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50x2030 Initiative

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SUMMARY

The 50x2030 initiative aims to support countries for implementing agricultural statistics data collection through farm surveys in up to 50 countries by 2030. Given its scale, it constitutes the biggest effort ever made in funding agricultural statistics and a major opportunity for FAO to support countries in closing the data gap. It also provides an opportunity for the improvement of the quality of the data on which the statistics produced by FAO are based. In practical terms, the initiative represents the scaling up of the AGRISurvey program. Countries can choose to implement either an agricultural survey programme with a focus on agriculture or an integrated agricultural and rural survey programme, that also includes the production of data addressing household social conditions and rural development. Both options can be adapted to countries' specificities and priorities and guarantee the annual production of basic agricultural data and the periodical production of detailed thematic data.

The initiative will operate in a multi stakeholder setting with a steering committee giving strategic guidelines to its implementation and with different international agencies playing different roles. It has been agreed that FAO will take the lead on the data production component. At the same time, while IFAD is expected to contribute to data use component, the World Bank is expected to coordinates the methods component.

I. INTRODUCTION

The 50x2030 Initiative brings together the strongest partners in agricultural development to solve the problem of the agricultural data gap. The availability of accurate and frequent data is fundamental to support governments in planning investments and implementing effective agricultural development policies. The lack and limited use of data lead to sub-optimal decisions, causing losses in productivity and agricultural income and, ultimately, more hunger and poverty.

Sustainable Development Goal 2 (SDG2) can only be achieved if accurate and timely data are produced and made available to help decision-makers from governments, civil society, the private sector and development organizations strategically plan and gainfully choose their best options to end hunger and promote sustainable rural development.

The 50x2030 Initiative seeks to transform country data systems across 50 countries in Africa, Asia, the Middle East, and Latin America and make evidence-informed decision-making in agriculture the norm in L/LMICs by 2030.

The 50x2030 Initiative: rationale, objectives and scope

The 50x2030 Initiative to Close the Agricultural Data Gap aims to empower and support 50 low and lower-middle-income countries (L/LMICs) to build strong national data systems that produce and use high-quality and timely agricultural data through a cost-effective survey programme.

The Initiative supports countries in creating stronger capacity to produce, analyze, interpret, and apply data to decisions in the agricultural sector. It enables countries to (i) report on key SDG2 indicators:

- 2.3.1 Agricultural Labor Productivity
- 2.3.2 Small-scale Agricultural Producer Income
- 2.4.1 Land area under Sustainable Agriculture

In addition, it provides information to monitor the Comprehensive Africa Agriculture Development Programme (CAADP), and national priority indicators, (ii) monitor annual agricultural production, (iii) produce data for official agricultural statistics, (iv) collect conjunctural as well as annual data for policymaking, and (v) generate the data needed to understand agricultural productivity and income.

The Initiative either supports countries to build and implement an Agricultural Survey Programme or improves the existing programme depending on the country's needs, wishes, capacity, and potential for technical and financial take-over. National statistical offices (NSOs) and Ministries of Agriculture (MoA) provide leadership to develop and execute the programme to suit their needs and they lead the design and implementation of their survey programmes with technical support from the partners of the Initiative.

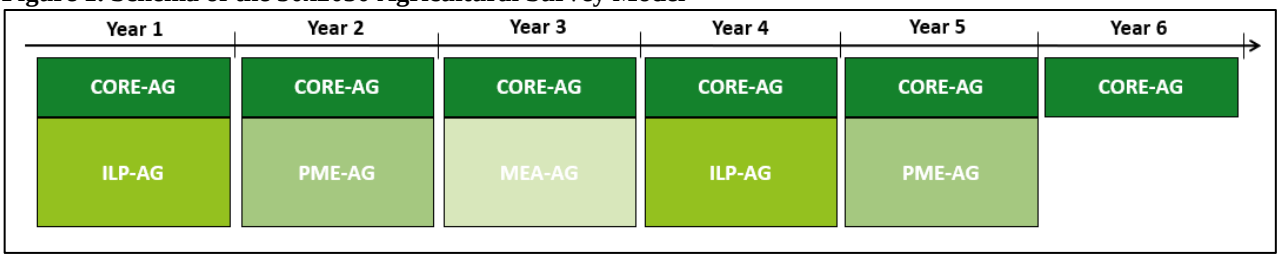
Beyond data availability, the Initiative strives to build the capacity and motivation of decision-makers to use of the data in diverse and strategic ways, to strengthen data producers to align with decision-maker needs, and to improve data sharing and open data.

