



ORGANISATION FOR ECONOMIC  
CO-OPERATION AND DEVELOPMENT

SAHEL AND WEST AFRICA CLUB

## Security implications of climate change in the Sahel region (SICCS)

### Technical workshop – Summary Record

Organised by the OECD Sahel and West Africa Club Secretariat

Dakar (Senegal), 17 November 2009 – Novotel Hotel

*Financed by*







## **The workshop**

This workshop brought together 25 participants from international and regional organisations, technical agencies, research centres and governments.<sup>1</sup> The workshop was introduced by H.E. Deputy Ambassador of the UK to Senegal Susie Townend followed by an introduction of the project's origin, objectives and partners.

The morning session was reserved for presentations by the project team on the thematic analyses carried-out (climate, mapping, socio-economic trends, security events and case studies, econometric modelling). The objective was to present the methodology applied for the analyses, the results obtained and initial conclusions and proposals for follow-up activities. Each presentation was followed by questions and discussions.

During the afternoon session a presentation of identified climate hotspots and security case studies proposed possible tools of identifying risk/vulnerability parameters. The remainder of the afternoon was reserved for open discussions around the presentations, the proposed next steps in terms of risk/vulnerability mapping, project objectives and policy implications<sup>2</sup>.

## **Expected results**

- Discuss, adjust if necessary and approve methodology
- Discuss, complete and supplement vulnerability maps
- Define a joint work plan for scenario building (January 2010 – March 2010)
- Define policy messages and activities to be put forward

## **Key points and messages**

This section summarises main comments on methodology, presented outputs, initial conclusions and policy implications. It focuses on the points that are of particular relevance for this project and concerning the thematic analyses presented. The order does not reflect any prioritisation.

### **Thematic analyses: Climate**

- Need to develop regional climate model which include the key regional processes (aerosol-rainfall interaction and land-use feedback are among the most important)
- Problem of weak network of observation stations, particularly concerning early warning and high resolution analyses
- Improve seasonal forecasting techniques and dissemination in order to promote adaptation to climate variability

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<sup>1</sup> See annex 2 for complete list of participants.

<sup>2</sup> See annex 1 for workshop programme.



- Support the maintenance and the innovation of the observational network which constitutes the fundamental starting point of any climatological analysis
- Include other parameters such as the start and the length of the rainy season into future analysis

#### **Security event analysis:**

- The Solana based classification of security risks of climate change does not provide a useful tool for identifying, analysing and classifying climate change implications in the Sahel; based on the analyses carried out a new grid should be produced focusing on the Sahel and main confirmed features and parameters
- Importance of analysing crises exits, to understand processes and inform prevention policies
- Analyse episodes that witnessed similar features and dynamics but did not lead to conflict
- Importance of identifying causal links where possible

#### **Vulnerability / risk mapping:**

- It is rather a mapping of risks/threats since vulnerabilities are influenced by adaptive capacity, which is a function of the type of risk/threat
- Propose thematic maps (by type of risk/threat)
- “hotspot” mapping has to take into account that conflicts can emerge in other areas than where the actual cause has been observed
- Parameters/variables should be distinguished between static and dynamic, this is important for analysing adaptive capacities (e.g. borders )

#### **Case studies:**

- Best option to identify parameters that have had an influence in security processes and are a similar feature of different events – Need to multiply case studies to be able to identify key and common features (i.e. Agro-pastoral conflicts)
- Case studies / hotspots to focus on strongest climate change impacts, choose thematic entry by risk/threat
- Include analysis of conflict exit

#### **Policy implications:**

- Policy recommendations should focus on conflict prevention and early warning
- Involve national offices of prospective studies
- Propose tools and activities that improve conflict management capacities of local stakeholders
- Raise awareness of need to develop more regional models and data collection stations

#### **Scenarios:**

- Uncertainty of climate projections is key variable
- Large uncertainty of climate projections favours focusing on thematic scenarios (e.g. food security, livelihoods, water resources, etc.) and features with strongest signal



## Proposals for next steps and follow-up

Based on the discussion and comments summarised above a list of next steps in terms of analytical and policy activities is presented. These products and activities have been identified taking into account the scope and objectives of the project.

1. **Risk/threat grid:** The Solana based typology does not provide a useful tool for identifying and classifying climate change implications in the Sahel. A new grid of current and future threats of climate change in the Sahel will be developed. This classification will include main risks as identified by the analyses (already carried-out and following case studies) and take into account the link between adaptive capacities and vulnerabilities.
2. **Case studies:** Further case studies will be conducted to identify key parameters of climate change impacts on security. It has been agreed that a thematic entry for case studies is to be chosen. This will allow identifying similarities and fine-tuning the mapping of hotspots. Also, an analysis of conflict exits and conflict prevention and alleviating mechanisms is to be included in the case studies. An analysis of these processes will help identify certain variables of adaptive capacity (e.g. endogenous/traditional conflict settlement mechanisms). In addition, it will also highlight potential prevention mechanisms. Concerning agro-pastoral conflicts the team will expand the analysis using the CEWARN database of pastoral cross-border conflicts.
3. **Risk/threat mapping:** The mapping of hotspots will be complemented by integrating additional variables (distance from border, distance from water resources, etc.). Given the complexity of mapping combined vulnerability (see above for interdependence of adaptive capacity and vulnerability based on type of threat), thematic threat/risk maps are to be produced. The thematic entries already proposed include: agro-pastoral issues, access to water, climate exposure, food security, livelihoods. Attention should also be paid to geographical contagion of security events.
4. **Policy implications:** It has been stressed that conflict prevention is a key policy objective, therefore policy implications should also focus on possible prevention and mitigation activities. Further, this requires including non-climate variables that might influence security processes. Capacity building of local stakeholders as well as institutions has also been identified as important.
5. **Scenarios:** The large uncertainty in climate projections for the Sahel favours a thematic entry for work on scenarios. Possible entries identified include agro-pastoral issues, access to water, climate exposure, food security, livelihoods. It has also been stressed to look at potential large “game-changing” impacts on the area (e.g. large scale acquisition of agricultural land, mineral resource production, etc.).



