

## Summary of response on question 1

### in the online dialogue on Climate Resilient Agriculture (CRA)

"Which of the key elements of CRA (compare below and box of the next page) did you experience in your activities, projects, programmes and strategies? And how was the experience?"

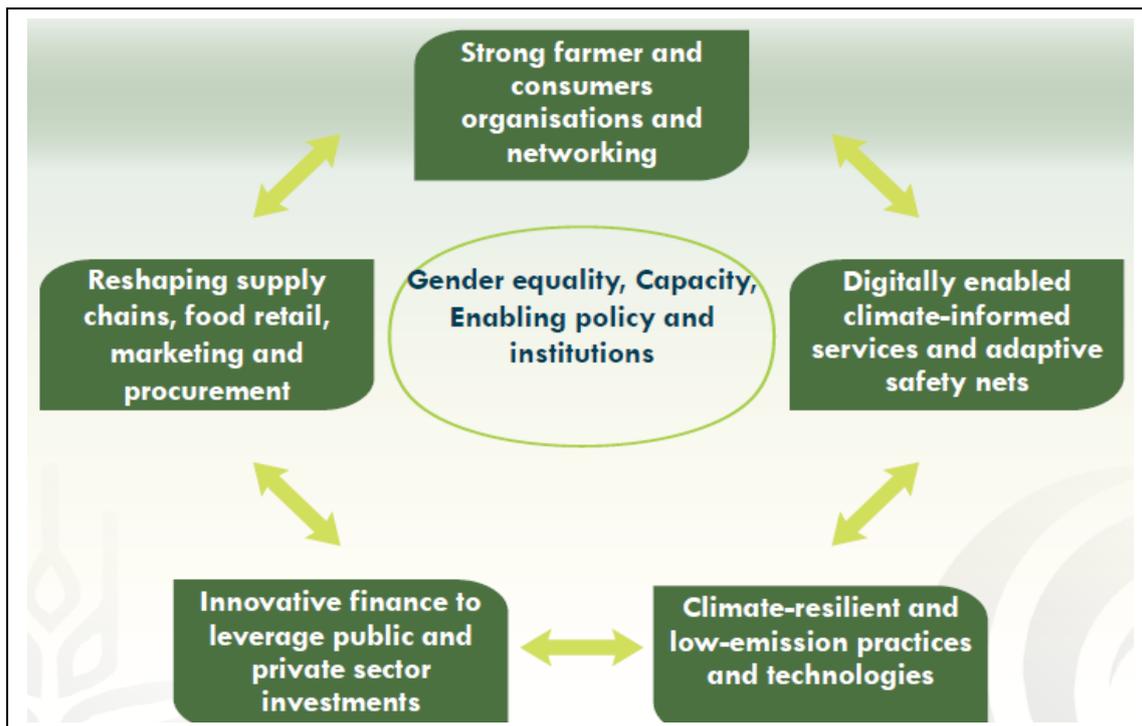


Figure 1: Slide shared by Bruce Campbell from CCAFS in his introductory presentation in the first webinar

Thank you, dear followers of this first step in the learning journey on Climate Resilient Agriculture for taking the time to learn collectively!

However, a special 'Thank you!' goes to all of you: Bernard Conilh de Beyssac, Kennedy Matikiti, Thomas Kalytta, Karl Schulz, Yamuna Ghale Upreti, Sarah Mader, Judith Reusser, David Schwitter, José Luis Perreira Ossio, Nicole Harari, Sarah Imbach, Simon Degelo and Martin Schmid, who took the time to participate actively and share their experience verbally during this busy time of the year!

The information shared and the new connections made in the webinars and in this dialogue were substantial enough already. We therefore decided to **first digest and promote the lessons learnt jointly before we move ahead** in this learning journey, which is as ambitious as necessary. **We will contact all subscribers to vote on next steps!**

**If you click here, you will in any case find [Webinar-Recordings, Summaries and the PDFs of the presentations!](#)**

**If you were subscribed to the [online dialogue](#), you may also click here to access individual contributions!**

An online dialogue is not a scientific exercise. It is not more, but also not less than an **interdisciplinary dialogue of professionals** via the internet. In contrast to a live dialogue it has the advantage of allowing participants to think a bit longer in-between posts and digest and reflect information shared by former participants. While an online dialogue only occasionally goes into depth, it rather **prioritises** issues, **highlights** the most **striking matters** and **opens questions**.