II. THE 50X2030 INTEGRATED SURVEY SYSTEM

The 50x30 Initiative offers two possible survey programmes. Countries can choose to implement either an agricultural survey programme with a focus on agriculture or an integrated agricultural and rural survey programme, that also includes the production of data addressing household social conditions and rural development. Both options can be adapted to countries' specificities and priorities and guarantee the annual production of basic agricultural data and the periodical production of detailed thematic data.

The agricultural survey programme is a modular survey system that joins an annual core module focused on crop, livestock, aquaculture, fishery, and forestry production and several periodic rotating modules that cover vital socioeconomic and environmental variables as costs and agricultural income, labour and productivity, gender decision-making in agriculture, production practices and environmental aspects of farming.

Figure 1. Schema of the 50x2030 Agricultural Survey Model

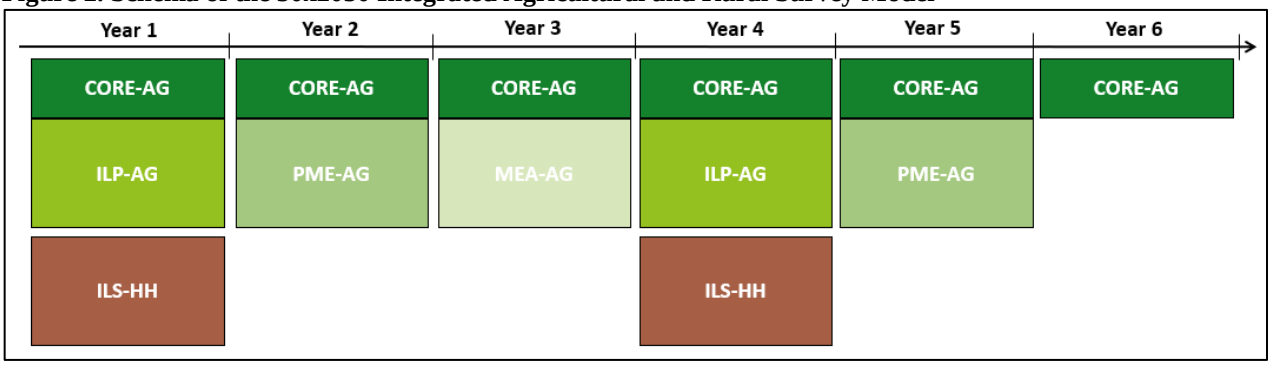


The integrated agricultural and rural survey programme expands the scope as it combines a farm-based agricultural survey programme with a household-based rural socioeconomic survey programme. Coherent with the data needs for policymaking, the integrated survey system goes beyond the traditional agricultural statistics as it combines an annual core module on production and several periodic rotating modules on key socio-economic and environmental variables and incorporates surveys of rural households that cover socioeconomic and demographic topics like income, poverty, employment, and food security.

The integrated programme complements the agriculture tools with a household survey tool and broadens the target population to incorporate a sample of rural non-agricultural households into the system every three years. This model allows to understand, on the one hand, the drivers and dynamics of rural development, structural transformation, and its linkages with agriculture; and on the other hand, the linkages between agricultural productivity and income and the aspects of welfare and livelihoods, such as educational outcomes, non-agricultural income, or shocks and coping strategies.

The integrated programme contributes to greater efficiency regarding the fieldwork and survey cycle as a whole and it results in the production of more data, increased data interoperability, and greater cost efficiencies.

Figure 2. Schema of the 50x2030 Integrated Agricultural and Rural Survey Model



The overall results of the core and rotating modules include social and economic questions with a comprehensive view of the structure, dynamic and evolution of the employment, income, food security and social inequality in the rural areas, *via a vis* the role performed by the agricultural activities, data on the machinery, equipment and assets of agricultural holdings and the use of the land. Data on environmental issues related to agriculture cover natural constraints faced by the holdings and the environmental impacts of the agricultural activities, conservation measures, waste management, adaptation to climate change and mitigation strategies, among other aspects. The programme covers also information required for the compilation of GHS emission.

Special attention is given to gender issues in the survey system. Sex disaggregated data are produced for relevant aspects from ownership of assets to the decision-making process related to agricultural production.

