

Switzerland: Blessing or Curse for Water in the World?

WWWeek at home
27 August 2020



HEKS
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AQUA4D
WATER SOLUTIONS

Public Eye

cewas



HELVETAS
Swiss Intercooperation



SWISS WATER
PARTNERSHIP



SWISS TOILET ORGANISATION

Today's speakers

Javier Meyer, Marketing Director, AQUA4D®



Arjumand Nizami, Country Director Pakistan, HELVETAS

Karla Schlie, founder/ operator, Swiss Toilet Organisation



Karl Heuberger, thematic advisor on access to water, HEKS / Swiss Church Aid, thematic advisor on access to water

Carla Hoinkes, expert on agriculture, Public Eye



Moderation: Bernita Doornbos, Secretary General, Swiss Water Partnership

Coordination: Marisa Ruoss, Coordinator, Swiss Water Partnership



Sandra Fürst, Climate-resilient Water, Food and Livelihood Systems, Skat

SWP in a Nutshell

Vision

A globally recognized brand of high quality solutions for water security and the multi-stakeholder platform for water in Switzerland. The SWP is a knowledge hub, a knowledge setter and a cross-sector innovation carrier.

Why

Contribute to work towards a **water secure world for all**.



Water-Smart Swiss Efficiency

Javier Meyer, Marketing Director, AQUA4D®



Water-Smart Swiss Efficiency



The CEO **Water** Mandate



Founded in 2004 - A Swiss Clean-technology - +30 Scientific studies - Present in more than 40 countries
- Over 4500 installations worldwide - An innovative Swiss clean-technology

Precision Irrigation



Sustainable Buildings



Animal Health





*Water-Smart
Clean Technology*

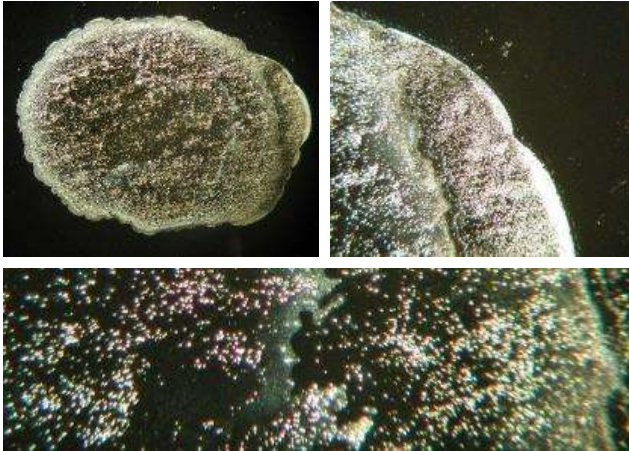


STRUCTURE OF THE WATER

AQUA4D® effect on dissolution of mineral and organic materials

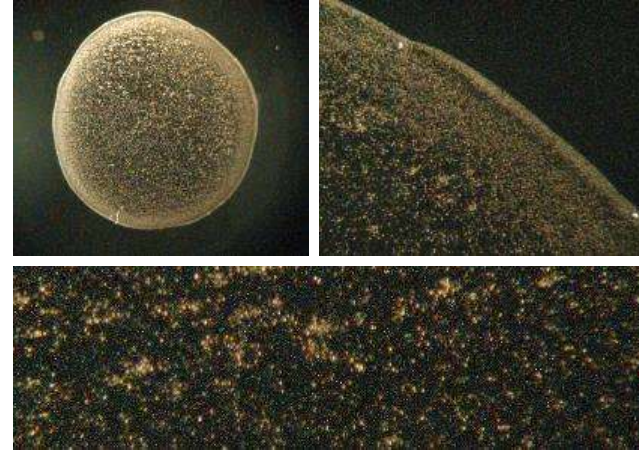
- **Non treated water**

Irregular border, irregular coarse distribution,
tendency to coagulate



- **Treated with AQUA4D®**

Regular border, regular fine distribution et
tendency to coagulate clearly reduced



AQUA4D® modifies the physical structure of the water increasing the hydration and dissolution of any mineral and organic material present in it

"Innovative Thinking for Fundamental Changes"

