

FAO/WHO GIFT Global Individual Food consumption data Tool

Background

Many policy makers and programme managers still rely, today, on data related to the availability of food at national level (i.e. food supply data) or at household level (i.e. household survey data). While important, these data are not sufficient to assess the nutritional adequacy of the diet of different population groups, such as adolescent girls, pregnant and lactating women, small children, adult males, etc.

On the ground, the availability of food does not necessarily match the consumption of that same food. There are economic, social, cultural and behavioural factors influencing food distribution between members of a single family, making it difficult to use food availability at household level as an indicator of effective food consumption by all household members. This discrepancy is even more relevant for food availability data at national level.

Data on individual food consumption are needed to better inform agricultural and food policies and programmes at global, national and sub-national level and make them more nutrition sensitive. In particular, food-based indicators expressed as nutrient intakes (i.e. estimates of the quantity of nutrients ingested by population groups, based on the type and quantity of foods eaten, combined with the food composition of those same foods) are needed to inform nutrition-sensitive agriculture and fortification programmes and policies.

The use of food-based indicators, derived from sex and age disaggregated data on individual food consumption, would strengthen nutrition information systems. Food consumption data disaggregated by sex and age would help assessing the dietary exposure to food safety hazards, identifying the main food sources of these hazards and carrying out risk analysis. Individual food consumption data are also needed for natural resources' management and to mitigate climate change, as they can lead to the identification of food consumption patterns that have low carbon footprint, water footprint, etc.

Individual food consumption data are being collected in many countries, including low-income countries. However, the data produced are largely under-utilized, due to a poor dissemination and a lack of data harmonization that prevents comparisons across periods of time, seasons and geographical locations.

Objectives of FAO/WHO GIFT

FAO and WHO are working together to enrich FAOSTAT¹ with a publicly available multipurpose global database on individual food consumption. The collation and harmonization of existing data, collected through national and sub-national surveys on individual food consumption, will contribute to increase the capacity of all stakeholders to monitor food consumption.

The process will be similar to the one that has led to the development of the EU comprehensive database within the European Food Safety Authority (EFSA)². This database currently contains 51 surveys from 23 EU countries, covering all age classes from infants to elderly.

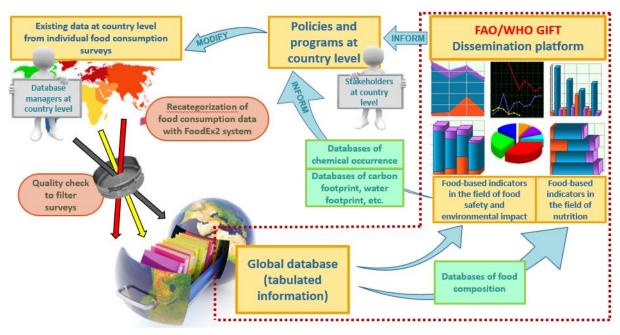


Figure 1. Proposed flow of information between countries and the FAO/WHO GIFT dissemination platform

FAO/WHO GIFT Platform

FAO/WHO GIFT will consist of a global database, containing individual quantitative food consumption data from any country disregarding their level of income, made freely accessible online through an interactive web platform. FAO/WHO GIFT aims to be a multipurpose tool, providing information on specific indicators in the field of nutrition, food safety and environment, in addition to data on food consumption.

FAO/WHO GIFT platform is now available online, and displays the following features:

- Browsing of available data on individual food consumption representative at either national or subnational level, matching specific quality criteria;
- Access to the data of the user's interest based on specific filtering criteria such as age, sex, countries, sub-regions, time period, etc. (available for 4 datasets from the project's four pilot countries);
- Generation of dynamic graphics related to indicators of interest chosen through a flexible process. (available for 4 datasets from the project's four pilot countries):
 - ✓ access to dynamic dashboards in the style of infographics displaying pre-selected indicators related to food consumption, food safety and nutrition, disaggregated for different types of population (age, sex, physiological status, etc.), for easy and quick use by policy makers with low scientific literacy;

¹ FAOSTAT (http://faostat3.fao.org/home/E) is one of the ways FAO accomplishes its mission of improving data collection and dissemination. Through this online platform, users can freely and easily access data from 245 countries and 35 regional areas, from 1961 to the most recent year available, as well as access enhanced features such as data search, analysis and download. Current available data relate to food production, food expenditure, food supply, food security among others but data on individual food consumption are still missing.

²http://www.efsa.europa.eu/en/food-consumption/comprehensive-database

- ✓ module to download microdata and/or navigate into the data (the end user will have to provide his contacts so that a monitoring of data downloads can be provided to owners);
- Access to full documentation of each survey (purposes, objectives, methods, uncertainties, etc.).

FAO/WHO GIFT platform is accessible under the following link: <u>www.fao.org/gift-individual-food-consumption</u>

Future developments of the platform will include:

- Possibility to download all outputs of the indicator section directly from the platform to the user's computer;
- Possibility of logging into the system and obtaining a privileged access which enables additional
 features such as uploading own data (reference values, food composition tables, etc.) into the
 platform to use them through FAO/WHO GIFT to display data more targeted to user's work.

