The Global Strategy to Improve Agricultural and Rural Statistics provides a common framework to collect agricultural data in view of improving policy decision making processes. Economic modelling is an important field in which agricultural and rural statistics are utilized to analyze impacts of policy decisions and propose new policy strategies.

This paper analyzes whether the guiding lines developed by the global strategy formulated by the UN match with the needs of economic modelling. We take into account some of the relevant political questions related to the development of African countries and two different types of models. The policy measures considered are: the adoption of subsidy programmes (i.e. the maize input subsidies in Malawi), infrastructure programmes and international aid. All these measures are meant to have a major impact on agricultural productivity, food security, farmers' welfare, trade patterns, and growth in general.

We analyze two economic models: a single-country Computable General Equilibrium (CGE) model and a farm household model. The CGE model is an economy-wide model, based on a Social Accounting Matrix (SAM). The farm household model includes farm and household characteristics in terms of inputs and outputs, both in terms of quantity and value and allows analysis of change, adaptation and optimisation.

The CGE model focuses on effects of exogenous shocks and policies on the productive sectors, production factors (mainly labour, land and capital) and economic institutions (government, households and firms). The farm model concentrates on productivity and optimal utilization of resources as well as on income aspects.

We select two countries as pilot of developing Sub-Saharan African countries; Malawi, on the eastern side and Sierra Leone on the western one, which have several common characteristics and some peculiarities that give a comprehensive view of the need of statistics. They represent different agro-ecologies but also being two countries amongst the poorest. Additionally Sierra Leone represents a post-conflict situation with the need of building-up and improving data collection structures and institutions.

The case studies on the policy issues, countries and models selected underline the data needed for comprehensive impact analyses. In the case of Malawi, we analyze the needs to build a SAM suitable for a CGE studies, and all the satellite accounts and parameters needed to study...
the effects of the input subsidies programme and of the government expenditure in infrastructures. The case of Sierra Leone adopts a farm household model seeking to identify key factors of income and production increasing activities and evaluation of rural poverty reduction strategies.

The examples presented, on the one hand, CGE-modelling, based on secondary and aggregate data, on the other hand, farm modelling, based on primary data, provide a complementary overview of data needs for policy analysis from different perspectives and approaches, targeting different aspects of production and market mechanisms.

We compare the data needed with the data considered as priority by the new UN Global Strategy. Conclusions concentrate on the main steps to produce policy analysis: data collection and data analysis. Based on this study some suggestions will be given on the Global Strategy to increase the availability of relevant data to - improve the quality of existing one, with a particular focus on questionnaire design, use of standards, definition and creation of suitable time series.