

# UNFCCC on Water, Food and Climate

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# Overview: Why is Water part of the Climate Solution

- **More than 733 million people** live in countries with high (70 %) and critical (100 %) water stress areas, accounting for almost 10 % of the global population in 2018.
- Agriculture uses **11% of the world's land surface for crop production** and accounts for **70% of all water** withdrawn from aquifers, streams and lakes.
- **Smart management of water and freshwater ecosystems** can offer a range of impactful solutions to mitigate carbon emissions. For example, the use, storage, distribution and treatment of water and wastewater contribute to about 10% of global greenhouse gas emissions collectively
- Out of the 118 countries that submitted their NDCs in 2021, **57 countries have prioritized water management for irrigation and reuse**. Likewise, 13 countries have identified the importance of water, energy, food nexus in their NDCs.



# UNFCCC on climate change

- The UNFCCC provides the foundation for multilateral action to combat climate change and its impacts on humanity and ecosystems
- Governments gather and share information on emissions, climate risks, national policies and best practices, and develop international guidance
- Key instruments: the Nationally Determined Contributions, the National Adaptation Plans, and the long-term low emission development strategies



## Temperature goal

Limit the global rise to as close as possible to 1.5 °C.



## Pre-2020 action and support

Encourage action between now and 2020 by all actors, including non-Party stakeholders.



## Transparency and the global stocktake

Robust transparency and accounting, supported by international review and global stocktakes.



## Finance, technology and capacity-building

International cooperation to support a low-carbon and climate-resilient future.



## Mitigation and voluntary cooperation

All Parties must prepare nationally determined contributions (NDCs) and work to achieve them, reporting on progress, and regularly enhancing ambition.



## Adaptation and loss and damage

Strengthen national adaptation efforts and support vulnerable countries to cope with climate change effects.



# Water sector as adaptation priority of countries

<i>Priority area</i>	<i>Examples of specific measures</i>	<i>Examples of quantified targets</i>
Freshwater resources	<ul style="list-style-type: none"> <li>- Developing national information systems, including hydrological maps and resource models</li> <li>- Defining watershed indicators</li> <li>- Developing tools for evaluating impacts and socioeconomic costs</li> <li>- Diversifying supply, including through rainwater harvesting and treatment, recycling and desalination</li> <li>- Enhancing water storage options</li> <li>- Introducing legal and institutional frameworks</li> </ul>	<ul style="list-style-type: none"> <li>- Ensuring 99 per cent of the population has a basic water supply and 40 per cent has an improved water supply by 2030</li> <li>- Reducing water consumption by 20 per cent by 2036</li> <li>- Reusing 95 per cent more treated water by 2036, recycling 10 per cent of wastewater by 2030 and treating 68 per cent of wastewater by 2030</li> <li>- Reducing non-treated sewage by 25 per cent</li> <li>- Inspecting water quality in 95 per cent of health systems</li> <li>- Increasing desalinated water supply by 50 per cent by 2036</li> <li>- Increasing the number of companies participating in water efficiency initiatives by 40 per cent</li> <li>- Implementing 84 structural and 30 non-structural flood management measures</li> <li>- Creating a risk management plan for 30 per cent of highly vulnerable municipalities</li> </ul>



# Koronivia Joint Work on Agriculture (KJWA)

## Development of KJWA

**KJWA was launched by Decision 4/CP.23**, whereby Parties confirmed to focus on agriculture and agreed to take on further work, starting with identified focus areas.

The decision sent a strong signal to all Parties and implementing agencies **to put a stronger focus on the implementation of activities related to agriculture and climate change.**

## KJWA and water management

**Water management was part of the topics covered in Koronivia workshops during the first part of the intersessional workshop held in June 2021** which dealt with sustainable land and water management, including integrated watershed management strategies, to ensure food security; **and in the workshop on improved soil carbon**, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management **organized in June 2019.**



# The Nairobi Work Programme (NWP)

## NWP

Constitutes the **UNFCCC knowledge-to-action hub**: closing knowledge gaps to advance transformative adaptation and resilience in a changing climate.

Engages countries and a growing network of partner organizations from across the world.

Supports Parties to meet adaptation goals set out in the Paris Agreement.

Has identified a number of collaborative actions to catalyze adaptation through knowledge, which also support the work of UNFCCC constituted bodies.

## Adaptation at subregional level

The **Lima Adaptation Knowledge Initiative (LAKI)** is a joint action pledge with UNEP Global Adaptation Network, where priority-setting workshops are convened to identify and prioritize **climate change adaptation knowledge gaps for specific subregions and sectors/themes**.

**65 knowledge gaps including fisheries, water resources, and coastal and marine ecosystem have been prioritized** for target knowledge users in fourteen Small Island Developing States (SIDS), as well as Australia, New Zealand and seven Pacific island territories.

The NWP has also engaged with regional, national, and local partners in the **Gulf Cooperation Council (GCC) and North Africa subregions** to design and address the priority knowledge gaps on water resources.

## NWP Projects

The research project named “**Ecosystem-based adaptation and water resource management in Nepal and Peru**” was successfully completed in collaboration with the IUCN and the Mountain Institute in 2021.

**Additional projects on water and climate change adaptation are underway in India and Nepal** with the Jawaharlal Nehru University and the Tribhuvan University of Nepal in collaboration with the Global Water Partnership.



# Opportunities and synergies with CRFS

## WHY FOOD SYSTEMS & CLIMATE CHANGE?



Whilst extreme weather events impact food systems and communities, at the same time, food systems, their production cycles, underlying diets and consumption are responsible for negative effects on ecosystems and the environment.

**However, this does not have to be a downward spiral** - we can reverse the negative relationship between food systems and climate change and turn it into a positive and mutually beneficial one.

## ➤ WHAT NEEDS TO BE DONE? ➤



To feed 9 billion people on the planet by mid-century, global food systems will need to operate efficiently while achieving the SDGs and meeting the 1.5C climate commitments.

To preserve a livable climate, greenhouse-gas emissions must be reduced by half by 2030 and to net zero by 2050. Bold, fast, and wide-ranging action needs to be taken by governments and businesses.

The **CRFS Alliance** advocates for integrated food and climate nexus approach around 3 key areas with 9 themes

## OUR CALLS TO ACTION



**Make food systems more resilient to climate change induced shocks and stressors** through access to climate finance, DRR and CRM approaches, early warning and climate risk insurance.

**Make food systems more resilient to man-made shocks and stressors** by addressing climate-food security- conflict interlinkages and building resilient local food systems

**Make food systems more sustainable** by mainstreaming regenerative agriculture, WEF nexus, preserving soil health and halting biodiversity loss.



# NEXUS Gains (CGIAR)

## Objective

Providing support across **water, energy and food ecosystems** in selected transboundary river basins.

Providing **tools, guidelines, training and facilitation** for analysis and research for development.



## Activities

**Boosting water productivity and water storage management** to improve food and nutrition security

Energizing food and water systems by co-developing business and finance models for **accelerated access to clean energy and water systems**

**Strengthening water, energy, food and ecosystems nexus governance** by supporting cross-sectoral multistakeholder platforms

**Developing capacity for emerging women leaders** by supporting women's empowerment through technical and leadership skills development





