The FAO contribution to monitoring SDGs for food and agriculture

To the Editor — A recent Editorial in *Nature Plants*[1] highlighted the key role that the Food and Agriculture Organization (FAO) plays in the implementation of the 2030 Agenda for Sustainable Development. The FAO is the designated United Nations custodian agency for 21 United Nations Sustainable Development Goals (SDGs) indicators and the contributing agency for another five — covering over 10% of the entire SDG global indicator framework in total. We recognize that this expanded role implies a considerably higher commitment of the organization in the definition of new methods and tools for collecting and disseminating food and agriculture statistics, but also a larger involvement in supporting countries' efforts in monitoring SDG targets. An extensive modernization of the national data systems and the establishment of new coordination mechanisms among national producers of food and agriculture data are required to meet the new, significant challenges introduced by the 2030 Agenda. We would add that the need for such modernization and coordination is even further emphasized by the growing agriculture and land use data requirements of the Paris climate agreement[2].

Nevertheless, we would like to stress that the path towards data improvement at the FAO and in its member countries starts from a solid base, with FAOSTAT[3] already representing state-of-the-art food and agriculture data worldwide. The usefulness and reliability of FAO data, which were, in part, questioned by the Editorial, are well demonstrated by its large, multi-faceted user base — with a total of almost 1.7 million visits every year — as well as by the frequent use of FAOSTAT data among the scientific community. A simple search on ScienceDirect using 'FAOSTAT' as a keyword, for instance, yields over 3,000 peer-reviewed papers published over the last five years, including several *Nature* papers focused on global food and agriculture issues[4]. In addition, a recent online FAO customer satisfaction survey, conducted anonymously among its users, showed that about 80% of its users, while demanding increased timeliness of data dissemination, were satisfied with FAOSTAT in terms of accessibility, relevance, consistency and accuracy of the statistics published.

We concur that further progress is needed to ensure continuous improvements in the collection, analysis and dissemination of relevant, timely, comparable and accurate data in food and agriculture. Even in today's world of 'big data' and new Earth observation tools, we note that the ability of countries to report even their basic national data on the socio-economic and environmental dimensions of food and agriculture are still quite limited. For instance, about 40% of FAO member countries have not conducted an agricultural census in the last 2010 round (2006–2015). Improving statistical capacities in these basic processes will likewise boost the capacity of countries to report on the 21 FAO-relevant SDG indicators.

In order to foster continuous data progress, FAO is implementing a number of initiatives to strengthen the statistical capacities of countries and enable them to produce and report timely and reliable basic food and agriculture data, as well as the SDG indicators under FAO custodianship to better support evidence-based national policy making.

To this end, the FAO statistical system and its internal governance were recently reorganized with the establishment of the Office of the Chief Statistician to improve the harmonization, quality and integrity of the technical and normative data work of the organization while preparing it to meet the new and expanded countries' reporting needs. The office is leading a renewed effort — on the one hand by supporting countries to visibly increase their capacity to collect and analyse improved farm survey and, on the other, by promoting the uptake of innovative methods and new data sources (such as big data and Earth observation data) for the generation of high-quality food and agricultural statistics.

These renewed efforts are producing tangible results. Over the last few years, the FAO has introduced a new global standard to measure the severity of food insecurity, which was endorsed as an official indicator to monitor the hunger target and complements existing indicators, and whose results have already been accepted by a large number of countries. *The State of Food Insecurity in the World*[5], an annual report produced by the FAO in collaboration with the lead international agencies for food security and nutrition (WHO, UNICEF, WFP and IFAD), is the reference publication to monitor global trends and identify the key drivers affecting food insecurity and malnutrition.

A number of targeted initiatives increasingly mobilize donors' support while aiming at significantly improving the quantity and quality of the data available for policy and research purposes. These include the 'Voices of the Hungry' project, for improving the availability of reliable food security statistics; the '50 by 2030 initiative', which is expected to change the agricultural statistical system in at least 50 countries over the next 10 years through a new integrated programme of farm surveys; the Global Forest Resources Assessments, which will provide more frequent and accurate data on deforestation; and the GEMI project, which will improve our ability to obtain better water stress and water efficiency indicators. In addition, under the new statistical governance at the FAO, nearly US$6 million in corporate resources have been leveraged over the previous four years to cover the most urgent needs and priorities for SDG monitoring through the development of comprehensive e-learning courses, the organization of regional training courses and the implementation of hands-on technical assistance missions.

As these initiatives only cover the poorest countries and pertain to only a limited number of SDG indicators, a more comprehensive and integrated approach is being promoted to address the current challenges and make a visible impact on the capacity of all countries to monitor the SDGs. To this end, the FAO has developed an integrated strategy to measure SDG progress that focuses on four main areas: (1) development of national statistics plans that are fully aligned with the SDG Indicator Framework; (2) supporting the implementation of new, cost-effective data collection tools; (3) supporting countries in upgrading existing data collection tools to produce food and agriculture data as well as relevant SDG indicators; and (4) improvement of analysis and use of SDG indicators in decision-making.

For supporting its implementation, the FAO has developed a multidonor Umbrella Programme, which builds on and integrates all the above-mentioned specific extra-budgetary initiatives. Resource partners' support is essential to ensure that the Umbrella Programme is properly funded and implemented in countries requesting FAO assistance, because only through their generous support, with just 10 years left, will the 2030 Agenda stand a chance to be fully achieved. ❐

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