



**“From islands of innovation to a sea of change: how
can we sustainably build resilient livelihoods and food
security in the Sahel at scale”**

Opening

- Introduction to the session. Alain Vidal.
- Climatic and environmental change scenarios across the Sahel. Chris Baker.

Case studies

- Community-based innovations for food security in the Sahel. John van der Walle, CARE.
- Decision support for rural communities in the Inner Niger Delta: the OPIDIN tool. Frank van Weert Wetlands International.
- BioRights: an innovative financial tool for increasing community resilience. Ibrahima Sadio Fofana, Wetlands International.
- Farming for the future, communication efforts to advance family farming in Mali. Francois Laureys, ICT4D information and communication technologies for development.

“From islands of innovation to a sea of change: how can we sustainably build resilient livelihoods and food security in the Sahel at scale”

Panel 1.

- Facilitator Alain Vidal
- John van der Walle, CARE, the Netherlands
- Frank van Weert Wetlands Int'l, the Netherlands
- Ibrahima Sadio Fofana, Wetlands International
- Francois Laureys, ICT4D information and communication technologies for development

Panel 2.

- Facilitator Alain Vidal
- Pieter Terpstra, DGIS, Netherlands
- Mahamar Assouyouiti, Senior Climate Officer, GEF
- Jane Madgwick, Wetlands International

Wrap up

- Rapporteur 5mins summary
- Chair close session.

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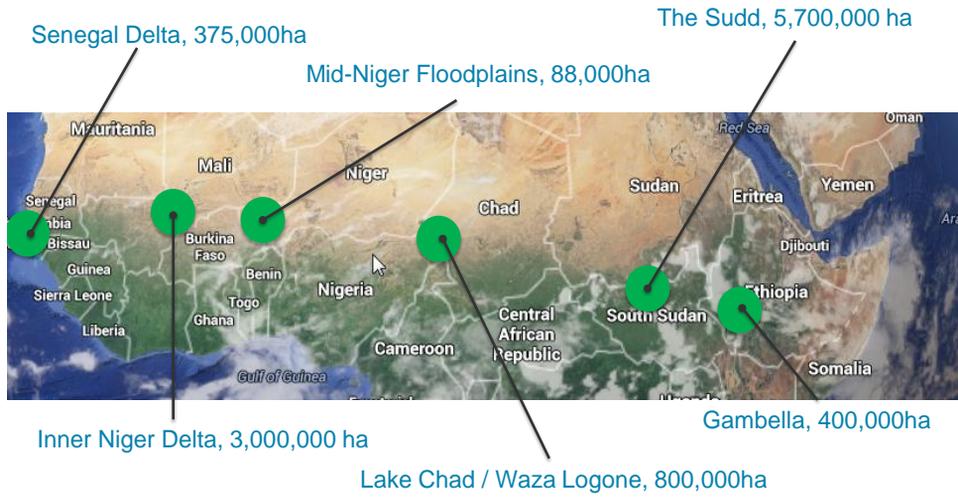
Climatic and environmental change scenarios across the Sahel

Chris Baker

Programme Head Water Resources



Wetlands in the Sahel: Blue Lifelines



Community dependencies

Pastoralism



e.g. Inner Niger Delta

40% people are herders (cattle and goats)

Approximately 3 million livestock in and around IND (5 million in Mali)



