donors: SDC, CIDA, EU, ADB, WB, USAID, Netherlands
Lesson 3. Enhance linkages between **training**, **applied research & best practices** through **joint projects**

**Regional Project IWRM in Fergana Valley** (2001-2012 SDC) Implemented by national WMOs, SIC ICWC & IWMI in the Fergana Valley (the Kyrgyz Republic, Tajikistan & Uzbekistan) – over 116,000 ha.

**Results:**
- With a limited investment (~US$ 7 mln for six years), water users learned **how to save water** (250 mln m3/year) & ultimately **live under water shortage**, producing better yields & improve land productivity
- Professionals from riparian countries **work together to achieve common goals & build trust**

**Challenge: Decreasing number of regional projects**

**The Way Forward**: Aral Sea Basin Program for the period of 2011-2015 (ASBP-3) approved by all CARs & fully supported by donors as “an essential framework to guide future assistance to the region”
Lesson 4: Establish databases, knowledge bases and **connect** them to training needs
L5: Invest in future water leaders & promote mutual learning for transboundary cooperation

SIC ICWC invests in the future water leaders by delegating young water specialists to complete master and PhD programs at the universities of Germany (LUCA, ClinCa projects) and the Netherlands (IHE-UNESCO).

Provide a platform for communication and interactive dialogue among representatives of the CARs to foster peaceful cooperation on transboundary waters in the region and reaching consensus on water issues through education.

Building new skills and knowledge but also fostering new mindset and attitudes.
The Way Forward

Focus on establishing and sustaining a basis for building trust and encouraging collaborative learning between riparians through:

- Data, information and knowledge sharing,
- Joint regional projects (replication and scaling-up across countries of successful pilots),
- Training,
- Modeling and future development scenario building

With a view of managing shared water in a climate of peace & security