



IRRIGATION
STRATEGY
OF SERBIA

Supporting the development of an Irrigation strategy for Serbia

Brief 2: Governance

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1. INSTITUTIONS



Water responsibilities by administrative level

LEVEL	REPUBLIC OF SERBIA & CENTRAL SERBIA	AUTONOMOUS PROVINCE OF VOJVODINA
Government	Government of the Republic of Serbia	Government of the Autonomous Province of Vojvodina
Ministry	Ministry of Agriculture, Forestry and Water Management	Provincial Secretariat for Agriculture, Forestry and Water Management
Directorate	Republic Water Directorate	–
Water fund	Water Fund for Central Serbia	Water Fund for Vojvodina
Public water company	Srbijavode	Vode Vojvodine
Implementation: I&D, flood protection	Water Utility Companies	
Implementation: Water & sanitation	Public Communal Enterprises	



Other ministries with responsibilities for water

MINISTRY OF...	AREAS OF RESPONSIBILITY
Public Administration & Local Self-government	Municipalities & cities manage water supply & sanitation
Environmental Protection	Protection of water in the natural environment (SW & GW) Quality monitored by EPA
Health	Monitoring quality of drinking water
Construction, Transport & Infrastructure	Parent ministry of water utility companies Responsible for Sava & Danube navigation & commissions
Mining and Energy	Hydropower, thermal power cooling, protection of mines Preparing groundwater balances
Interior	Disaster preparedness & early warning, inc. floods
Finance	Approves all ministries' budgets Approves water tariffs



Other institutions involved with water

INSTITUTION	AREAS OF RESPONSIBILITY
Republic Hydrometeorological Institute	Meteorology, climatology agrometeorology & hydrology Water quantity only (quality under EPA)
“Jaroslav Černi” Institute for Water Management	Design & consultancy in many areas of water Designed many of Serbia’s I&D systems
University faculties (Belgrade, Novi Sad, Kragujevac, Niš)	Research, teaching & consultancy
Agricultural Advisory and Professional Services	Advising farmers on all aspects of agriculture, inc. irrigated agriculture, but no I&D department



2. LEGAL FRAMEWORK

Laws concerning water

- Law on Waters (basic legal act on water)
- Laws on drinking water and wastewater (2)
- Laws on government, administration & public finance (7)
- Laws on environmental protection (4)
- Other relevant laws (7).



3. CLIMATE CHANGE FRAMEWORK



Споразуми из области климатских променада

- **United Nations Framework Convention on Climate Change (UNFCCC)**
 - Serbia ratified in 2001 as “Non-annex party” (i.e. non-OECD, no binding commitments)
- **Kyoto Protocol and Doha Amendment**
 - Not binding on Serbia as a “Non-annex party”
- **Paris Agreement**
 - Serbia committed to 8.9% reduction in GHG emissions by 2030
- **Other agreements**
 - Bali Action Plan (2007); Copenhagen Accord (2009); Cancún agreements (2010); Durban Platform for Enhanced Action (2012).



Climate change reports by Serbia

- 1st National Communication under UNFCC (Aug 2014)
- 1st Biennial Update report under UNFCC (Feb 2016)
- 2nd National Communication under UNFCC (Aug 2017)
- Low Carbon Development Strategy (under adoption)
- 2nd Biennial Update report under UNFCC (under discussion)
- 3rd National Communication under UNFCC (under preparation).



