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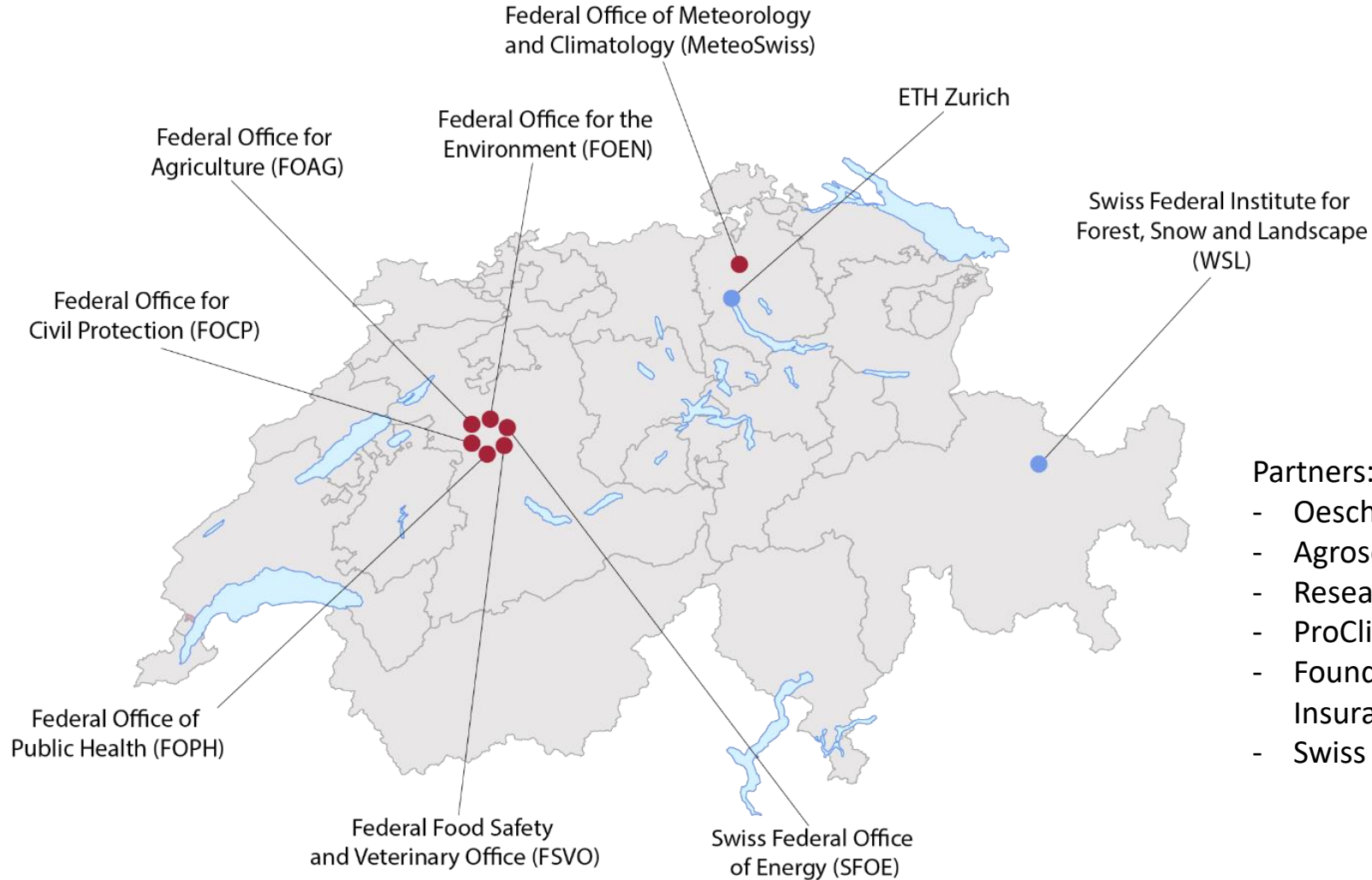
Webinar: Global impacts of climate change on Switzerland's supply chains NCCS Impacts project update

NCCS

The Federal Network for Climate Services



NCCS members



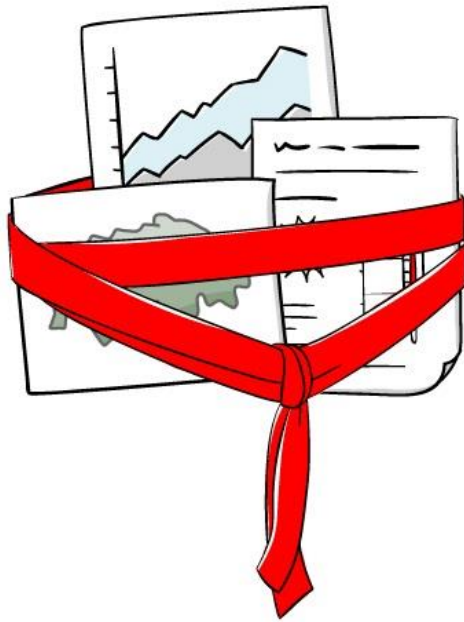
Partners:

- Oeschger Centre for Climate research
- Agroscope
- Research Institute of Organic Agriculture FiBL
- ProClim
- Foundation for Prevention of the Public Insurance Companies for Real Estate FPPIRE
- Swiss Insurance Association SIA



Vision and goals of the NCCS

«Climate services for a resilient Switzerland – today and tomorrow»



