

DEFINITION OF FBS AND ITS IMPORTANCE

The Food Balance Sheets (FBS) is a national accounting/statistical framework, presenting a comprehensive picture of the pattern of a country's food supply and use during a specified reference period. It is useful in tracking progress against some of the established development goals, such the Sustainable Development Goals (SDGs). It also acts as a monitoring and evaluation tool for national agricultural policies. One of the main applications of FBS is to calculate derived indicators which can be used to analyse a wide range of concepts, including hunger, malnutrition, import dependence and food self-sufficiency. Among the major outputs of the FBS is the computation of Dietary Energy Supply (DES), which is an important indicator in determining the levels of undernourishment in a given country.

JUSTIFICATION OF THE NEED TO UPGRADE KENYA'S FBS SYSTEM

Kenya has had a great experience in the compilation of Supply and Utilisation Accounts (SUA) and in generating Food Balance Sheets (FBS). It was in 2005 when the Kenya National Bureau of Statistics (KNBS) established an FBS system using the international methods and standards. However, since 2018, new guidelines on the approach to be used for compiling SUA/FBS were proposed to countries, including new features that aim at improving how imputation of missing SUA basic data is done, and how SUA/FBS identities for each commodity are balanced, etc. As a result, a new FBS compilation tool was developed and customised to Kenya. In view of the foregoing, it was important for Kenya to review and upgrade its current FBS compilation system to the new standards. To that end, the country requested and obtained technical assistance from the African Development Bank (AfDB) in aligning its system to the new guidelines.

METHODOLOGY

The approach used in the compilation of Kenya's FBS was inclusive and participatory, such that all relevant stakeholders were involved. The methodology followed was based on the revised Food Balance Sheets guidelines. For the period 2014-2017, data used for SUA/FBS compilation included estimated figures at SUA level, which were extracted from the Old Tool and uploaded into the new FBS compilation Tool.

The main reason for using the existing estimated SUA data from the Old Tool was to enable comparisons in situations where differences in results between the two systems arose. Data for 2018 was compiled directly using the new Tool.

- The activities undertaken in compiling the FBS entailed the following:
- Development of a roadmap;
 - National training workshop;
 - Data validation;
 - Elaboration of FBS report.

DATA SOURCES

The official basic data used to compile SUA/FBS were received from various sources, including KNBS, the Ministry of Agriculture, Livestock, Fisheries and Irrigation, Kenya Revenue Authority (KRA), County governments, other state agencies that deal with agricultural data, and private enterprises.

SETTING UP OF FBS TECHNICAL WORKING GROUP

The roadmap recommended the establishment of a Technical Working Group on FBS (TWG_FBS). The TWG_FBS should be responsible for the technical work on FBS compilation, ensuring coordination and sharing of information among the key relevant institutions. The TWG_FBS should be fully integrated in the National Strategy for the Development of Statistics (NSDS), in general, and Strategic Plan for Agricultural and Rural Statistics (SPARS) in particular.

KEY RESULTS

Table a: Overall calories, proteins and fats supply

	2014	2015	2016	2017	2018
Calories ((Kcal/cap/day)	2,206	2,300	2,105	2,130	2,235
Proteins (g/cap/day)	66	71	65	67	69
Fats (g/cap/day)	48	52	52	47	48

During the period under study, the amount of daily per capita calories ranged from 2,100 to 2,300. The increase of daily per capita supply of calories from year 2014 to 2015 (of about 100 calories) is explained by the simultaneous increase in the Dietary Energy Supply (DES) from vegetable and animal products. Regarding the increase (of 100 calories) in 2018 compared to 2017, it was mainly due to the increase of DES from vegetable products. Daily supply of proteins ranged between 65 and 71 grams for the period under review. In 2014, daily supply of proteins was 66 grams. This increased to 71.2 grams in 2015, and declined again in 2016 to 64.9 grams. It slightly remained under 70 grams a day until 2018. The increases in 2015 and 2018 were mainly driven by improved availability of milk and products due to favourable weather conditions, which had led to better production of vegetables. In 2014, the Per Caput Daily Supply of fats was 48.3 grams. This increased to 52.3 grams in 2015 due to a rise in fats supply from cereals, vegetable oils, meat and milk. There was a drop of 9.4% from 52.2 grams in 2016 to 47.3 grams in 2017. This drop was a result of a decrease in fats supply from all food groups

Figure a: Contribution in DES of vegetable products and animal products in Total DES

