

Revolutions, food and diets, and shrinking diversity

Luigi Guarino¹, Jeremy Cherfas² and Danny Hunter³

¹Global Crop Diversity Trust, Bonn, Germany, ²Rome, Italy ³Bioversity International, Rome, Italy

While early hunter-gatherers subsisted on a wide range of wild animal and plant biodiversity, this changed with the domestication of crops and livestock, which happened independently in a number of localities around the world over a relatively short space of time. Out of an estimated 300,000 plant species, approximately 7,000 have been used for human food, but only 150-200 have been cultivated. Today, 12 crops and 5 animal species provide 75% of the world's food. It has been suggested that The Neolithic and subsequent revolutions – the agricultural, industrial, chemical, Mendelian genetics, Green, modern livestock and supermarket revolutions, to name a few – have each contributed to the shrinking diversity in today's agriculture, food systems and diets. This has had important health, socioeconomic and environmental impacts. It has been further suggested that other paradigms exist, such as the 'agroecology revolution,' which can help address these challenges with their holistic and inclusive approach, and offer of opportunities to regenerate agrobiodiversity, foster diverse, sustainable food systems and ensure healthy foods for diversified diets and improved nutrition. We will examine these major events and periods of transformative change and attempt to illustrate their impacts on food, diets and agrobiodiversity.