

Volker Frobarth
GIZ

A Source of Peace - Transboundary Water Management in Central Asia



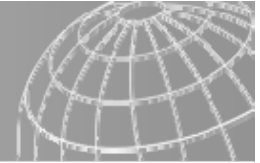
A programme
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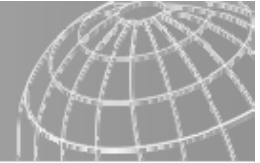
In cooperation
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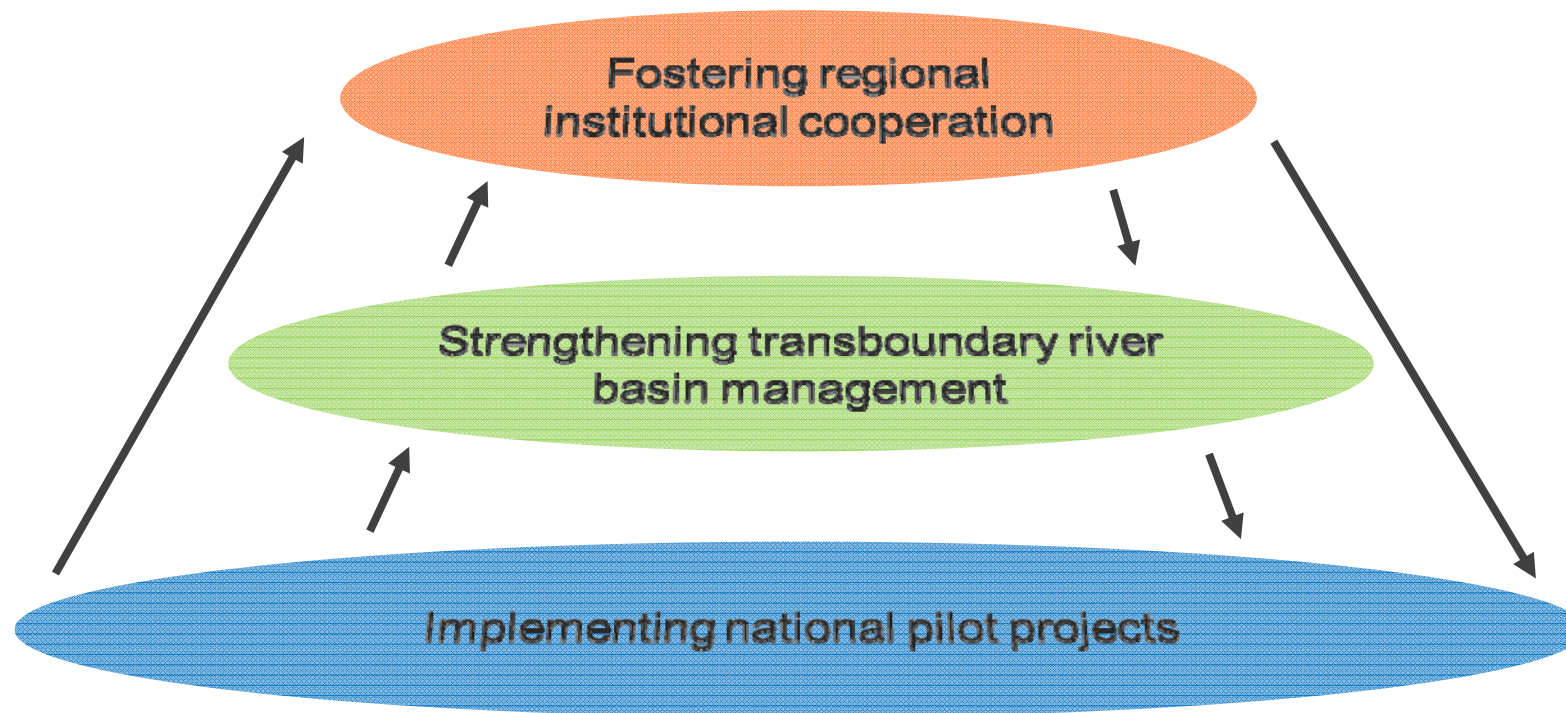
Background

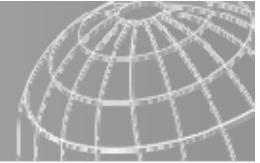
- EU-Strategy for Central Asia
- 'Berlin Process'
 - Supporting the CA states in water management
 - Water as a subject of intensified transboundary cooperation
- Programme objective:
 - The Central Asian states jointly develop practical approaches for sustainable regional water management and implement selected measures.



