

CFS SIDE EVENT @ GFFA 2021 – 18 January
QUESTIONS RECEIVED ON SLIDO DURING CFS EXPERT PANEL

5:32pm

What practical recommendations would you give to small holders in developing countries who depend on rainfalls? Many thanks.

J Roux (GWP): there are approaches that are very accessible and that can greatly improve smallholder rainfed agriculture, especially by improving soil health and soil moisture management (zai, cover crops or mulch for example...). At the same time, I'd like to note that what is simple 'on paper' can be difficult for an individual smallholder to implement on their own – they might need some inputs, knowledge or equipment that they don't have access to, and also can't afford to take any risks... So the recommendation would be as much addressed to smallholders as to governments and development partners.

A Cattaneo (FAO): There are two broad water management strategies for increasing yields in rainfed agriculture, which are accessible to small holders: either conserving or collecting/harvesting more water. The first strategy attempts to control the amount of water available to a crop by affecting the soil water content in the root zone. Approaches include terracing, agroforestry, contour cultivation, conservation agriculture, and organic mulching. Water harvesting, on the other hand, involves concentrating and collecting rainwater or runoff for productive purposes. Water can either be diverted directly to the fields or stored locally for later use. Options include supplemental irrigation, surface microdams, reservoirs and ground water storage. While some of these are within reach of smallholders, others would require some support from the government or development partners. Although these options are smaller scale than irrigation projects, they are also a lot less expensive and can be tailored to smallholder needs.

5:35pm

How would you evaluate existing initiatives to combine preparedness tools - e.g. in the EU as part of the new CAP/farm to fork a contingency plan encompasses different "silos" like DG agri and sante and mare. Could such joint tools address overarching crisis/ threats like climate change?

C Ringler (IFPRI): Cross-DG working groups could be a great mechanism to identify solutions that align with DG goals while addressing global challenges, such as climate change. There is growing evidence on the effectiveness of cross-sectoral approaches.

5:39pm

How can we spread agroecology extension programs. We've had great success with this on 3,000 smallholder farms in Central America over the past 24 years in terms of increased production, decreased costs, water conservation, health, carbon sequestration, biodiversity etc...

J Roux (GWP): nice to read about this success and support the importance of disseminating further agroecological approaches. Two important approaches from my perspectives are i. to work with and on value chains – ie increase opportunities for agroecological products to be sold, at a good price for producers and ii. to work with governmental institutions, including in particular Ministry of Agriculture & extension services, to figure out what's holding agroecology back and if a more enabling environment can be put in place, and to try and disseminate some of this thinking through the more regular 'extension channels'

5:39pm

And what about tree crops that don't generally require irrigation?

J Roux (GWP): there are some assumptions behind this question that could be untangled : irrigation is per se not a bad thing and can be sustainable ; some tree crops can be extremely water thirsty...

But trees have an important role to play indeed in sustainable land and water management, and we think in particular that agroforestry is an important approach

Müller (BMEL): Agroforestry systems seem to be a good adaptation measure to climate change as they increase the resilience of the agricultural system, reduce water and wind erosion, improve the microclimate due to the tree component, and help build up humus in the soil and thus improve water storage capacity.

5:44pm

"And what about tree crops that don't generally require irrigation?" for example olive & olive oil. The olive trees do not require watering in dry weather.

C. Ringler (IFPRI): Olive trees are well adapted to some environments but, as many other plants, they are also vulnerable to climate change and extreme events.

A. Cattaneo (FAO): Crops that rely on rainfall, as opposed to irrigation, are an important component of a water management strategy in areas where there is water stress or irrigation is not an option. The viability of such a strategy will also depend on whether farmers can market these products and make a living once they factor the opportunity cost of their labor and the investments required.

5:37pm

Since re-carbonizing soil, by improving soil structure, improves water infiltration and retention, shouldn't soil health be the main priority? Soil health also addresses nutrient density in addition to improving the carbon and water cycle issues.

J Roux (GWP): Soil health is very important and should be systematically taken into account in land management and agriculture. We do not see attention to water as excluding attention to soils, quite the contrary ! Still, one cannot focus solely on soils - there are some questions, for example depletion of available water resources and long term sustainability of water resources, that cannot be addressed if one focuses only on the soils...

