50x2030
DATA-SMART AGRICULTURE

ANNUAL REPORT

1 JULY 2019 TO 30 JUNE 2020

THE 50x2030 INITIATIVE TO CLOSE THE AGRICULTURAL DATA GAP

THE 50x2030 INITIATIVE TO CLOSE THE AGRICULTURAL DATA GAP
seeks to transform data systems in 50 countries by 2030 to advance the age of *data-smart agriculture*

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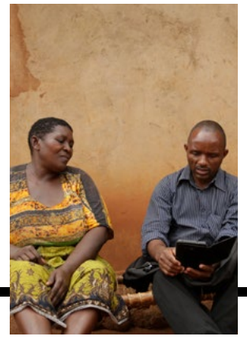

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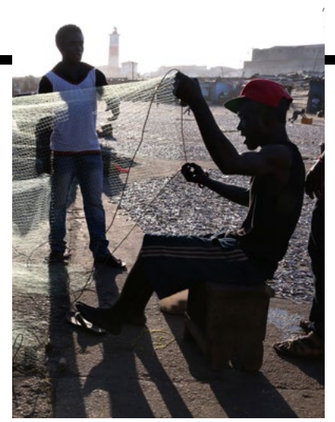

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ABOUT 50x2030

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OVERVIEW

The 50x2030 Initiative for "Data-smart Agriculture" is an alliance of development agencies, governments and development partners, including philanthropic organizations and the private sector. By 2030, it aims to empower and support **50 low- and lower-middle-income countries** (L/LMICs) across Middle East and North Africa (MENA), Sub-Saharan Africa (SSA), East Asia and the Pacific (EAP), Central and South Asia (CSA), and Latin America and the Caribbean (LAC). More specifically, the Initiative will strengthen national agricultural data systems to produce and use high-quality and timely agricultural data through survey programs.

Launched at the 2018 United Nations (UN) General Assembly, the Initiative's initial key partners include the Bill & Melinda Gates Foundation (BMGF), the United States Agency for International Development (USAID), the Governments of Australia, Germany and Italy. It brings together the technical and operational capabilities of its **Program Implementing Agencies (PIA)**: the Food and Agriculture Organization (FAO) of the United Nations, the International Fund for Agricultural Development (IFAD) and the World Bank (WB).

The **Partnership Council (PC)** is the Initiative's highest decision-making body and provides strategic guidance and oversight for the execution of the Initiative's activities. The **Program Management Team (PMT)** and its **Program Manager** are responsible for coordinating the Initiative's inputs and activities, including all technical assistance, capacity development, research activities, and monitoring implementation, including country-level activities.

A **Technical Advisory Group (TAG)** has also been set up to provide technical advice and peer review services for the consideration of the PC. This is to ensure the Initiative pursues the highest quality standards in the delivery of its data collection, methods and tools development and data use activities.

Photo by Curt Carnemark / World Bank

50x2030 PROGRAMMATIC APPROACH

The Initiative is organized and implemented under three components:

1. **Data Production**
2. **Methods and Tools Development**
3. **Data Use**

to ensure the program builds upon the mandate as well as the strengths and capacities of each PIA in supporting countries across the data cycle.

The 50x2030 survey program achieves integration through a comprehensive sampling frame, representative both of the household and non-household sectors, and through a set of best-practice survey tools which are administered as part of a country-chosen modular survey system to cover relevant topics. The program is built around an annual core module which covers agricultural production, and rotating modules covering specialized topics. The two variations of the survey program supported by the 50x2030 Initiative are the **Agricultural Survey Program** and the **Integrated Agricultural and Rural Survey Program**.

In addition, the Initiative fosters **increased and improved use of survey data** with the aim of ensuring decision makers have the capacity and motivation to access data to make informed decisions that facilitate progress towards achieving Sustainable Development Goals (SDG) 2.3 and 2.4 (see box page 44). It is foreseen that countries that join the Initiative will receive five-to-eight years of project support to conduct multiple rounds of surveys, make survey datasets publicly available and open, and apply the data in key decision processes.

The 50x2030 Initiative supports this flexible survey system which facilitates

i. assessing progress towards the SDGs and calculating regional indicators, such as the Comprehensive Africa Agriculture Development Programme (CAADP) indicators;
ii. timely reporting of national statistics and production monitoring; and
iii. the provision of high quality, integrated data for analysis and informed policymaking.

Activities under the Initiative officially started on 1 July 2019. This Annual Report covers the period from 1 July 2019 to 30 June 2020.

Photo by Rumi Consultancy / World Bank

MESSAGE FROM OUR PROGRAM MANAGER

When I joined 50x2030 as program manager in January 2020, I was excited about the impact this young Initiative could have on agriculture and the people whose lives and livelihoods depend in it. What I couldn't foresee —what none of us could— was the COVID-19 global pandemic that would come barreling down within weeks, having unimaginable consequences for the world, and also for our operations and our partner countries. COVID-19 would impact nearly every aspect of our work, from data collection plans and reduced funding for government agencies involved in implementing the Initiative, to the viability of certain survey modules. Less than one year since the start of the Initiative, we had confronted our first big test.

Now that the Initiative has completed its first year, I can say we have been both encouraged and humbled. On the one hand the agile operations of our three implementing agencies —the Food and Agriculture Organization of the United Nations, the International Fund for Agricultural Development and the World Bank— allowed us to pivot to pandemic-proof solutions such as remote training, phone surveys and desk-based research. We also benefitted from the collaborative channels forged with partner countries over years of implementing the FAO Agricultural Integrated Survey (AGRISurvey) Programme and the World Bank's Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA). On the other hand, we realized that the effects of COVID-19 would force us to rethink and play catchup on implementation for years to come.

