Institutional Change Towards Sustainable Intensification of African Agriculture

The need to feed 9 billion people in 2050 has given rise to widespread debates on the resilience of our food system. Intensification of agriculture, which enabled population growth and food for most of the global population, is often regarded as incompatible with current environmental (and social) sustainability. Sustainable intensification is viewed as an oxymoron, unless real progress can be made in ecological intensification. Suggested pathways to sustainably intensify agriculture vary from business-as-usual to a radical rethinking of our agricultural production.

Dr. Struik and his team explored institutional determinants of innovation towards sustainable intensification of West African agriculture and investigated issues relating to crop, animal, and resources management. Inter- and trans-disciplinary research, accompanied by innovation platforms, proved essential to agricultural development in West Africa. Through case studies Struik and team assessed institutional factors that influence small-holder innovation. They proved that institutional mechanisms at aggregation levels higher than the household, farm, or village are relevant. Dr. Struik hopes that his experience will have consequences for setting priorities for agricultural research and the way research should be organised in order to have impact.

ABOUT THE SPEAKER

Paul C. Struik is head of the Centre for Crop Systems Analysis and professor of crop physiology at Wageningen University, Wageningen, the Netherlands. He obtained his PhD with distinction in 1983 from Wageningen University. Since 1986 he has been a full-time professor responsible for teaching and research in crop and grassland science. He has carried out research on forage crops, potato physiology, seed production technology, crop ecology, and the use of nonfood crops. He currently is involved in research projects on social and agronomic aspects of biodiversity in Africa, QTL-based modelling of crop growth and quality, micronutrient husbandry, modelling of basic processes in photosystems of C3 and C4 plants under stress, 3D modelling, and chain management of agricultural produce in Africa. He is (co-)author of more than 400 scientific papers, 15 books, and more than 160 papers in proceedings/books of abstracts. He has supervised over 85 PhD candidates and currently supervises about 30 PhD students.

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