FFEM-EECCA project
Capacity building in data administration for assessing transboundary water resources in the EECCA

Project presentation
April./2011

Boris MINARIK
International Water Assessment Center
SLOVAKIA

Paul HAENER
International Office for Water
FRANCE
Table of content

- Characteristics of the project
- Focus on the diagnostic phase
- Example of final expected outputs
Characteristics of the FFEM-EECCA project
General context

- Efficient IWRM requires to have access to the information necessary to better guide water resource management decision making

- In each transboundary basin and in each country, the data necessary to elaborate the requested information is produced/managed by various organisations

- Information generally in a fragmented, incomplete dispersed and heterogeneous way, either at international or national level

- Each level of decision in water management (national, local, regional) and each actor need different kind of information for decision making

=> need efforts to rationalize and make this information readable, easily accessible and available in order to produce useful information
Title: “Capacity building in data administration for assessing transboundary water resources in the countries of Eastern Europe, the Caucasus and Central Asia (EECCA)”

Developed in collaboration with the secretariat of the “Convention on the Protection and Use of Transboundary Watercourses and International Lakes”/ UNECE

Location: 2 levels of implementation
- Transboundary basins
  - Dniester basin
  - Aral sea basins
- Regional (EECCA countries)

Global project management
- Steering: FFEM/ French Ministry of Ecology/ Secretariat of the water convention/ IWAC
- Mandated beneficiary: HIS/IWAC
- Prime contractor: IOWater

Planned duration: 18 months (Nov. 2010 to April 2012)
- Nov 2010 = signature of contracts
FFEM Project governance

- UNECE/ Water Convention Secretariat
- FFEM
- French Ministry of Ecology and Sustainable Dev.

IWAC

OIEau

Basin pilot area 1
Central Asia basins
ASBP3
EC-IFAS

Basin pilot area 2
Dniester basin
Dniester III project
Plenipotentiaries of transbound. agreement

Regional level
IWAC
FFEM project global objective

- **On the 2 transboundary pilot areas:**
  - to support development of capacities in data administration and data exchanges within the main national and regional concerned authorities to develop the production of information necessary to better guide water resource management decision making

- **At regional level**
  - to develop **regional tools** aiming to facilitate identification of the available information
  - to **disseminate the results** and experience feedbacks obtained in the 2 pilot areas, to the other transboundary river basin area and to the other EECCA countries in order to help them develop their own information systems.
Main activities of the project

- **Component 1: Simultaneous actions on the 2 transboundary areas**
  - Preliminary phase: validation of project global organisation
  - **Diagnostic of the situation**: picture and analysis of existing situation
    - Potential stakeholders inventory
    - On line catalogue of data sources
    - Data flow diagrams per topics
    - Analysis of data/information needs
  - Transboundary basin data management action plan proposal
  - Contribution to the action plan implementation
  - Dissemination of results

- **Component 2: Actions undertaken at regional level**
  - Creation of a regional catalogue of data sources hosted by IWAC
  - Production/management of communication tools (leaflet, website, news letters..)
  - Production of guidance to support transboundary data management
  - Participation to regional meetings
Focus on the diagnostic phase

(starting activities)
Analysis of the existing of the situation

- Legislative and institutional context
  - On line database of actors and project partners
  - Synthetic document

- Data source analysis
  - Objective: Inventory of
    - existing information systems
    - Existing data digital or paper datasets
  - Using the online data source catalogue tool
  - Training on metadata production/ capture into the catalogue
    - National technical Workshops
  - Possibility to install the catalogue at regional level, then latter at national level if needed

- Diagrams of data flow
  - Objective: Identification of main regular data flows between institutions
  - Done on priority topics at regional and national level
On line database of actors and project partners