Implementation principles

To achieve its objectives, the survey system promoted by the 50x2030 Initiative should observe several principles:

Long-term perspective. The survey system is a long term continuous programme, producing official agricultural statistics. To this end, a compatible infrastructure in terms of staff, instruments and means for statistical frames building and maintenance survey planning, data collection, data processing, data storage and data dissemination should be put in place, developed and maintained. The survey system should be part of the National Statistical System and should be formally incorporated in the National Strategy for the Development of Statistics (NSDS).

Comprehensive coverage. The system should provide a comprehensive view of the agricultural activities of the country. In this sense, it should cover all the relevant crops grown in the country, and all the livestock activities, including medium and small animals, as well as the household sector and the non-household sector. The sampling frame(s) and sample design should ensure such coverage. The system adopts the same definition of agricultural holding of the WCA 2020 (FAO, 2015). Consistent with this, the target population should comprise small, medium and large units of the household sector as well all kind of units of the non-household sector like corporations, cooperatives, government institutions, etc.

Enlarged scope. The system is conceived to go beyond the production of traditional agricultural statistics. The engagement in the 50x30 Initiative implies not only the production of data about land use and agricultural production but also data about technical, economic, social and environmental aspects associated with the agricultural activities.

High dissemination. Special attention is given to access and use of the results. Tabulation plans and dissemination calendar and programme for both macro- and anonymized microdata should be implemented in a friendly and timely way to ensure the maximisation of possibilities to use the information collected. To this end, it is fundamental to ensure the systematic publication of calendars for the release of bulletins, reports, tabulated results and databases. Finally, access to comprehensive data and documentation must be guaranteed , including access to information in standardised data and metadata digital formats.

Target populations and sampling design

Target populations of the survey programme are (i) all households in rural areas and (ii) all agricultural holdings in the country. The Agricultural Survey Programme will consider only agricultural holdings while the Integrated Agricultural and Rural Survey Programme covers both households in rural areas and all agricultural holdings.

Two types of agricultural holdings are considered as recommended in the FAO WCA 2020: (i) holdings in the household sector and (ii) holdings in the non-household sector. In the household sector, agricultural holdings are holdings operated by household members.

Stratified two-stage sampling design is recommended for the household sector. This sampling scheme is widely used in households and agricultural surveys. The Primary Sampling Units (PSU) should preferably be enumeration areas (EAs) usually considered in the PHC as, in general, they present a quite homogeneous population size.

Subsampling can be used as a cost-effective tool for various purposes including the use of different estimation domain for specific information (information for which reliable estimations are expected at the national instead of subnational level) and the collection of information with high operation cost and/or high respondent burden.

Integration in existing statistical systems

Countries willing to adopt the 50x2030 Integrated Agricultural and Rural Survey Model may already have or not have regular agricultural survey and/or households surveys in their national statistical system. Depending on the countries' situation, some recommendations are provided below:

(i). Both agricultural and households surveys exist in the country

If the country wants to keep separate surveys for agriculture and households, then they may use the data integration model with the two sources of microdata to develop integrated agricultural and households microdata for analyses. Otherwise, they can integrate the two survey operations by either (i) merging the two samples (at least in rural areas) every three years for a single survey operation using the integrated questionnaires, or (ii) selecting a new integrated agricultural and household sample (this is the most cost-effective option and should be preferred).

(ii). Only an agricultural survey system exists

A complimentary sample of non-agricultural households may be used to complement the sample of agricultural households but the final sample of households may not be fully representative. The best option is to select a new integrated agricultural and household sample.

Implementation at country level

The 50x2030 Initiative addresses data needs and builds capacities across all components of the data production cycle. The main objective is to empower and support the targeted 50 partner countries to produce and disseminate more, better, and more timely agricultural data as they build sustainable agricultural statistical systems. Partner countries receive targeted technical assistance and financial support to collect data and establish the survey programme that addresses the countries' data needs and build capacities across all steps of the data production cycle.

Starting with data prioritization, both programmes help partner countries assess their agricultural data needs – including national, regional and international frameworks– to ensure surveys produce the most critical data for policy and investment decision-making and reporting needs. Secondly, the programs focus on data collection, – the costliest stage– including developing questionnaires and the sample, training enumerators and supervisors, and collecting data across the sample, typically through computer-assisted personal interviews (CAPI). Once data are collected, programs support partner countries to clean, format, and get the data ready for use during the data curation and preparation phase. Once the data are ready, a considerable amount of technical support is provided to support data analysis and interpretation. Many partner countries need and demand support to analyze and understand the data they have collected. Support also targets improved policies, including open data requirements to ensure microdata and reports are made publicly available and can be reused broadly. Supporting all of the components of the data cycle is essential to ensure the data system develops in ways that are statistically sound and self-sustaining.