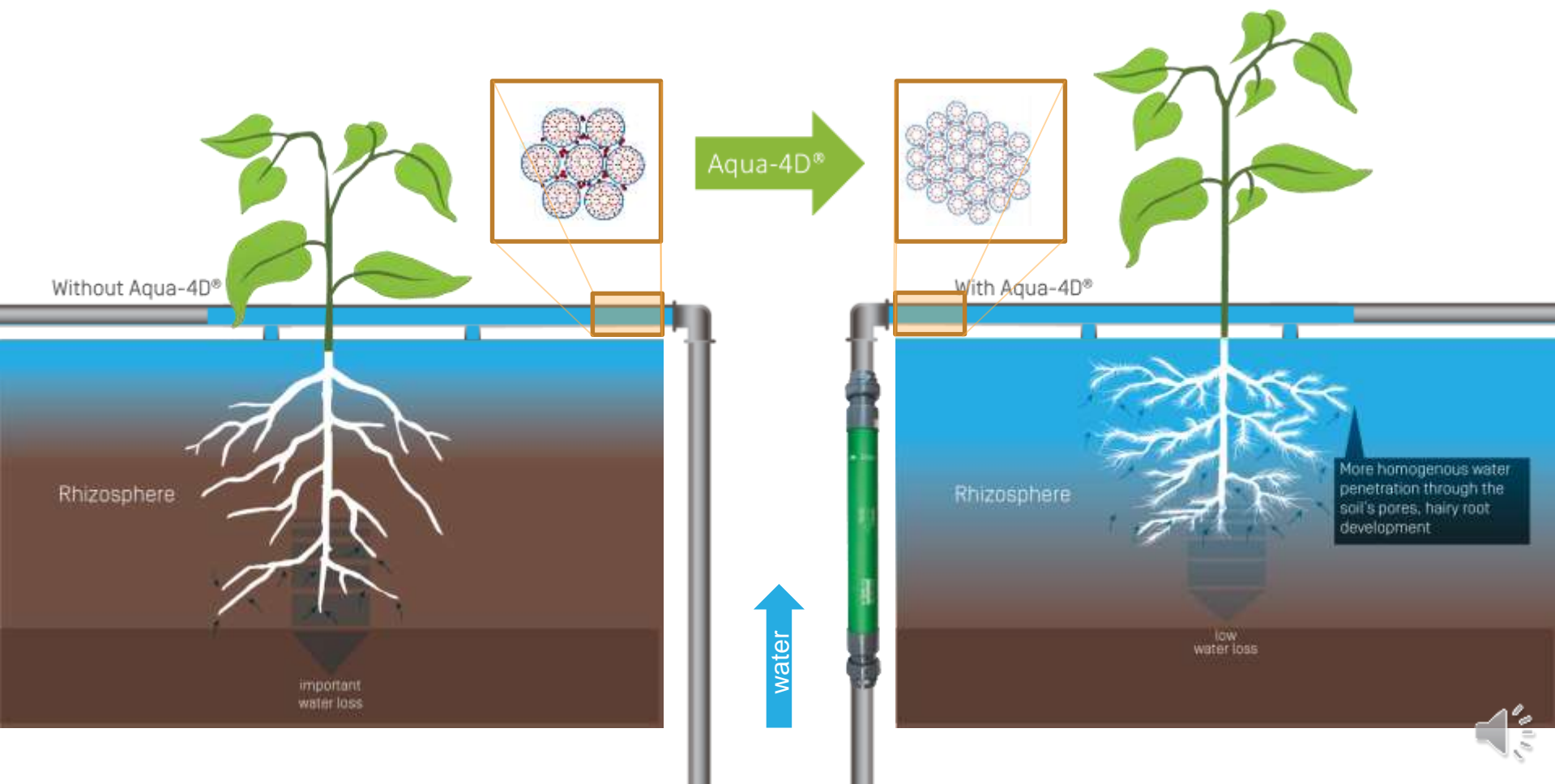


Global water
consumption today



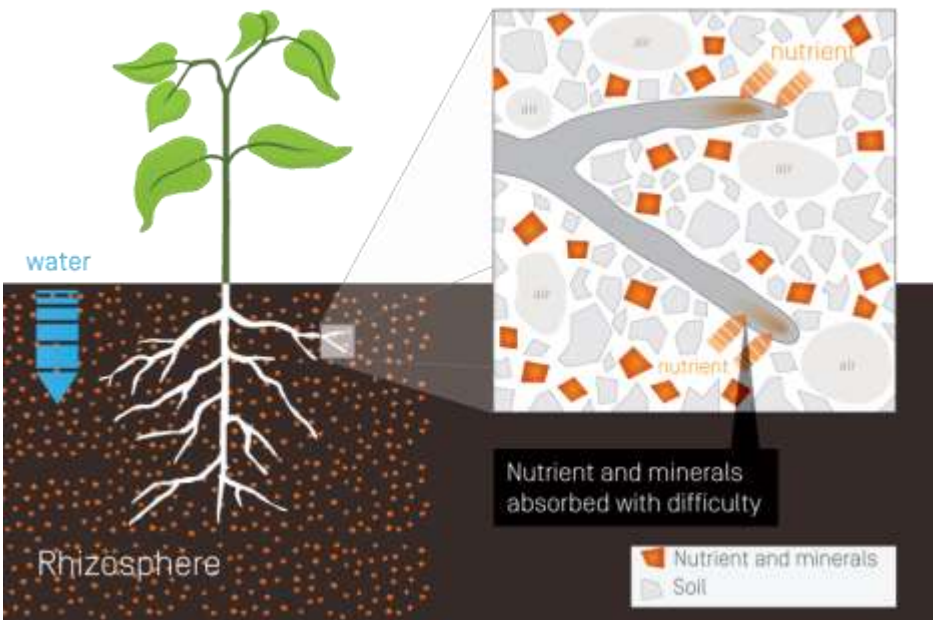
+30% Water Savings at the same time restoring Soils and improving Yields



