Future of Aral Sea Basin

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Aral Sea
Kazakhstan
Uzbekistan
ri
Issyk Kul
Kyrgyzstan
Turkmenistan
China
Tadjikistan
Iran
Afghanistan
Pakistan
India

How the situation in the region will evolve in the future?

United Nations A/RES/72/283

General Assembly

Distr.: General
25 June 2018

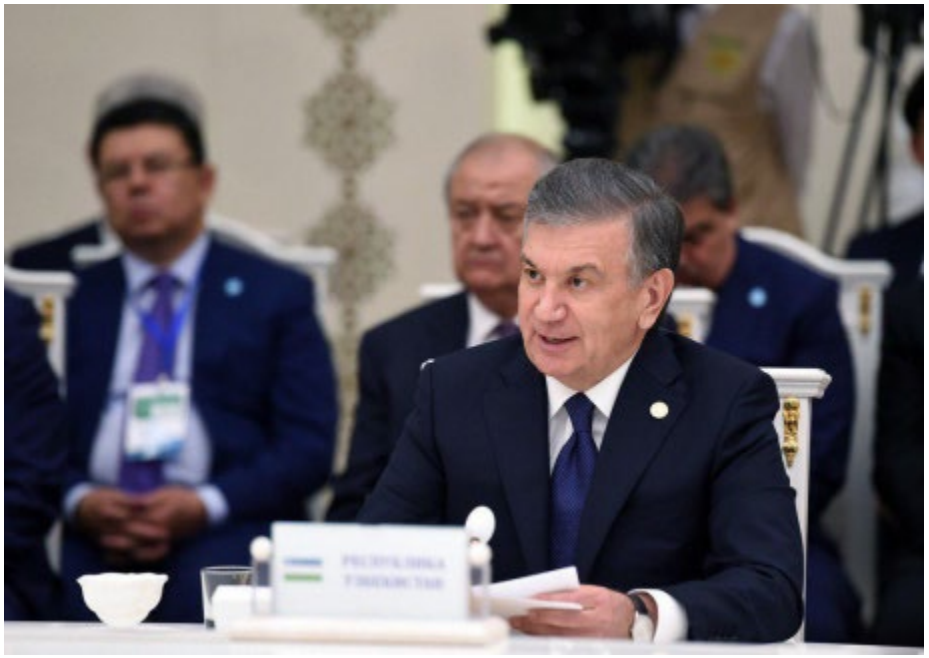
Resolution adopted by the General Assembly on 22 June 2018

The UN GA's Resolution of 22 June 2018 gives clear answer: Strengthening regional and international cooperation to ensure peace, stability and sustainable development in the Central Asian Region.

Way out – understanding and implementing a set of joint actions between the Central Asian countries

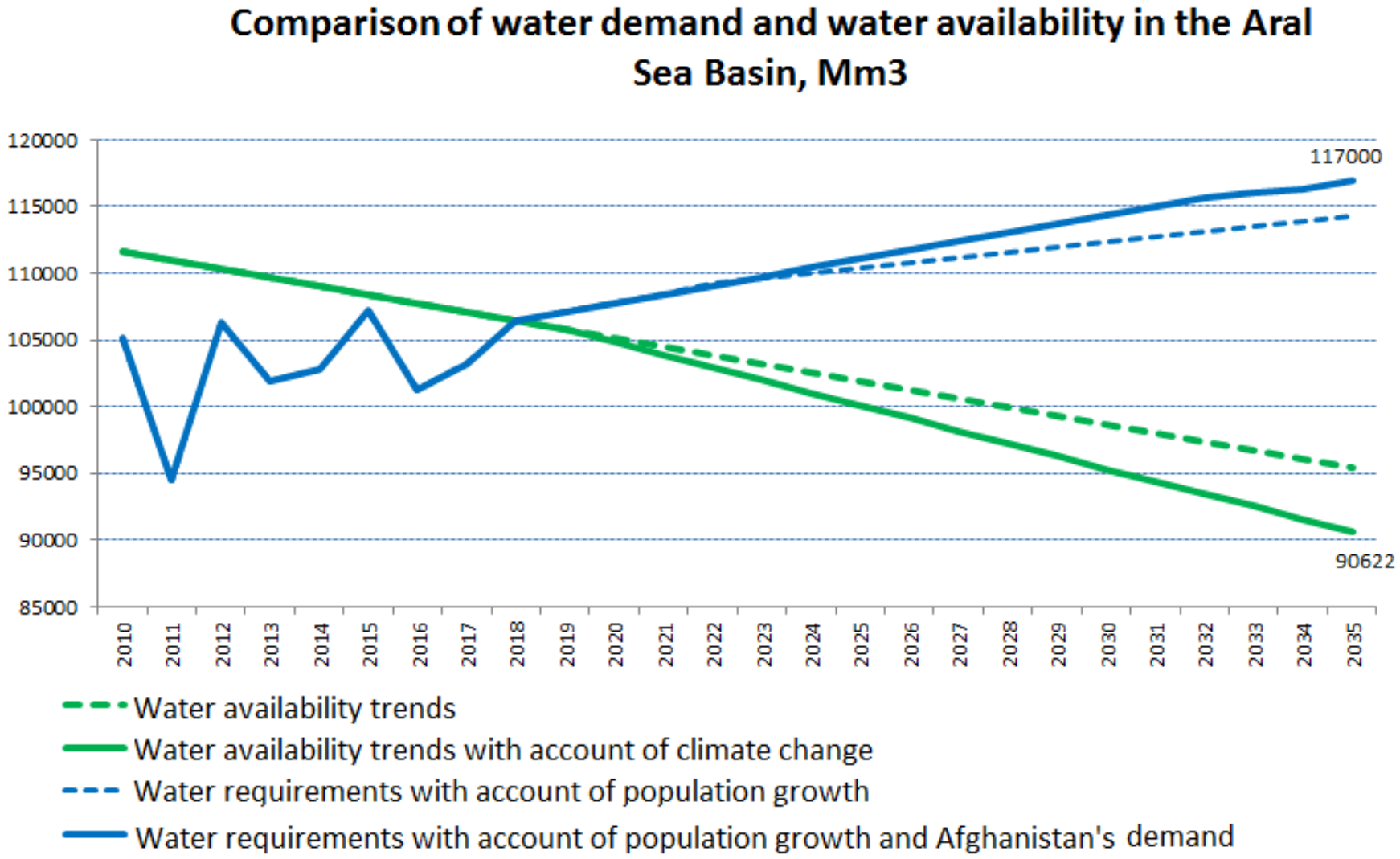
«Our future is in our hands»