Community dependencies

Rice

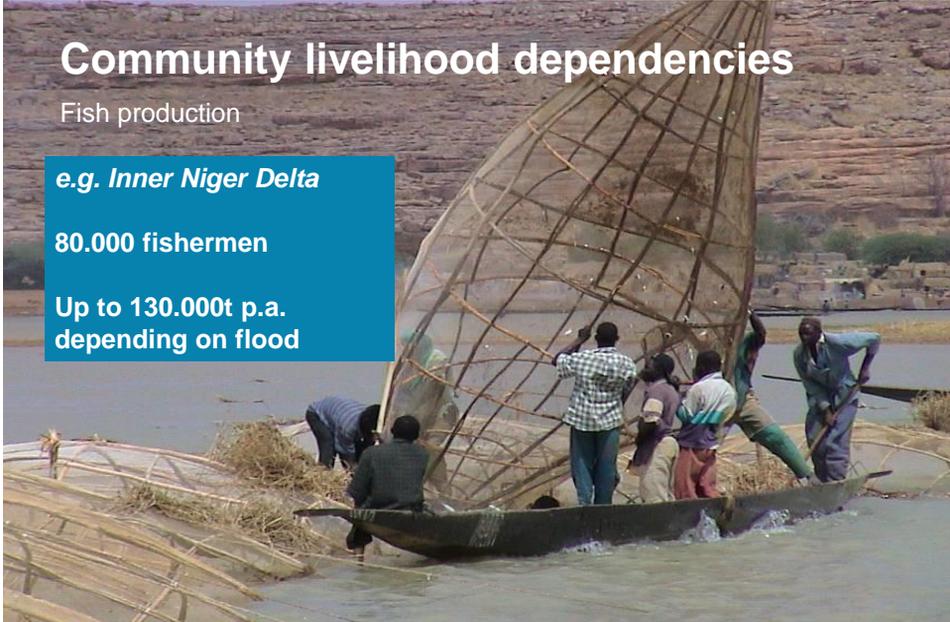


e.g. Inner Niger Delta

30% people are in agriculture

Annual rice production up to 170.000 tonnes





Community livelihood dependencies

Fish production

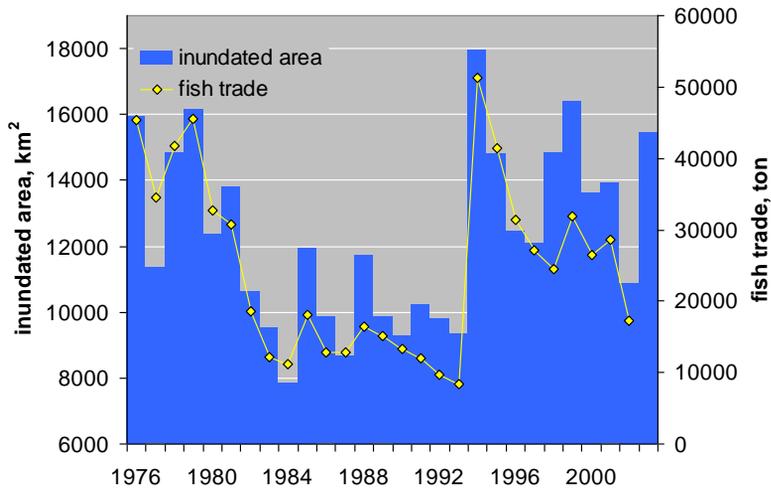
e.g. Inner Niger Delta

80.000 fishermen

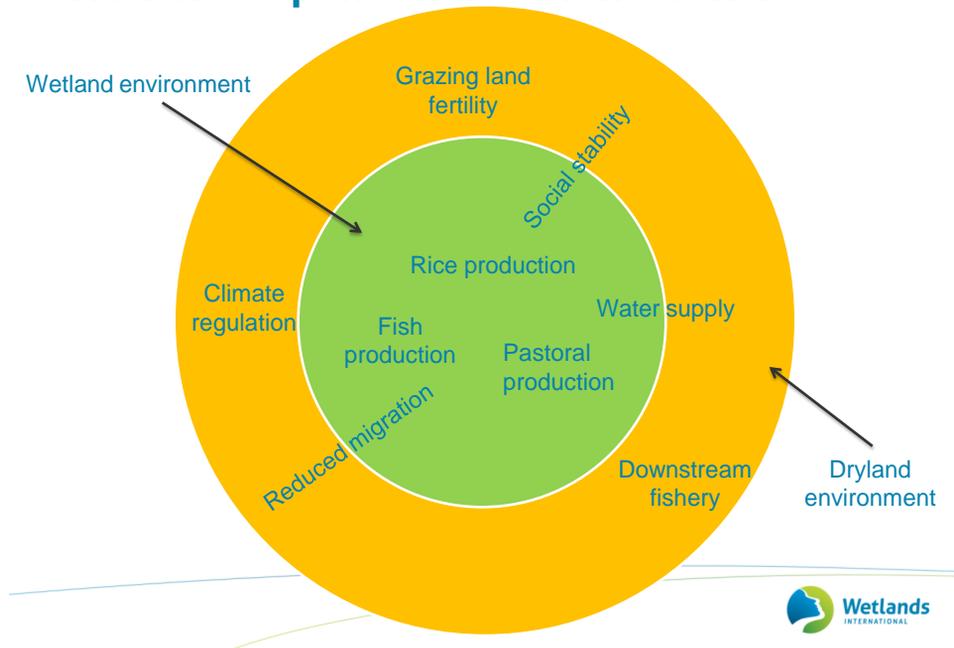
Up to 130.000t p.a. depending on flood



Livelihoods reliance on seasonal flooding



Wetland dependencies in the Sahel



Climate Change in the Sahel

Temperature and precipitation



Temperature

- South Sahara and North-East Africa warmer than global mean
- 2°C threshold exceeded
 - before 2050 (stable emissions)
