



Climate Resilient Development Pathways: Food Systems for all beyond 2030

Introduction: The increasing frequency and intensity of extreme weather events such as cyclones, floods, or droughts have brought an estimated 166 million people in Acute Food Insecurity between 2015-2017. Climate change and variability are projected to further increase undernutrition, stunting, and related childhood mortality, as well as dietary risk factors and related non-communicable diseases globally by 2050. Conflicts, economic and health (e.g. COVID-19) shocks further compound these impacts which disproportionately impact the world's most vulnerable populations. These ongoing challenges require solutions to build greater climate resilience within the current food system from production to consumption. To address this, the UNFSS Action Track (AT5) on Resilience, is proposing resilience actions to ensure that food systems can maintain functionality, become resilient to the impacts of climate change, and improve to a sustainable state. These actions include a focus on "productive disruption" in the context of global crises, such as pandemics, biodiversity loss and the global climate emergency. The Action Area on Climate Resilient Development Pathways (CRDP) focuses on integrated and cross-cutting system and nexus approaches to enhance resilience and reduce vulnerability to compounded risks, structural fragility and systemic causes, on risk reduction, and on multi-risk and crisis management across and within food systems.

Why an Alliance?

Climate Resilient Development Pathways are development trajectories, based in equity and justice, which combine climate adaptation and mitigation, and resilience with the goal of sustainable development.

This Climate Resilient Development Pathways action area aims to provide a framework for food systems transitions that deliver resilience to climate, shocks and stresses, protect biodiversity and ecosystems' services, reduce poverty and enhance social, gender, and inter-generational equity and justice. Food systems transitions to long term resilience require multi-sectoral and multi-systemic integrated solutions innovative water and energy solutions implemented through a Nexus approach, multi-risk reduction, and management, ambitious policies and platforms to support climate resilient food systems beyond 2030. This calls for strong partnerships and alliances with Member States (MS) and stakeholders, in particular related to innovation (social,

technical, financial) to offer bold ideas for cooperative action to take systemic actions at scale. This Alliance will offer a space to follow-up the UNFSS at national and international level, by supporting the integration of resilience in International and National Policy and Planning and innovative Initiatives for Food Systems Resilience beyond 2030.

This Alliance also aims to engage high-risk regions and the most vulnerable:

- Small Island Developing States (SIDS)/SIS
- Arid and Semi-Arid Lands /Deserts (e.g., the Sahel)
- Least Developed Countries.

What are the Alliance's actions?

This Alliance is the result of a merge of three solutions' clusters under the Climate Resilient Development Pathways' Action Area, and the Water-Food-Energy Nexus. The main thematic areas under this Alliance are:

- Climate adaptation, mitigation, and resilience
- Nexus approach to Water-Food-Energy
- Modern/Clean cooking
- Climate Risk Reduction and Risk Management.
- Integrating resilience in international and national policies plans and initiatives.

Climate adaptation, mitigation, and resilience.

This thematic area brings together innovative solutions in climate change adaptation and mitigation to promote the transformation of the agricultural production and consumption systems for building resilience to climate vulnerabilities, and other shocks. This thematic area particularly focuses on empowering vulnerable groups such as smallholder farmers, small and medium enterprises, women and youth, thus making them more resilient to climate and other shocks. On the production side, it is crucial to shift to more environmentally friendly activities that reduce greenhouse gas emissions while securing the income of producers, especially in rural areas. On the consumption side, it is necessary to raise consumers' awareness on sustainable and healthy consumption. Further, to build resilient global and local food systems capable of withstanding climate change and global disease outbreaks, such as the COVID-19 pandemic, it is pivotal to build and strengthen mutual relationships between producers, food-related business and consumers, especially at the local level. Additionally, the solutions address key dimensions of the food system, including securing tenure rights, land banking and sustainable land management. Finally, this area covers finance for sustainable food systems. In this regard,

innovative solutions include improving access to finance; enhancing financial literacy; expanding low-interest loan opportunities; encouraging private and public investments.

Nexus approach to Water, Food, Energy

This provides innovative water and energy solutions which simultaneously support the decarbonization of food systems and incentivizes sustainable and equitable water access for the production, processing and preservation of healthy and safe foods. Core is the Water-Food-Energy (WFE) Nexus approach to guide sector planning, policy and technology decisions. The approach identifies potential trade-offs and explores synergies in water and energy storage, access and (re)use considering the climate and other related water and energy risks to food systems and the finite amounts of natural resource assets. Examples of trade-offs include risk of over-pumping in solar powered irrigation and other types of water withdrawals for food processing due to the no-cost character of solar energy, high energy needs to desalinate water to be used in agriculture, and use of water for biogas at the expense of water for food or animal feed in arid regions. Examples of synergies include the production of biogas from food residues and wastewater treatment, and renewable energy used for food systems and pumping good quality water for households, schools and health centers. The WFE nexus contributes to key factors needed to help achieve food systems' resilience: i) coping with shocks and stresses, by ensuring equitable access to adequate amounts of water and energy; ii) minimizing the trade-offs in local water and energy production and use to build local food systems resilience; iii) reducing the risk of water and energy shortages and unreliable access for food producers and agri-food value chain actors; iv) providing food chain actors with a diversity of income generation options; and v) helping to reorient food system outcomes towards a less-demanding future, thereby enhancing both resilience and sustainability.