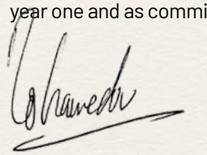
Today, I am proud to report that we nonetheless hit multiple milestones, starting at the country-level where our program takes on its full meaning. There, we successfully completed data collection activities in six countries and made critical agricultural data publicly available in three. We finalized our 50x2030 integrated questionnaires, which give us a basis for concrete discussions with countries and for implementation. This integration reflects the essence of the program: bringing together the expertise of lead agencies in the field and drawing on the best of their long-standing practices to support country data systems.

Programmatically, IFAD began work on country implementation with a dedicated team. Together with our Partnership Council and Technical Advisory Group, the presence of our implementing team meant we were well positioned to deliver on our threefold promise to countries: support on data production, use, and innovating how they conduct surveys.

Over the past year, we grew our web of support, including from the World Bank's International Development Association (IDA) and technical partners, such as the Regional Strategic Analysis and Knowledge Support System (ReSAKSS), the International Food Policy Research Institute (IFPRI) and Atlas AI. Financially, we confirmed five main development partners: the Bill & Melinda Gates Foundation (BMFG), the United States Agency for International Development (USAID), Australia's Department of Foreign Affairs and Trade (DFAT), Germany's Federal Ministry of Economic Cooperation and Development (BMZ), and Italy's Ministry of Foreign Affairs and International Cooperation (MAECI). And at the time of publishing, both the European Commission and the UK's Foreign, Commonwealth and Development Office had shown strong interest in joining our development partner family.

Because neither the world nor 50x2030 has seen the end of the uncertainty created by COVID-19, as a program we are determined to stay focused on what is within our control. We will push ahead with onboarding the next set of countries, diversifying our partnerships to include the private sector, and maximizing country operations despite increased constraints, with a focus on gender issues. With progress towards regional and global goals under great threat, we will emphasize the Sustainable Development Goals (SDGs) and Comprehensive Africa Agriculture Development Programme (CAADP) indicators to which 50x2030 can contribute by advancing tools and knowledge for application in our partner countries and beyond.

To my mind, as we enter the Initiative's second year, our role is to stay as enthusiastic as we were on day one, as clear-eyed as we were at year one and as committed as ever.



EL IZA MOHAMEDOU

"This integration reflects the essence of the program: bringing together the expertise of lead agencies in the field and drawing on the best of their long-standing practices to support country data systems."

50x2030 IN 2019–2020

An overview in numbers of the agricultural sector in which we have been working, the inroads we have made this past year and the impact COVID-19 has had on our partner countries.

OUR WORKING CONTEXT

US$ 264 BILLION

Amount invested annually in agriculture in low- and lower-middle income countries from 2015-2017[1]

US$ 10.2 BILLION

Amount of official development assistance (ODA) to agriculture (including rural development) in 2018, a 9% decrease in real terms from 2017[2]

5% TO 6%

Agriculture's share of official development assistance since 2012[3]

51%

Percentage of employed people in our partner countries who work in agriculture[4]

42%

of the agricultural workforce in developing countries is made up of women[5]

1 The FAO, FAOSTAT, 2019 http://www.fao.org/faostat/en/#home
2 https://donortracker.org/sector/agriculture
3 Idem.
4 Elaborated from World Bank, World Development Indicators, 2020
5 International Labour Organisation, World Employment Social Outlook: Trends for women 2017 (in ILO sectoral brief, 2020)

50x2030 IMPACT

US$ 32 MILLION

Amount mobilized to date for 50x2030[6]

11

Number of survey activities undertaken in partner countries[8]

9

Number of survey methodology-related research papers published[9]

50x2030 aims to contribute to:

8 SDG INDICATORS & **9 CAADP INDICATORS**[7]

6 50x2030 Initiative to Close the Agricultural Data Gap, Annual Report, 1 July 2019 to 30 June 2020
7 Producing, Using, Innovating: How 50x2030 is Closing the Agricultural Data Gap, https://www.50x2030.org/resources
8 50x2030 Initiative to Close the Agricultural Data Gap, Annual Report, 1 July 2019 to 30 June 2020
9 50x2030 Initiative to Close the Agricultural Data Gap, Annual Report, 1 July 2019 to 30 June 2020

COVID-19 AND STATISTICAL SYSTEMS
(AS AT JUNE 2020)

90%

of national statistical offices (NSOs) in low- or lower-middle income countries face difficulty operating due to funding constraints during the COVID-19 pandemic[10]

65%

of NSOs fully or partially closed due to COVID-19 restrictions[11]

95%

of NSOs interviewed have fully or partially stopped face-to-face data collection[12]

25%

of surveys planned in Sub-Saharan Africa have been halted or suspended by NSOs[13]

10 https://unstats.un.org/unsd/covid19-response/covid19-nso-survey-report.pdf
11 Idem.
12 Idem.
13 UNECA, African Centre for Statistics, Quick assessment of the impact of the COVID-19 pandemic on Africa https://www.uneca.org/sites/default/files/Publication-Files/quick_assessment_of_the_impact_of_the_covid-19_pandemic_on_africa.pdf

OUR PROGRAM

Photo © LSMSPlus - Tanzania (2019)

OUR COUNTRY WORK

The 50x2030 founding document, the Governance and Operations Framework (GOF), establishes that the Initiative "will include among its 50 participant countries all countries already receiving assistance through the AGRISurvey or LSMS-ISA projects that 1) qualify as an L/LMIC at the time of selection and 2) demonstrate willingness to co-finance the survey program and completely take over its implementation within a multi-year period." These 15 countries, called pre-approved - or transitioning - countries are: Burkina Faso, Ethiopia, Malawi, Mali, Myanmar, Nigeria, Tanzania, and Uganda from the LSMS-ISA program; and Armenia, Cambodia, Georgia, Ghana, Kenya, Nepal, Senegal, Uganda from the AGRISurvey program (with Uganda appearing under both programs).