But let's start with an important statement made:

***“All key elements of Climate Resilient Agriculture appear to be mutually supportive and interdependent.”***

We think the above message is so central that it corresponds to a **strategic lesson of this dialogue**.

The following two open questions already give us a direction on how to work this interdependence of key elements of Climate Resilient Agriculture:

*"How we can take the various tools and improve them through applications? - In particular, how do we mobilise methods of measurements, standards and governance and digital tools to improve target setting, evaluation, and perhaps most importantly, finance for climate resilient adaptation?"*

The following statements and open questions are likely to already raise some controversy among its readers.

They highlight the important **game changing role private sector stakeholders and regulating authorities might play** – from very beneficial to very destructive – depending on willingness of the private sector to take social and ecological responsibility and depending on the governance of the agricultural sector in a country:

*“In the Sahel, SME's and smallholders are more and more convinced that it is the way to go. CRA is likely to become a key business development driver. Climate Resilient Agriculture (CRA) has become a ‘must have’.”*

*“How to shape cooperation with other business and institutions regarding CRA? What is the role of private sector in CRA? Will services and products offered by the private sector be sufficiently well developed if it comes to inclusiveness and agro-ecology? Will matters of access and prices be fair? What regulations and framework conditions are necessary? “*

Participants shared the following on a **1<sup>st</sup> key element of CRA “Capacity and enabling policy and institutions”**:

**NGOs** appear to be working mainly on the **local level**, thus with local authorities and local policy makers on an enabling local framework (e.g. by establishing platforms for seed regulations, participatory land use planning and management). A certain frustration is felt, that international players, such as big corporations seem to exert substantial business power on national governments to change regulations and laws in their own private sector interests (e.g. on seed regulations). Some participants – mainly participants from SDC – appear to be **working with national governments** on certain key elements of CRA, however nobody does so on the whole range of key elements. The example of the SDC Office La Paz in Bolivia, which **strengthens women in public decision making spaces and forums**, needs to be highlighted.

► **Lesson: It appears that alliances between different stakeholders (NGOs, donors & researchers from different countries, farmer organisations) could balance national legislations and ensure that all key elements of CRA for an enabling framework are strengthened and that more inclusive and more agro-ecological approaches are possible.**

#### **Key elements of Climate Resilient Agriculture:**

1. Capacity and enabling policy and institutions;
2. Strong farmer organisations and networking;
3. Climate-informed advisories and early warning;
4. Digital agriculture;
5. Climate Resilient and low-emission practices and technologies (incl. smart water management interventions, land and soil conservation, community based natural resource management approaches etc.)
6. Prioritisation and pathways of change (vulnerability integration);
7. Credit and insurance;
8. Expanded private sector activity and Public Private Partnerships.

(Source: **CGIAR CCAFS**)

Regarding a 2<sup>nd</sup> key element of CRA: Strong farmer organisations and networking, several participants highlight that they do

► **Lesson: Capacity building and strengthening of farmer organisations, because they are key constituencies to promote other elements of CRA among the farmer population.**

We got mixed responses from participants regarding a 3<sup>rd</sup> key element of CRA “Climate-informed advisories and early warning”,

In some countries, climate informed advisories and early warning are still weak. In some of them, dialogue participants tried to close the gap by equipping farmers with weather stations and training them on use, interpretation and dissemination of data as well as maintenance.

In other countries such as Zimbabwe, climate-informed advisories are more advanced and experiences with digital innovations and farmer organisations providing farmers with weather and climate-related information are in place.

► **Lesson: The quality of weather and climate-informed services and early warning determines the quality and guides the development of other key elements of CRA. Cooperation with key-stakeholders is necessary.**

► **Lesson: Digital agriculture (see lesson below) offers a lot of new opportunities for the provision of weather and climate services to farmers and other agricultural stakeholders.**

A 4<sup>th</sup> key element of CRA, “Digital agriculture” is of strategic importance.