50x2030 works with countries to build the capacity and motivation of decision-makers to use data, to strengthen data producers to align with decision-makers needs, and to improve data sharing and open data. To do so, the Initiative supports countries in assessing their agricultural data ecosystem, the degree of data use and uptake of evidence by decision-makers within that system, and the barriers to data use. The assessment is followed by a contextualized plan aimed at strengthening the capacity of data producers to analyse, interpret and present data and the capacity of decision-makers to interpret data and apply it when solving problems and choosing between options.

Alongside these activities, the 50x2030 Initiative prioritizes critical methodological research for agricultural and rural surveys to produce more efficient and cost-effective tools. In particular, the Initiative develops and documents methodological solutions for the efficient implementation of its modular survey systems.

Sustainability

Implementation in the 50 countries will be planned based on their capacity/category.

The countries will be the owners of the implementation process from the beginning. Because of the different levels of technical capacities, there likely will be large differences between the amount of technical assistance and financial support needed across the groups. Nevertheless, the support provided to each country is expected to be aligned with the implementation principles and to translate into the following minimum deliverables:

- an assessment of agricultural data needs which takes into account national and regional data needs, the minimum set of core agricultural data1 and SDGs monitoring requirements;
- a strategic plan for the implementation of the country's agricultural survey programme addressing the country's specificities, in line with existing national statistical strategic plans;
- the conduct of several annual survey rounds supported by the Initiative;
- the dissemination of fully-documented datasets for each conducted survey round;

Country engagement

Countries participating in the Initiative and receiving financial support are required to commit in several dimensions:

- **Principles -** Embrace the statistical programme principles: have a long-term perspective, implementing or maintaining the agricultural survey programme along the years, define a sample that ensures comprehensive coverage of the agricultural activity of the country; adopt an enlarged scope covering new emerging data needs for short and long-term agricultural development policy; implement high dissemination procedures for friendly and timely access to aggregate data, microdata and metadata.

- **SDGs -** Produce five selected SDGs indicators during the life of their 50x2030-supported survey project. The five SDGs indicators are: 2.3.1, 2.3.2, 2.4.1, 5.a.1.a.[2],5.a.1.b.

- **Staff** – Countries should provide the minimum staff required for managing the survey system. The staff should comprise the following position/expertise: overall technical coordinator, field-work coordinator, sampling and estimation statistician, data processing statistician, IT expert and thematic analysts and should include human resources for the fieldwork: enumerators and supervisors.

- **Overtaking** – The country should fully take over funding and technical requirements of the survey programme over time, ensuring the sustainability of the system. For this purpose, the Initiative requires a progressive technical takeover of data production activities by the national statistical system as well as a progressive financial takeover on the national budget of the resources necessary to the sustainability of the system.

[1] (2012) Action Plan of the Global Strategy to Improve Agriculture and Rural statistics www.fao.org/docrep/016/i3082e/i3082e.pdf

[2] If the sampling universe is appropriate, the survey can produce the related SDG 1.4.2 Indicator - Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure.

III. CONCLUSIONS AND RECOMMENDATIONS

The 50x2030 Initiative is the biggest effort ever done for improving agricultural statistics systems at the country level. The majority of the eligible countries are in Africa. The Initiative represents a unique opportunity for countries to empower themselves. The 50x2030 partners and donors will support the country to plan and mobilise resources for the production, dissemination and use of data. The countries will receive technical assistance, trainings, and financial support including a complete set of capacity development activities.

With the support of the 50x2030 countries will be enabled to produce sound information to understand their agricultural and rural sectors and turn that understanding into actions that will make agriculture reach its potential as an engine of growth and means of poverty reduction. The improved statistical systems, will allow countries to monitor progress towards Sustainable Development Goal 2 (SDG2) - End hunger, achieve food security and improved nutrition and promote sustainable agriculture, in particular indicators 2.3.1, 2.3.2 and 2.4.1.

Countries intrested in the program, can contact the partners, through FAO, for more information regarding the participation in the Initiative.