

An agro-ecological transition is crucial to tackle future climate challenges

Emile Frison¹

¹ International Panel of Experts on Sustainable Food Systems (IPES-Food), Italy



Emile Frison

Abstract

 $\mathbf{A}_{\mathrm{griculture}}$ and food systems have received relatively little attention in theclimate debates until the adoption of the Koronivia Joint Work on Agricultureat COP23 in December 2017 in Bonn. This, despite the fact that global foodsystems generate one-third of all human-caused GHG emissions, withagriculture, forestry, and other land use changes contributing as much as 25%, and livestock contributing significantly to GHG emissions. Agriculture is, andwill be further impacted by climate change in the decades to come, potentiallycompromising food security. The Paris Agreement emission reduction targetscan only be achieved with the contribution of the agriculture and food sectors, which hold major potential for climate mitigation as well as adaptation. Thechallenge is to reduce those emissions while meeting unprecedented demandfor food, reducing diet-related diseases and securing the livelihoods of theagricultural producers on whom all food production is ultimately reliant. This willrequire a major transformation, away from high-carbon, high-input agricultureto diversified agroecological production systems. Such systems have the potential not only to keep carbon in the soil and reduce GHG emissions, butalso to regenerate ecosystems, provide nutritious foods to local populations, and provide decent livelihoods for small-scale farmers - thereby contributing toas many as 12 of the 17 sustainable development goals. Such transformation requires a food system approach from production to consumption, involving all relevant sectors and actors and developing a coherent food policy framework in order to minimize trade-offs and to create synergies among them. After years of neglect, it is urgent to harness the potential of agriculture and food systemsin addressing the climate challenge.

Biography:

Emile Frison is a Member of the International Panel of Experts on Sustainable Food Systems. A Belgian national, he spent his entire career in international agricultural research for development, including sixyears in Africa in Nigeria and Mauritania. In 2003,he became Director General of Bioversity Internationaland developed a strategy entitled "Diversityfor Well-being" focusing on the contribution of agricultural biodiversity to the nutritional quality of dietsand to the sustainability, resilience and productivity of smallholder agriculture. Since 2013, he focuseshis energy on supporting efforts to transition to sustainable food systems. He is the Lead Author of the IPES-Food report "From uniformity to diversity: aparadigm shift from industrial agriculture to diversified agroecological systems" and is the Chair of theBoard of Directors of Eco-agriculture Partners



.Speaker Publications:

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