Sh.M. Mirziyoyev



Summit of the Heads of IFAS Founder-States, Turkmenbashi, 24 August 2018. UzDaily.uz

Forecast of the future in form of two counter trends: growing demands and decreasing resources



Data, information & knowledge management

Databases & regional info systems

✓Practical tool to assess water situation using the data on water availability, distribution, reservoir operation, losses, environmental flows, etc.

Analytical models

✓Aral Sea Basin Management Model (ASBmm)

✓Scenarios of water-related situation in Amudarya & Syrdarya

Knowledge base

✓14 thematic knowledge bases

✓Knowledge tools: reference database, glossaries, e-library, reviews & training materials

✓Rubricator with 15 sections

Publications

✓distribution to government officials, policy makers, development partners, and scholars within Central Asia and beyond;

✓more than 900 books & brochures in more than 400000 copies

Four directions for strengthening ICWC activities approved by Commission in 2014

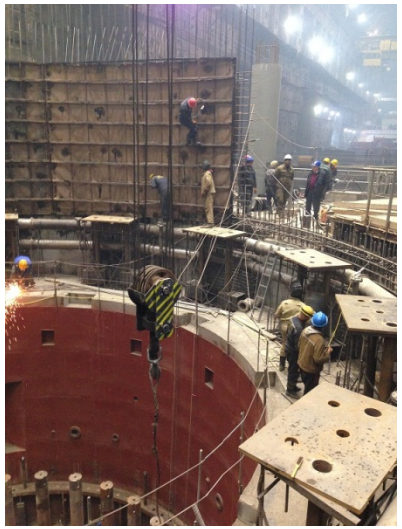
1. Water saving

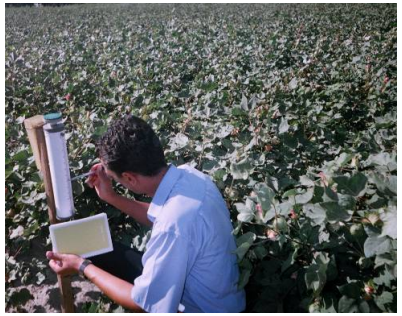
2. IWRM as tools for green growth and climate change adaptation

3. Improving accuracy of water accounting/measurement

4. Capacity development

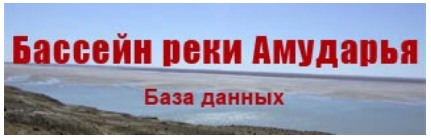
Search for trade-offs and creative solutions

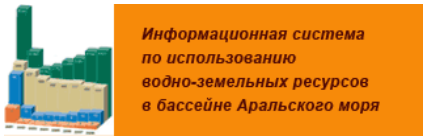




- Strengthen cooperation and mutual obligations with respect to joint management, development and construction to guarantee water for country and environmental needs;
- Remove all obstacles on the way to joint and trustful water use – balance of interests of all the countries;
- Reach high level of water productivity;
- Ensure equal and equitable participation in integrated water resources management (IWRM).

What it takes?





- Rational water use program
- System of open access, accurate and timely information
- Regular dialogue in the course of management, development of joint rules for water use and management
- Enhanced scientific and analytical basis
- Regional water sector vocational training and future water leader program.

Diagnosis – where cooperation stagnates?

- Involvement in ICWC of other water use sectors;
- Strong control over observance of water use limits, especially for downstream;
- Equal representation and proportional shares of financing;
- Thorough and regular control over runoff and water delivery – no tricks with water are possible.