Müller (BMEL): Absolutely. The soil is not only an important carbon sink and thus an indispensable climate protector, it is also the basis for our food production. Therefore, we have to maintain and in many cases improve soil health.

5:44pm

The HLPE has recently recommended agroecological approaches to address the problems discussed today. Has the report already been adopted by CFS/FAO? From the speakers' view what can agroecology contribute in times of changing climate, less water and more people to feed?

Müller (BMEL): In order to feed a growing population in the future, we have to make our agricultural production systems more sustainable and climate-resilient. We believe that in the long term, this is only possible with holistic, agroecological approaches.

5:44pm

Supporting African women in the food and agriculture sector financial grants and equipment is very essential if we truly want to build back better in the post covid-19 world. How do you intend to go about this? Thank you.

J Roux (GWP): Fully agree that a specific focus on women is required. One of the focus of the Africa Water Investment Programme is on gender equity. We are pushing for gender transformation – this means that we are working to support and empower individual women and also are trying to have a bigger impact by addressing systemic issues that drive gender inequity. This includes for example working on norms (institutional norms, cultural norms..) and mobilizing leadership for gender equity

5:49pm

Food security according to FAO is build up by different elements like own production, imports and aid. So, not limited to own production. Do you see a recent risk to use the crisis-reflex-argument as narrative for protectionism in developed regions like the EU.

C. Ringler (IFPRI): There have been some indications of protectionism in the early part of the pandemic, but overall international food trade restrictions linked to the Covid-19 have been limited so far. There are now several [tools](#) that make it easy calling out countries and regions that restrict trade. Let's hope that vaccine and other health product policies that developed with Covid-19 do not enter the food security realm.

5:58pm

How (can we) get quicker to the point that people take into consideration that there is a very important interlinkage inbetween climate change and water, because with less and less forests the important evaporation circle is decreasing more and more - and in the same time also the cooling effect?

GWP: We often emphasize that water is the primary medium through which we will feel the effects of climate change, and we are not the only ones to say that... [UN Water page](#) for example makes this case and presents the arguments in a very brief and clear way. We are pleased that there is now more attention being paid to climate adaptation and to the importance of managing water better in this regard.

IFPRI: It is also correct that deforestation directly affects the water cycle with cutting down the Amazon in northern Brazil directly affecting precipitation in southern Brazil according to at least one study and others suggesting that Ethiopia's rainfall is directly linked to the tropical forests threatened in Africa's Congo Basin. I think the key is for everyone to invest yet more effort into protecting our remaining tropical forests.

Müller (BMEL): Both climate change and water are cross-cutting issues that transcend sector boundaries as well as national boundaries. The work of international organizations like FAO and its various committees (including CFS) is very important as it promotes cross-sectoral work and stakeholder dialogue at global, regional and national level.

5:47pm

In response to the other Florence R, one option is more crops that grow on trees since trees get through periods without rain better than many crops. Of course, building up organic material in the soil allows it to better retain water, as does keeping the soil covered with cover crops or mulch.

GWP: and also working on agroforestry !

5:58pm

Carbon sequestration is the most effective approach to balance the water-food-climate dimension. However stable carbon is needed and this requires a large influx of finance for kilns, gasifiers, etc. Is there a financial facility that supports this initiative?

IFPRI: Our forests and lands are key to carbon sequestration but we need more support to retain tropical forests and slow climate change to stop peatlands and other carbon-rich areas from drying out. The UNFCCC has warmed up to the importance of agriculture as a solution to the climate change challenge.

Müller (BMEL): Project based carbon sequestration can either attract carbon credits on a voluntary basis from companies that want to offset their emissions or within regulated carbon trading schemes like CDM. Also international financing institutons like IFC (International Finance Coperation) as well as GEF (Global Envirionment Facility) and the GCF (Green Climate Fund) provide financial support for carbon sequestration projects. Regarding carbon sequestration by forests,

various REDD+ initiatives (Reducing Emissions from deforestation and forest degradation) support nationally implemented processes.