Synergy between G4AW projects and water management and food security programs of MoF/DGIS

G4AW week
22-09-2015

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1. **Opening of this session**

   By Mr. Jan Hijkoop, Ministry of Foreign Affairs

2. **A climate compatible development on Water and Food Security needs geodata**

   By Mr. Bert Satijn (NWP)

3. **FAO Water productivity Initiative**

   By Mr. Jippe Hoogeveen (FAO)

4. **Pitches by project leaders of G4AW projects**

5. **Discussion**

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- As part of the Multi Year Strategic Plans there are water programs and/or food security programs under implementation in the focus countries
- Synergy between those programs, where feasible and possible is one of the policies of DGIS to boost the impact of both programs
- Contributing to a climate compatible development is another policy of DGIS becoming more and more important given climate variability
- Due to climate change and especially climate roughness water stress (too much and too less) the need to strive for synergy will increase as one of the climate adaptation measures

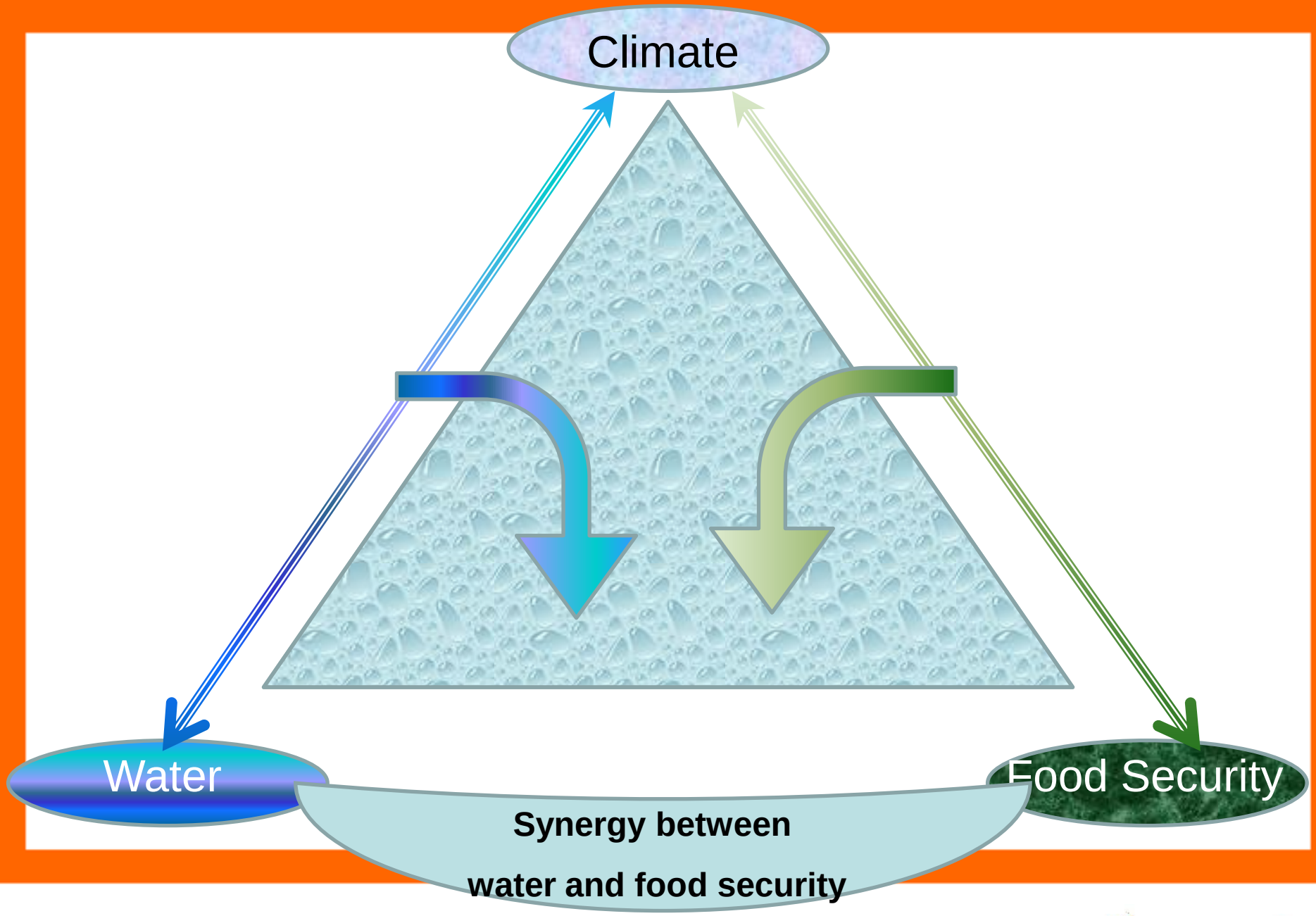

Figure 1 Framework for sustainability on water and food security

- **There is also a need to look for synergy between the different programs on water and food security, financed by the Dutch government, like G4AW, CDKN, the bilateral and multilateral programs**
- **So it is interesting to see what we can learn in the near future from the G4AW projects and how we could achieve synergy with other MoF/DGIS programs on water and food security including promotion of synergy between those programs, if feasible**
- ***And that is the objective of this session***

- **Climate change is a long term process with higher temperatures, changing rainfall patterns, heavy thunderstorms and sea level rise over a period of 30 to 50 years**
- **Climate roughness is observed already for some years with unpredictable more frequent heavy rains and extreme droughts. In Africa and Asia with an unpredictable pattern of rainy and dry seasons**

not

- **Population growth, in some countries > 3,5%**
- **Urbanization and hardening surfaces**
- **Deforestation and erosion**
- **Decrease of soil fertility**
- **Overexploitation and leaching of arable soil**
- **Overexploitation of groundwater resources**