Bundeling of
existing climate services



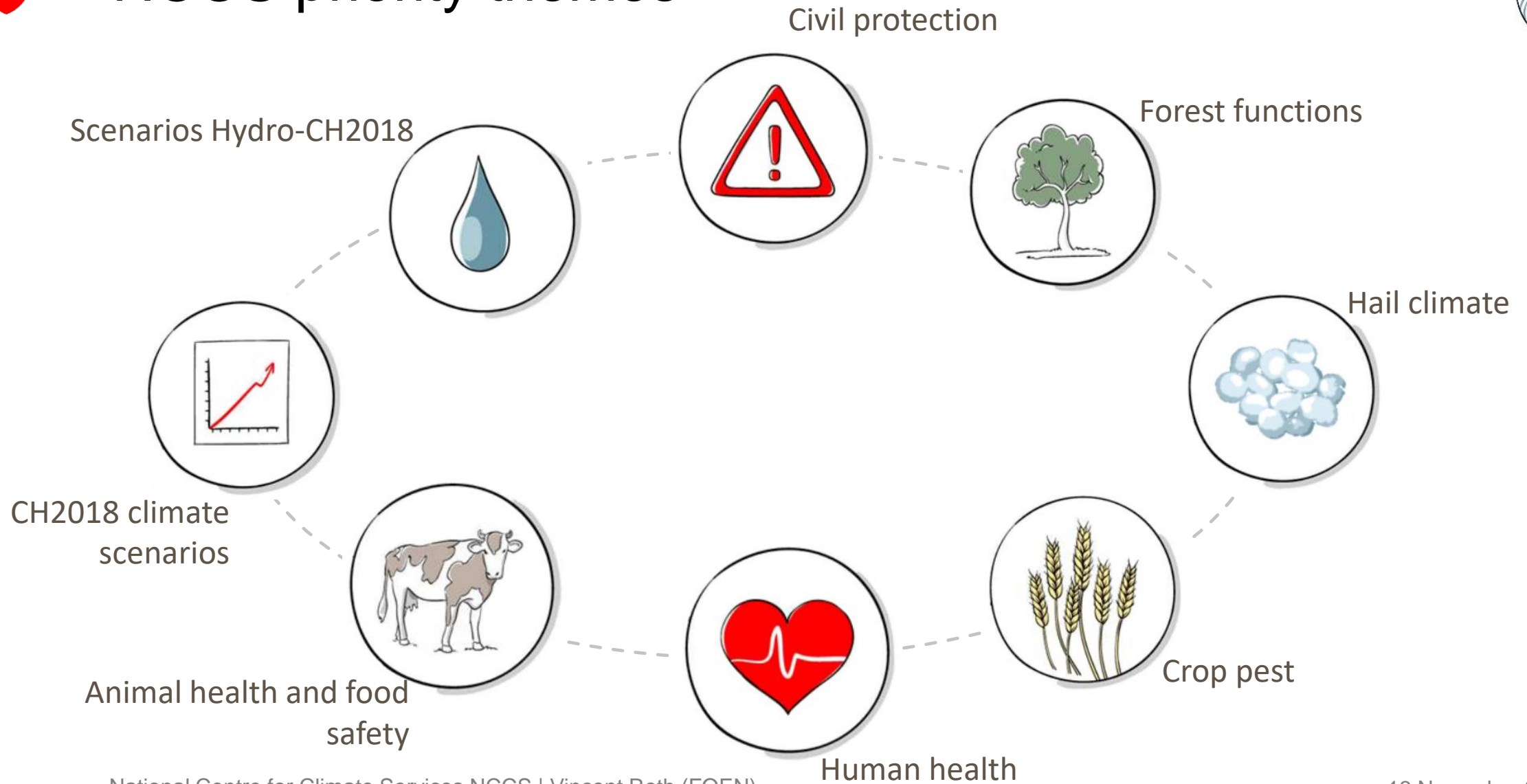
Promoting
stakeholder
dialogue



Develop & communicate
tailored information,
processes & solutions



NCCS priority themes

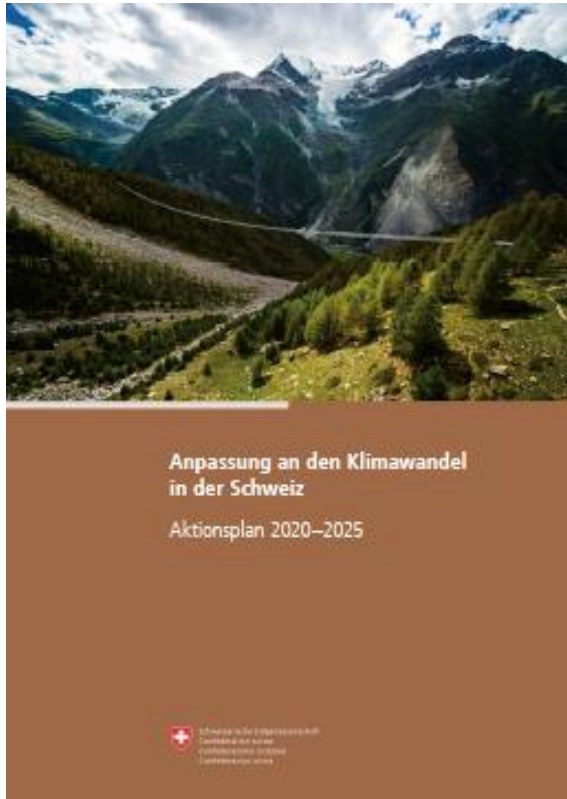


Program NCCS-Impacts



Political anchorage

Federal Council resolution of 12 August 2020 (Adaptation to climate change in Switzerland - Action Plan 2020-2025)



- **Mandate from DETEC, FDHA, EAER and DDPS**
to jointly implement the cross-sectoral research programme "CH-Impacts - Impacts of climate change on Switzerland" under the umbrella of the National Centre for Climate Services
- **Measure AP2-wg4 2nd Action Plan 2020-2025**
"Analysis of the effects of climate change on Switzerland - CH-Impacts"



Overarching goals

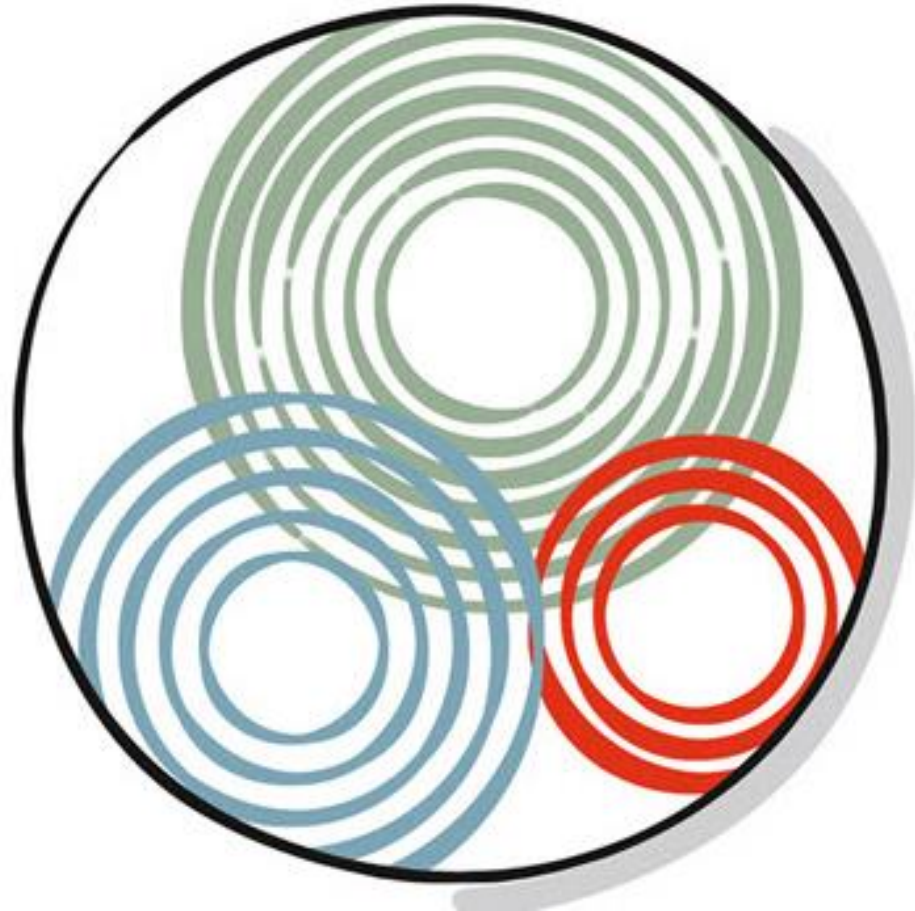


1. Impacts: Systemic overview of the **effects of climate change** on and in Switzerland and its key challenges for the environment, economy and society.
2. Basis for decision-making: Broad **availability and utilization of jointly produced climate services** for a targeted and sustainable approach to the risks and opportunities of climate change.
3. Authority-orientated support: **Cross-sectoral support for the Confederation and all stakeholders in their forward-looking actions** to tackle the challenges of climate change.