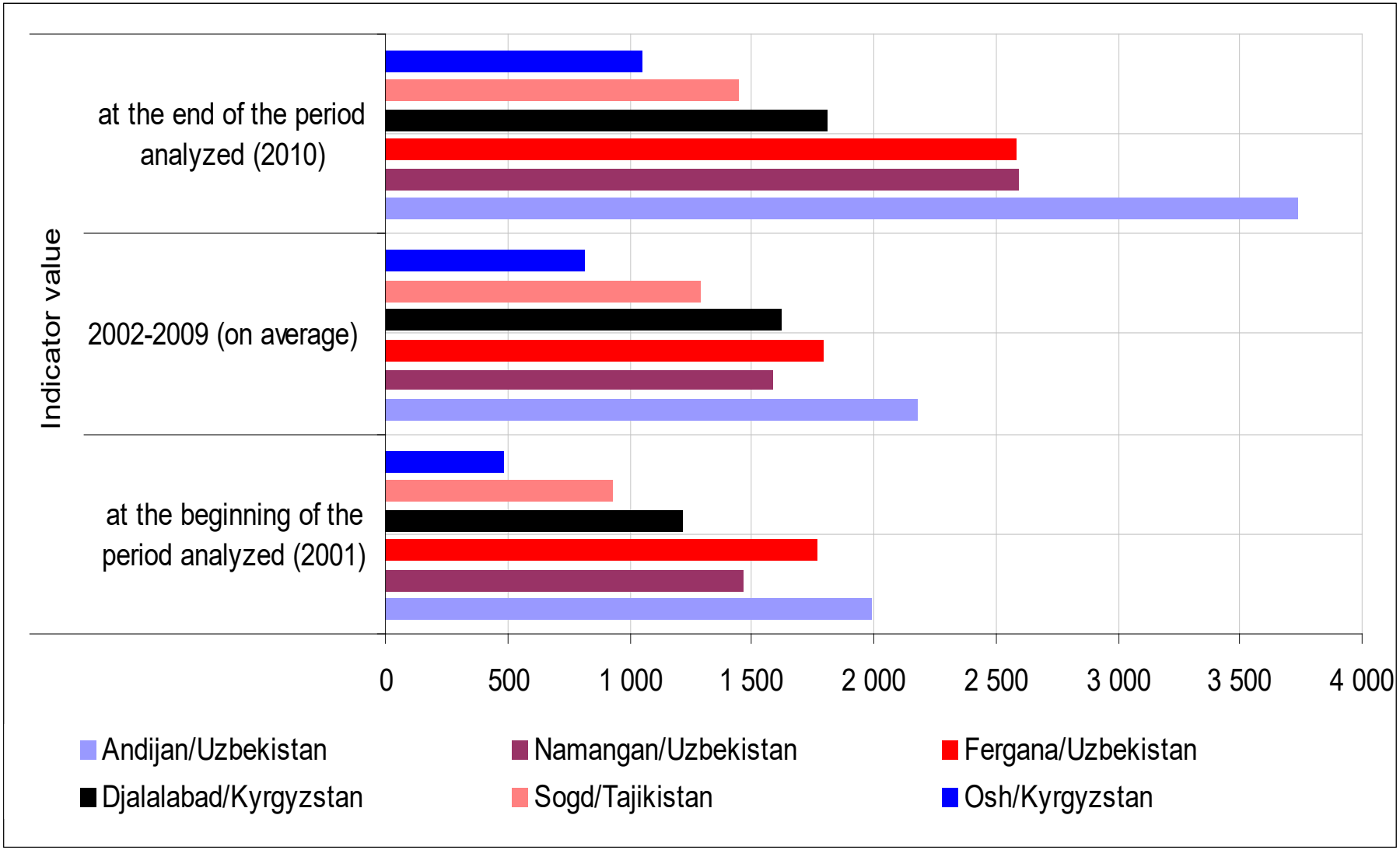
Adaptation measures

- Implementation of IWRM in the basin
- Reassessing water demands of irrigated land, taking into account the advantages of temperature growth (Dr. Stulina's research findings)
- Implementation of SCADA system
- Shift in regimes of flow regulation from priority hydropower production to combined hydropower and irrigation regime

Reduction of vegetation period for cotton

Рис.3.18. Сокращение периодов вегетации (хлопок ранний)

Comparison of crop yield dynamics in the Fergana Valley



Water saving is the key

- Crop selection
- Make most of available irrigated land
- Revision of hydro-module zoning and irrigation regimes
- Reduction of non-productive loses on the basis of programming
- Decrease areas of saline lands & reduce water for leaching
- Smart use of irrigation techniques, including drip irrigation
- Improve water accounting
- Use waste and mineralized waters
- Use crops requiring less water

Role of donors

- Address the countries' needs – orientation to specific practical solutions.
- Better coordination – overcome duplication and pursuing of their own interests.
- Greater focus on professional development, best practice sharing and scientific cooperation.