Programme strategy

- 3 components

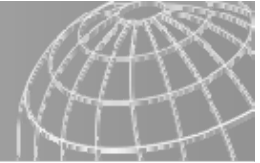




Background (1/2)

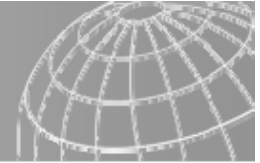
Modern information tools:

- Geographical information systems (GIS),
- Mobile communication technologies,
- Remote sensing tools (RS),
- Modeling
- Data bases



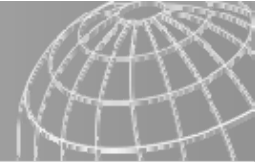
Background (2/2)

- In Central Asia: (national or sub-national level)
– top-down approach
- Since mid 1990's SIC ICWC, IFAS by support of EU
- Projects WARMAP and WARMIS
- Since 2001 with support of Swiss Development Cooperation (SDC)
- Central Asia Regional Water Information Base (CAREWIB)



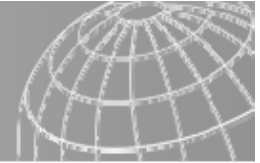
Challenges

- Increasing variability in water resources availability (Climate Change)
- Different sectors and water users
- Increase in numbers of water users, particularly within agricultural sector



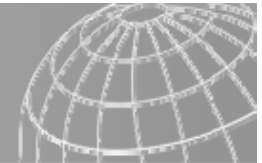
Principles

- Main partners: Water management organisations from CA countries
- bottom-up approach from WMO-operational level in provinces, districts, basin organisations
- Participatory approach: Systematising, inventory, filling, working with and storage of the DB and land use map jointly with partners from Water management organisations (→ ownership)