NCCS-Impacts program

Decision-making basis for dealing with climate change in Switzerland



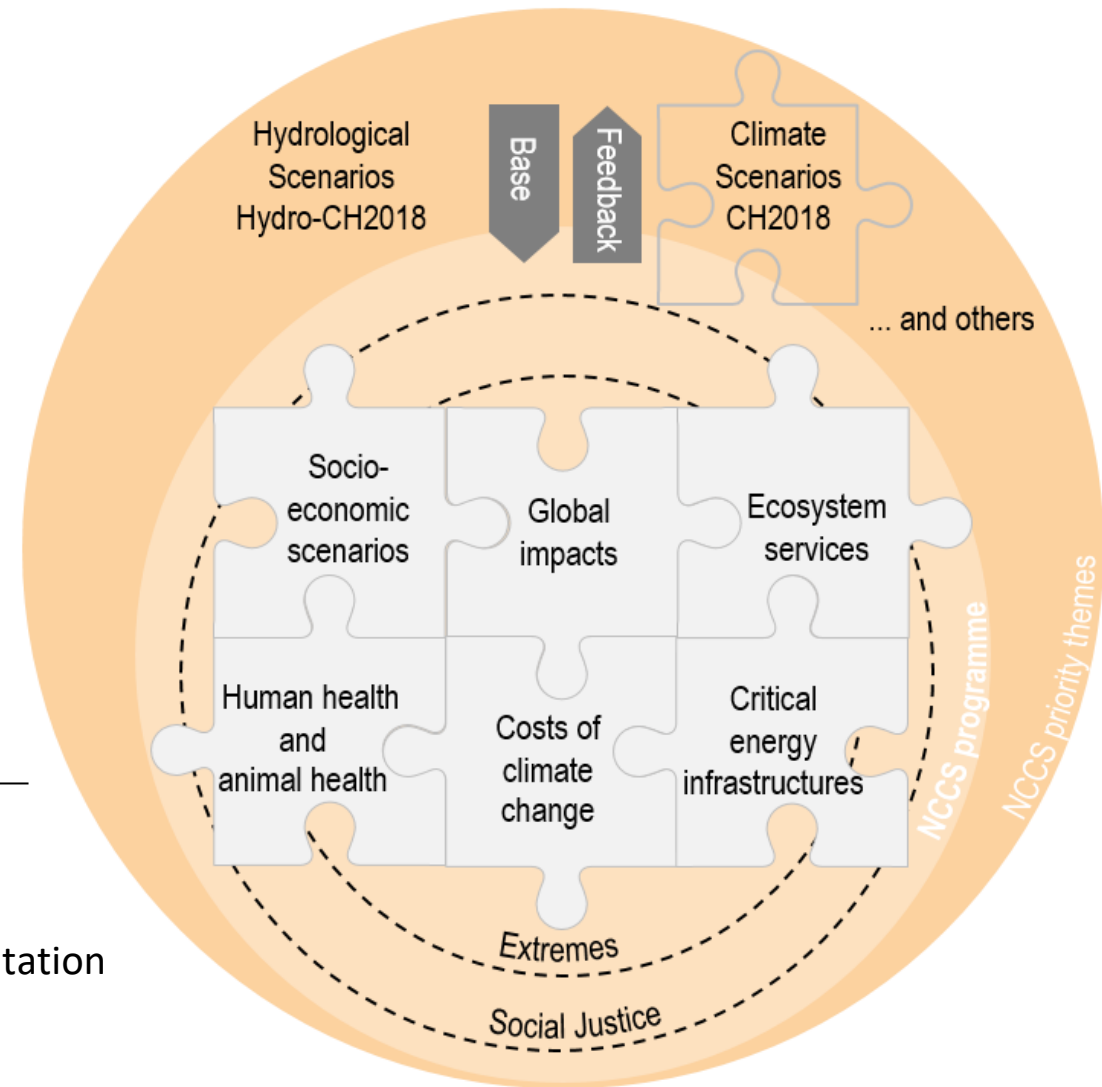
- Implementation from 2023 to 2025
- Financed by all NCCS members
- Coordination by NCCS-Secretariat at MeteoSwiss

www.nccs.admin.ch/impacts



NCCS CH-Impacts

- Shared Socioeconomic Pathways for Switzerland
 - Global impacts of climate change on Switzerland
 - Impacts of climate change on ecosystem services in CH
 - Impact of climate change on human and animal health
 - Impact costs of climate change in Switzerland
-
- **Impacts of climate change on critical infrastructure
 - ***Climate information as a basis for programme implementation



Project «Global impacts of climate change on Switzerland»

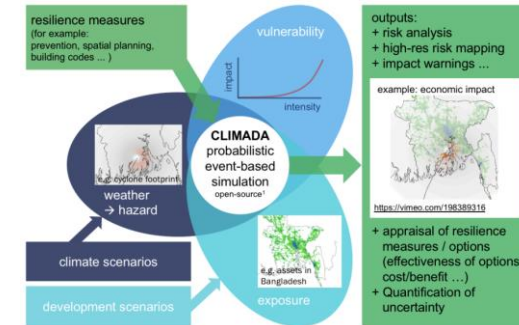
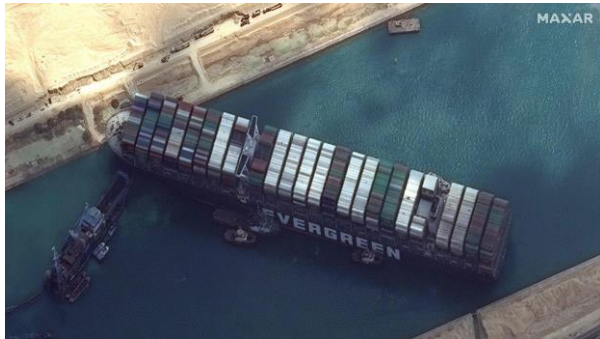


Project «Global impacts»



Primary goal:

Analyzing the impact of global climate change on Switzerland's economic performance, food and pharmaceutical supply due to climate-related disruptions in production chains and on international sales markets



Project management: FOEN

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Project «Global impacts»

Key questions



1. How does global climate change affect Switzerland's **internationally interlinked production chains**?
2. How does global climate change affect Switzerland's **international sales markets**?
3. What is the global economic impact / "time to emerge" of rising sea levels?
4. What is the dependency between security of supply or basic food/medicine supply and global food/medicine supply and global climate change?