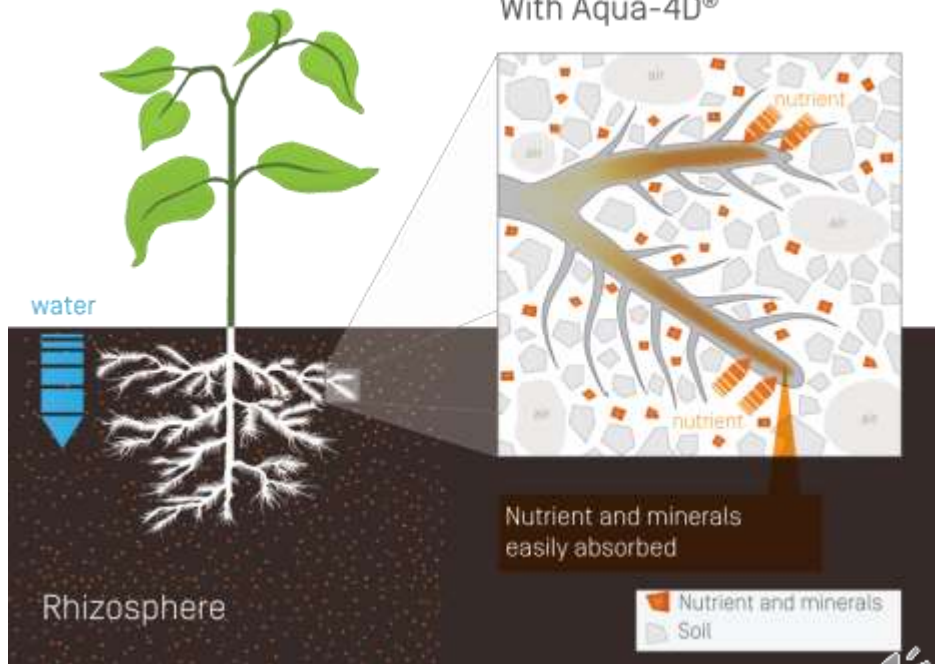


Increased absorption of nutrients and water with less water and fertilizers
= better yields and quality
(Doing More with Less)