 - within 25-30 years (high emissions)

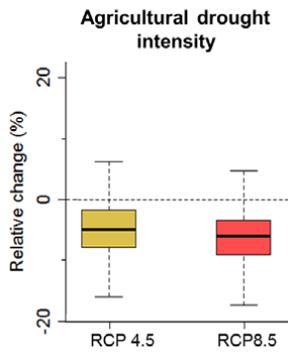
Precipitation

- Predictions are variable and hard to generalise
 - West Africa: small increase in precipitation
 - Both regions: more extreme rainfall, less rainfall days
 - Changes in the onset of rainy and dry seasons



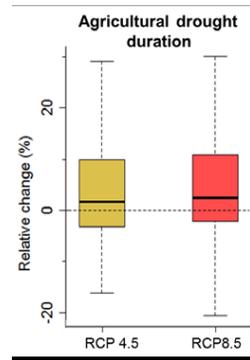
Climate Change in the Sahel

Agricultural impacts in the Niger



RCP 4.5:
538ppm

RCP 8.5:
936ppm



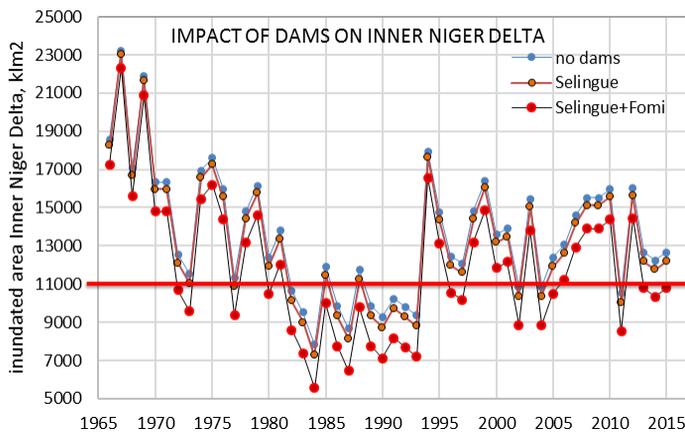
More intense droughts

Longer Droughts



Environmental Change in the Sahel

Environmental change drivers



NBA
Charter,
average
inundation
11,000



What does this mean for communities?