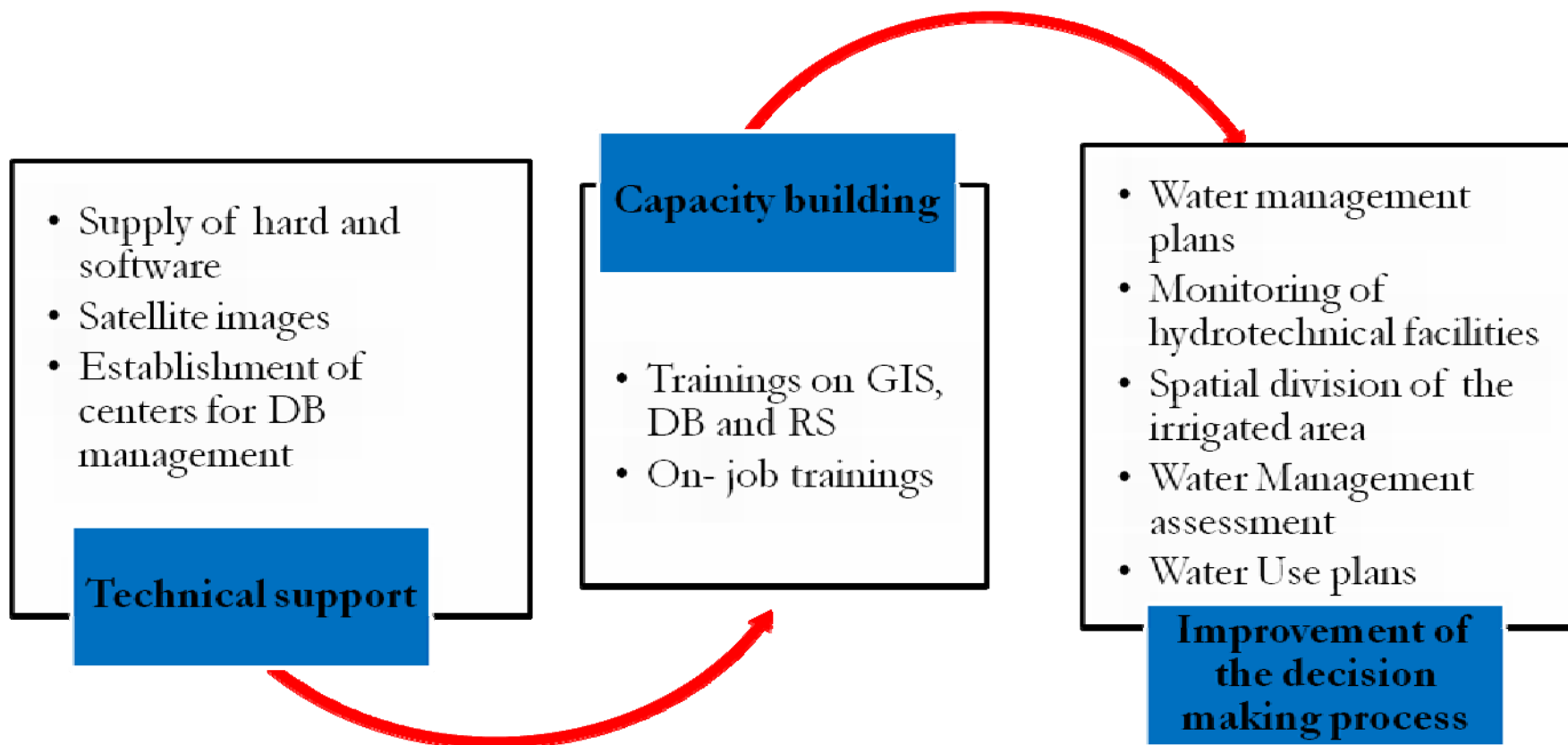


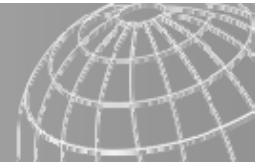
Data management for IWRM

- **Goal:** WMO on provincial and national levels are professionalised with regard to river basin planning in their respective area of responsibility
- **Intermediary objectives:** support WMOs in selected sites to establish Integrated Data Bases enabling partners to:
 - Systematise regular flow of data on water management
 - Improve regular reporting and reports
 - Conduct comprehensive analysis of water management (basin analysis)
 - Prepare and analyse different water management scenarios (basin plans)