Without Aqua-4D®

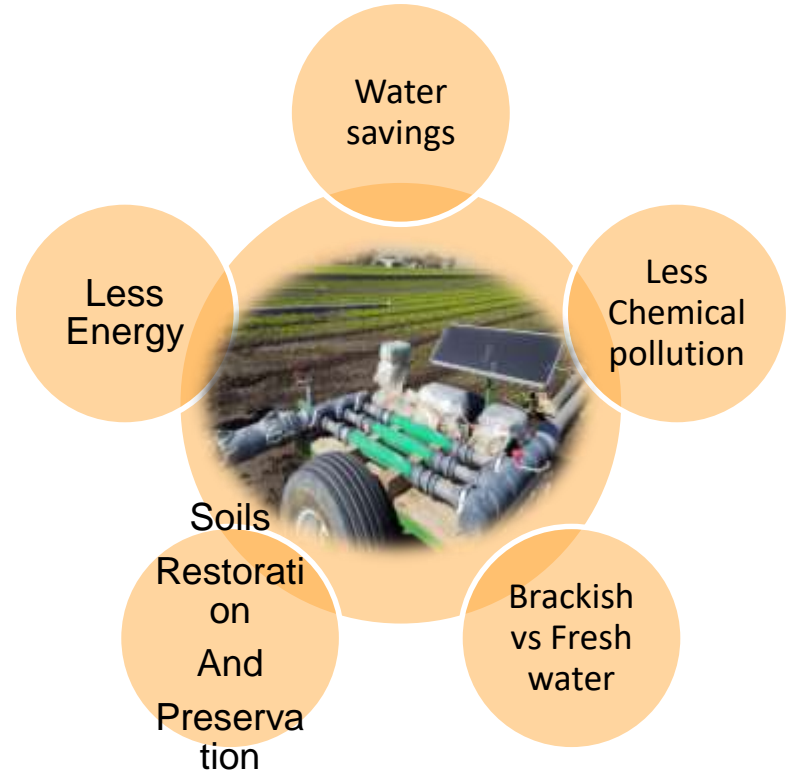


With Aqua-4D®





AQUA4D®
contributes with 11
of the 17
sustainability goals
set by the United
Nations



➤ 50,000 kg to 150,000 kg of CO2 reduction per 20 m3 / h treated by Aqua-4D® systems over an estimated service life of 10 years





Aqua4D sees "huge potential" in Chile to improve water efficiency and sustainability

June 18, 2020



Story of WAPRO in Pakistan

Arjumand Nizami, Country Director Pakistan, HELVETAS



Story of WAPRO in Pakistan

Story of WAPRO in Pakistan..



Multi-stakeholders collaboration in supporting small producers to optimise water productivity in rice value chain in a changing climate?

Arjumand Nizami

August, 2020.

Pakistan



Challenges



Pakistan, India, Tajikistan,
Kyrgyzstan, Madagascar,
Myanmar



Solutions

WAPRO is a collaborative effort to transform roles

- **Water Users / Communities:** *Feel more obligation for water saving; urge for water efficiency, taking climate change seriously*
- **Private sector/ companies:** *Investing in water use efficiency and providing incentive for sustainable sourcing through water stewardship*
- **Public actor:** *Recognizing contribution of other actors in water stewardship; act as effective regulator and problem solver for small farmers; up-taker*
- **NGOs:** *Adapting role from project implementer to facilitator in multi-actor collaboration in water stewardship and policy interventions*
- **Academia:** *Providing new knowledge, much needed research evidence and learning to trigger entry points for action*



Results



So how does it impact small farmers?

- Saving water – product security longer without eliminating rice
- More predictability in rice value chain
- Reduced cost of production at farmers' end
- Increased return from production
- Improved access to affordable technology
- Improved production technology and knowledge
- Improved ability to govern water and be part of stewards
- Recognition by government "users as managers"
- Contribute overall as a revenue winner for the state!!