Of the 15 countries, two (Kenya and Ghana) were supposed to receive assistance through existing grants from FAO; however, activities in Kenya did not start due to a reduction of available funding from a USAID grant, and activities in Ghana were postponed due to the need to clarify possible funding via International Development Association (IDA) mechanisms.

For the reporting period, survey activities continued under the Initiative in 12 of the 15 pre-approved countries, with official onboarding scheduled to begin on a rolling basis from May 2020. These countries, also called active countries, are Armenia, Burkina Faso, Cambodia, Ethiopia, Georgia, Ghana, Malawi, Nepal, Nigeria, Senegal, Tanzania and Uganda.

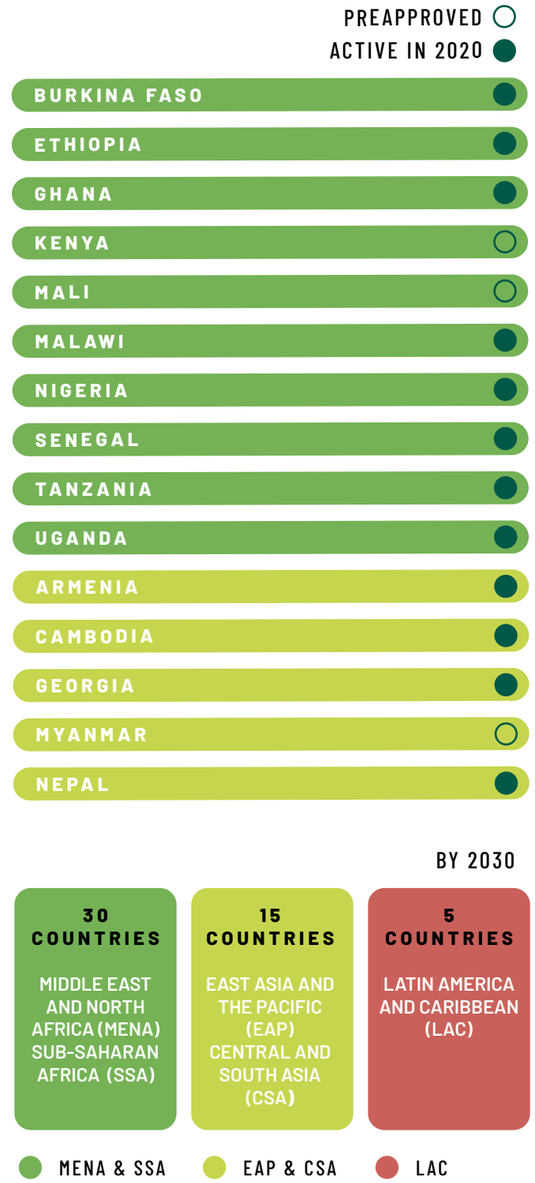
In addition to the above-mentioned pre-approved countries, the Initiative identified selection criteria for new countries, based on a combination of criteria, also indicated in the GOF: (i) belonging to the World Bank's L/LMIC classification; (ii) belonging to one of the six World Bank geographic subregions identified in the GOF; iii) having medium, low or very low capacity to produce SDG 2.3 indicators (see box page 44); (iv) expressing clear commitment to prioritizing agricultural statistics; (v) having the potential to make a large contribution to achieving SDG 2 globally through the Initiative; (vi) having funding available from national resources in order to take over from the Initiative at the end the five-to-eight year support period; and (vii) having the ability to leverage external resources.

The Initiative started preparations for the onboarding process for pre-approved countries in May 2020, alongside drafting its Country Engagement Protocol. This onboarding process is essential to ensure countries understand the objectives of the Initiative and the scope and extent of activities to be implemented. It is also to inform countries of their commitments to the Initiative, for example, the technical and financial takeover of the survey program, and producing SDG 2 indicators, among others. In addition, consultations were organized on possible IDA/IBRD funding, the schedule of implementation of country activities, and the timeline and procedures for onboarding pre-approved and new countries. Both pre-approved and new countries are scheduled to be onboarded on a rolling annual basis. Potential new countries will have the opportunity to submit an expression of interest to join the Initiative once the PC has endorsed the Country Engagement Protocol, which the PMT will submit to them in October 2020.

Photo by Sorapong Chaipanya on Pexels

During the reporting period, technical assistance was provided to Armenia, Burkina Faso, Cambodia, Ethiopia, Georgia, Ghana, Malawi, Nepal, Nigeria, Senegal, Tanzania and Uganda; detailed activities undertaken are reported on the following pages. Uganda is the first country of the Initiative that plans to implement the Integrated Agricultural and Rural Survey Program.

FIGURE 1: COUNTRY AND REGIONAL UPDATES



Armenia

ACTIVITIES

Photo by Armine Grigoryan / World Bank

DATA COLLECTION

- **Pilot test** of the **CAPI quarterly questionnaire undertaken** with representative samples in **four regions** (Sep 2019).
- **New sampling strategy for family farms developed**, based on the 2014 Agricultural census frame; **sampling plan** for the **four regions** developed (Sep-Oct 2019).
- Seven trainers and 130 enumerators and supervisors trained on **Survey Solutions (SuSo)** (Nov 2019), followed by a **Training on the SuSo Inception questionnaire** (Dec 2019).
- Three-week **Data collection** activity initiated (Jan 2020).
- **Draft tabulation plan developed** for the Inception survey (Feb 2020).
- **Inception questionnaire** adapted to agricultural enterprises (Mar-Apr 2020) and sent to respondents (Jun 2020).
- **First quarter survey round** postponed due to COVID-19 and merged with the second quarter survey round. **Quarterly questionnaire** modified to cover the first two quarters of 2020 (May 2020).