Approach



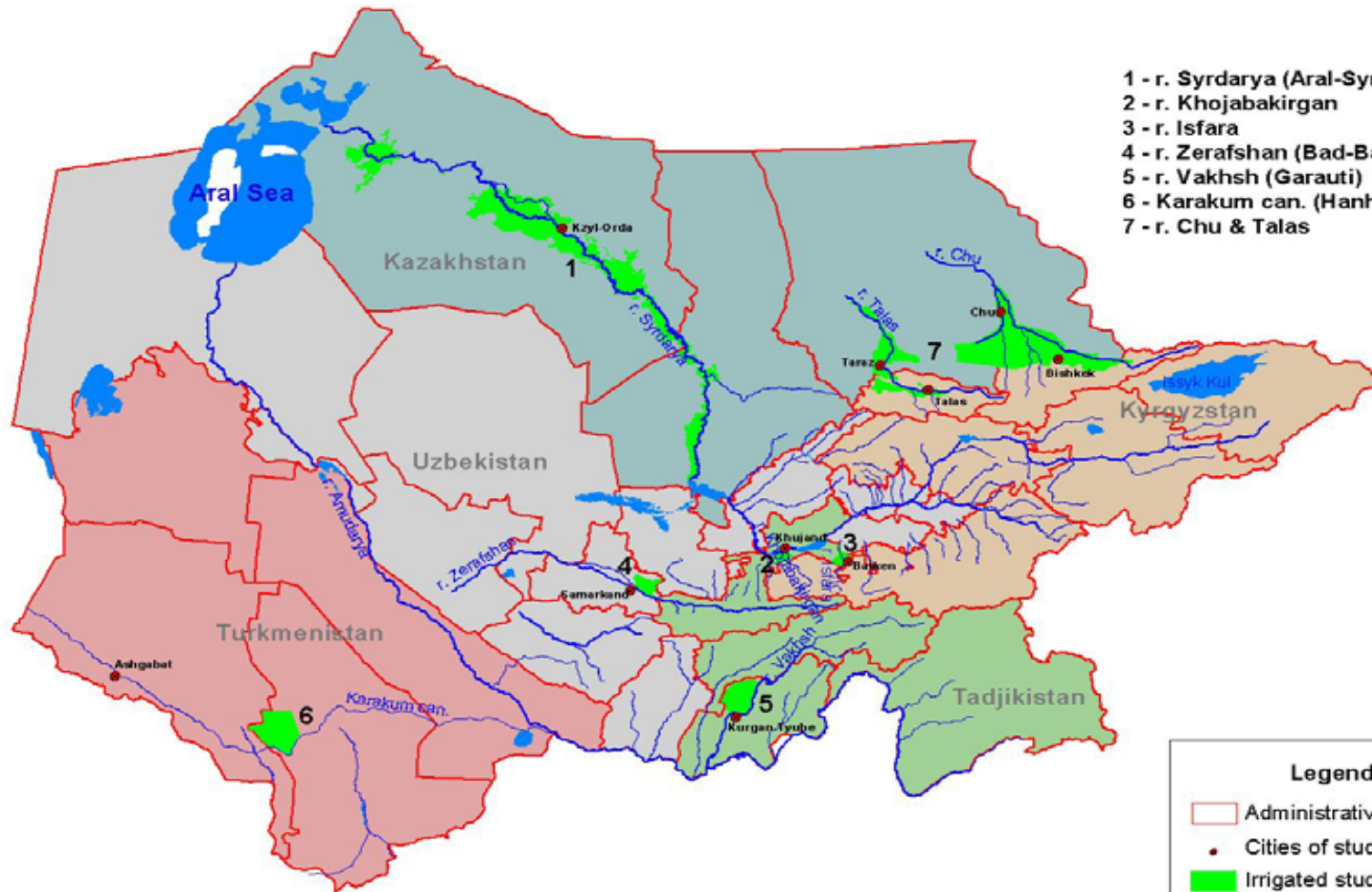


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Location of Transboundary Water Management Project's study areas



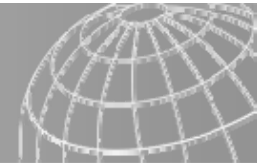
- 1 - r. Syrdarya (Aral-Syrdarya)
- 2 - r. Khojabakirgan
- 3 - r. Isfara
- 4 - r. Zerafshan (Bad-Bad)
- 5 - r. Vakhsh (Garauti)
- 6 - Karakum can. (Hanhowuz)
- 7 - r. Chu & Talas