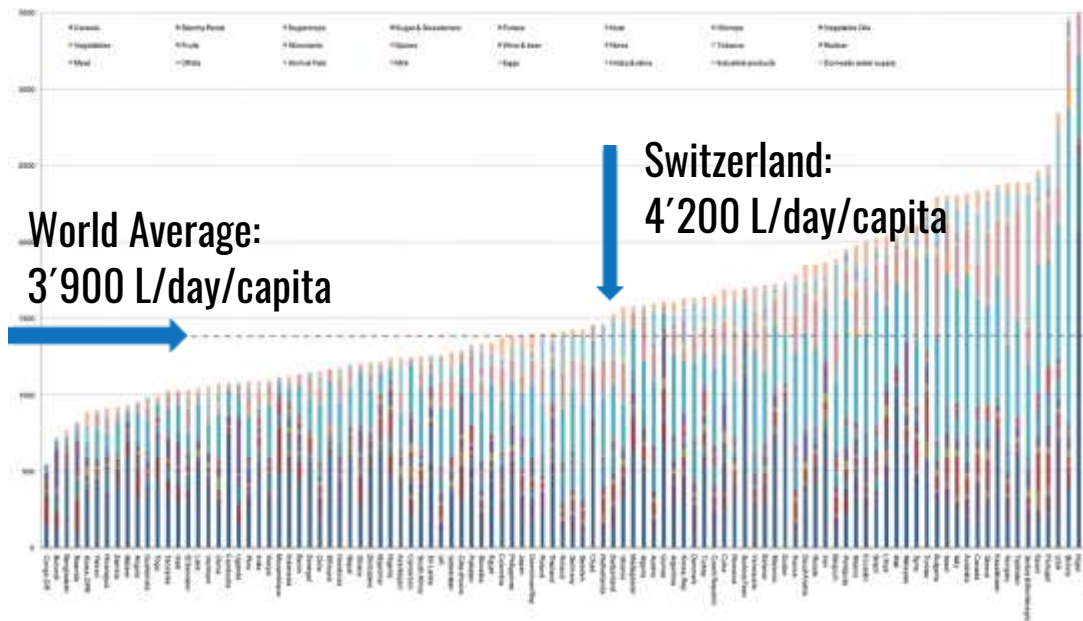
Water Footprint - Challenge or Opportunity?

Karla Schlie, founder/ operator, Swiss Toilet Organisation





Water Footprint - Challenge or Opportunity?



- The 'water footprint' is a measure of human appropriation of freshwater resources.
- Freshwater appropriation is measured in terms of water volumes consumed (evaporated or incorporated into a product) or polluted per unit of time.

Source: Mekonnen, M.M. and Hoekstra, A.Y. (2011) National water footprint accounts: the green, blue and grey water footprint of production and consumption, Value of Water Research Report Series No. 50, UNESCO-IHE, Delft, the Netherlands.

(Mekonnen, M.M. and Hoekstra, A.Y. (2011))

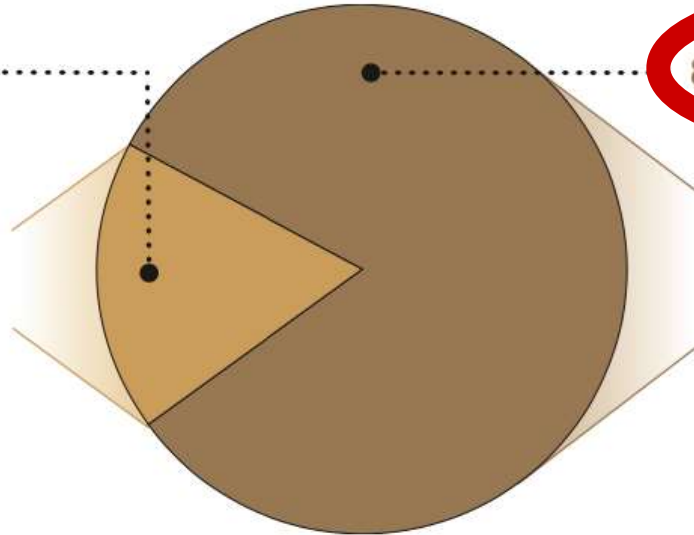




Challenge

18% Internal WF

15% Agriculture
2% Domestic
1% Industry



82% External WF

66% Agriculture
16% Industry





Opportunities - Solutions

Companies

- Identifying and mitigating water risks
- Internalizing externalities
- Impact monitoring
- Implementing water stewardship