DATA PROCESSING/ANALYSIS

- **Inception survey round data** (family farms) cleaned and processed (Feb-May 2020). **Training on data processing using Stata software** organized for Armstat's Agricultural statistics department (Feb–May 2020).

DATA DISSEMINATION

- **Initial technical pre-training** provided on data dissemination, using the Data Documentation Initiative (DDI) standard (incl. the Nesstar Publisher program) and National Data Archive (NADA) tools (Sep 2019).
- **On-site technical assistance** to set up and launch a NADA platform at Armstat (Oct 2019).
- **Training on microdata documentation using the DDI standard** at Armstat (originally planned for May 2020) postponed due to the COVID-19.
- **Training materials** developed for use and DDI metadata for the 2014 Armenia Agricultural Census drafted. The activity is rescheduled for late 2020 with two options considered (on-site or remote) to ensure flexibility in the event of an extension of COVID-19 containment measures.
- Remote technical assistance for the preparation of the first draft of the **Armstat dissemination program assessment report** ongoing.

Burkina Faso

ACTIVITIES

- **Workshop on data preparation and poverty measurement** from first and second visits of the *Enquête Harmonisée sur les Conditions de Vie des Ménages* (EHCVM) held, as part of a project to harmonize surveys in the West Africa Economic and Monetary Union (WAEMU) (Sep 2019). Data analysis completed and the Poverty and Equity Global Practice of the World Bank is working on anonymizing the data prior to publishing.

Photo by Dominic Chavez / World Bank

Photo by FAO / Chann Tet

Cambodia

ACTIVITIES

DATA COLLECTION

- **CAPI data collection for the Cambodia Inter-Censal Agricultural Survey (CIAS) completed**, focusing solely on the household sector. Approximately 16,000 agricultural households reached (Jul 2019).
- **Support** on **data collection and data cleaning provided** to staff at the Cambodia National Institute of Statistics (NIS) and Ministry of Agriculture, Forestry and Fisheries (MAFF).
- **Additional technical oversight and item-level imputation training completed** (Sep and Oct 2019).

- Data collection for **non-household sector and large farms** undertaken (Sep-Oct 2019).
- **Preparation of the Cambodian Agricultural Survey 2020 (CAS 2020)** initiated. CAS 2020 adopted the same sample of CIAS 2019 for the household sector. Non-household sector holdings list updated for CAS 2020. The **CAS 2020 questionnaire**, being finalized at the end of the reporting period, incorporates a set of questions related to the impact of the COVID-19 pandemic in the agricultural activities. Data collection activities postponed until October 2020 due to COVID-19.

DATA PROCESSING/ANALYSIS

- **Data cleaning (imputation and summarization) and analysis** efforts undertaken.
- **Communication and capacity building activities completed**. (Jul 2019-Mar 2020). **Tables and reports** under development.

DATA DISSEMINATION (CIAS 2019)

- Support on **data dissemination of CIAS 2019** provided to cover i) the assessment report of the NIS data dissemination policy and program, microdata dissemination program, training on DDI-metadata using Nesstar Publisher, and ii) discussions on aggregate datasets for the release of the National Indicator Reporting Platform of the NIS of Cambodia (CAMSTAT) (Nov 2019).
- The **CIAS 2019 report** undergoing the final review with the Technical Committee.

Ethiopia

ACTIVITIES

Photo by Stephan Bachenheimer / World Bank

- **Post-fieldwork data cleaning and curation, and data analysis completed** (following the completion of the fieldwork the Ethiopia Socioeconomic Survey (ESS) 2018/19).
- **Collaboration to collect data on additional themes** ongoing with multiple partners. These include with the National Bank of Ethiopia on financial inclusion (i.e. saving, banking and insurance practices of households and individuals) and the Institute for Fiscal Studies on taxes (i.e. formal and informal taxes at household and community levels).

Georgia

ACTIVITIES

Photo by Givi Pirtskhalava / World Bank

- Support for the i**mprovement of the tabulation plan in line with the questionnaire** provided (Mar 2020).
- **Phone data collection and training** for the April survey round performed remotely due to COVID-19 restrictions. **Data entered in the SuSo** application on tablets for family farms; agricultural enterprises use the web data collection application, Computer Assisted Web Interview (CAWI) (Mar 2020).

DATA PROCESSING/ANALYSIS

- Support for the **improvement of data quality (data cleaning) procedures** provided (Feb-Mar 2020). The new procedures were employed for the quarterly surveys.
- Support for the **preparation of routines for calculating SDG 2.3.1 and SDG 2.3.2** provided. The first draft of the indicators was calculated with 2019 data; the results have undergone additional checks (Jun 2020).

DATA COLLECTION

- **Sampling frame** for the 2020 survey updated with administrative sources (Sep-Nov 2019).
- **Supported training** of more than 300 enumerators and supervisors for the **annual survey** covering agricultural production and economic data for family farms and agricultural enterprises (Dec 2019).
- **2020 data collection rounds** organized in January (Annual 2019 and Inception 2020 rounds) and April 2020 (first quarter survey round).

DATA DISSEMINATION

- Mission to present the **data dissemination sub-component** and main aspects of **microdata dissemination** undertaken. Covered statistical disclosure control, access models, the DDI standard and the NADA tool (Feb 2020).
- **Publications on 2019 aggregated data and 2019 preliminary data released** (Apr 2020; Jun 2020). **New tables** under preparation, with additional checks and controls performed. **Quarterly data on livestock** main figures (aggregated data) published.

