Integrated environmental and economic accounting for agriculture: A framework for measuring the environmental impacts of agricultural policy in Guatemala

Héctor Tuy*
Instituto de Agricultura, Recursos Naturales y Ambiente (IARNA) / Universidad Rafael Landívar (URL), Campus Central, VH-III, zona 16 Guatemala City, Guatemala – htuy@url.edu.gt

Jaime Luis Carrera
Instituto de Agricultura, Recursos Naturales y Ambiente (IARNA) / Universidad Rafael Landívar (URL), Campus Central, VH-III, zona 16 Guatemala City, Guatemala – jlcarrera@url.edu.gt

As in many other parts of the world, the economy of Guatemala remains dependent on agricultural activities both in terms of production and in terms of the country’s human and social capital. In this paper we examine the potential application of the Integrated Environmental and Economic Accounting (SEEA) framework for measuring the environmental impacts of agricultural policy in Guatemala. Undertaking for the Institute of Agriculture, Natural Resources and Environment (IARNA) of the Rafael Landívar University (URL), the research is based on the adoption of this international statistical standard to better analyze the relationships between population growth, agricultural outputs and environmental pressures, which relates to the discussion of sustainable agricultural development.

As a contribution to the development of the SEEA Agriculture, we examine how the SEEA 2012 Central Framework can help to analyze the mutual relationships between agriculture and the environment, identifying how the environmental assets are being used, the intensity at which they are being used, the efficiency of such use, and the precise activities that are involved. In addition, we address the limitations of SEEA to provide a complete picture of the interrelationships that exist between agriculture and the environment. And finally, some ideas are proposed to overcome these limitations in order to assess in a more adequate way the economic, social and environmental impacts of agriculture.

Keywords: SEEA; Integrated Environmental and Economic Accounting; Environment and agricultural statistics; Guatemala