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"Competition for Resources in a Changing World: New Drive for Rural Development"

Agroecology – Movement for Rural Development, Scientific Discipline or Just an Agricultural Practice?

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Abstract

The term 'agroecology' is used more than ever today with varied meaning ranging from scientific discipline, agricultural practice, or social movement. The objective of this presentation will be thus to clarify these different meanings. Towards this aim, the historical development of agroecology was analysed, with selected examples from USA, Brazil, France and Germany, in an attempt to study and discuss the evolution of the different meanings from the four contrasted examples.

The term agroecology can be traced back to the 1930s. The period up to the 1960s can be called the scientific 'old age' of agroecology. Scales and dimensions of scientific research in agroecology changed over the past 80 years from the plot or field scale to the farm or agroecosystem scale. Presently two main approaches persist: one maintaining the agroecosystems scale approach, the other leaving a concrete spatial scale around the farming system, and entering the dimensions of the food system. The latter approach tries to link natural and environmental sciences and agronomy with sociology and economy. Based on this highly interdisciplinary basis, agroecology might be able to significantly contribute to applied research topics, in particular in tropical and subtropical agroecosystems.

Different environmental movements started in the 1960s, often developed in opposition to industrialisation processes of agriculture. Some of them evolved towards agroecological movements in the 1990s, often with the major objective of rural development. Agroecology as an agricultural practice emerged in the 1980s, and was thereafter often intertwined with agroecological movements.

In general, various interpretations of agroecology exist with different weights and specifications throughout the world. In France, agroecology is better known as a practice, and to certain extent as a movement, whereas the scientific discipline is occupied by the discipline agronomy. In Germany, agroecology has a long tradition as a scientific discipline, but the agroecology in the sense of a movement or a practice is more or less inexistent. In the USA and in Brazil we find all three types of utilisation of agroecology with a certain predominance of agroecology as a science in the USA and a stronger movement and/or agricultural practice in Brazil.

Keywords: Agroecosystem, Brazil, France, Germany, rural development, scientific discipline, sustainable agriculture, USA