The 2014 Uganda Manufacturing Innovation Capability Survey (the 2014 Uganda ICS)

The 2014 Uganda Manufacturing Innovation Capability Survey (the 2014 Uganda ICS) is a collaboration between the Tilburg University and the Enterprise Analysis Unit (DECEA) of the Development Economics Group of the World Bank. This is part of a wider project undertaken by the Tilburg University to study the innovative capability of manufacturing firms in nine countries selected from three regions- Ethiopia, Kenya, Ghana, Uganda and Tanzania from Africa; India and Bangladesh from South Asia; and Indonesia and Vietnam from East Asia and Pacific.

The 2014 Uganda ICS is aims at studying the innovative activities and innovative capabilities of manufacturing firms in Uganda, by collecting firm-level data using a suitably designed questionnaire and following the DECEA's global methodology of survey design. This survey is a follow-up to and complements the 2013 Uganda Innovation Follow-up Survey undertaken by the World Bank Group. The data can be linked to the 2013 Uganda Innovation Follow-up Survey (and the 2013 Uganda Enterprise Survey (ES)) using the "idstd" variable, enabling a richer analysis of the links between innovative capabilities, innovation and the performances of manufacturing firms in the country.

The **main objective** of the project is to collect firm-level data from manufacturing firms in the country to better understand:

- Sources of information and motivation for innovative activities by manufacturing firms;
- Key factors constraining innovative capability of the manufacturing firms;
- The ability of firms to locate, acquire and utilize knowledge for innovation.
- Access to foreign markets and firms' innovative capability.

The **Sampling Strategy** follows the standard ES global methodology of stratified random sampling¹. However, sample is drawn from manufacturing firms covered in the 2013 Uganda Innovation Followup Survey (itself a sub-set of manufacturing firms covered in the 2013 Uganda Enterprise Survey (ES))². Therefore, sample is stratified based on firm size and location, unlike the standard ES sampling methodology which includes sector as one of the three stratifying variables.

¹ Information on DECEA's global survey methodology can be found at the Unit's website (<u>http://www.enterprisesurveys.org/methodology</u>).

²Please see the World Bank's Enterprise Survey website (<u>http://www.enterprisesurveys.org/data/survey-datasets</u>) for detailed information on the 2013 Uganda Innovation Follow-up survey and the 2013 Uganda ES. In particular, the

The universe consists a total of 207 manufacturing firms, out of which 184 firms were randomly selected and interviewed. Firms are selected from all regions covered in 2013 Uganda Innovation Follow-up Survey, and distributed across small (5 to 19 employees), medium (20 to 99 employees) and large (100+ employees) firms. Table-1 provides distribution of the realized sample by region and firm size. Overall, the survey response rate is fairly good, with over 80% of the contacted interviews turned into completed interviews.

	Small	Medium	Large	Total
Kampala	32	17	14	63
Jinja	25	4	4	33
Lira	9	5	0	14
Mbale	18	1	0	19
Mbarara	22	3	0	25
Wakiso	10	18	2	30
Total	116	48	20	184

Table 1: Realized Sample for the 2014 Uganda ICS

TNS Opinion was hired to implement the fieldwork and data collection was undertaken through its local branch, the TNS RMS East Africa Limited. This was the same survey firm that implemented the fieldworks for the Uganda 2013 Enterprise Survey and the 2013 ES Innovation Survey. The fieldwork for the 2014 Uganda ICS was conducted during the period October 2014 to January 2015.

The **Sampling weighs** for this survey are calculated from the 2013 Uganda ES weights. More specifically, the 2013 Uganda ES weights are multiplied by a cell-specific factor, which equals the proportion of total completed interview in the cell during the 2013 Uganda ES to the completed interviews in the corresponding cell in the 2014 Uganda ICS.

implementation reports of the respective surveys contain useful information on the design and implementation of the surveys. Access to the raw data and the implementation reports requires having a log-in account.