Sustainable food production through irrigated intensive farming systems in West Africa (SIFA)

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Abstract

The SIFA project (2010-2013) aims at developing irrigated high-value vegetable cropping systems in Southwest Africa that are "climate proof". This will be accomplished by introducing water saving drip irrigation systems and new round-the-year cropping systems that secure higher cash flow and income for farmers. Scientific research to test the new systems will be carried out in cooperation between Danish universities and University of Ghana promoting education of PhD and MSc-students trained in methods of applied hydrology, crop science, environmental protection and participatory research approaches by Danish and Ghanaian researchers. Scientific papers, PhD and MSc theses worked out by the Ghanaian students and researchers will outline the technical, economic and environmental feasibility and potential of the new drip irrigation based systems for saving water, protecting the aquatic environment and stimulating rural business opportunities, education and employment of young people. As agriculture is the largest sector, and irrigation the most important crop growth factor, there is a very large unrealised economic potential. Dissemination material will be produced describing how the local farmers can apply the new systems. Also material will be worked out on how the new technology platform may be applied broadly in West Africa. Its role and importance for the Ghanaian Poverty Reduction Strategy will be outlined as currently less than 0.5% of the irrigation potential is realized in Ghana.