



2nd EDO User Meeting

Guidelines for the break-out groups

Ispira, 11-12 October 2018

Disaster Risk Management Unit
Directorate for Space, Security and Migration
Joint Research Centre, EC



1



OBJECTIVE OF THE BREAK-OUT GROUP DISCUSSIONS

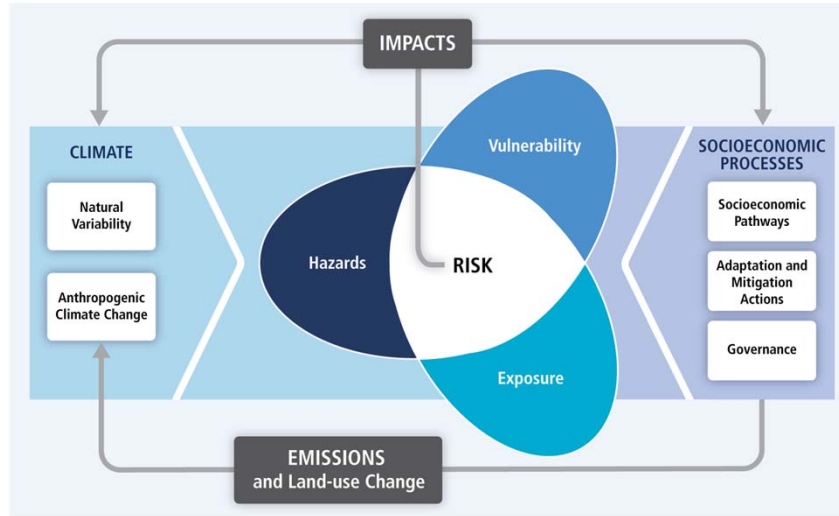
1. Discuss the drought risk concept presented and if other alternative concepts are needed (Maximum 30 minutes)
2. Discuss on the usefulness of a Dynamic Drought Risk (e.g. every 10-days, only the hazard component is dynamic) and of a Static Drought Risk (e.g. yearly) (Maximum 30 Minutes)
3. Considering the drought risk concept, propose the information (indices, indicators, variables) needed to define each of the components (Hazard, Exposure, Vulnerability) in each of the sectors (You can dedicate more time to this)
4. Discuss the feasibility of implementing a Drought Risk Indicator for each of the sectors (Agriculture has been already implemented in GDO but there is room for improvement) (Maximum 30 minutes if there is time left)

22 October 2018



2

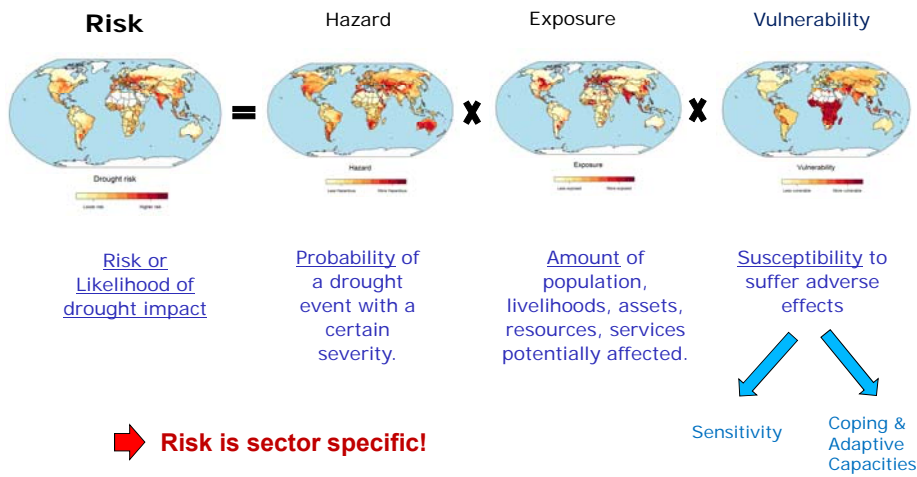
Methodological framework




Intergovernmental Panel on Climate Change, Fifth Assessment Report



Drought Risk Concept

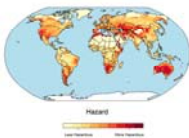




European Commission

Which indices can be proposed for the different sectors?


Hazard



Probability of a drought event with a certain severity.