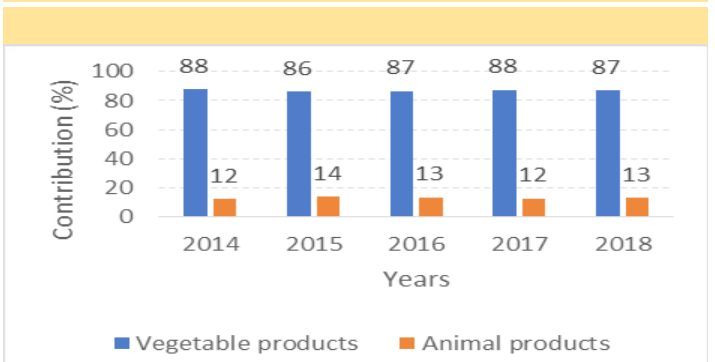
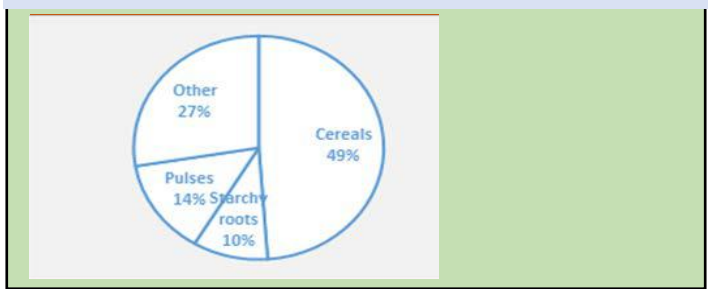


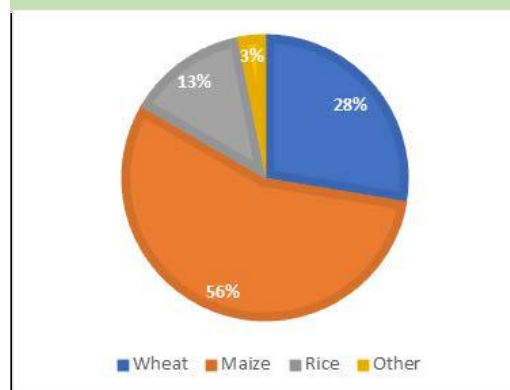
Figure b: Average Contribution in DES of vegetable commodity groups in vegetable products



Under vegetable products, cereals contributed an average of 49% to the daily per capita Dietary Energy Supply (DES) during the period under review. The pulses and starchy roots contributed 14% and 10%, respectively.

Regarding the other vegetable products, their average contribution to the total daily per

Figure c: Average contribution in DES of cereals commodities in cereals commodity group (%)



Among cereals, maize is by far the most important commodity. During the period under study, the average contribution of maize to total cereal per capita daily Dietary Energy Supply was 56%. In terms of importance, this commodity was followed by wheat and rice with 28% and 13% as their respective average contributions over the period 2014-2018.

Figure d: Comparison of per capita calories daily supply with the Old Tool



The obtained results were close to those achieved using the previous tool. In fact, the difference between the results ranged from 0.2% to 0.5%. The resultant total Dietary Energy Supply (DES) from the new tool is slightly higher than that obtained from the Old Tool.

This was attributable to the improvement in the balancing methods employed in the New Tool.

Furthermore, given that the 2018 results are in the same range, it can be concluded that the New Tool is robust enough to sustain Kenya FBS system over the time.

Comparison with FAOSTAT results

Table b: comparison 2014 results with 2013 FAOSTAT results

	2014 Results	2013 FAOSTAT results
Calories (Kcal/cap/day)	2,206	2,205
Proteins (g/cap/day)	66	62
Fats (g/cap/day)	48	48

The last year for FBS results to be published on FAOSTAT website was 2013. The FBS results generated using the New Tool for the year 2014 were close to those published on FAOSTAT website for 2013. This points further to the robustness of the results generated by the New Tool.

CONSTRAINTS AND LIMITATIONS

The constraints are mainly related to the use of the New Tool. In fact, the New Tool doesn't include fishery products. These products have been compiled using the Old Tool to supplement the results generated with the New Tool.

In compiling tourism data, the New Tool does not allow the compiler to add more countries to the system in order to record all available country data and accurately estimate tourist consumption.

At the beginning of the process of compiling FBS using the New Tool, it was not possible to run it from 2017 onward due to technical problems. This problem was solved thanks to AfDB support, but led to a delay in the FBS compilation in the country.

LESSONS LEARNT

Upgrading the existing FBS system allowed the strengthening of capacities on the revised methodology. Kenya FBS team learnt more about the compilation of Supply and Utilisation Accounts (SUAs), better estimation of missing data, and the generation of FBS.

WAY FORWARD

The Kenya National Bureau of Statistics is committed to sustaining the production of FBS information on a regular basis. This will ensure timely data availability for users.



Enhanced Food Balance Sheets for Kenya 2014-2018 Results



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