Ghana

ACTIVITIES

Photo by Dominic Chavez / World Bank

- **Initial discussions** held with the Ghana Statistical Office. Activities will start when funds are made available from the MDTF.

Photo © LSMS / Clement Mtengula - Southern Malawi (2015)

Malawi

ACTIVITIES

- **Malawi Fifth Integrated Household Survey (IHS5) 2019/20 and Integrated Household Panel Survey (IHPS) 2019** undertaken (Apr 2019-Apr 2020).
- **Fieldwork for the Malawi IHS5** completed in early April 2020 with 92% of survey households interviewed. Field operations cut short due to COVID-19. **Data** for the IHS5 and IHPS 2019 **cleaned and processed**.

Nepal

ACTIVITIES

Photo by Simone D. McCourtie / World Bank

DATA COLLECTION

- **Second workshop for data producers and data users** on formulating survey questionnaires (Core and Environment modules) held. Support provided to CBS and Ministry of Agriculture and Livestock Development (MoALD) for the development of the questionnaires (Core and PME modules). **Newly developed questionnaires** transposed **in CAPI** format, using CSPro software and core competencies of CBS (Jul 2019).
- **Pilot test of new questionnaires and the overall CAPI process conducted in 10 households** in Chituwan District (Aug 2019).
- **Training of trainers** conducted on survey management and the new AGRIS-based survey methodology for CBS and MoALD staff. Training also covered data collection for SDG indicators 2.3.1, 2.3.2, 2.4.1 and 1.5.2 (Sep 2019)
- **Official pilot data collection** activities conducted in Chituwan district (897 non-registered agricultural households and 307 commercial farms enumerated). Direct **face-to-face interview method using CAPI** used for data collection with 16 enumerators and 4 supervisors (Oct-Dec 2019).
- Technical support on **sampling methodology for the 2020 commercial survey provided**, including on **weights adjustments** and **sampling procedures** for full implementation of the 2020 survey on commercial farms (Mar 2020).
- **Listing of commercial holdings** completed; representative **sample of Primary Sampling Units** selected; **complete listing of all commercial households** performed to build the sampling frames of Secondary Sampling Units (Apr 2020).
- Support for the **design and revision of questionnaires for the commercial survey** provided (May-Jun 2020)
- Support and guidance provided to the national consultant and CBS for the **drafting and preparation of enumerator manuals** (May-Jun 2020).

DATA PROCESSING/ANALYSIS

- **Data cleaning and analysis of 2019 pilot survey data** undertaken (Jan-Feb 2020); **final pilot survey report and datasets** compiled (Mar-Apr 2020) by CBS and the hired national consultant, with support from the FAO Survey team.

DATA DISSEMINATION

- Mission to **present the data dissemination component** and start activities postponed due to COVID-19. **Remote discussions** on the topic commenced with the aim of starting the drafting process of the dissemination program assessment report.

Photo by Curt Carnemark / World Bank

Nigeria

ACTIVITIES

- Preparations made for the dissemination and **public release of the microdata and documentation** of the fourth wave of the General Household Survey-Panel (GHS-Panel) in Nigeria (fieldwork for which was completed in March 2019). These included: **data cleaning and documentation**; a 10-day **data analysis workshop** with the National Bureau of Statistics of Nigeria (NBS); the development of a **survey report** jointly with NBS; and an official **data launch event** (Dec 2019) at which time the GHS-Panel data from the fourth wave was made available on the NBS and World Bank microdata catalog websites simultaneously (Jul and Dec 2019).
- Remote exchange in view of the **Agricultural Sample Census 2021** (Jan-Jun 2020) support.

Senegal

ACTIVITIES

DATA COLLECTION

- Preparations made for the **first visit of EAA 2019-2020**: review of the survey's sampling plan to include non-rainfed activities (livestock, horticulture), questionnaire development and training of enumerators (Jul-Aug 2019).
- **Data collection for the first EAA 2019-2020 visit undertaken**, following the listing exercise linked to the sampling renewal (Sep-Dec 2019).
- **Second EAA 2019-2020 visit** cancelled due to COVID-19 (Mar 2020).
- **Listing operation of the non-household sector** completed (after being interrupted due to the COVID-19 outbreak) in view of establishing the master sampling frame (Jun 2020).
- **Preparatory activities for the EAA 2020-2021 agricultural survey** underway.

Photo by Daniella Van Leggelo-Padilla / World Bank

DATA PROCESSING/ANALYSIS

- Technical assistance activities continued, through the organization of regular remote technical sessions. These focused on **cleaning, processing and analyzing data** from the first EAA 2019-2020 visit and the **drafting of the report to present the EAA 2019-2020** (Jan-Jun 2020).

DATA DISSEMINATION

- **Data dissemination** work relating to the **EAA 2017-2018** advanced with technical assistance. This resulted in the **release of the EAA 2017-2018 report**, the **dissemination** of thematic statistical tables and the **release of scientific use microdata files**. Support provided to the *Agence Nationale de la Statistique et de la Démographie du Sénégal* (ANSD) to create a domain dedicated to agricultural surveys on the NADA platform and upgrade the latter (Jul-Dec 2019).
- **EAA 2018-2019 report released** and presented during a national dissemination workshop (Dec 2019). Remote technical sessions held on **statistical dissemination** of the 2018-2019 survey (Jan-Jun 2020).
- The list of **indicators** of the multi-dimensional datasets released by the Open Data Platform was enriched as a result of the integration of the Economy module of AGRIS (Jun 2020).
- **Data anonymization** and documentation work started (May 2020) with the aim of releasing **scientific use microdata files for the EAA 2018-2019**.