Some of the digital tools mentioned by online dialogue participants provide **market intelligence to farmers** (e.g. by informing them on **prices** of different **crops** on different **markets**, by **matching offer and demand** and **saving time and travelling costs** to farmers and by **attracting buyers to collect the harvest** of farmers). They impact **capacities of rural advisory services**, **farmers and farmer organisations** regarding CRA, they support the **promotion** of agricultural adaptation and mitigation **technologies**, easy **access to finance, credit and insurances** as well as the **linkage with the private sector** and they also **change the nature of climate and disaster vulnerability assessments**. The SDC vulnerability tool [www.cedrig.org](http://www.cedrig.org) for instance is a tool that already exists in both forms: As a document and in a digitalised form. (cf. **recent workshop on digitalisation for smallholder farmers**).

► **Lesson: Digitalization is closely linked to almost all other key elements of CRA. The (co-) development of digital tools or the improvement of existing digital tools with other key stakeholders in a country has lots of potential to strengthen virtually all key elements of CRA.**

A lot of info was shared by participants on a 5<sup>th</sup> key element of CRA: Climate resilient and low emission practices and technologies (including smart water management & on community-based landscape and natural resource management)

As the people who were planning this learning journey already found out: **Contexts vary a lot and technological responses, i.e. agricultural practices, need to be adapted** to them.

Participants mentioned a broad change of **different climate resilient and low emission practices and technologies adapted to context already applied by participants**, e.g. the appropriate seeds, diversification of crops, soil conservation and stabilisation meaning measures to reduce erosion, water harvesting, drip irrigation, mulching, reforestation and breeding of more resistant seeds, organic pesticides, agroforestry, crop association, locally adapted seeds, measures to increase water retention such contour hedges, swales.

In many countries, participants observe a **coexistence of the application of traditional knowledge and modern inputs & a high yield agriculture** (e.g. high yielding seeds); the latter often being driven by a comprehensible motivation to get farmers to high productivity and higher incomes with cash crops.

Participants observe that degradation of natural resources is often accompanied (or preceded?) by broken relationships, a lack of trust within the community and/or between members of the community and responsible government agencies. Participants highlight **that establishing joint rules for the management of natural resources offers the possibility to not only restore natural resources, but also social cohesion in communities.** Community-based management of natural resources has a huge potential to contribute to better local governance and – if community rules such as taxes and levies for the use of natural resources will be accepted by the local population – to **increase village or municipal budgets for local development.**

Special solutions need to be found in the case of **co-existence of farming, protection of natural resources, herding of animals (pastoralism).** They may be tackled in **local or even regional land management conventions,** if farmland and/or natural resources (e.g. recently regenerated ones) are to be protected from hungry livestock, especially small ruminants (goats and sheep).

The **WOCAT [www.wocat.net](http://www.wocat.net) database** contains a **wealth of 1,500 different soil and NR conservation methods** for different contexts and landscapes. The challenge remains to find the right incentives and/or finances to upscale them. With this regard one participant shared a statement by Tony Rinaudo, who was one of this year's winners of the **[www.rightlivelihoodsaward.org](http://www.rightlivelihoodsaward.org),** which is as grounded as spiritual:

*Why is that child poor?*

*From a natural resource management perspective, that child is poor because her life support system, the environment, has been damaged.*

*It cannot provide abundantly, as it was created to.*

*That child is poor because only 50% of the land is converting sunlight energy to usable energy for 30% of the year, while 75% of the rainfall runs off or evaporates (causing downstream flooding and contributing to local drought), 95% of the available biodiversity goes unused and 90% of the soils are infertile and biologically dead.*

*Fortunately, like God, the environment is very forgiving, and will give us a second chance – if we turn from our destructive ways and walk humbly with it.*

► **Lesson:** In order to **restore natural resources or a landscape** and promote soil, land or water conservation measures participants highlight that **incentives** are necessary: For instance a) shift of land & natural resources tenure and management to the local population, b) linked income generating activities such as grass growing for fodder production, bee keeping or the culture of non-timber forest products (NTFPs) under trees (e.g. vanilla but also coffee, other NTFPs might apply for drier zones) in Farmer managed Natural Regeneration (FMNR), or c) cash for work programmes making an important linkage between humanitarian and development interventions.

