



Q & A to the WWWeek at home 2020 Session “Switzerland: Blessing or Curse for Water in the World?”

- 1) **@SWP:** I like to know how large the Swiss Partnership is, number of members, and percentage public/private/government/knowledge

Answer: SWP has around 70 member organisations. The percentage for 2019 was at 43% Private, 30% non-profit, 12 % academia, 7% Public, 8% networks and professional associations

- 2) **@SWP:** thanks for answers on SWP. I get the impression from the different presentations that SWP (and policy of Switzerland?) focusses more on waterproductivity, water and agriculture, less on WASH. Is that assumption correct?

Answer: In general SWP focuses on all water sectors, including WASH, agriculture, water-energy, etc. In this session today we focus indeed more on productive water in the agricultural value chain. Here you can have a look at a SWP overview: https://www.swisswaterpartnership.ch/wp-content/uploads/2018/04/SWP2018_Image-Flyer-A5-RZ02-Web-FINAL_0.pdf

- 3) **@Javier**

- How the size of water molecule is controlled?
- are there some success stories / crops where this AQUA4D technology has been utilised?
- Has Aqua4D been involved in any Hydroponics projects ?
- can you explain chemistry perspectives behind the water molecule size control

Answer: yes, you can find several successful stories on our News section: <https://aqua4d.com/blog-news/>

Yes, AQUA4D has been involved in hydroponics projects, aeroponics projects, all kind of greenhouses and open fields projects with more than 50 different varieties of fruits, vegetables and flowers. For instance https://aqua4d-irrigation.com/wp-content/uploads/2019/10/MKT-CSH-007-10-EN-Hydroponic-Lettuce-Brazil_compressed.pdf

Thanks to the influence on water clusters size, AQUA4D modifies some specific physical water properties, which lead to improvement in water penetration in the soils, improvement of water retention, better dissolution of fertilizers and chemicals...

- 4) **@Arjumand:** what is the role of private sector for improving water use efficiency in irrigation sector in Punjab Pakistan?

Answer: There are two types of private sectors.

- Those who source rice from the farmers
- Those who invest in technology

Both are important. We want to see increasingly more companies who source rice produced with efficient practices. For this they invest in farmers and give them technology and agronomic guidance. There is increasingly more demand for complying sustainable rice



production. Hence export oriented private sector is under more obligation to contribute to water efficiency. We are trying to have more of such companies in the net. As far as technology vendors are considered, we are trying to work with them to improve technology and reduce cost so small farmers can afford it.

- 5) **@Arjumand:** what do you see as the ideal role for public sector regulation in obliging the private sector to support/demand these more water efficient behaviors? Do you think a national standard for the rice sourcing companies or a subsidy for irrigation technologies for example? In your opinion what would be the most urgent/effective policy response?

Answer: Thank you for this question, and this is under policy discussion at the moment. I think standards from the government for use of water private sector as a whole is a big policy vacuum. Standards for rice sourcing companies may only be part of the solution because the actual problem is how rice is cultivated. Often international companies only purchase and not monitor how rice is grown. However more international obligations from example sustainable rice platform standards can oblige companies to fulfil their responsibilities and invest in water efficient technology at farmers' level. The government probably can act here "only SRP compliant companies can source rice from Pakistan" so that we only export sustainable rice. This way farmers will also become compliant actors of value chain since they are interested to sell their rice. The government subsidy to water efficient techniques alone did not yield good results because water is practically free and farmers are not looking for water efficiency if they can still sell rice without any water accountability. In my view there needs to be a total water accountability in the value chain rather than to single out one actor in a larger picture. We also need to sensitize domestic rice buyer on such standards so that people encourage to buy sustainable rice from shelves.

- 6) **@Carla:** Is Atrazine not banned in EU?

Answer: Yes, you're right it is banned. That's what I said or intendend to say. It is still sold in Brazil and other countries but banned in the EU and Switzerland.

- 7) **@Carla:** yes right, I was confused as the slide was saying Brazilian water influenced by EU .

Answer: yes, this is exactly the Problem we see: that companies based in Switzerland and the EU are selling atrazine in other countries - a pesticide already banned in their homecountry due to drinking water contamination in the past.

- 8) **@Carla:** Many thanks also may I know how much concentration in PPM atrazine is found? and at what extent it is removed? Is there any database available?

Answer: yes you can find the details about atrazine concentrations in Brazil on page 28/29 of this report: https://www.publiceye.ch/fileadmin/doc/Pestizide/2019_PublicEye_Highly-hazardous-profits_Report.pdf. And on the previous pages you will find more information and perspectives on "safe" limits and the differences between countries. In the case of atrazine, the detections were mostly within the brazilian limit of 2 micrograms per litre, yet often exceeding the European limit for atrazine (and all pesticides) of 0.1 micrograms/l. A further issue was the joint detection of atrazine + simazine, two pesticides with similar structure and therefore cumulative negative effects. If you'd like to have the details of all detections in all brazilian municipalities, you can use this interactive map we did together with Reporter Brasil (it's in portuguese though): <https://portrasdoalimento.info/agrotoxico-na-agua/#> (you need to click on the municipalities on the map to get the details).