DATA USE

- **Kick-off mission** to Dakar organized to present the **Data Use component**, consult with national stakeholders, and establish a work plan (Nov 2019).

Photo by Scott Wallace / World Bank

Tanzania

ACTIVITIES

- Next round of the **National Panel Survey** funding secured and survey preparations underway. Due to COVID-19, survey implementation was slightly delayed.

Uganda

ACTIVITIES

Photo by Arne Hoel / World Bank

Ongoing activities for the 2018, 2019 and 2020 rounds of the Annual Agricultural Survey Programme (AAS) (FAO) related to:

DATA COLLECTION

- **AAS 2019 fieldwork** conducted as planned (Aug 2019-Jan 2020) but suspended in March 2020 due to COVID-19.
- **Contingency plan for the agricultural year 2020** developed by UBOS and FAO. It is envisaged that the AAS is conducted as a standalone survey in two field visits.

DATA PROCESSING/ANALYSIS

- FAO and UBOS work on the **processing and analysis of the AAS 2018 data completed** (Jul 2019-Oct 2019). **Report writing** took place between October 2019 and February 2020.

DATA DISSEMINATION

- **National dissemination workshop** held on the key findings of the AAS 2018 (Oct 2019). The following outputs were achieved: i) online publication of the UBOS **calendar of agricultural statistical publications**; ii) finalization and release of the **AAS 2018 report**; iii) dissemination of the **2018 multi-dimensional data tables** on the Open Data Platform and iv) anonymization, documentation of **AAS 2018 microdata** and **improved management** of the NADA platform (Mar-May 2020).
- **Microdata access policy** awaiting clearance from UBOS senior management, upon which AAS 2018 microdata will be released.

DATA USE

- **Introductory training** organized for MAAIF on the use of agricultural survey data for economic analysis (Oct 2019).
- **Stakeholder workshop** held to bring together UBOS and policy makers/ formulators largely involved with the Agriculture Sector Strategic Plan **(ASSP-3) formulation** process (Mar 2020).
- **Joint policy paper developed** by FAO in collaboration with MAAIF, using data from the AAS 2018 (Mar-Jun 2020).

UGANDA NATIONAL PANEL SURVEY (UNPS) - WB

- The **Uganda National Panel Survey (UNPS) 2018/19 data** reviewed and prepared for dissemination, in collaboration with the Directorate for Socioeconomic Surveys of UBOS.
- **Data collection** activities for the **Agricultural Year 2019 (UNPS 2019/20)** conducted and completed (Feb 2020).
- Support provided to UBOS during UNPS 2019/20 fieldwork to improve data quality control system. A technical mission took place in October to provide support in the implementation of the **Data Validation System** prior to the start of the survey second visit (Oct 2019). Data is currently under revision and preparation for dissemination.

ISP - INTEGRATED SURVEY PROGRAMME - WB/FAO:

- **UNPS/AAS Integrated Survey Programme (ISP)** activities significantly advanced. UBOS and the FAO/WB partners worked together on the **Integration of the AAS and the UNPS** in a technical retreat (Jul 2019) and the **draft UNPS/AAS questionnaire**, which is being **programmed into Survey Solutions**.
- **First round of field tests undertaken** and the establishment of common **workplan established as a result** of a joint FAO/WB mission (Jan 2020). In addition, the FAO and WB teams conducted preliminary work on the **survey management routines** aimed at controlling the quality of the data collected. UBOS worked on the **listing of operations for the new sample**. The launch of fieldwork has been postponed due to COVID-19.

Consensus on the inclusion of the Uganda National Study on Objective Measurement in Agriculture (UNOMA) as part of the Uganda ISP was reached. This followed (i) agreements between FAO, WB, and UBOS during a technical mission of UBOS to Rome (Jul 2019); (ii) the CGIAR-UBOS-MAAIF consultation meeting in Munyonyo (October 2019); and (iii) UBOS, FAO, WB and CGIAR SPIA plenary discussions during the last technical joint FAO/WB mission in Kampala (Jan 2020). The UNOMA study, to be conducted as part of the 2021/22 ISP, will pilot the integration of crop cutting and variety identification in national surveys.

Photo by NasaHarvest.org

Mali

Some activities were also implemented in Mali under a separate WB grant. They are listed here given that Mali is a pre-approved country and such activities are in line with those supported by the Initiative, and also considering the official interest the country has expressed in continuing this work. They are:

- Support provided to the *Cellule de Planification et de Statistique du Secteur Développement Rural* (CPS/SDR) of the *Ministère de l'Agriculture* (MoA) for the finalization of the report for the *Enquête Agricole Conjoncture Intégrée* (EAC-I) 17 LSMS-ISA survey. The report was published in December 2019, while data for the EAC-I 17 was publicly disseminated in February 2019.
- Release of additional data files and documents to improve the usability of EAC-I 14 and EAC-I 17 for data users, namely the income and consumption aggregates and the conversion factors for non-standard units, including the release of the English versions of the questionnaires.

COVID-19 RELATED HIGH-FREQUENCY PHONE SURVEYS

As COVID-19 related measures have severely limited the use of traditional, face-to-face interviews in population-based surveys, the Poverty and Equity Global Practice and the Development Economics Data Group (DECDG) of the World Bank have set up High-Frequency Mobile Phone Surveys of Households to Assess the Impacts of COVID-19 in several countries. The information collected can potentially complement —though not substitute— traditional face-to-face interviews and their usability will be further investigated.

The WB LSMS team developed and/or implemented rounds of phone survey data and, in some cases, disseminated the data on the WB's Microdata Catalog in Burkina Faso, Ethiopia, Malawi, Nigeria, Tanzania and Uganda.