Questions / Discussion





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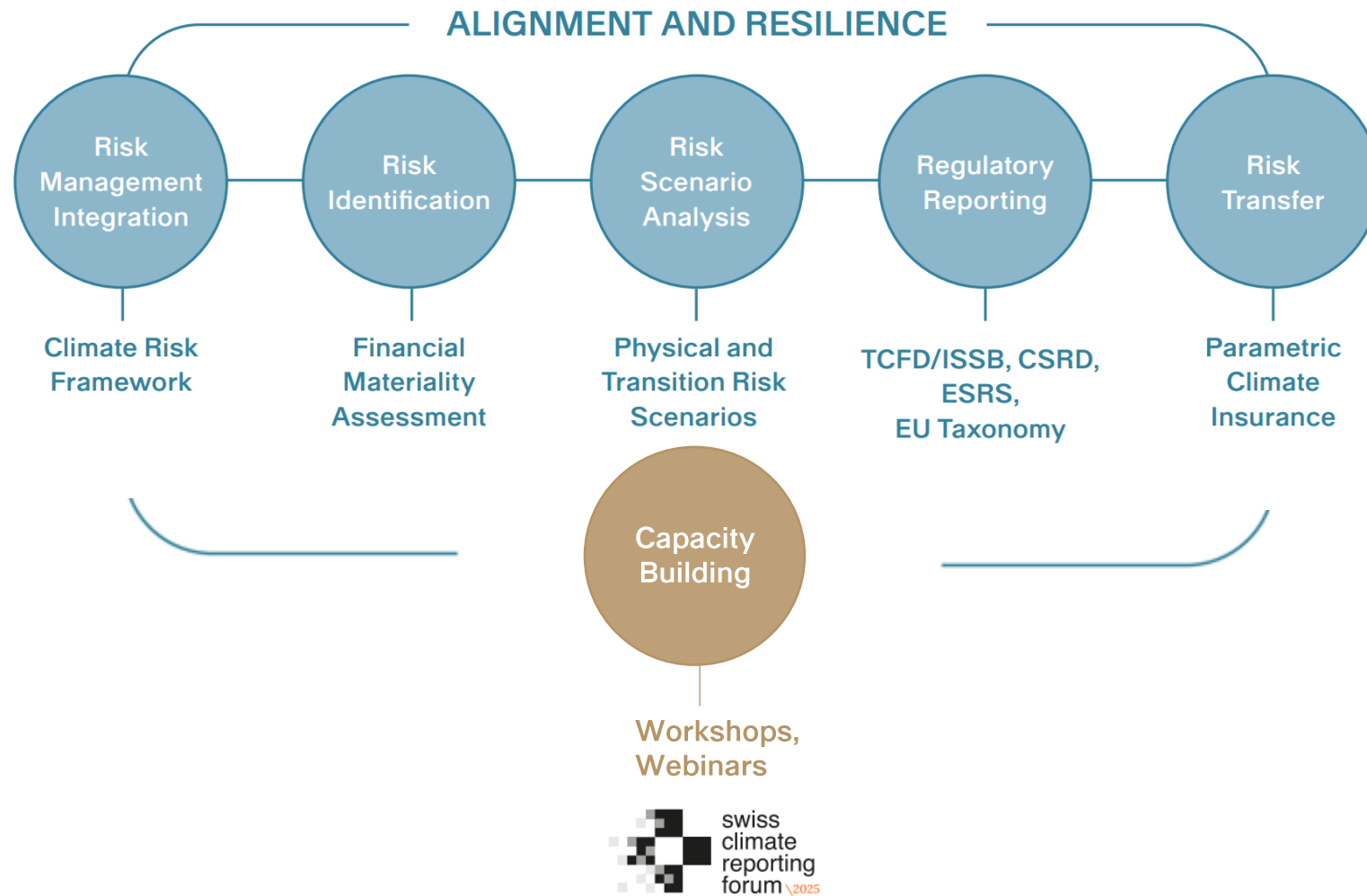
Global Impacts of Climate Change on Switzerland's Supply Chains

Stakeholder Webinar

13.11.2024

°CelsiusPro Capabilities

Future-proof your climate journey



Impacts of global climate change on Switzerland

Which questions do we answer?



Scenario: Representative Concentration Pathway 2.6



Scenario: Representative Concentration Pathway 8.5



Drought



River flood



Sea level rise



Tropical cyclone



European windstorm



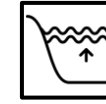


Impacts of global climate change on Switzerland

Which questions do we answer?



Drought



River flood



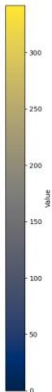
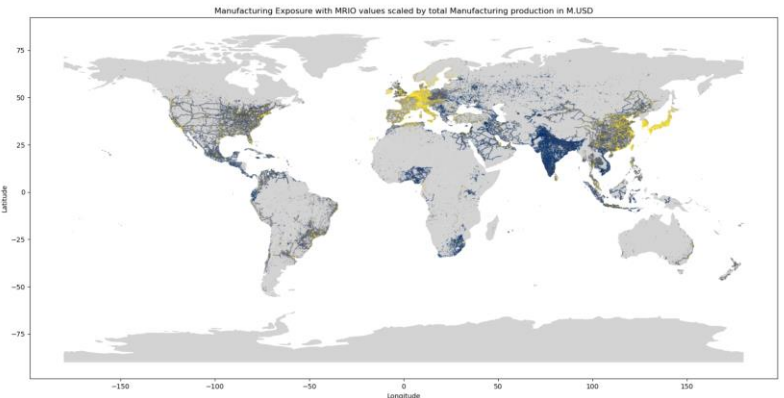
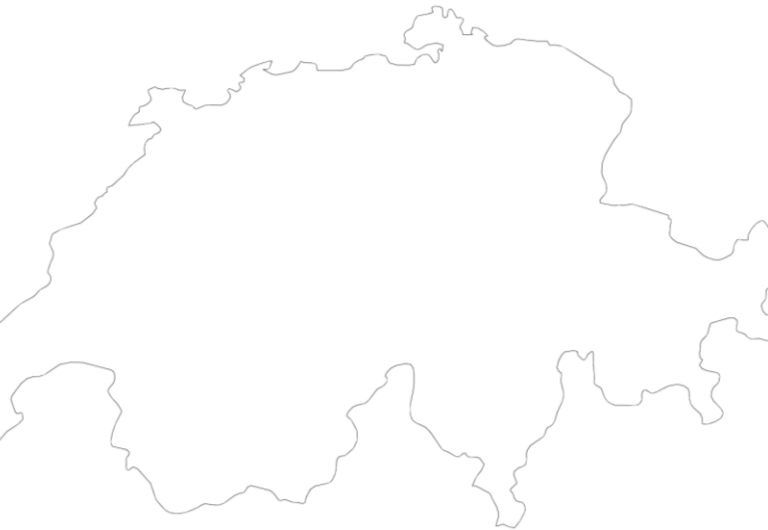
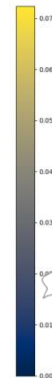
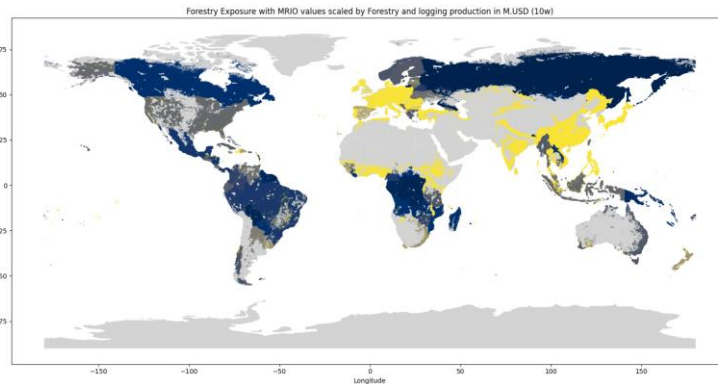
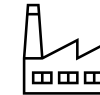
Sea level rise