Investors

- Accepting sub-commercial investment opportunities
- Focus on scalable impact/social water-businesses
- Investing in water-business ecosystem

Public sector

- Defining the playground (regulations, SDGs, etc.)
- Fostering cooperation, development and stewardship

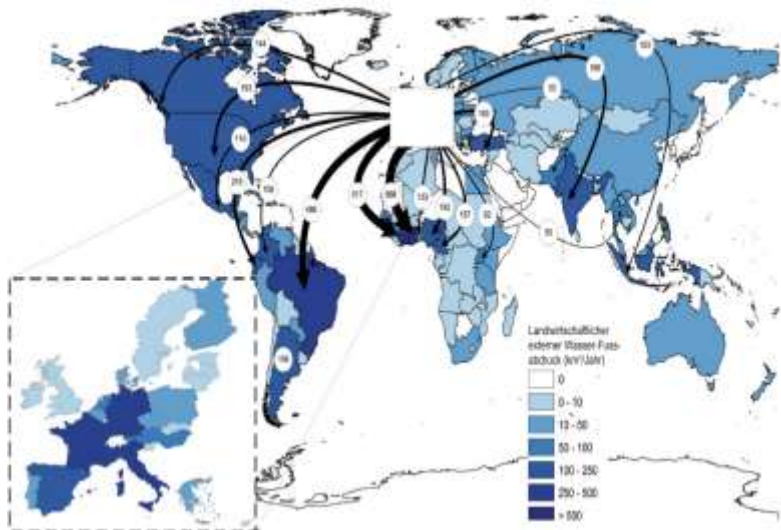
Consumers' decisions

- Taking responsibility related to consumption and product quality

Water footprint - entry point for action

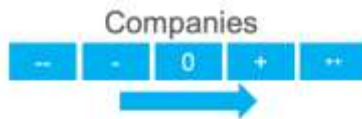


How big is Switzerland's responsibility in curbing the water use worldwide?

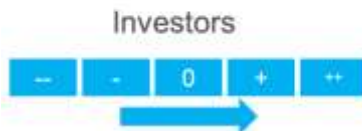


Source: Sonnenberg et al., 2010, Der Wasser-Fussabdruck der Schweiz, WWF Schweiz (2010)

Swiss responsibility shift



➤ internalizing externalities – leadership for water



➤ «Impact First» – impact investment efficiency



➤ advocacy for SDGs



➤ change of habits – sufficiency



Swiss Policy Initiatives

Karl Heuberger, thematic advisor on access to water,
HEKS / Swiss Church Aid, thematic advisor on access to water



Carla Hoinkes, expert on agriculture, Public Eye



Swiss Policy Initiatives



Water law Canton of Zürich



Drinking Water Initiative

Initiative “For a Switzerland without synthetic pesticides”