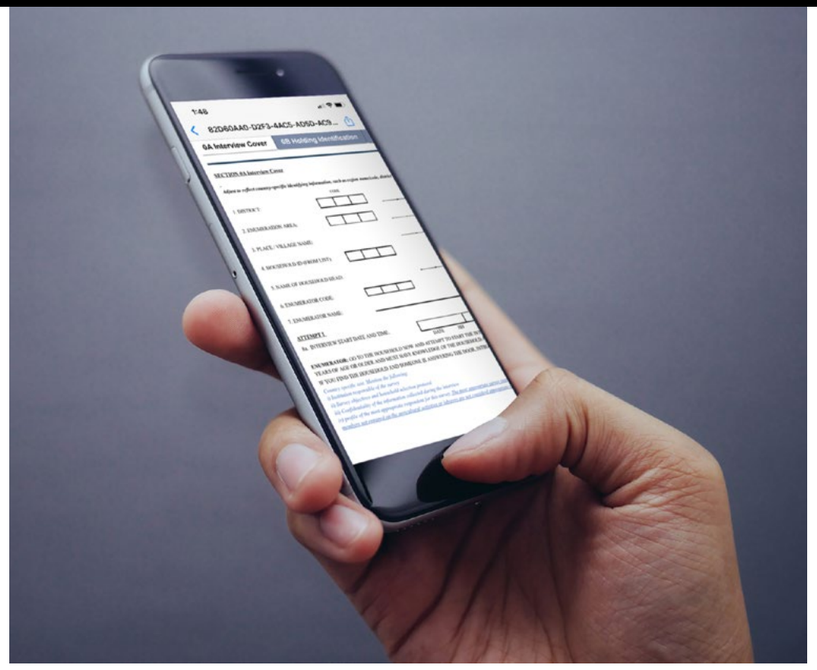


Photo © LSMSPlus - Ethiopia (2020)

DATA ECOSYSTEM MAPPING

Starting in November 2019, IFAD began collaboration with the Centre for Agriculture and Bioscience International (CABI) and the Open Data Institute (ODI) to develop the methodology to carry out country-level Data Ecosystem Mappings in Initiative countries. The work with CABI and ODI was put on hold due to funding delays. However, IFAD staff developed the methodology and data collection instruments independently, loosely based on previous CABI/ODI work.

Country-level Data Ecosystem Mappings and assessments are to be undertaken by the Data Use component in coordination with the PMT and the Data Production component when country negotiations initiate. During the reporting period, a desk review was conducted in May 2020 by IFAD staff/consultants as groundwork for the ecosystem mapping in Cambodia. Additional Data Ecosystem Mapping activities were not undertaken in countries during the reporting period due to lack of funding from the MDTF.

Photo by Feed the Future Innovation Lab for Markets, Risk & Resilience / UC Davis.

SURVEYS, TECHNOLOGY AND NEW DATA SOURCES

SURVEY INSTRUMENTS

The full package of Initiative questionnaires was developed by a joint World Bank/FAO team. It comprises the CORE questionnaire, the Farm Income, Labor and Productivity (ILP-AG) questionnaire, the Non-Farm Income and Living Standards (ILS-HH) questionnaire, the Machinery, Equipment and Assets (MEA-AG) questionnaire, and the Production Methods and Environment (PME-AG) questionnaire https://www.50x2030.org/resources. The team also developed a detailed document on how the questionnaires contribute to the monitoring of SDG and CAADP indicators.

Each of the finalized questionnaires was programmed in the Survey Solutions open access platform in order to facilitate use.

A Guide to 50x2030 Data Collection: Questionnaire Design to describe survey systems, content, implementation and enumerator manuals for the CORE-AG, ILS-HH, and ILP-AG questionnaires have also been developed. Other supporting documentation is in the making (on the sampling strategy, on post-data collection integration, etc.).

The Initiative's Methods and Tools Development component undertook several activities aimed at advancing knowledge of survey methods and their implications for agricultural statistics. These were intended to guide activities of the Initiative as well as those of external survey practitioners and stakeholders. Activities revolved around three pillars: (i) Integration of survey approaches; (ii) Use of technology, updating of methodologies for measurement; and, (iii) Integration with other data sources. Each pillar is made up of several sub-components, the progress for each over the reporting period is summarized below.

Pillar 1: Integration of survey approaches

A primary output of activities under Pillar 1 during the reporting period is the **package of survey instruments and related documentation** that serve as the foundation of the Initiative's Data Production component (see box to the left).

During the reporting period, the **full package of questionnaires** was reviewed by external experts, with the exception of the PME questionnaire. First drafts of the questionnaires are available on the 50x2030 website. The questionnaire package is meant to inspire country customization of the surveys and

indicate the minimum data requirements and compliance with international standards that each country needs to achieve. It is a work in progress and will be updated as further comments are made and as country activities proceed to implementing the surveys. The package will also be submitted to the TAG for further expert review.

As mentioned, a **detailed document** of how the questionnaires can contribute to the monitoring of SDG and CAADP indicators was developed in collaboration with the Data Production component and presented to relevant stakeholders, in particular during meetings with ReSAKSS within their support to the CAADP.

A draft paper to provide practical steps on survey design and sampling was initiated. This aims to optimize the possibility of post-data collection integration and will benefit from the practical integration experience in Uganda.

Research on survey approaches was furthered, specifically related to potential issues of **recall bias in single *vis-à-vis* multiple survey visits**. The paper, "Recall Length and Measurement Error in Agricultural Surveys", was published in the World Bank Policy Research Working Paper Series, and subsequently submitted to the journal Food Policy.