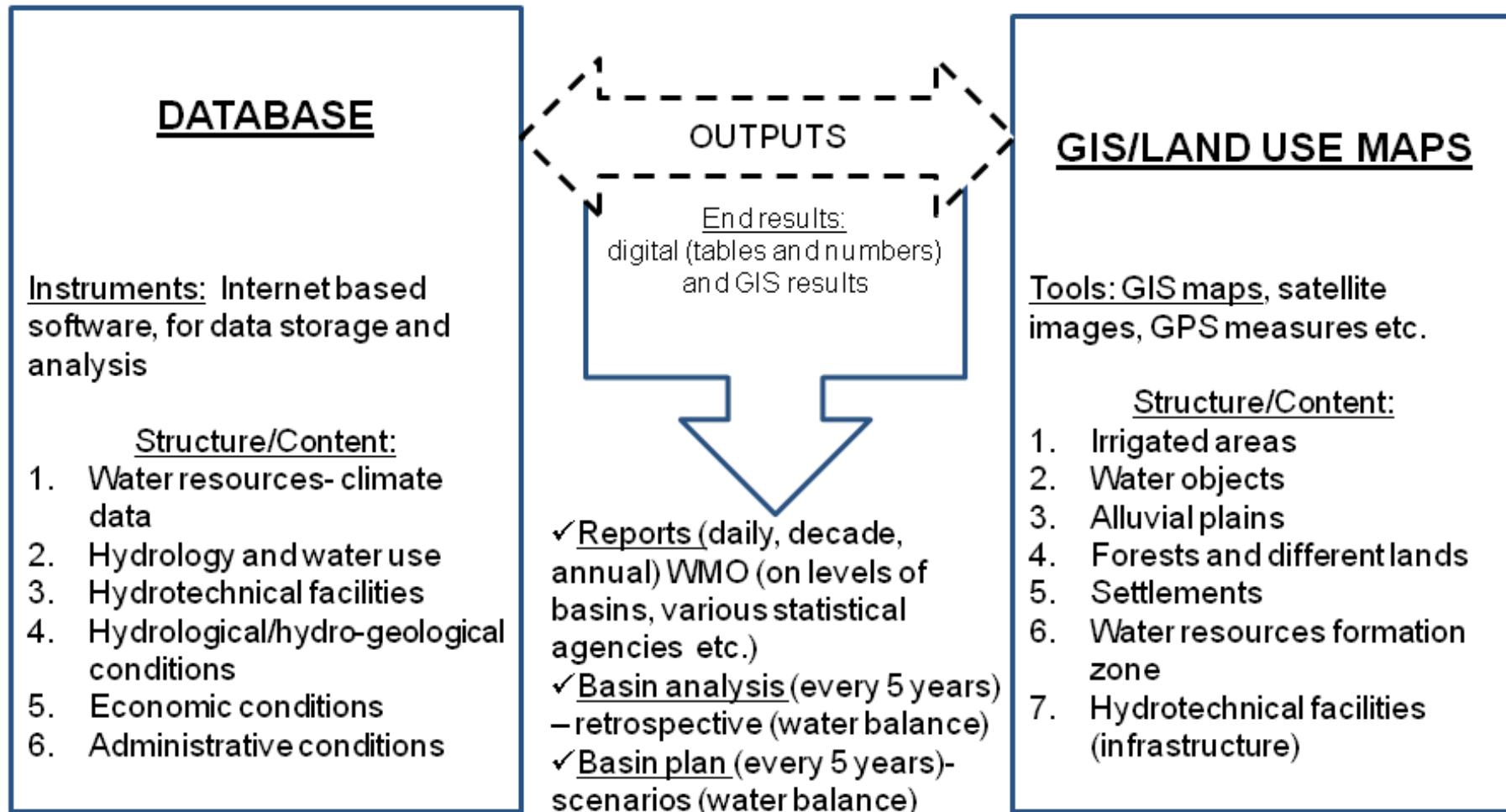
Legend

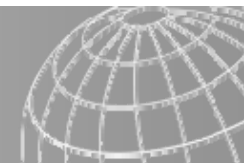
- Administrative boundaries
- Cities of study areas
- Irrigated study areas
- Lakes, reservoirs
- ~ Rivers





