You should be concerned about the topic through your activities related to agricultural policy, planning, practice, funding, evaluation and research; and to be curious to learn more about the topic for you and your institution and/or to contribute with your own personal and/or institutional questions and experience (lessons learnt/best practice).
Relevance of CRA and challenges: If by 2050 world food production is to meet the demand of the world population it has to increase by 60%. However, climate change related challenges are expected to exceed regular coping capacities of smallholder farmers - through their characteristics, their magnitude and their frequency. Whereas scenarios forecast regional average annual harvest reductions of up to minus 25% by the year 2050, some farmers in the sub-regions might even lose their complete harvest in 1 of 10 years on average due to extreme and unexpected events like droughts, heavy rains, heat or cold waves.

Agriculture accounts for an estimated 70 percent of global water withdrawals and up to 95 percent in developing countries, while competition with other sectors for water is increasing. FAO projects that irrigated food production will increase by more than 50 percent by 2050, but the amount of water withdrawn by agriculture can increase by only 10 percent, provided that irrigation practices are improved and yields increase. Agriculture is both a cause and a victim of water scarcity. More frequent and severe droughts impact agricultural production, while rising temperatures translate into increased water demand in agriculture sectors. Improving water productivity and sustainable water resources management is critical for ensuring food, nutritional and livelihood security in the long-term. 80 and 89% of Low and Middle Income countries, respectively, include adaptation and mitigation measures in agriculture in the Intended Nationally Determined Contributions - INDCs to the Paris Declaration ratified by 170 of 197 countries.

Approaches to CRA: Climate Resilient Agriculture (CRA is the term the learning journey will work with), Climate Wise or Climate Smart Agriculture have become buzzwords in the current decade. SDC is interested in converging aspects of the different terms and definitions. The concepts covered under the terms give the ideal of a multifunctional agriculture - encompassing food production and income generation, soil and water protection, biodiversity conservation, landscaping and amenity (recreation) services for an increasingly urbanized society - a new importance. The most commonly used definition is provided by the Food and Agricultural Organization (FAO) of the United Nations. It explains the concept as “agriculture that sustainably increases productivity, enhances resilience (adaptation), reduces/removes GHGs (mitigation), where possible, and enhances achievement of national food security and development goals”. Another definition explains it as “an approach for transforming and reorienting agricultural systems to support food security under the new realities of climate change”.

Both concepts encompass on the adaptation side early warning systems for extreme events, risk and vulnerability assessments (i.e. also for value chain and market approaches), concrete adaptation measures including for instance insurance schemes as well as agricultural practices and techniques to increase productivity. But it also aims at improving the capacity of soils and agricultural systems to mitigate greenhouse gas emissions and to absorb carbon, respectively – according to optimists up to a third of global annual greenhouse gas emissions. Carbon retention in agro-food systems might also contribute to rendering them more climate resilient, i.e. resistant to climatic shocks like droughts, heat waves or floods.

Contradictions of CRA: Some stakeholders are skeptical and see the components of CRA as stated in the first definition as partly conflicting goals. For them, trade-offs between resilience, sustainability and productivity are unavoidable. They claim that development cooperation under the new paradigm of a CRA will need to contribute also to 1. fairer access to food production assets for producers like land, biodiversity, water and services (i.e. inputs like seed, fertilizers and pesticides and other pest control measures, logistics & marketing, research, innovation systems & rural advisory services, financial services, insurances) and fairer access to food for consumers (i.e. price, quality and nutritional values); 2. shifts to more sustainable consumption patterns; 3. ecological intensification based on biological processes, diversification, reliance on renewable resources, minimization of agrochemicals and inorganic fertilizers, environmentally more sound, sustainable land and water management, soil conserving mechanization or more human labor as well as a reinvestment in (agro-) biodiversity and landscape diversity; 4. a production, distribution and consumption of food that is as local as possible; 5. a general change in the power balance in the agricultural investment agenda (a broader stakeholder participation and better prioritization of smallholder interests in structural programming and research and more transparence).

Key elements of Climate Resilient Agriculture: 1. Capacity (vulnerability assessment) 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 and modern irrigation technologies to address scarcity and enhance water productivity by adopting a multi-stakeholder approach to improve sustainable water resources management at basin level (water stewardship), 6. Prioritisation and pathways of change (vulnerability integration); 7. Credit and insurance; 8. Expanded private sector activity and Public Private Partnerships. (Source: CGIAR CCAFS). But experts highlight also the importance of a landscape approach to climate and disaster resilience.

Quality criteria for CRA: In a first round of consultation, professionals from NGOs, research and donors highlighted that effective CRA approaches should contribute to 1. Productivity & ecologic resilience, 2. Adaptive capacity of stakeholders (including SDC), 3. Mitigation of greenhouse gases 4. National commitments/policies in reference to UNFCCC process (National Adaptation Plans and Nationally Determined Commitments) 5. Contributions of CRA and Food Systems to other SDGs.

4 see https://klimatlog.de-gbi.de/ndc and www.ndcpartnership.org
5 see http://www.fao.org/climate-smart-agriculture/en/ or