Modern cooking. Food consumption is enabled by cooking which in many places is still biomass based through traditional methods that cause environmental degradation, health issues and represent a considerable economic and time burden for households and women in particular. This thematic area proposes a radical and global transition toward modern cooking solutions (electricity, gas and liquid fuels) through technological innovation, inclusive business and delivery models, policy and advocacy actions, and engaging communication tools.

Climate Risk Reduction and Management (CRRM).

CRRM focuses on actions to mitigate the impacts of climate variability and climate-driven disasters deploying climate information solutions to trigger action, programming, relief, and finance. Information and knowledge about climate-related events, trends or forecasts are used in CRRM for climate-resilient decision-making, to reduce the negative impacts of climate change and variability on climate-sensitive sectors (i.e. agriculture), communities or geographical areas. CRRM is in line with the general concept of disaster risk management, which involves activities related to i) Risk Prevention (measures to avoid existing or new risks); ii) Risk Management (mitigation, i.e., limiting the impact of disasters, and preparedness, i.e. anticipate, respond to, and recover from the impacts of disasters); iii) Risk Transfer (transferring the financial consequences of future risk from one party to another). CRRM, therefore, covers a diverse set of measures and approaches, from early warning systems to the provision of climate information, seasonal forecasts, or analytical approaches to evaluate the probability of climate risks and take action accordingly, to financial instruments – including insurance, education, and knowledge development, capacity building, national planning and investment, infrastructure design or strengthening institutional and legislative arrangements.

Integrated international and national policies plans and initiatives.

This thematic area provides the landscape of international and national policies, strategies and plans to enable and guide a transformative change towards climate resilient development. This includes, at the top level, the Nationally Determined Contributions (NDCs) and the national adaptation plans (NAPs) implemented through the UNFCCC as the forefront of international action to address climate change. There is also a wide range of planning instruments focusing on different issues (e.g. hazards, sectors, geographic regions) that bring about complementary efforts to achieve climate resilient development. For example, the integrative framework for national adaptation plans and sustainable development (NAP-SDG iFrame) follows a systems approach to coordinating the different entry points or aspects (e.g. climate hazards, sectors, actors, development goals and scale) of the adaptation planning cycle, and to manage coherence between the NAPs, NDCs, SDGs, the Sendai Framework for Disaster Risk Reduction, and other frameworks. The cluster also presents innovative approaches to guide underpinning assessments, scenario planning and pathways for the implementation of the different plans. This includes the Resilience Frontiers multi-agency initiative coordinated by UNFCCC.



What do commitments look like?

Commitments made by the Alliance are voluntary, the following are examples:

- Sign up to and be an active member of the Alliance.
- Commit to the alliance until 2030 and beyond
- Define the structure of the alliance, regional and national stakeholders' representation;
- Seek financing for the alliance structure and a Secretariat, placed within existing UN organizations such as the WFP/UN Capital Development Fund, essential if the Coalition is to maintain the required momentum towards 2030.
- Propose financing mechanisms that will support post summit implementation and reporting
- Meet regularly to support alliance-building among countries in different regions
- Support alliance members to leverage existing bilateral agreements that address the objectives of the alliance and resource mobilization.
- Build linkages with global and regional IFIs, global, regional and local private sector players
- Propose policy changes in line with national and regional priorities that will accelerate food systems transformations
- Propose actions and global agreements and financing mechanisms that will accelerate countries progress towards the SDGs and food systems transformation

Who has indicated interest in this Alliance?

Member states	
Disclaimer - need written confirmation from MS	
Submitted solutions	China, Dominican Republic, France, Japan, Germany, NZ, Turkey, USA, UK
Expression of Interest	Bangladesh, Germany, Fiji, Japan, Denmark, Netherlands, Ethiopia, Turkey, Saint Kitts and Nevis, Saint Lucia, USA, UK, UAE.
Participating in Insu-Resilience Coalition	Bangladesh, Canada, Ethiopia, EU, Fiji, France, Gambia, Germany, Japan, Madagascar, Marshall Islands, Philippines, Switzerland, The Netherlands, UK, USA
Participating in Risk-Informed Early Action Partnership (REAP)	Bangladesh, Belize, Egypt, Finland, France, Germany, Ireland, Jamaica, Japan, Liechtenstein, Luxembourg, Malawi, Norway, Saint Lucia, Sweden, UK, USA