4. INTEGRATED WATER RESOURCES MANAGEMENT

Harmonisation with EU Water Framework Directive

- **5 River Basin Districts defined (*Central Serbia & Vojvodina)**
 - Sava River Basin District*
 - Danube River Basin District*
 - Morava River Basin District
 - Ibar and Lepenac River Basin District
 - Beli Drim River Basin District
- **River Basin Management Plans under preparation.**





River Basin Districts



5. MANAGEMENT OF IRRIGATION & DRAINAGE

Management models found in Serbia

MODEL	SCOPE OR EXAMPLES
1. Public drainage systems, with or without irrigation	DTD, Mačva Large areas
2. Public irrigation systems	Mali Iđoš; Negotinska nizija; Resavska celina Small areas, few in number (3 known systems working)
3. Tap-water irrigation	12,700 farms each irrigating av. 1,000 m ² e.g. greenhouses, nurseries, gardens
4. User-managed irrigation systems	Various Water Users' Associations Small areas, few in number (possibly 10-12 working)
5. Individual irrigation	166,000 farms each irrigating av. 0.9 ha



6. INTERNATIONAL APPROACHES



Strategic management of irrigation & drainage

TERRITORIES	MODEL
Serbia; Croatia; RS	Public water companies (YU model)
FBiH	Water Agencies (Sava basin; Adriatic basin)
N. Macedonia	Water Economies (public enterprises)
Albania	Irrigation & Drainage Directorates (4)
Kosovo	National Public Company
Portugal	Regional Environmental Agencies
Spain	SEIASA (State Society for Agricultural Infrastructure)
Israel	Agricultural cooperatives



Local management of irrigation & drainage

1. Management by local government or government institution

- Strategic institution delivers to farm (e.g. Ukraine)
- Contracted organisations deliver to farm (e.g. DTD)
- Municipalities deliver to farm (e.g. Albania)

2. Management by farmers

- Water Users' Associations ("WUA"s, under dedicated law)
- Cooperatives (under general coop law).



Issues affecting best choice of system

- **Size:** Large systems need public company at the top
- **Complexity:** Complex systems need professional companies, whether public or private
- **Land fragmentation:** Areas with many small farms require WUAs or other ways to represent farmers
- **Legal framework:** Difficult to implement WUAs without dedicated law
- **Government financing:** If system cannot be self-funding, public bodies are more likely to get consistent budget support.



7. KEY ISSUES



KEY ISSUES

1. Split river basins
2. WUA law
3. Irrigation & drainage fees
4. Capacity for irrigation & drainage development
5. Capacity to manage local systems.



1. Split river basins

- **Responsibilities for Sava & Danube are split between Srbijavode & Vode Vojvodine**
 - Is this a problem in practice?
- **Proposed response:**
 - Keep current allocation of responsibilities but improve coordination across basins (what action is required?).



2. WUA Law

- **Serbia does not yet have a Law on Water Users' Associations**
 - Would give another option for managing local multi-user systems, as an alternative to municipalities (*Operational WUA*)
 - Could be used to improve communication between water users and Srbijavode or Vode Vojvodine (*Representative WUA*)
- **Propose response:**
 - Prepare a new law on Water Users' Associations, allowing them to manage water supply and collect fees (*Operational*).



3. Irrigation & drainage fees

- **At present, irrigation & drainage fees go to the central budget and MoF gives budget lines to Srbijavode & Vode Vojvodine**
 - No direct link between payment & service received
- **Alternative options include:**
 - Automatic or *de facto* pass-through of fees received
 - Farmers pay direct to Water Utility Companies, with mechanisms for user representation
 - Farmers form & pay fees to WUAs, which contract Water Utility Companies (requires a WUA law).



3. Irrigation & drainage fees (contd.)

- **Proposed response:**
 - What does the Working Group think?



4. Capacity for I&D development

- **At present, Water Directorate & Provincial Secretariat have limited capacity or experience with evaluating proposed irrigation & drainage projects**
 - Unsustainable schemes may pass the political “point of no return” before the issues become apparent
- **Proposed response:**
 - Establish a unit to monitor & evaluate I&D schemes, learning from experience and applying lessons learned to new schemes.



5. Capacity to manage local systems

- Investments are being prepared (e.g. *Negotinska nizija, Resavska celina*) without a clear management plan
- Most municipalities have no experience of managing irrigation, and new WUAs will start from scratch
- **Proposed response:**
 - Establish an “Irrigation Support Unit” to train and support municipalities & WUAs in managing irrigation, develop tools and help resolve disputes.



Thank you for your attention