Agriculture	Public water Supply	Energy Production	Water transport
<ul style="list-style-type: none"> 1. Soil Moisture 2. fAPAR 3. Evapotranspiration 4. Phenology 5. Crop specific info ... 	<ul style="list-style-type: none"> 1. WEI + (water exploitation index plus - compares water use against renewable water resources) 2. Sources (wells, reservoirs) 3. Water districts (where the water come from for each main city) ... 	<ul style="list-style-type: none"> 1. Low-Flow 2. Temperature 3. Other sources (lakes, reservoirs, etc..) ... 	<ul style="list-style-type: none"> 1. Low-Flow 2. Water levels ...

22 October 2018



Joint Research Centre

5

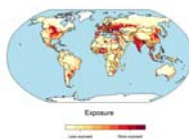


European Commission

Which exposure layers can be proposed for the different sectors?

Exposure


X



Amount of population, livelihoods, assets, resources, services potentially affected.

Agriculture	Public water Supply	Energy Production	Water transport
<ul style="list-style-type: none"> 1. CORINE Land Cover 2. Map of agric land 3. Irrigated vs. rainfed 	<ul style="list-style-type: none"> 1. Population 2. Water demand (seasonality) 	<ul style="list-style-type: none"> 1. Map of Energy plants 2. Type of system water dependency (hydro, thermos vs others) 3. Local dependency (energy transfer) from energy generation 	<ul style="list-style-type: none"> 1. Navigable River Network

22 October 2018



Joint Research Centre

6

European Commission

Which vulnerability indices can be proposed for the different sectors?

Vulnerability



[Susceptibility to suffer adverse effects](#)

22 October 2018

Agriculture	Public water Supply	Energy Production	Water transport
<ul style="list-style-type: none"> • Illiteracy rate (%) • Life expectancy at birth (years) • Population below national poverty line (%) • GDP per capita • Refugee population (% total pop.) • Rural population (% of total population) • Dependency on agriculture for livelihood (%) • Agriculture (% of GDP) • Irrigated land (% total arable)Energy consumption per capita • Rail & road density (km/km2) per 10,000 • National investment in disaster prevention & preparedness • Government effectiveness • Early Warning Systems • Drought Management Plan • Distance from the coast (use of sea water) • 	<ul style="list-style-type: none"> • Illiteracy rate (%) • Life expectancy at birth (years) • Population below national poverty line (%) • GDP per capita • Refugee population (% total pop.) • Energy consumption per capita • Rail & road density (km/km2) per 10,000 • Population without access to clean water • System size (small system are more vulnerable) • National investment in disaster prevention & preparedness (%) • Government effectiveness • Early Warning Systems • Drought Management Plan • Distance from the coast (use of sea water) • 	<ul style="list-style-type: none"> • Illiteracy rate (%) • Life expectancy at birth (years) • Population below national poverty line (%) • GDP per capita • Energy consumption per capita • Rail & road density (km/km2) per 10,000 • National investment in disaster prevention & preparedness • Government effectiveness • Early Warning Systems • Drought Management Plan • Distance from the coast (use of sea water) • 	<ul style="list-style-type: none"> • Illiteracy rate (%) • Life expectancy at birth (years) • Population below national poverty line (%) • GDP per capita • National investment in disaster prevention & preparedness • Government effectiveness • Early Warning Systems • Drought Management Plan • Flow density • Boat tracking? • Goods value •

European Commission

Breakout Groups Participant Distribution

Agriculture	Public Water Supply	Energy Production & Transport
Gerard van der Schrier (Moderator)	Christel Prudhomme (Moderator)	Veit Blauhut (Moderator)
Michael Hagenlocher	Jamie Hannaford	Claudia Vezzani
Silas Michaelidis	Katarzyna Dabrowska-Zielinska	Vanda Cabrinha Pires
Olga Penalba	Monica Lakatos	Jaime Fraile
Zornitsa Popova	Paulo Barbosa	Elke Rustemeier
Niall McCormick	Jürgen Vogt	Alfred de Jager
Gustavo Naumann	Carmelo Cammalleri	Diego Magni
Marco Mazzeschi	Jonathan Spinoni (Rapporteur)	Christophe Lavaysse
Carolina Arias Muñoz (Rapporteur)		Dario Masante (Rapporteur)

22 October 2018

8