► **Lesson:** All methodologies aiming at collective action in Community based Natural Resource Management (CBNRM) imply an agreement of all resources users on the same rules applying for all.

Regarding the **6<sup>th</sup> element of CRA, the prioritisation and pathways of change (vulnerability assessment and integration),** few participants mentioned experiences

One NGO informed that the **PACDR (Participatory Assessment of Climate and Disaster Risks) was successful in some countries whereas in others it had little impact.** In some places people stick to the way they practised agriculture before and in others people decided to change practices after the application of the diagnostic tool. SDC **CEDRIG ([www.cedrig.org](http://www.cedrig.org))** experiences in assessing climate, environmental and disaster risks or mitigation potentials and in identifying appropriate measures were not shared in the dialogue.

► **Lesson:** Facing the fast increase of climate or weather-related disasters, both NGOs and donors should become more responsible and invest the few days that are necessary to apply and promote diagnostic tools in order to assess climate, environmental and disaster risks and mitigation options and in order to identify

the most important no-regret options regarding all key elements of CRA to adjust their costly multi-year strategies, programmes, projects and activities.

Participants shared a lot of activities regarding a **7<sup>th</sup> key element of CRA, Credit and insurance**

Participants underlined for their countries **how important access to finance is for farmers to invest in technologies that help them to become more productive and resilient through the avoidance of climate and disaster risks**. Participants of this dialogue use different modalities to create this access: Some prefer **Village Saving and Lending (VSL) groups** as a way to establish access to finance for smallholders for investments in Climate Resilient Agriculture (e.g. appropriate inputs and seeds). Some of them seemed to have made bad experiences with microcredit (with farmers falling deeper into the poverty trap). These bad experiences highlight the **need to work with (or to develop) appropriate financial products** for poor farmers in order to make sure they move out of poverty and are not trapped in debts. Anushka Ratnajake from MyAgro also highlighted the **big interest of farmers in digital savings products** in SDC's [Digitalisation event](#).

Some participants work on **innovative financial products for Climate Resilient Agriculture**: In Bolivia, the SDC co-developed an **access to finance package (seed money)**, which was prepared by the Bolivian Productive Development Bank **for the promotion of agro-ecological systems and for irrigation** with optimised use of water in Bolivia. Other agriculture-related pilot experiments/developments are **climate "vulnerability reduction credits" VRCs(tm)**, see [www.thehighergroundfoundation.org](http://www.thehighergroundfoundation.org), and digital platforms/apps especially integrating distributed ledger technologies, see [www.adaptationledger.com](http://www.adaptationledger.com).

Participants shared that the **insurance products they witnessed were not yet enough tailor made** and also **insufficiently promoted**, meaning that **accompanying education was not sufficient either**.

► **Lesson: The SDC and NGOs jointly need to work with high priority with appropriate partners and like-minded stakeholders on the development of innovative financial products dedicated to Climate Resilient Agriculture technologies and practices**. This was highlighted several times by participants or presenters in the dialogue and our webinars.

An **8<sup>th</sup> element are expanded private sector (PS) activity and public private development partnerships (PPDPs)**, regarding which participants

**PPPs, contract farming or out grower schemes** are another way to increase efficiency and optimal distribution of tasks between Government and the private sector in agricultural value chains. One SDC office promotes these by actively **integrating climate resilient agriculture into their M4P/MSD programmes** by shortening value chains, including energy saving measures and reducing intermediary costs, however not more was shared on the modalities used to promote CRA in these M4P/MSD programme. A **business model with technologies to save time and work load targeting women in Bolivia** was mentioned.

► **Lesson: An efficient way to tackle climate resilient agriculture is to integrate climate resilient agricultural technologies, practices and tools (e.g. financial and insurances products) in our agricultural value chain, market systems development approaches**. However, more resilient competitive business models will take as much time to be tested as other business models. And don't forget the diagnostic tools, e.g. [www.cedrig.org](http://www.cedrig.org) - they take a few days, but help to identify the best no regret measures for years and for costly investments.