Participating Water-Food-Energy Nexus	Netherlands, Sweden, Germany, EU, USAID, Ghana, Ethiopia, Mali, Rwanda, Uganda, Kenya, South Africa, Egypt, Arab Water Council, Nepal, India, Bangladesh, Pakistan, Turkey, Japan
Participating in NAP-SDG iFrame	Bhutan, Comoros, Haiti, Lesotho, Kiribati, Malawi, Mozambique, Sao Tome, Principe, Timor-Leste, Tuvalu
National dialogues indicates interest	Azerbaijan, Cambodia, Cameroon, El Salvador, Dominican Republic, Fiji, Finland, Honduras, Ireland, Myanmar, Nigeria, Rwanda, Samoa, Sudan, Switzerland, Turkey
Partners	
UN	UNFCCC, WFP, FAO, UNDP, IFAD, UNEP, UNDRR, UNEP-CTCN
Research & Think Tanks	CGIAR, ILRI, CCAFS, Oxford University, Columbia University, CIFOR-ICRAF, Futur.io, SLYCAN Trust, IPBES Coordination Office (DLR), Ohio State University, ICCCAD, IWMI, Centre for Development Research (ZEF, Germany), IFPRI, Borlaug Institute, Water for Food Global Institute, Daugherty Water for Food Global Institute, University of Zambia, World Resources Institute, University of York
International Financial Institutions	GCF, World Bank, ADB, Global Commission on Adaptation, African Development Bank
Farmers' Organizations	WFO, SAAI, Young Farmers Associations, Artisanal Fishermen's Cooperatives
Civil Society	World Vision, IIED, The Club of Rome, Global Evergreen Alliance, SYSTEMIQ, WWF, Environmental Defense Fund, Future of Food, WRI, FOLU, Climate KIC, ARCOS Network, Mercy Corps
Private Sector	2030 Water Resources Group, WBCSD, AGRA, ReGen Villages
Partnerships & Intergovernmental Organisations	IUCN, IRENA, GWP, Sustainable Energy 4 All, AMCOW, WE4F, GGGI, 2030 WRG, International Solar Alliance, Arab Water Council, CEPAL, Clean Cooking Alliance, Southern Africa Development Community, SACREEE, FANRPAN
Indigenous Peoples, Youth & Women	Association of Indigenous Peul Women and Peoples of Chad (AFPAT)



EMERGING ALLIANCE FOR

Climate Resilient Development Pathways: Food Systems for all beyond 2030

DESCRIPTION

Climate Resilient Development Pathways are trajectories which combine climate adaptation and mitigation with a goal of sustainable development, based in equity and justice.

This Alliance offers a space to build resilient food systems, building synergies between the UNFSS and the UNFCCC Policy Frameworks related to the Paris Climate Agreement and the Sendai Framework for DRR. It includes solutions related to climate adaptation & mitigation, the Nexus WFE, universal access to modern cooking, multi-risk reduction & management and integration of resilience in Policies and Planning (NAPs, NDCs, DRR, SDGs). There is a special attention to engage the most vulnerable and at risk, in Small Island States, Deserts and Arid and Semi-Arid lands (e.g. The Sahel) and Least Developed Countries.

Potential Alliance Members

Member States (TBC):

Bangladesh, Fiji, NZ, Germany, Turkey, UAE, Japan, Spain, Netherlands, Sweden, EU, USAID, Ghana, Ethiopia, Mali, Rwanda, Uganda, Kenya, South Africa, Egypt, Nepal, India, Bangladesh, Pakistan, Canada, France, Gambia, Madagascar, Marshall Islands, Philippines, Switzerland, The Netherlands, UK, Belize, Finland, Ireland, Jamaica, Liechtenstein, Luxembourg, Malawi, Norway, Saint Lucia, Bhutan, Comoros, Haiti, Lesotho, Kiribati, Mozambique, Swaziland, Sao Tome & Principe, Timor-Leste, Tuvalu, CELAC

UN: UNFCCC, WFP, FAO, UNDP, CTCN, IFAD UNEP, UNDRR

RESEARCH & THINK TANKS:

CGIAR, ILRI, CCAFS, Oxford University, Columbia University, CIFOR ICRAF, Futur.io, SLYCAN Trust, IPBES Coordination Office (DLR), Ohio State University, ICCCAD, IWMI, Centre for Development Research (ZEF, Germany), IFPRI, Borlaug Institute, Water for Food Global Institute, Daugherty Water for Food Global Institute, University of Zambia, World Resources Institute, University of York

FARMERS' ORGANIZATIONS:

WFO, SAAI, Young Farmer's Associations, Astisinal Fishermen's Cooperatives

IFIs: GCF, World Bank, ADB,

CIVIL SOCIETY:

World Vision, IIED, The Club of Rome Global Evergreen Alliance, SYSTEMIQ, WWF, Environmental Defense Fund, Future of Food, WRI, FOLU, Climate KIC, ARCOS Network, Mercy Corps

PRIVATE SECTOR:

WBCSD, AGRA, ReGen Villages

PARTNERSHIPS & INTERGOVERNMENTAL ORGANISATIONS:

IUCN, IRENA, GWP, Sustainable Energy 4 All, AMCOW, WE4F, GGGI, 2030 WRG, International Solar Alliance, Arab Water Council, CTCN, CEPAL, Clean Cooking Alliance, Southern Africa Development Community, SACREEE, FANRPAN
INDIGENOUS PEOPLES, YOUTH & WOMEN: Association of Indigenous Peul Women and Peoples of Chad (AFPAT)