



NEPAD African Networks of Centers of Excellence

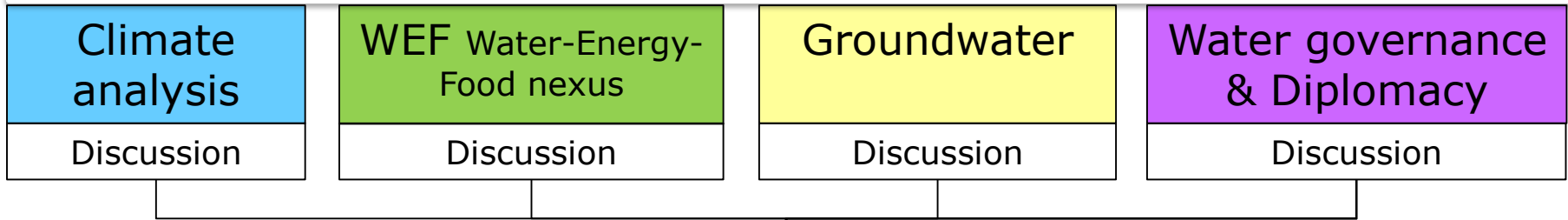
Conclusions and way forward

ACE WATER phase II

Joint Research Centre, Italy

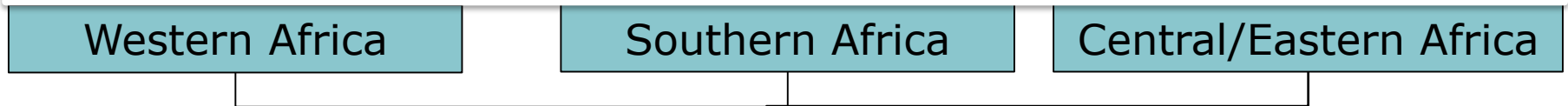
FROM THEMATIC TO REGIONAL PERSPECTIVE

Thematic sessions



WCC - Water Crisis and Cooperation dynamic Atlas

Regional sessions



Plenary session
Screening and selection of candidate flag case studies
Way forward and tentative work program

CLIMATE ISSUES

- Data collection, including quality, sharing and processing
- Climatic data statistical analysis
- Scenario based simulation assessment on climate impacts: drought (water availability) and flooding (specific issues with flash flooding)

WEF ISSUES

- increasing water demand (population growth, agriculture),
- Water quantity, allocation to competing uses and equity principle, water divergences (i.e. inter-basins transfer or even countries transfer), irrigation management practices, sea water desalination, dams
- Impact of human settlements (i.e. sewage – and radioactive - disposal, poor water treatment facilities -> sanitation issues), agriculture (fertilizers, nutrients), industries (mining) on water quality
- Energy, hydro-power production (and multi-purpose)
- Land and soils degradation (loss of fertility, erosion), sediment transport, reservoir sedimentation
- Scenario based analysis on different water allocation, use and consume

GROUNDWATER

- Challenges of aquifers systems characterization (geometry, hydrogeological properties)
- Recharge/storage/discharge assessment (even more critical in fractured bedrock)
- Impact on groundwater quality
- Guideline for monitoring assessment
- Artificial recharge (see also to positive impact of flooding on recharge before dry season)
- Specific issues, as knowledge of drilling technique, monitoring strategies