Tropical cyclone



European windstorm



Helping Stakeholders mainstream climate impacts in Supply Chains

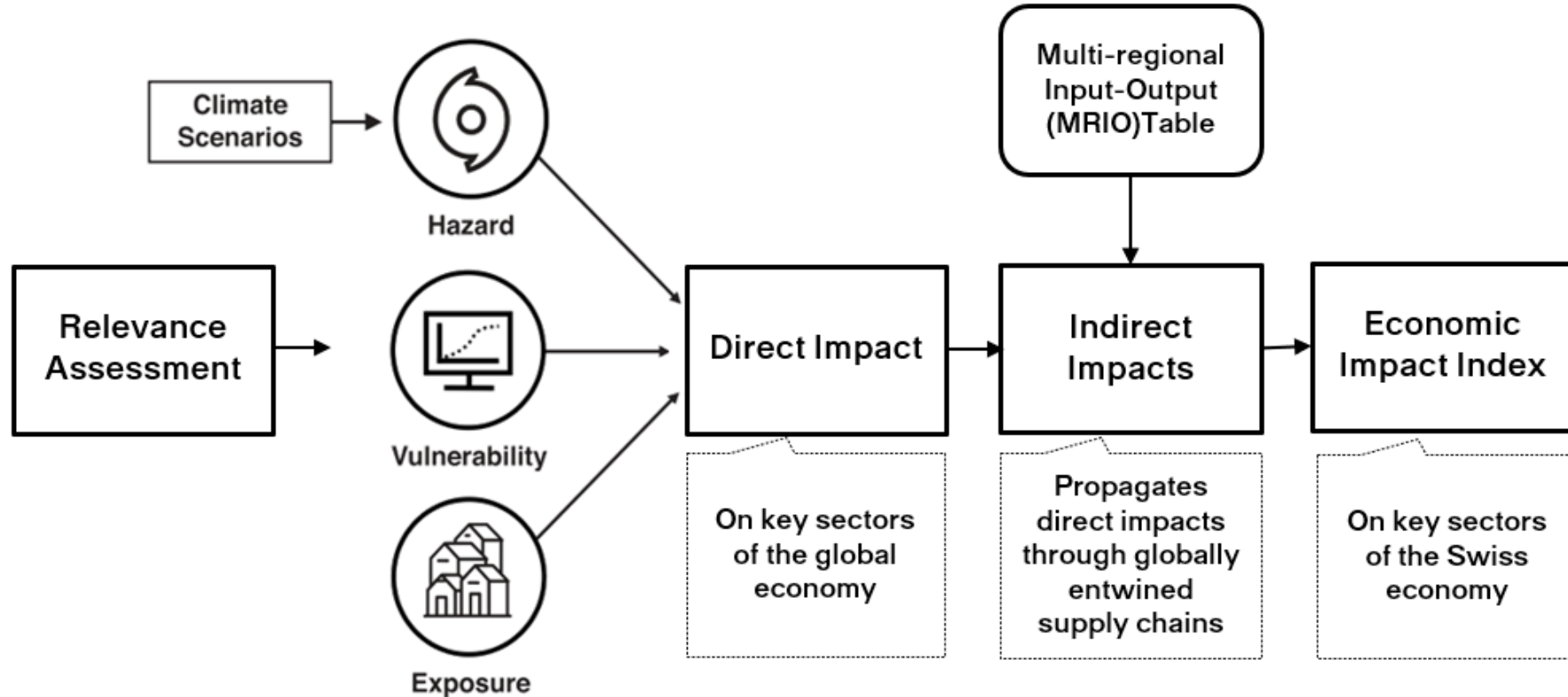
Products of the project

- Climate Impact Report
- Interactive Map
- Open-Source Model Chain



Supply Chain Climate Impact Modeling Approach

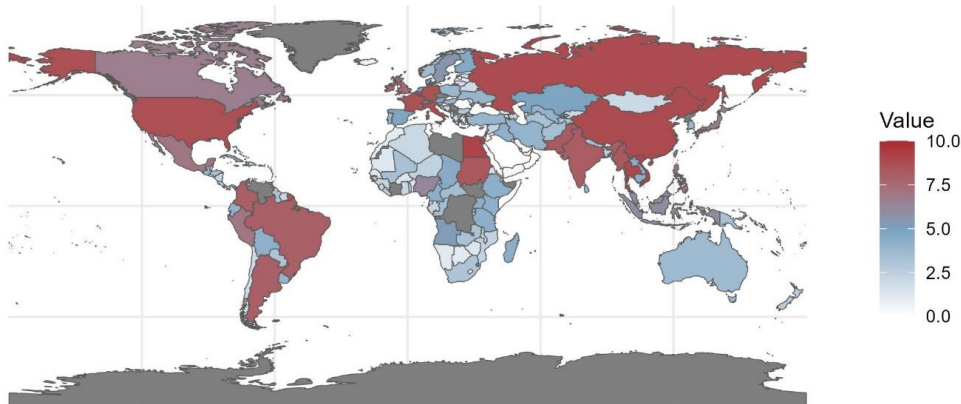
Mixed Method and Modeling



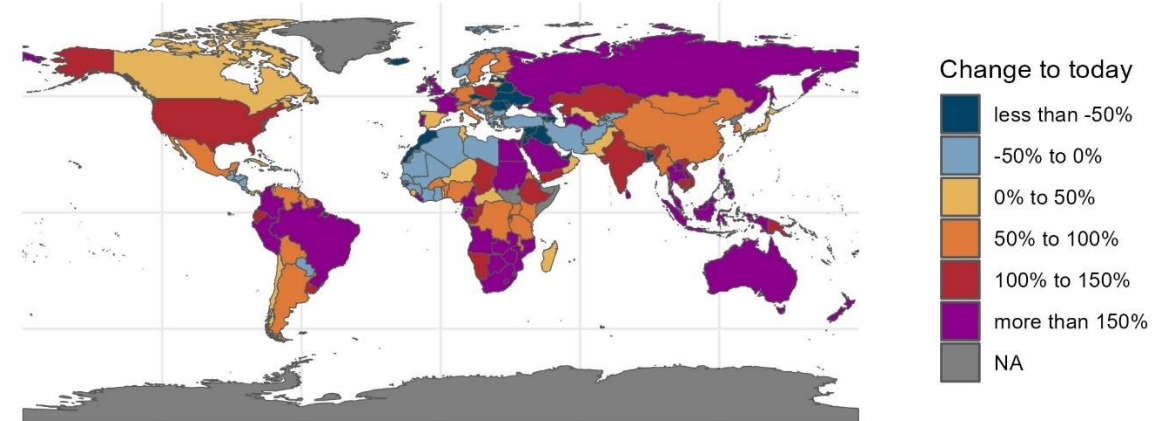
What we have assessed so far

A first glance at intermediary results

Economic impact across all hazards, today



Change future (RCP8.5) vs. today, all hazards



Impact on Swiss economic sectors due to

- Reduced *output* to Switzerland of affected sectors abroad or
- Reduced *demand* for Swiss outputs from affected sectors.

Other potentially addressable questions (illustrative examples):