- Example of list of actors in Ukraine

<table>
<thead>
<tr>
<th>Country code</th>
<th>Name of Organisation</th>
<th>Acronym</th>
<th>Tel.</th>
<th>Website</th>
<th>Code Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>UA</td>
<td>Ministry of Agriculture and Food of Ukraine</td>
<td>MoAF</td>
<td><a href="http://www.minagro.kiev.ua/?lng=E">http://www.minagro.kiev.ua/?lng=E</a></td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>UA</td>
<td>Ministry of emergencies of Ukraine</td>
<td>MoE</td>
<td>00 380442473211</td>
<td><a href="http://www.mns.gov.ua">www.mns.gov.ua</a></td>
<td>2000</td>
</tr>
<tr>
<td>UA</td>
<td>Ministry of Environment and Natural Resources of Ukraine</td>
<td>MENR</td>
<td>00 380 44 206 33 02</td>
<td><a href="http://www.menr.gov.ua">www.menr.gov.ua</a></td>
<td>2000</td>
</tr>
<tr>
<td>UA</td>
<td>State Agency of Ukraine Fisheries</td>
<td>SAoF</td>
<td></td>
<td></td>
<td>2000</td>
</tr>
</tbody>
</table>
Catalogue of data sources – web link

Example of output when looking for GIS Layer on the Dniester basin

Metadata indicates who manages what!
Data flow diagram/ example

Draft diagram presenting the main exchanges of ground water

DATA FLOW DIAGRAM/ DNIESTER BASIN - MOLDOVA LEVEL / Topic: Groundwater

EXECUTIVE POWER

INTERNATIONAL

Laws
National Government

MoE/ MAEP
MoE/ DEPP
MoE/ BNRB

AGeoM
Ehigrom
AFLM

AFLELE MOLDOVA

Apea project

NATIONAL

NEC

MoCRD
MoAFI
MoH

NCB
NS/FCE
ALRCA

INSEO CAD

MoCPE

MAIN LEVEL

Basin direction

DISTRICT LEVEL

District Authority
DeE (32)

DoG (12)

LOCAL LEVEL

Communal Authority

Universities and others institutes

Private companies

Water/sanitation companies

User/ Polluter

LEGEND: Digital data exchange
Paper data exchange

Data producer
Data management
Final data user

IWMDC

P. Huet/ W2Water

April 2011
Analysis of needs *(to be launched in June 2011)*

- Identification of needs to facilitate the production of information necessary for activities and decision making
  - Target: the main regional, national and local water related authorities
    - With first priority to the one participating to the analyse of existing situation
  - Identification/analysis of needs in:
    - Data (what complementary data?)
    - Service (what service? Ex map production, indicator production …)
    - Tools (which software?)
    - Equipment (which hardware?)
    - Training (which training related to data processing? Ex database, GIS, web services development, modelling ….)

- Methodology
  - Survey (on line survey + targeted survey)
  - Expert analysis
Examples of expected final outputs of the project
Organising data exchanges (example)

Initial data provider

Prod 1

Prod 2

Prod n

Metadata catalogue

DB

DB

DB

Aggregation/exploitation e.g. national, basin, administrative unit level

Manager 1

Manager n

National Reference framework
Examples of final outputs at national and basin level

- Partner need analysis and agreements on action plan related to data management

- On line catalogue of data sources (national and basin level)

- Partners information system reinforced to develop new data exchange scenarios

- New tools to facilitate access to information for decision making
Examples of potential services to reinforce the partner information systems and their interoperability

- Coherent database development (data models, data dictionaries)

- Harmonized transboundary GIS

- Maps series production answering to the needs

- Specific processing such as satellite images and digital elevation model processing (3D)

- On line mapping tools and Web services
Example of expected outputs at regional level

- **Regional Web portal**
- **Regional catalogue of data sources**
- **Handbooks/guidances**
- **Events for experience exchange**
Conclusions

- A starting project to reinforce cooperation between institutions in water data management
- Working first at national level, considering the important role of the data producers
- Supporting the development of collaborative tools and methods of national and regional interest
  - Catalogue of data sources and data flow analysis
  - Analysis of needs
  - Actions plans definition
- Supporting the development of priority actions
Thank you for your attention

For more information

http://www.aquacoope.org/ffem_eecca