All together step by step degradation of natural resilience

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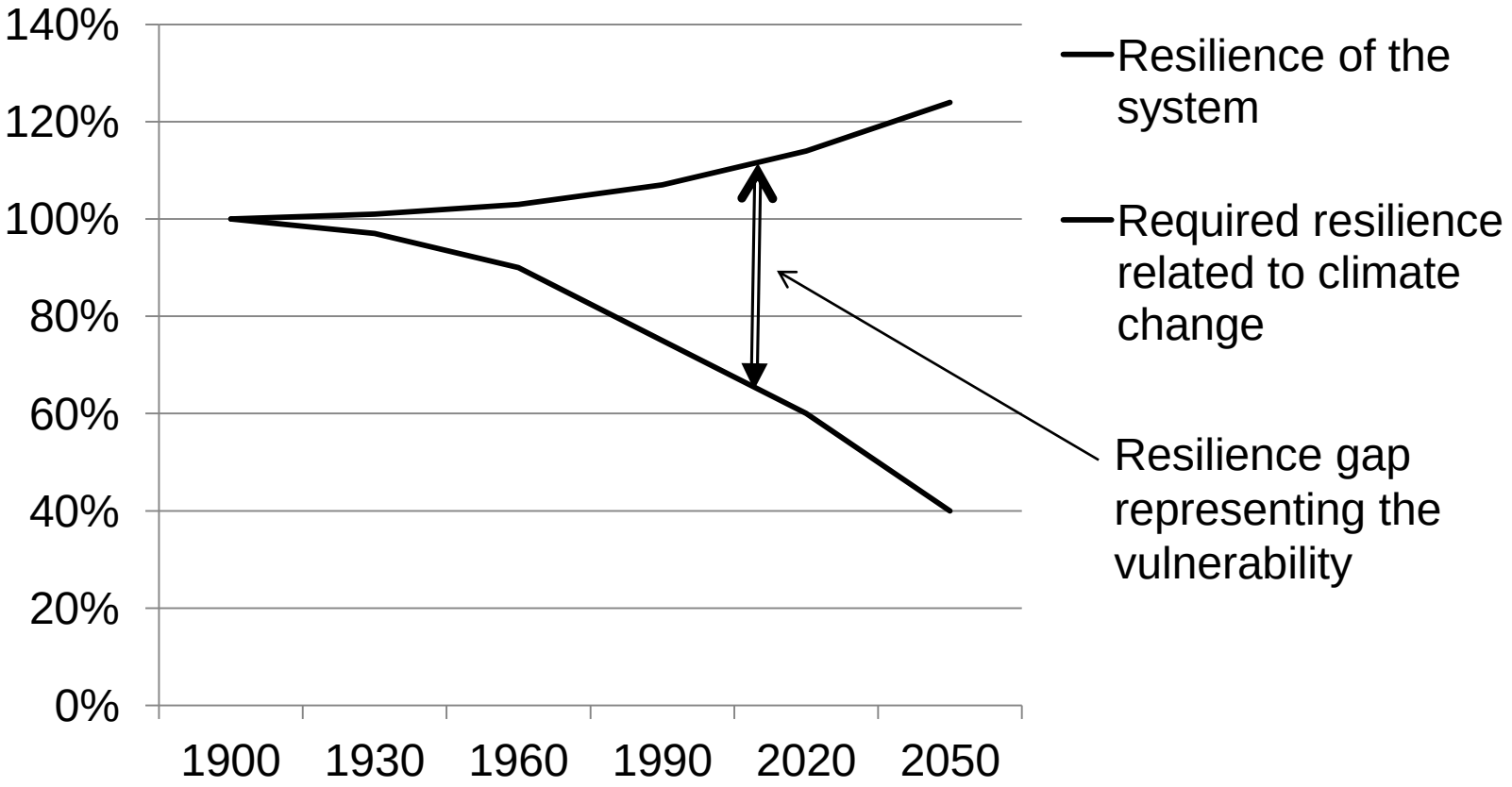
Schematic decrease of resilience of the system and required resilience due to climate change



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- **R**eduction of water use, so more crop per drop
- **R**estrictions of water use
- **R**ainwater harvesting
- **R**euse of water
- **R**echarging
- **R**etaining

All leading to keeping the water in the water-soil system, preventing erosion and floodings and building up resilience for droughts

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Water productivity and water efficiency leading to More crop per drop

This concept is focusing on encouraging the farmers to cultivate their land in such a way, that during the rainy season water is promoted to infiltrate in the soil with 2 goals:

- Short term goal: to increase the productivity of the land and surface run off, floods and erosion are prevented
- Long term goal: to replenish the groundwater resources to help the population to bridge the droughts, not only for drinking water, but also for small scale irrigation in the dry season

The synergy between water management and food security goes both ways

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- Appropriate agricultural activities could contribute to the resilience of the system and recharge of the water resources and in this way damping the hydrological cycle
- Soil fertility, organic material, minerals, etc. do play a crucial role to keep the water in the system and to promote groundwater recharge
- Geodata from G4AW projects could contribute to support a landscape approach focused on promotion of resilience and recharge
- G4AW consortia could also contribute with their knowledge, capacities, infrastructure and geodata to support the synergy between water management and food security programs