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SPECA project realization problems

(Strengthening Cooperation for Rational and Efficient use of Water and Energy Resources in Central Asia)

Geneva

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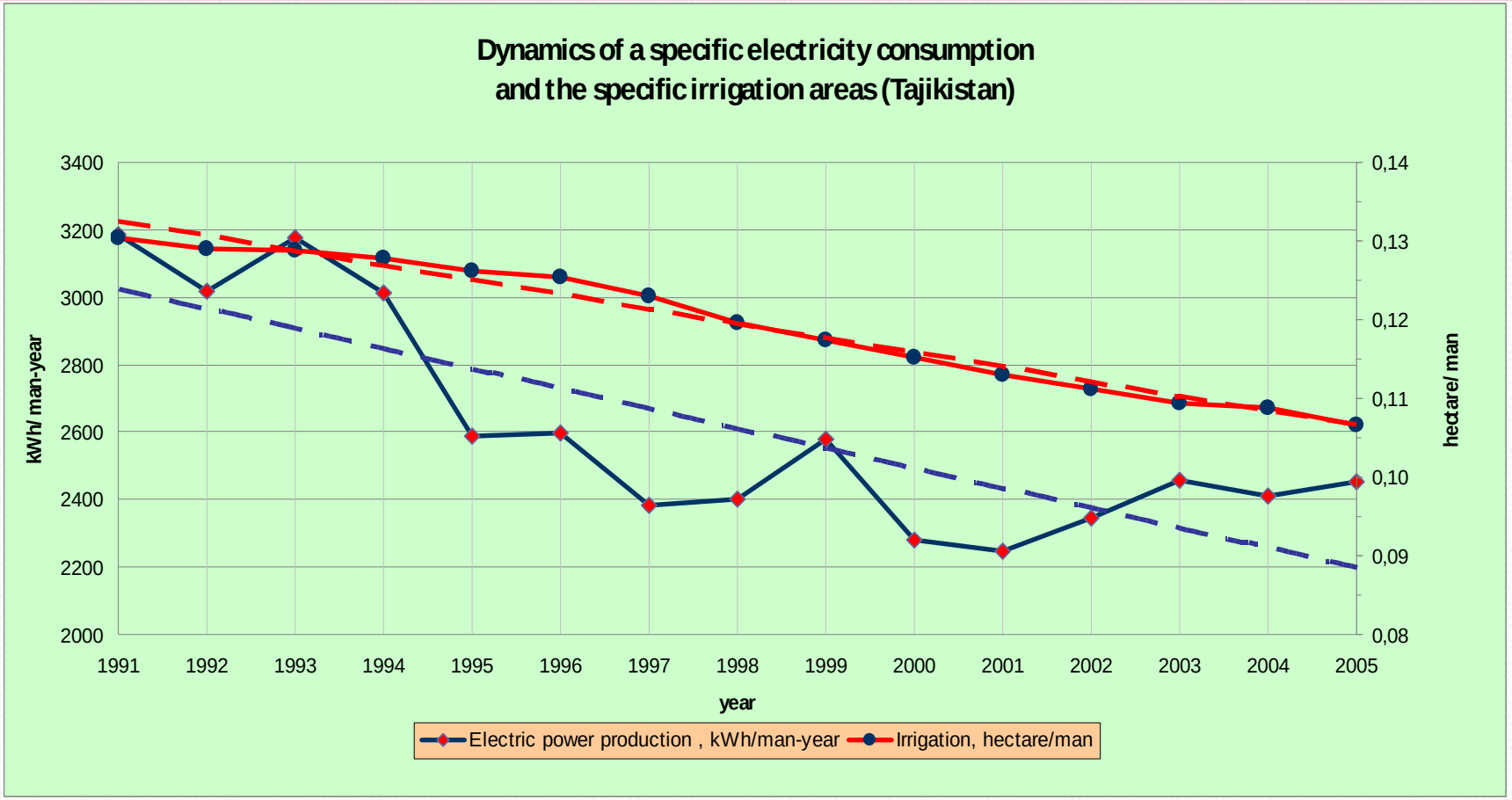
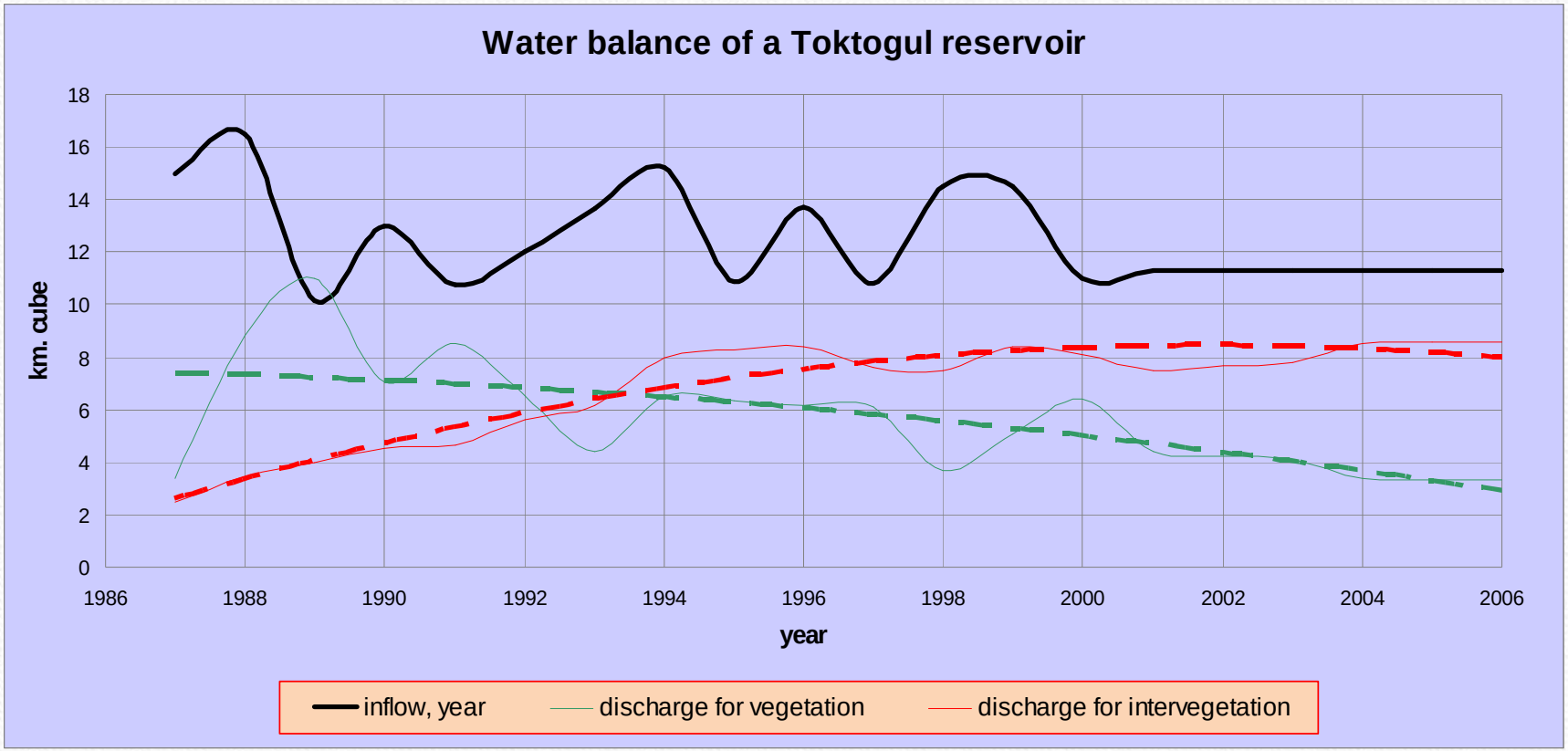
Problems related to Central Asia water-and-power resources using

