AFASYS (Agrar-Forst-Aquatische-Systeme der Zukunft) - Vision of a sustainable agricultural system

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As part of a collaborative work between several German research institutions involved in different sectors of the bioeconomy field, a vision of the agricultural system of the future was developed as means to understand the potential role of the agricultural system in a future bioeconomy. This concept was named AFASYS (Agriculture-Forest-Aquatic System of the Future: Heart of the bio-based Economy after 2030 – Bioeconomy 2.0").

The agricultural system of the future envisaged in the AFASYS concept depicts the decentralized production, provision and distribution of sufficient biomass amounts as a cornerstone to cover the diverse needs of the entire bioeconomy. It sets the agricultural system of the future at the center of society, leading their change in consciousness and in creating an understanding of its limited resources. Moreover, this vision includes all forms of biomass production, processing, recycling and use, thus involving a much broader definition of the agricultural system as we know today.

However, developing our current agricultural system towards a more integrated concept such as the one envisaged by AFASYS implies the parallel evolution and integration of several sectors, such as society (e.g. demand of new products, societal behavior), industry (e.g. infrastructure development and refurbishment, widening of raw material basis) as well as policy makers (e.g. further development and implementation of circular economy strategies).

Therefore, this presentation intends to present the vision of the future agricultural system described in the AFASYS, identifying the role of this agricultural system in the development of the bioeconomy field. Moreover, it intends to identify some the most relevant aspects for achieving this vision, as basis for the discussion to be held in this session.