- Food insecurity
- Water insecurity
- Increased vulnerability to climate and environment related shocks
- Increased competition for resources
- Degradation of natural resources (fish stocks, grazing land)
- Loss of livelihood options, culture and identity
- Increased population movement and migration and loss of social cohesion
- Increased risk of ethnic based conflict



Thanks!

Further Contact:

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Further Information:

<https://www.wetlands.org/our-approach/blue-lifelines-in-the-desert/>



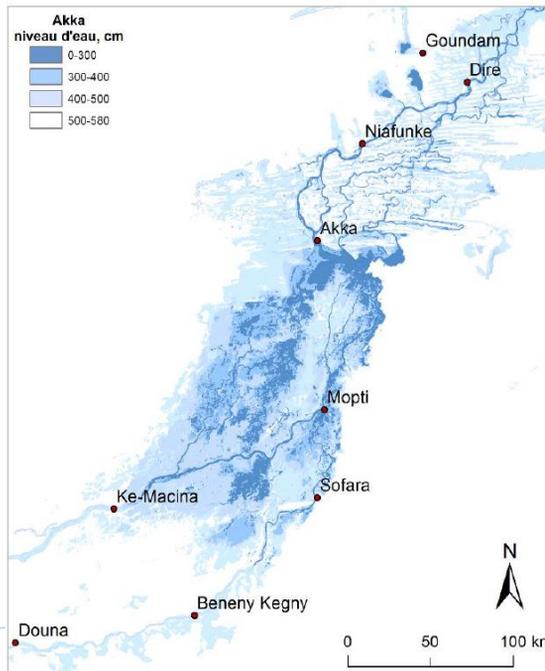
<http://impact2c.hzg.de/>

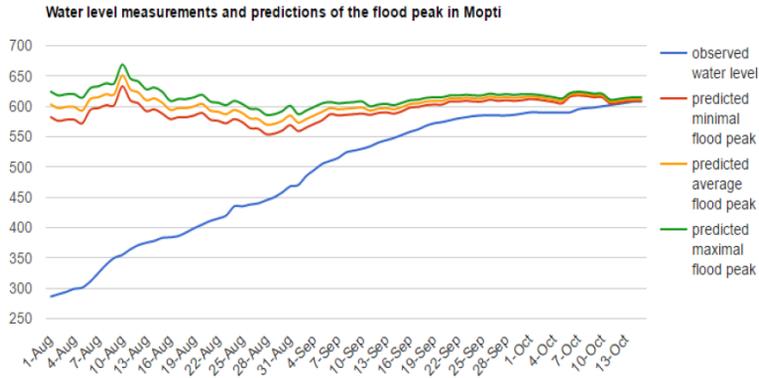
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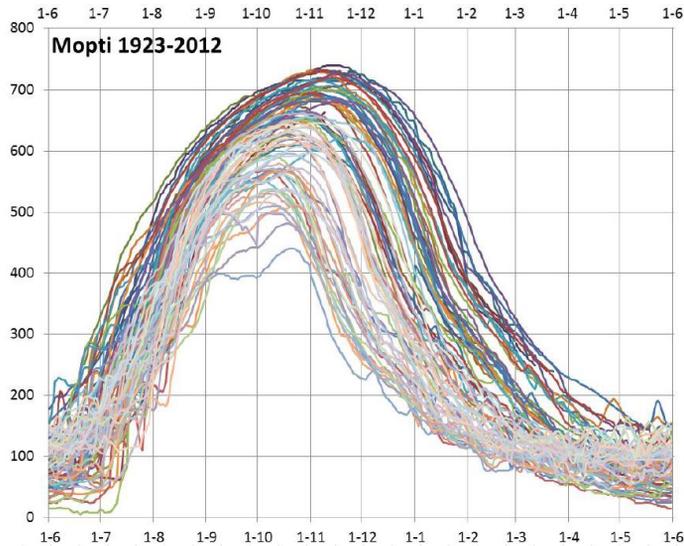
 [Wetlands International](#)







www.opidin.org



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