

Promoting energy access to safeguard food security and nutrition gains within the agrifood systems and beyond

CFS 51 Side Event jointly organised by FAO, WFP and the Economic Community of West African States (ECOWAS)

Wednesday, 25 October; 8.30 – 9.45 (UTC+2), Iran Room (FAO HQ) & via Zoom

Summary

I. Background

By 2050, feeding a global population of almost 10 billion will require a radical transformation in how food is produced, processed, traded and consumed. Ensuring energy access for all, and at every stage of agrifood systems, is a critical dimension of this transformation. 30% of global energy is consumed by agrifood systems and one third of agrifood emissions come from energy. 12% of total food production is lost due to lack of effective refrigeration, amounting to 4% of global GHG emissions. Energy inefficient agrifood systems contribute to aggravating climate change, energy and food insecurity. In 2021, 675 million people had no access to electricity and 2.3 billion to clean cooking. In many developing countries, lack of access to energy is a fundamental barrier to reducing hunger and ensuring that the world can produce enough food to meet future demand.

Renewable energy solutions and integrated food-energy systems can directly advance energy and food security, while also contributing to job creation, gender equality, and climate resilience and adaptation. Increasing access to sustainable, green energy solutions can serve as an entry point for providing an ecosystem of integrated services needed to drive rural transformation in geographically remote or isolated areas. Food security and nutrition can be safeguarded by ensuring access to sustainable energy in all areas of agrifood systems. This ranges from energy for irrigation and agro-processing, to cold chains for transport and storage of safe and nutritious food, and clean cooking in households.

The FAO, WFP and ECOWAS joint CFS 51 Side Event “**Promoting energy access to safeguard food security and nutrition gains within the agrifood systems and beyond**” shed light on the opportunities that increased energy access could bring to agrifood systems and beyond, making the difference for food security and nutrition, which is at the core of the CFS. Zero hunger can be achieved with both sustainable agrifood systems and community-based approaches to enable rural transformation, through innovative and green solutions that are virtuous from an environmental, social and economic point of view. In this context, the side event showcased how sustainable renewable energy can be deployed in agrifood systems to safeguard food security and nutrition. In addition, it explored concrete programmes and specific practices that have been successful in providing energy access and enhancing food security and nutrition. In light of this the side-event discussed how successful examples can be amplified and replicated.

II. Event and Panelists' Interventions

Ms. Constance Miller, FAO, opened the side event by introducing the consequences of energy-inefficient agrifood systems, which aggravate climate change, energy and food insecurity. Integrated food-energy systems represent a solution to directly advance energy and food security, while also contributing to job creation, gender equality and climate resilience and adaptation.

Ms. Maria Michela Morese, Energy Team Leader, FAO, gave an overview of FAO's Energy-Smart Agrifood Systems programme. By promoting energy for agriculture, energy efficiency in agriculture, and energy from agriculture, the programme fosters better nutrition, less food waste and reduced emissions.

Ms. Raffaella Bellanca, WFP, explained WFP's sustainable energy delivery models that strengthen food systems. To face issues related to climate unpredictability and production, WFP works with households, schools and farmers to promote energy for food security, for example through the delivery of improved stoves and solar water pumps.

A 3-minute Mentimeter session collected ideas and contributions from the audience on how energy access can enhance food security and nutrition.

A joint FAO-UNEP animated video was launched on sustainable food cold chains, showcasing their role in reducing food loss and waste to reduce hunger, emissions and to increase farmers' livelihoods.

Mr. Bah F. M. Saho, Executive Director, ECOWAS, presented on sustainable energy for enhancing a circular economy that positively impacts food security and nutrition. He introduced the ECOWAS region and the importance of circular economy concepts, and provided a concrete example of circular production and use of bioenergy in the region.

A video on "Energising Rural Transformation one village at a time" related to WFP's Madagascar Rapid Rural Transformation (RRT) initiative was displayed. **Ms. Frederica Andriamanantena**, WFP, dove deeper into WFP's efforts to promote rural transformation and food security in Madagascar by providing off-grid green energy solutions, enhancing productivity in electricity use and furthering an integrated Water-Energy-Food nexus approach.

Mr. Veljko Vorkapic, FAO Energy team, gave a presentation on FAO's sustainable bioenergy (BEFS) assessment for Rwanda. The presentation displayed cost-effective options to produce off-grid electricity and context-specific assessments of feedstocks and technologies for cooking in Rwanda.

A Q&A session deepened the discussion around sustainability success factors of food-energy interventions, the design of a sustainable economic model to improve the water-food-energy nexus, and stakeholder perception of the various cooking technologies.

Ms. Constance Miller, FAO, concluded the session by reiterating the essential role of energy for food security, development and climate change mitigation, and the importance of ensuring access

to sustainable energy in all areas of agrifood systems. While contributing to job creation, gender equality and climate resilience and adaptation Renewable energy offers the opportunity to address the challenge of decoupling fossil fuel use from food system energy needs and contributing to climate action.