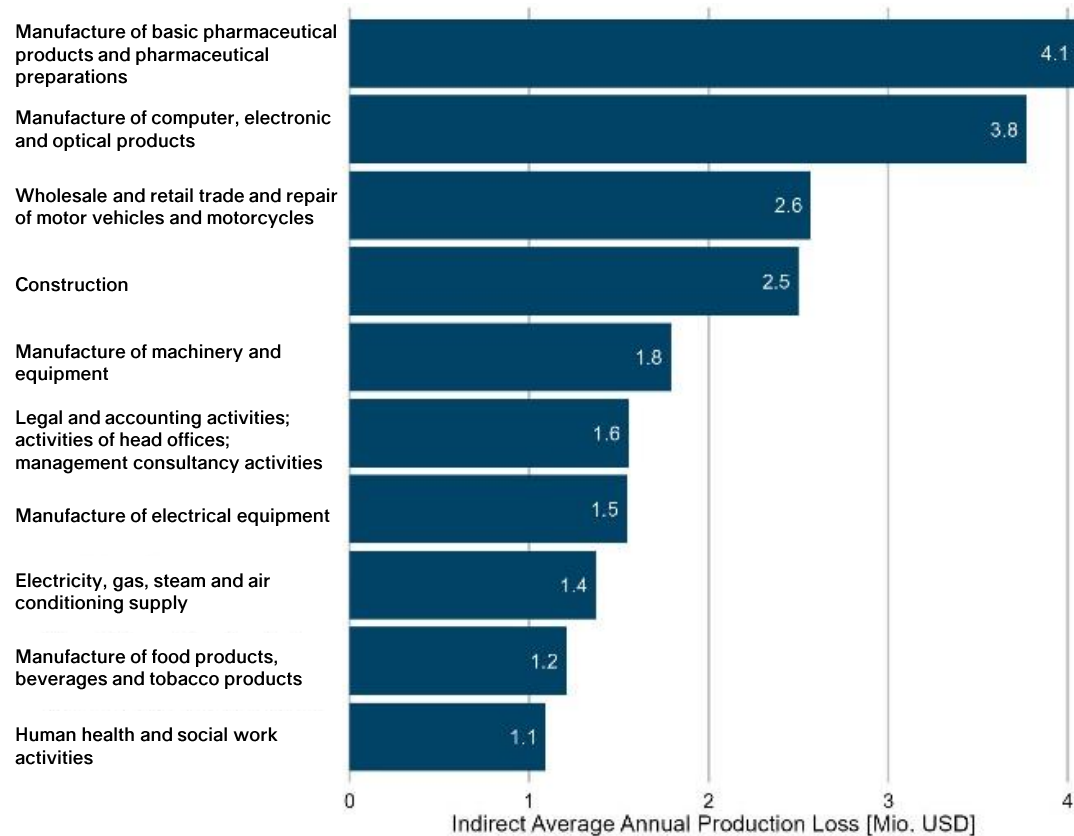
- What is the expected risk to the Swiss economy from flood globally?
- What is the impact on the Swiss pharma sector of tropical cyclones in China? Today and in the future?

These results are intermediary model outputs and subject to change. They do not represent an official visualization of the project's outcomes.

What we have assessed so far

From a global perspective to country-level case studies

Average annual production losses of Swiss sectors due to physical impacts in China (supply-side; only 10 most affected sectors).



These results are intermediary model outputs and subject to change. They do not represent an official visualization of the project's outcomes.



Interactive Map

Potential User Journey



An aerial photograph of a tropical island. The water is a vibrant turquoise color, transitioning to a deeper blue further out. The island is densely covered with palm trees and other tropical vegetation. Several small, simple houses with light-colored roofs are scattered across the land. A narrow strip of white sand beach is visible near the water's edge. The overall scene is peaceful and idyllic.

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Impact of Climate Change on Pharma (supply chains)

Alissa Monk- Sustainability Lead

Climate risks for the Pharma Industry



- Upstream

- Supply risk- raw materials, consumable products
- Bulk buying- e.g. during COVID -occurred to 'buffer' the risk but also further increases impact (increase footprint from over production- waste from oversupply)

- Downstream

- Medicine distribution delays
- Product integrity
- Climate impact on public health- and in turn demand for medicines

Challenges



- For a given product, downstream data is scarce (raw material source location, manufacturing location) and/or hard to get from suppliers
- Downstream risk models also limited
- **Therefore, difficult to calculate (reliable) company risk.**
- Expectation to report v reality of reliability of results
 - Nature related risk and disclosures (e.g. TNFD) also reliant on these data

Approach



- Minimising our impact
- Purchasing local when possible
- Focus- criticality v alternatives
- Elio software- AI and big data approach
 - Consumable product and company sustainability assessment (plus alternatives suggestion)
 - Next development stages of the software will allow for scenario modelling
- Collaboration- Pharma Eco-Design consortium
 - Data sharing framework

About ten23 health



- We are a pharmaceutical service provider for Pharma & Biotech clients (B2B).
- Committed to “*human centricity*” and “*fairstainability*” (fairness & sustainability) from its inception

Patients – People - Planet

- Founded May, 2021 in Basel/CH, funded with PE (3i)
- Company “went live” in Sept. 2021
- Acquisition of swissfillon AG (Visp, CH) end Oct. 2021
- Now, 200 employees on both sites



www.ten23.health

Start with the purpose and values



Patients, People, Planet

Our team at ten23 health is strongly purpose-driven. We put Patients, People and Planet at the center of our decisions and actions. We are driven by making a positive and sustainable impact: for our clients, patients, our team, people, and our planet.



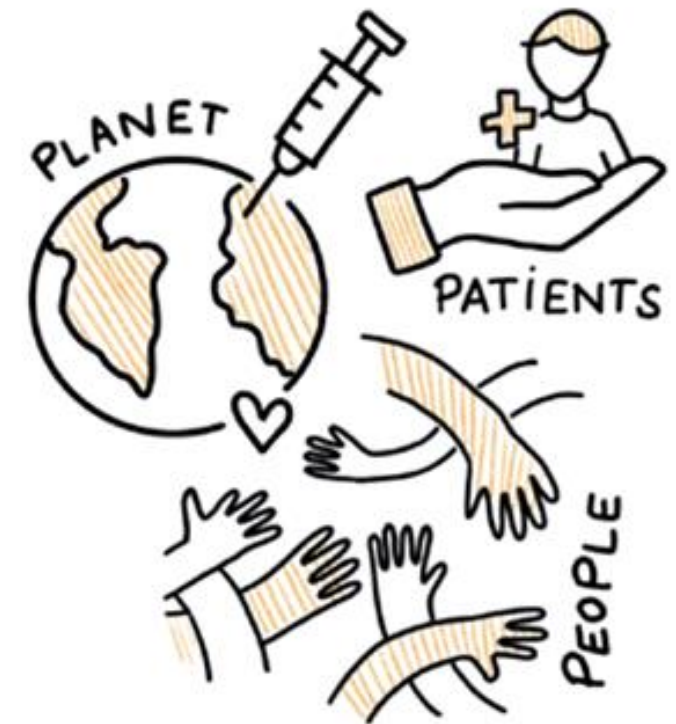
COLLABORATING FOR A
HEALTHY LIFE &
PLANET
- ten23



ten23's approach to sustainability



- Measure –Reduce-Offset
- Embedded in all we do at the company
- Identification of quick-wins
- Continuous Improvements
- Collaborate and share knowledge



Current Climate Targets and Results

By 2025, we reduce our greenhouse gas emissions by 50 % on Scopes 1 & 2, committing to being part of the Science Based Targets initiative (SBTi)



Since 2021,

44%

reduction in carbon footprint intensity



100%
Renewable
Electricity

We have **Carbon Neutral Operations**

(We offset any unavoidable emissions across Scope 1, Scope 2, and operational Scope 3 categories)

Approach



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Elio

Approach



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We change the rules

HOW IS GEBANA IMPACTED BY CLIMATE CHANGE?

OSKAR JÖNSSON, FACTORY CO-LEAD & BUSINESS DEVELOPMENT
MANAGER

CELSIUSPRO WEBINAR, 13.11.2024



Global Farmers Market

WHO AM I?