## Annex 1: Programme

### 09h00 – 10h45 Session 1: Presentation of thematic analyses: methodology, data, results

- Overall methodological framework of project and expected outcomes (Philipp Heinrigs, SWAC/OCDE)
- Snapshot: detailed spatial description of the region today, localising and highlighting current features and stakes (Emmanuel Balloffet, BRGM)
- Climate Science: observed past trends and main characteristics (Carlo Buontempo, Hadley Centre)
- Study of past security events 1969-2007 (Emmanuel Salliot, consultant SWAC/OCDE)
- Econometric analysis (Sebastien Hissler, consultant SWAC/OECD)
- Interpretation of first results (Philipp Heinrigs)

#### Questions and answer

### 11h00 – 12h30 Session 2: Vulnerability maps:

The vulnerability maps aim to characterise and localise zones of increased vulnerability towards climate variability and change. They are based on the thematic analyses carried out in the areas of environment, socio-economics, climate, security and econometric modelling. These maps will be accompanied by statistical information (tables, graphs, etc.), geographic and qualitative descriptions (past security events, main trends, etc.).

### 12h30 – 14h00 Lunch break

### 14h00 – 17h00 Session 3: Feedback: definitions, outputs, interpretation

This is the main session of the workshop. It is the opportunity for partners from various institutions and agencies to provide their feedback on the outputs, interpretation of outputs, possible missing elements, etc. Climate change impacts in the Sahel are multifaceted and have to be analysed through a multidimensional approach. The aim is that participants' expertise in different domains will a) underscore the implied links of climate and non-climate variables as presented in the vulnerability maps and b) suggest further cross-analyses of various variables. Comments will be integrated into the presentation of the project at COP15. (Side event 14 December, EU Pavilion 18h00 -20h00)

### 17h00 – 18h00 Session 4: Discussion on next steps: Scenarios, collaboration and policy actions

Partners are invited to propose issues and areas to be looked at in more detail during the scenario building phase of the project (January 2010 – March 2010). It is expected that partners will define specific analyses that can be provided towards the development of scenarios. Based on individual availabilities a joint work plan will be agreed upon.

In addition, a discussion on policy messages, political lobbying and policy actions and should allow to create synergies and provide opportunities for partner institutions to promote their work on climate change issues.

### 18h30 Cocktail at the invitation of the British Embassy

Reception hosted by H.E. Deputy Ambassador of the UK to Senegal



## Annex 2: List of Participants

List of Participants 17 November 2009			
	Name	First Name	Function / Institution
1	Badolo	Mathieu	IAVS/Ouagadoudou
2	Balloffet	Emmanuel	Consultant Sahel and West Africa Club Secretariat / OECD
3	Beaulieu	Nathalie	International Development Research Centre IDRC/CRDI West Africa Regional Centre
4	Bergers	Jean-Michel	French Embassy Dakar
5	Boanuh	Johnson	Economic Community of West African States (ECOWAS)
6	Boulenger	Xavier	African Development Bank, Senegal
7	Buontempo	Carlo	Hadley Centre UK Meteorological Office
8	David	Patrick	FAO Dakar
9	Eilerts	Gary	USAID / Famine Early Warning System Network (FEWS NET)
10	Fernandez	José Luis	FAO Dakar
11	Heinrigs	Philipp	Sahel West Africa Club Secretariat / OECD
12	Hissler	Sebastien	Consultant Sahel and West Africa Club Secretariat / OECD
13	Kadi	Mohamed	African Centre of Meteorological Application for Development / ACMAD
14	Leclerc	Gregoire	Agricultural Research Centre for International Development (CIRAD) Dakar
15	Lo	Henri	International Development Research Centre (IDRC/CRDI)
16	Marzo	Frederica	OECD Development Centre
17	MeLlucci	Chiara	FAO Dakar
18	Mersha	Bizusew	IGAD Conflict Early Warning Mechanism (CEWARN)
19	Ouma	Gilbert	IGAD Climate Prediction and Application Centre (ICPAC)
20	Ralph	Valerie	United States Department of Agriculture
21	Rowland	Jim	United States Geological Survey / FEWS NET
22	Salliot	Emmanuel	Consultant Sahel and West Africa Club Secretariat / OECD
23	Thiam	Abdoulaye	FAO Dakar
24	Townend	Susie	UK Embassy Dakar
25	Vincent	David	FAO Dakar