- Conflict between irrigation and water-power engineering
- Water-divisions in CA countries
- Economic relations between water-users
- Joint management of transboundary water resources

Sustainable region development and resource base



Water-division between main competing consumers: irrigation and water-power engineering



Water-and-power legislation in CA

Standard approach

Legislation

Sublegislative acts

Branch norms

Production and economic activity

CA countries practice

Legislation

Production and economic activity

Strategic planning in CA countries

World experience	Method used in CA countries
• linear strategy • cyclic strategy • branched out strategy • adaptive strategy • increments strategy • casual search strategy	• Linear strategy – **Planning**

Power resources structure in CA countries

(annual stocks)

Central Asia as a whole	Kyrgyzstan, Tajikistan
• Coal: 48,0 % • Oil: 14,7 % • Gas: 27,7 % • Hydro resources: 9,6 %	• Coal: 8-15 % • Oil: 1-2 % • Gas : 0,3-0,4 % • Hydro resources : 30-90%

Power efficiency and energy saving in CA countries

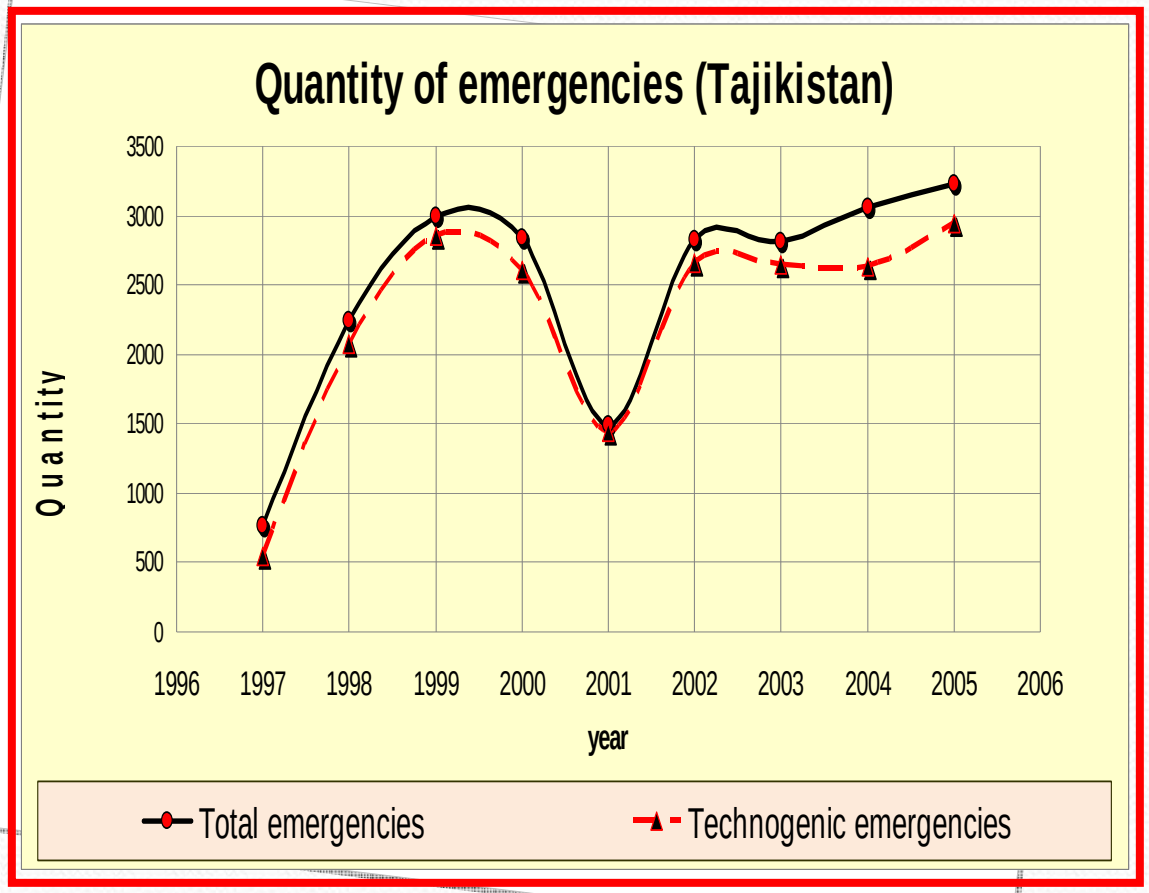
Kazakhstan, Turkmenistan, Uzbekistan	Kyrgyzstan, Tajikistan
1. Resources preservation for steady development 2. Greenhouse gases emissions decrease 3. Power efficiency: - power consumption decrease	1. Power efficiency: water-and-power engineering development ↓ **Construction of new large HPS**

Power safety

- **Economic** – proper access to resources, opportunity for their free export and import
- **Ecological** – prevention of excessive impact for environment
- **Technical** – durability and reliability of constructions

Nature disasters and technogenic failures

In CA country share of technogenic failures increases constantly and has made already 90-95 % of all emergency situations



Main conclusion

The basic reason for poor effective realization of SPECA program is absence of Feasibility Study (FS) between countries of the region.

General point of Feasibility Study:

- **Identification of the maim purpose, content and economic sense of such relations**
- **Functions sharing between water and economic objects**
- **Identification of mutual services of volume and price**

Proposed SPECA projects

- **FS agreement on Syr-Darya river (as the 1-st stage of water-power Consortium FS)**
  Participants - 4 CA countries
- **Complex development of renewed energy sources: solar, wind, biological, mini HPS (designing, equipment production, construction, using)**
  Participants - 5 CA countries
- **Sharing and protection of Zeravshan river water-and-power resources**
  Participants - 2 CA countries
- **Development of modeling laws, sublegislative acts and programs:**
  - **Hydraulic and engineering constructions safety**
  - **Power efficiency and power savings**
    Participants - 5 CA countries

Thanks for the attention