Institutional arrangements and partnerships

FAO/WHO GIFT is being developed by an **FAO/WHO inter-agency team** led by the FAO Nutrition and Food Systems Division (ESN) and bringing together experts from the FAO Information Technology Division (CIO), Statistics Division (ESS), and Food Safety and Quality Unit (AGFF), the WHO Department of Food Safety and Zoonoses (FOS) and the WHO Department of Nutrition for Health and Development (NHD).

The **European Food Safety Authority (EFSA)** is a key partner in the development of FAO/WHO GIFT. The FAO/WHO team worked with the Evidence Management Unit (DATA) to scale up the EFSA food categorization and description system named FoodEx2 at the global level.

Bioversity International, as part of the **CGIAR Research Program on Agriculture for Nutrition and Health**, is providing support to develop an inventory of datasets of individual food consumption surveys from low-income countries and is facilitating contact with other CGIAR Centres to collaborate on populating the FAO/WHO GIFT database.

HarvestPlus provided – and facilitated access to – microdata related to datasets of individual food consumption survey from Bangladesh (ICDDR,B/UC Davis), Burkina Faso (IRD), Philippines (FNRI) and Uganda which have been used to develop the prototype of FAO/WHO GIFT.

In addition, the following resource partners are contributing to the design of FAO/WHO GIFT and to the retrieval of microdata from further low-income countries:

- the International Dietary Data Expansion (INDDEX) Project (2015-2018), implemented by Tufts
 University's Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy with funding
 from the Bill & Melinda Gates Foundation;
- the **Codex Trust Fund from EU for ASEAN countries** (FAO/WHO Project and Fund for Enhanced Participation in Codex).

Other institutions are currently performing complementary activities. The FAO/WHO GIFT team links with them through regular meetings and calls in order to share experiences and avoid duplication of effort:

- ✓ The Global nutrition surveillance initiative (GloboDiet), using an international computerized software for the collection of 24 h recalls, is developed by the Dietary Exposure Assessment Group (DEX), International Agency for Research on Cancer (IARC-WHO).
- ✓ The **Global Dietary Database (GDD)**, at **Tufts University**, is developed by the Global Nutrition and Policy Consortium (http://www.globaldietarydatabase.org), informing the Global Burden of Diseases Study, and funded by the Bill & Melinda Gates Foundation.

FAO/WHO GIFT development timeline

	2014	2015	2016	2017	2018	2019
FAO/WHO GIFT 1.0 dissemination platform based on datasets from 4 countries accessible through FAO website	Х	Х	Х			
FAO/WHO GIFT 2.0 dissemination platform providing enhanced features accessible through FAO website				Х		
FAO/WHO GIFT 2.0 dissemination platform filled with data from 10 additional low and middle income countries				Х	Х	
FAO/WHO GIFT 2.0 dissemination platform becomes a global tool (filled with data from a significant number of countries in each FAO region)*						Х

^{*} Timeline may change depending on budget availability

Achievements as per end of 2016

1. Establishment of key partnerships

The FAO/WHO GIFT project draws on existing initiatives and uses the expertise of other organisations that already operate in the field of individual food consumption data and dissemination of such data. One of the first activities of the project was building partnerships and synergies with similar initiatives worldwide.

2. Upgrade of the FoodEx2 food categorization and description system to global level

The food categorization and description system called FoodEx2 was originally developed by EFSA to serve as a catalogue for food items consumed in the EU member countries and as a harmonising tool for the Member Countries' food consumption surveys. EFSA expanded it further through collaboration with FAO and WHO, to cover foods consumed globally and serve as a harmonization tool for data to be inserted in FAO/WHO GIFT. The system is being updated by EFSA once a year.

3. Four datasets on individual food consumption, contributed by HarvestPlus

HarvestPlus provided four datasets on individual food consumption from Burkina Faso, Uganda, Philippines and Bangladesh to support the development of the pilot FAO/WHO GIFT. These datasets were the first to be formatted, re-categorised according to the FoodEx2 and uploaded in FAO/WHO GIFT.

4. Webinars with potential users and stakeholders

In order to ensure that the final product answers the needs of end-users and achieves its objectives, FAO/WHO GIFT team organises consultations through webinars with key informants in the areas of agriculture, nutrition and food safety. The first round of webinars took place in November – December 2015. The second round started in December 2016 and is ongoing. Results of the webinars serve to revise and adapt the project work plan and guide the tool development process.

5. Support to data harmonisation

As a part of data acquisition activity, trainings in data re-categorisation withFoodEx2 system are organised for data managers from organisations and institutions owning quantitative individual food consumption data. As a result, three new datasets and one food composition table were re-categorised by professionals working with datasets collected by Bioversity and by Dhaka University. Such trainings are also performed in ASEAN (Association of Southeast Asian Nations) countries under the Codex Trust Fund Project.

6. Development of a prototype for the FAO/WHO GIFT web dissemination platform

The web dissemination platform prototype has been built under the FENIX environment. The prototype web platform comprises of a data upload and download module, metadata editor, an interactive map showing existing individual food consumption datasets, and a simple indicator module where pre-selected simple indicators are presented in a form of infographics.