From environmental science to free trade to sustainable trade



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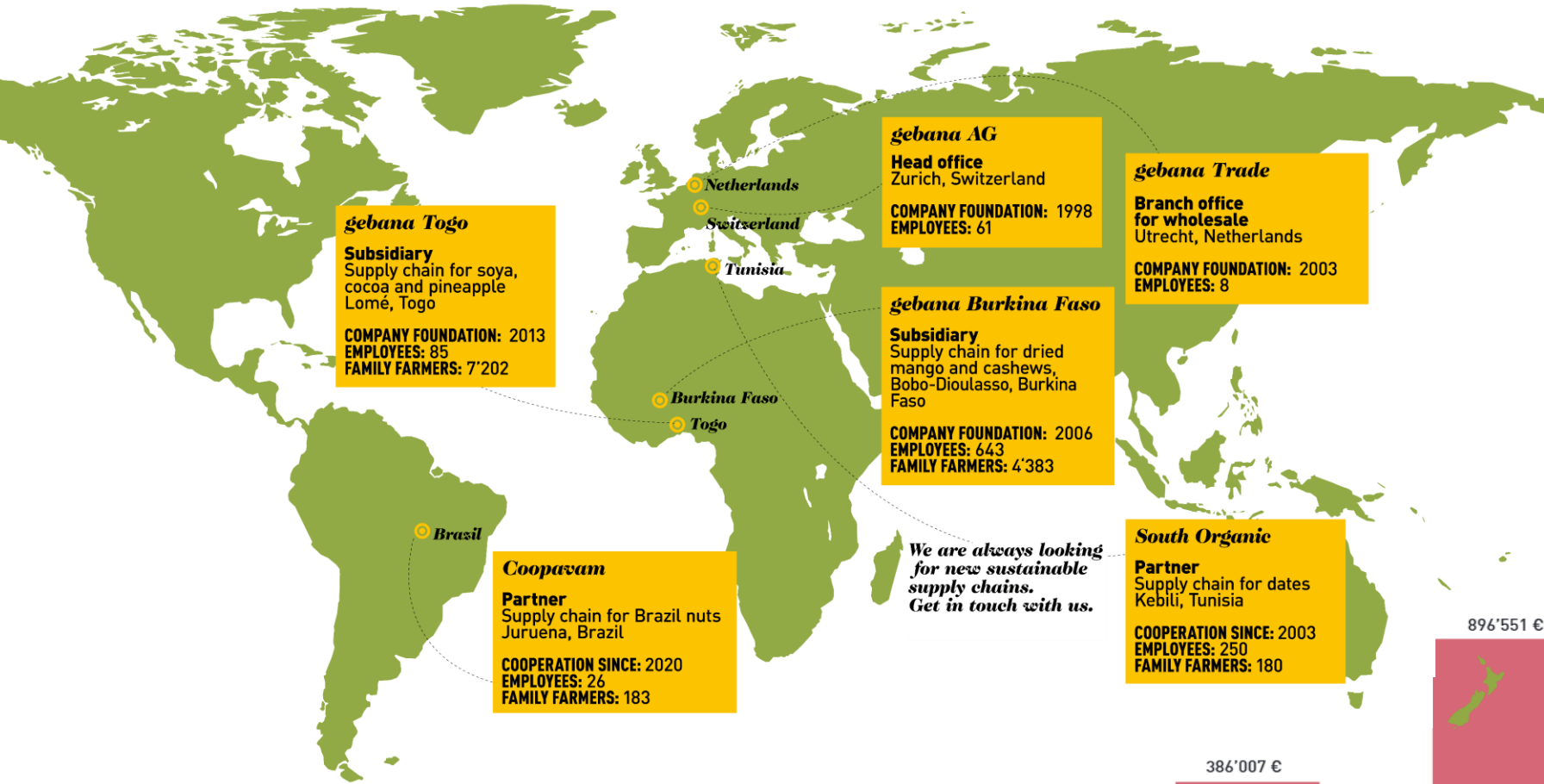




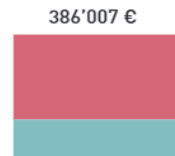
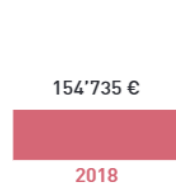
Global Farmers Market

GEBANA – A GLOBAL FARMER'S MARKET

Sustainable sourcing in the South, sales in the North



15.11.2024





Global Farmers Market

GEBANA IN TOGO

600 tons cocoa annually from >2'000 smallholders





Global Farmers Market

GEBANA BURKINA FASO

1'000 tons each of cashews and dried mango annually





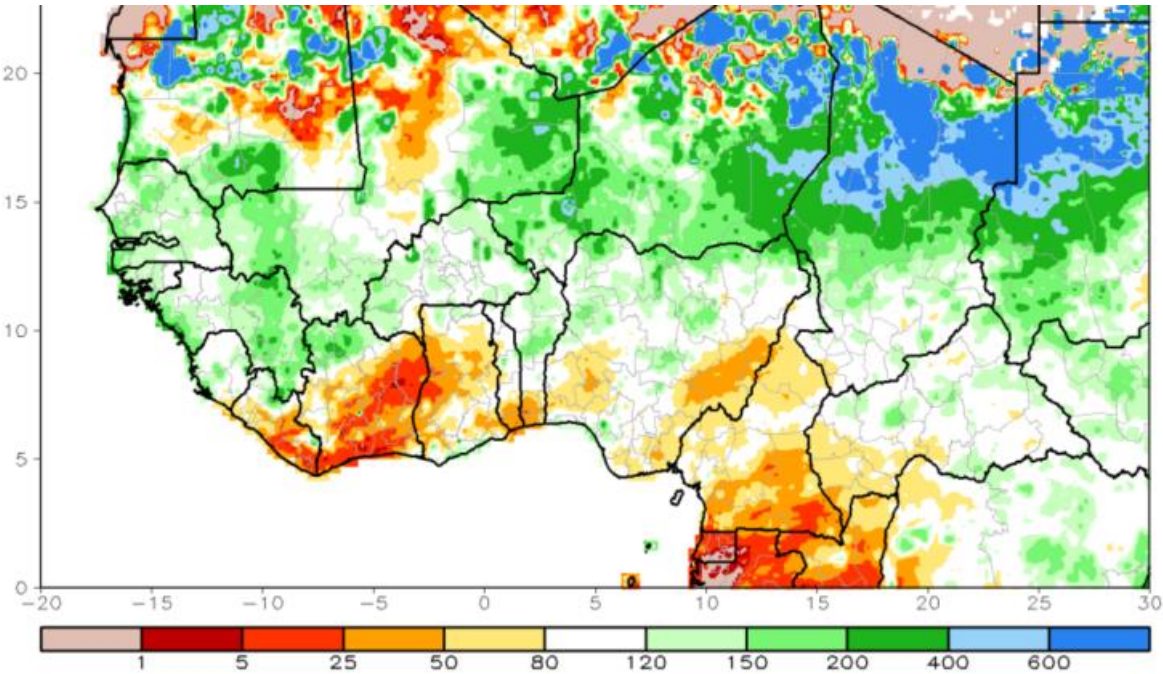
Global Farmers Market

HOW ARE WE IMPACTED BY CLIMATE CHANGE?