Main instruments

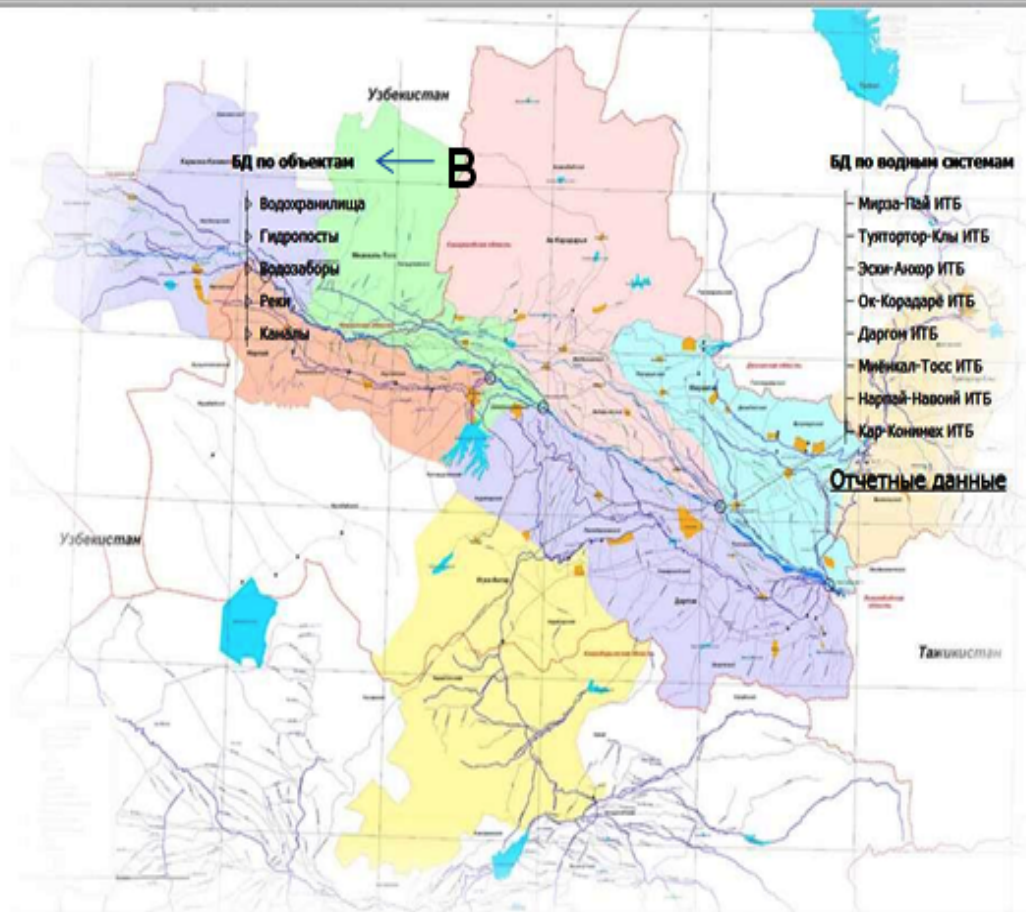




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WMC
Central Asia Data Base
ZARAFSHAN

БД по секторам ← A

- Водные ресурсы
- Земельный кадастр
- Экономические показатели
- Энергетика



БД по объектам ← B

- Водохранилища
- Гидропосты
- Водозаборы
- Реки
- Каналы

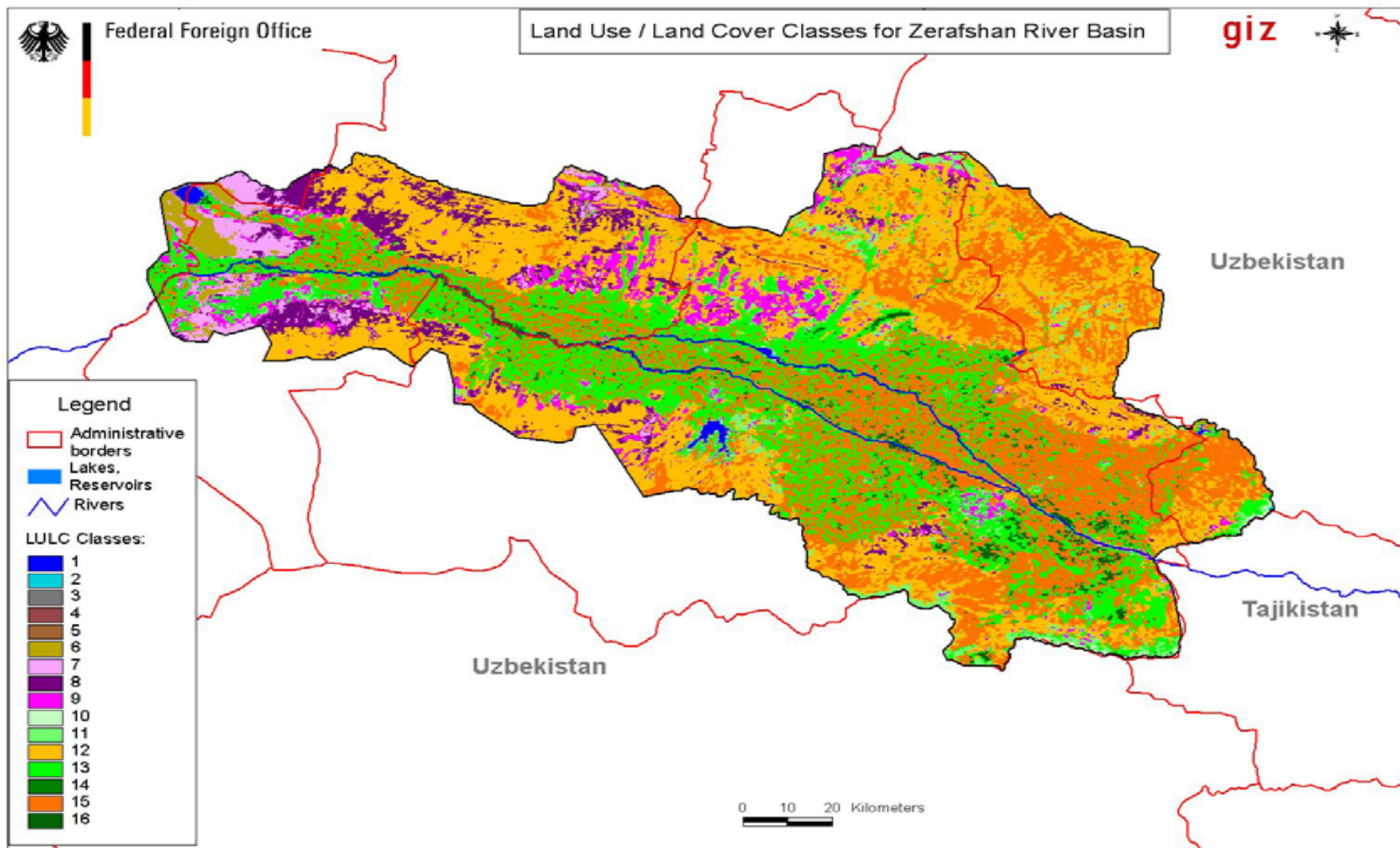
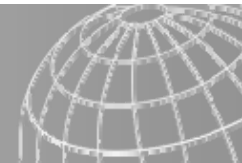
БД по водным системам ← C