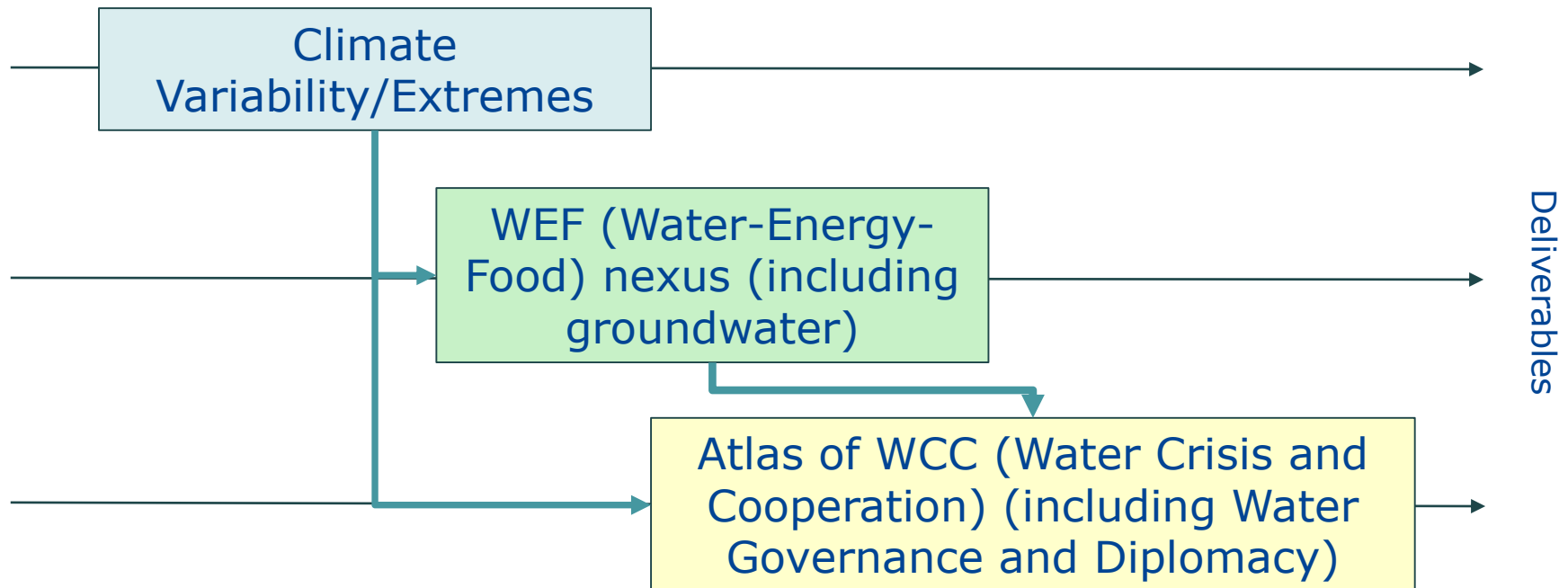
WATER GOVERNANCE & DIPLOMACY

- Different tools and models on participatory approaches on water governance
- Institutional networking on water governance, including management of data repositories
- Interactive session, by means of focus groups and plenary, around three main topics/questions:
 1. Identify barriers and opportunities offered by different water governance practices in Africa
 2. Gather information on participatory experiences in the African context
 3. Evaluating how the methodologies and tools presented can be used in the African context

WORKSHOP OUTCOMES

1. Deep share of scientific competences, interest and perspectives of CoEs network
2. Institutional networking towards the establishment of an effective sharing platform
3. Building the Atlas WCC (or other?) at regional basis exercise:
 - Southern Africa: Zambezi
 - Western Africa: Senegal and Niger
 - Central/Eastern Africa (candidate): Congo and Nile
4. The way of participating:
 - Being active in the process/analysis
 - Providing knowledge/Information/Data
 - Interest in using the results for further analysis
 - Interest in participating into the interpretation of the results
 - Interest in Capacity Building
5. Sharing on H2020 around topics and applicability issues

CLIMATE, WEF AND WCC ATLAS INTERPLAY



THE WAY FORWARD

1. Characterization of case studies:
 - regional/local scale data, including ground based;
 - available tools, models and documentation;
 - key issues, priorities, potential sources of conflict and/or cooperation
2. Based on selected flag case studies, agreement on participants role/contributions, depending upon specific 'local' knowledge, scientific interests and applicability of (general) lessons-learned to other basins of interest.
3. Preparation and circulation through partners of draft short state-of-the-art reports, to be used as key reference documents to build upon.

CASE STUDY CHARACTERIZATION

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CASE STUDIES CHARACTERIZATION		
WATER BASIN NAME BRIEF DESCRIPTION		
GEOGRAPHIC SCALE/SCOPE	Degree of relevance	Comments and/or integrative information
	Local	
KEY ISSUES		
1 Climate Change/Variability and Extremes		
2. Water quantity		
2.1 Water Scarcity/drought		
2.2 Water excess/flooding		
3. Water Quality		
3.1 Areal sources of contamination (i.e. pesticides/nutrients in agriculture)		

TENTATIVE PROGRAM

Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17
Extended case studies documentation											
	Agreement on selection of flag case studies										
		Available data and by-products sharing									
		Conceptual framework analysis and development									
				Climate Variability/Extremes analysis							
				African WEF (Water-Energy-Food) nexus (including groundwater)							
				Atlas WCC - Methodological analysis design and development (including Water Governance&Diplomacy)							
				Operational design	First tests on geovisualization capabilities		System check and appraisal			Beta version release	



THANK YOU !!!

3 November 2016

Joint
Research
Centre