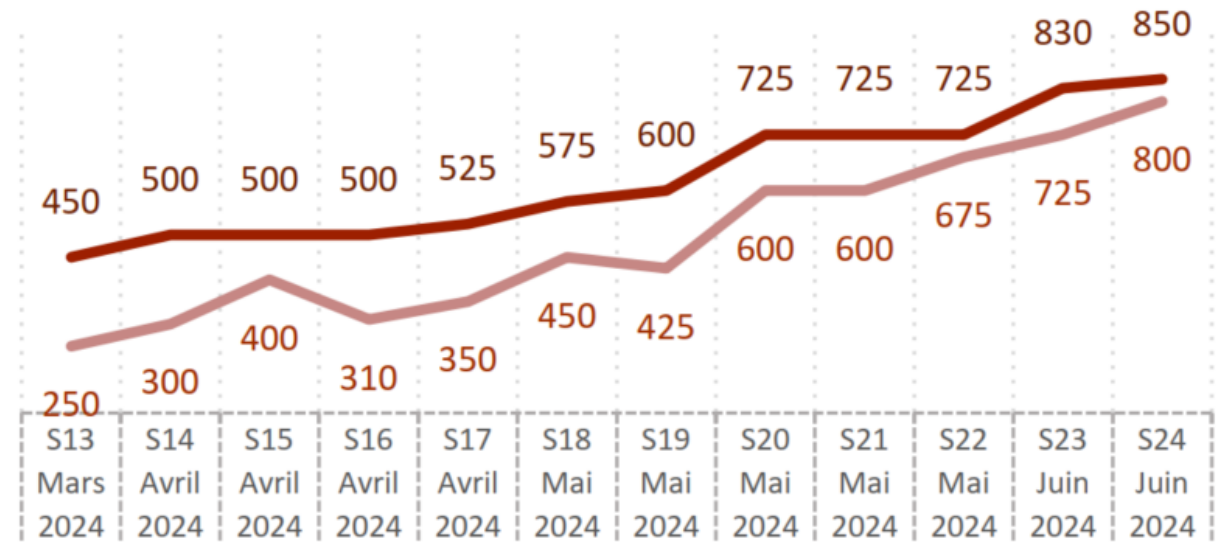
Lower yields increase prices, don't necessarily impact our volumes

RFE2 1-Month Percent of Normal Rainfall (%)

Period: 01Jul2024 – 31Jul2024



Raw cashew nut farm-gate price in **Senegal** (FCFA/kg)



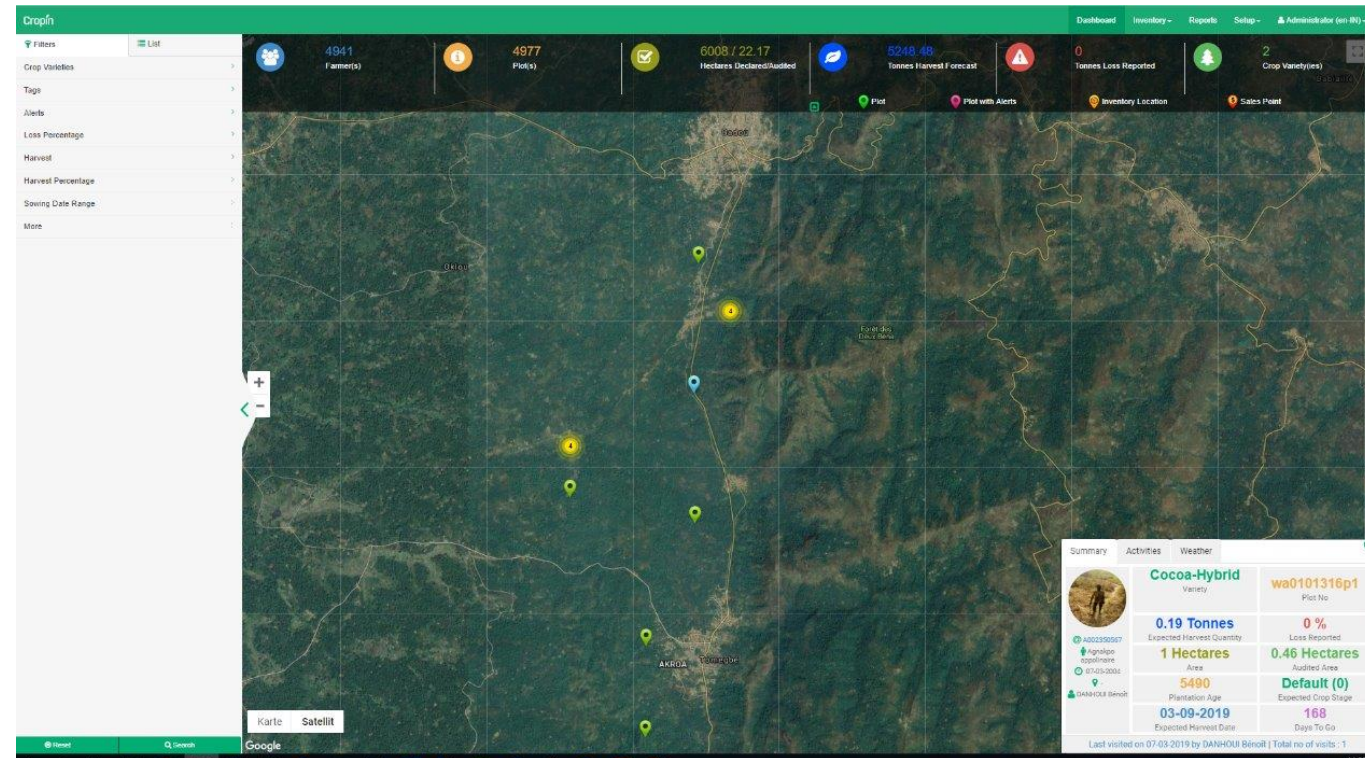


Global Farmers Market

HOW ARE WE ASSESSING IMPACTS?

Full traceability back to every farm

- Every farmer registered with plot
- Every purchase registered → yield per farmer/plot per year
- Challenge: Side selling, even on country level





Global Farmers Market

HOW ARE WE ADAPTING?

Investing into resilient agriculture

Dynamic Agroforestry in Togo and Burkina Faso

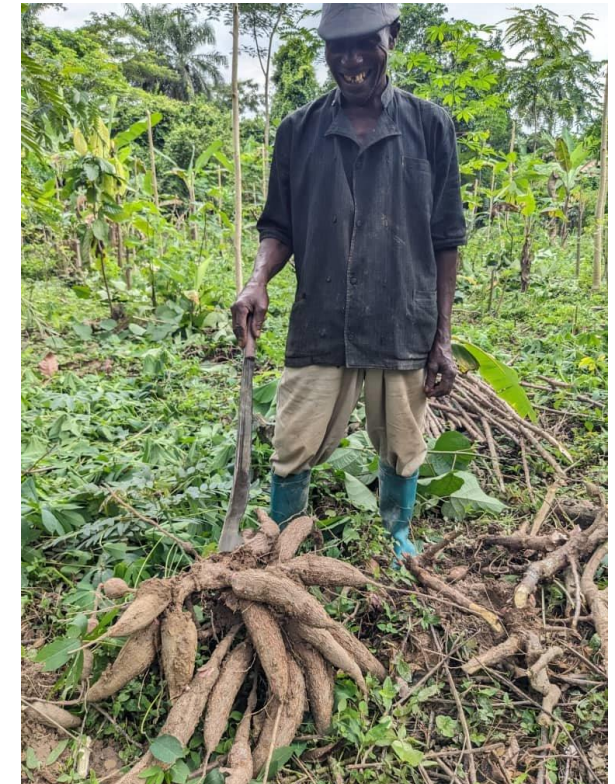
- 12 ha in cocoa so far
- 121 ha in cashew/mango
- Increase in area over next years

→ Improved yields

→ Increased resilience

→ Better soil fertility

→ Higher income through diversified cropping system





Global Farmers Market

QUESTIONS? COMMENTS? TIME FOR DISCUSSION!