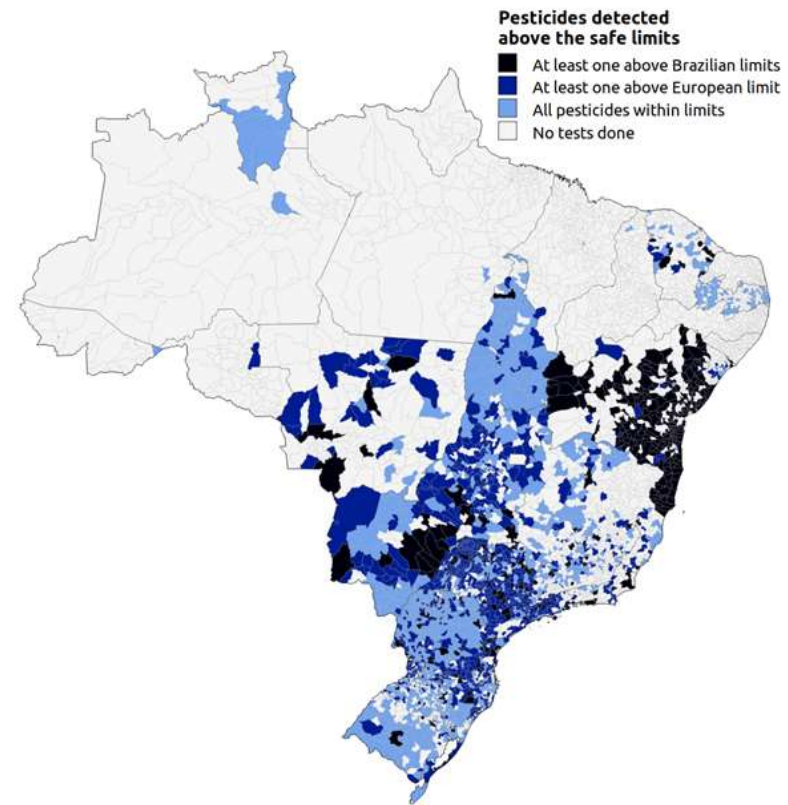
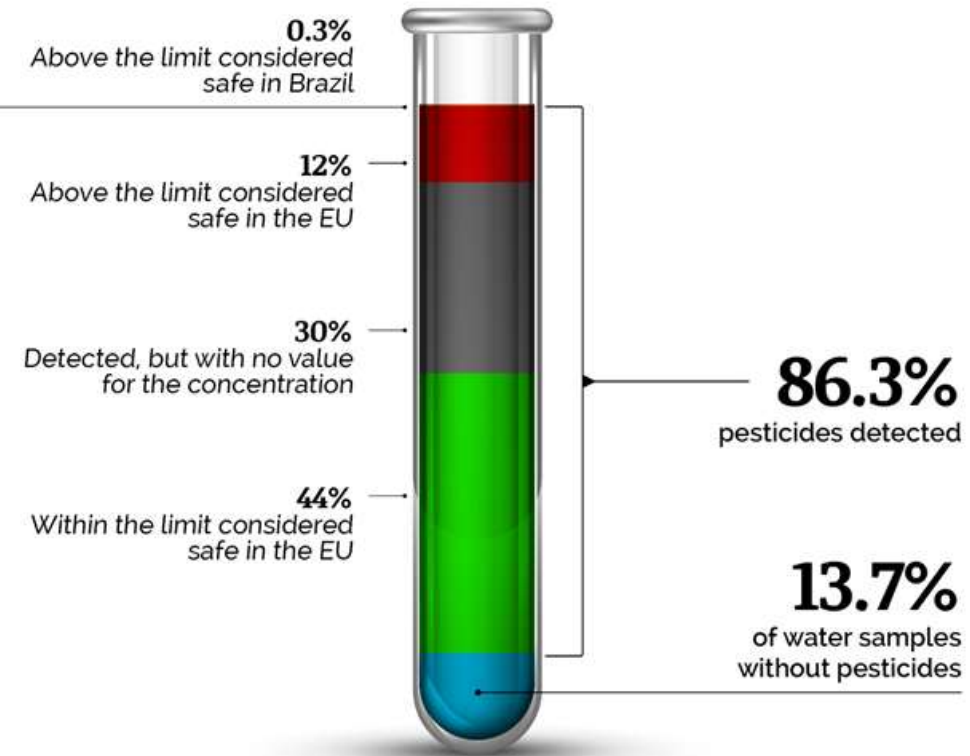
Swiss Policy Initiatives



Swiss Coalition
for Corporate Justice
SCCJ



Brazilian drinking water contaminated by pesticides?



Source: Sistema de Vigilância da Qualidade da Água para Consumo Humano (Sisagua)

Poll and comments from audience



Questions and Answers

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Take away messages

- 1) Swiss actors and their partners are **actively contributing solutions to SDG 6.4** on water.
- 2) It is **not only about optimising water use**. Often the use of inputs and **other resources** can be optimised, for greater local incomes and environmental sustainability. These **multiple dimensions** of water use need to be increasingly considered.
- 3) **Stakeholders**, linked through global supply chains, have different **roles and responsibilities** in sustainable water and resource use, through their decisions.

THANK YOU!



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