

The Perspective of Climate Change Impacts on Agriculture and the Environment

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Abstract: Climate change will impact upon all economic sectors with agriculture and forestry being one of the sectors most intensively affected. The resources needed for ensuring sustainable agricultural production, including soils, water, genetic resources and biodiversity, will also be impacted. It is crucial to start preparing for adaptation, in order to reduce the negative effects and take advantage of the potential benefits. To this end, a better understanding of the baseline situation and the challenges ahead is needed. This paper presents a discussion on which data and information may be necessary and whether agriculture statistics could give a response to this challenge.

The paper focuses on three aspects. Firstly, the impacts of climate change on agriculture and the challenges of adaptation strategies. Secondly, the efficiency of water use by agriculture in the face of growing water scarcities and the data needs for the application of market based instruments. And finally, the data needs for assessing the environmental consequences of the growth of bio energy.