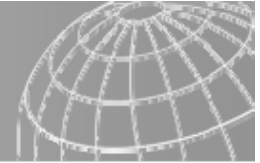
- Мира-Паё ИТБ
- Туптортор-Клы ИТБ
- Эски-Аюор ИТБ
- Ок-Карадарё ИТБ
- Даргон ИТБ
- Менкал-Тосс ИТБ
- Нарвай-Навой ИТБ
- Кар-Киникх ИТБ

Отчетные данные ← D

Здравствуйте, Курбанов Аюмаль.
Управление | Выйти

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E



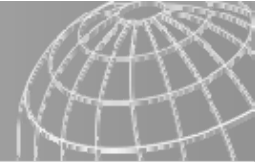


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- IWRM principles in Data Management stepwise approach:
 - It allows to build up sectoral data management systems first that makes easy coordination in later stages
 - Most of the data protocols and reporting system in CA are similar
- DM for IWRM is fitting into the regular reporting/data flow system of the WMOs

-

- IWRM principles in Data Management stepwise approach:
 - absence of efficient institutions for coordination of different sectors, uses and levels of water management- lack of data exchange
- Different capacities of WMO staff and experts- sustainability issue:
 - Additional support by external staff
 - Slow process

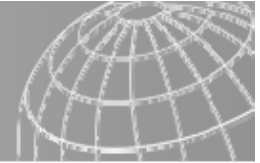


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- Growing awareness of usefulness of the IT technologies (cell phone, internet, computers)
- Data Management saves finances and time- traveling time, less printing, reporting is quicker- this recognized by partners
- National Reforms and donor community are supportive of Data Management tools

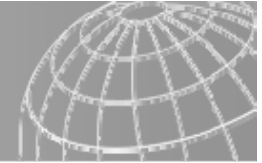
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- Business as usual approach of national agencies: paper backed reports are preferred
- Too many Data Projects- mainly for data collection- suspicion -too many projects popping up and uncoordinated
- Political background not supportive for data exchange
- Too many internal initiatives with no proper understanding of the concept



Next steps

- Creation of data base networks-linking up different units
- Developing of Analysis and Planning section of the Data Base
- Merging GIS and Data Base sections
- Adding more sectors and levels into Data Management
- Data quality control and data generation- new and reliable data



Thank You!



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