Lastly, in line with the aim of integrating LSMS-ISA and AGRISurvey methodologies, the Methods and Tools Development component began to explore various **approaches to integrate the commercial farm sector with surveys of the household sector**. During the reporting period, discussions with the governments of Ethiopia and Tanzania were started. The World Bank collaborated with the **Central Statistical Agency (CAS) of Ethiopia to improve the questionnaire design of the commercial farm survey**. The improved questionnaire tool was administered in the 2020 commercial farms survey. Additionally, the Methods and Tools Development team initiated a **desk review of data collection for non-household farms**.

UGANDA: PILOTING SURVEY INTEGRATION

Efforts to integrate existing LSMS-ISA (UNPS) and AGRIS (AAS) surveys began in **Uganda** during the reporting period.

The Initiative helped organize a workshop in Rome in which representatives from the Uganda Bureau of Statistics, FAO, and the World Bank worked together to develop the draft UNPS/AAS questionnaire and sampling design, both using and informing the Initiative's reference questionnaires described above.

Since the workshop, UBOS, FAO and the World Bank have further developed the integrated questionnaire instrument, sample design and listing operation, and prepared for fieldwork (which has been pushed back to May 2021 as a result of COVID-19).

Pillar 2: Use of technology, updating of methodologies for measurement

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Guidelines to measure agricultural labor were developed and will be further adapted as data collection activities are implemented

LABOR INPUTS:

The design for methodological studies was drafted and guidelines on measuring agricultural labor were finalized; FAO will provide further review or adaptation of the guidelines as data collection activities are prepared.

The guidelines went through **two rounds of peer review**, the first internal and the second external, each with two reviewers. The paper on Measuring Farm Labor: Survey Experimental Evidence from Ghana has been published in the World Bank Economic Review.

The team also drafted a proposal for **measurement of labor in farms using mobile phones**. The proposal will be finalized once a suitable country is defined.

LAND AREA AND TENURE:

The Armenia Land Tenure and Area (ALTA) study was conducted, building on GRAInS research. For land area measurement, selected parcels were measured through respondent estimates, GPS measurements, and through the use of the Survey Solutions satellite imagery area measurement function. For land tenure, four modules of the joint questionnaire for measuring SDG Indicators 1.4.2 and 5.a.1 (see box page 44) were implemented. These were designed through an extended collaboration between the World Bank, FAO, and UN-Habitat, as each organization employs different respondent strategies and levels of data collection. The ALTA study was implemented through a collaboration between the World Bank's LSMS team, the Statistical Committee of the Republic of Armenia (Armstat), and the

Photo by FAO / Chann Tet

Findings from the ALTA study were presented in a United Nations Statistics Division-hosted side event at the United Nations Statistical Commission

International Center for Agribusiness Research and Education (ICARE), as well as two locally recruited consultants. The ALTA study sample covered three regions and a total of 1,200 households across 100 enumeration areas.

A **cognitive interviewing component** was conducted from July – August 2019, in advance of the main fieldwork (September – December 2019). Data collection and processing were completed within the reporting period. Due to COVID-19 restrictions, the analytical workshop that was planned with Armstat had to be rescheduled. Findings from the ALTA study were presented in a **United Nations Statistics Division-hosted side event at the United Nations Statistical Commission**. An additional presentation, which would have included the launch of the joint World Bank, FAO, and UN-Habitat publication on measuring SDG indicators 5.a.1 and 1.4.2, was planned for the World Bank's Annual Conference on Land and Poverty but was cancelled due to COVID-19.

In addition, the World Bank undertook analytical work on **land area measurement via satellite imagery using data collected** in Ecuador through the GRAInS partnership. Preliminary findings were presented at the International Conference on Agricultural Statistics (ICAS) in November 2019. Although Ecuador is not an Initiative country, this activity is reported here given that it is used to validate methodological work directly linked to the Initiative's outputs. Analysis of the data from Ecuador and the ALTA study is ongoing.

SOIL FERTILITY:

As the initial step in the research on soil, the current landscape of soil and climate monitoring tools was explored. Meetings were held with the Global Good Fund, the India office of the International Maize and Wheat Improvement Center (CIMMYT), and Arable to learn about the soil monitoring tools and methods they have developed and/or employed. The development of a full concept note for a study on the **measurement of soil fertility in agricultural and household surveys** has been delayed, as has the finalization of a research paper on the integration of ground- and geospatial-based soil data, due to competing demands on staff time stemming from COVID-19 response activities.

CROP VARIETY IDENTIFICATION:

The initial year of the Initiative included collaboration with the CGIAR Standing Panel on Impact Assessment (SPIA) on methodological research for crop variety identification. Ongoing conversations, including participation in a SPIA-hosted workshop in December 2019, informed the design of future work under this theme. Building on the discussions with CGIAR, a study was designed to **test objective measurement of crop variety in household surveys**. The guidelines on crop variety identification in household surveys, which were planned for completion during the reporting period, have been delayed due to competing demands on staff time as a result of COVID-19 response activities.

Photo by Digital Buggu on Pexels

POST-HARVEST LOSSES:

With the aim of contributing to the collection of data required for the measurement of SDG Indicator 12.3, during the first year of the Initiative, a joint FAO/World Bank team worked on the development of the questionnaire instruments and documentation to **collect more reliable data about on-farm post-harvest losses**. Building on the methodology put forth by the Global Strategy to Improve Agriculture and Rural Statistics (GSARS), the full post-harvest loss questionnaire tool combines both declarative and physical measurement information for all operations occurring at the farm level, focusing primarily on on-farm and storage-based losses.

Moreover, the joint FAO/World Bank team has identified a few methodological topics related to **food losses** that have received less attention than other food loss-related methodological topics and that could make significant contributions to the measurement and understanding of post-harvest losses. The following research topics have been identified: (i) the determination of minimum loss levels; (ii) the integration of survey approaches with modelling to improve the estimation of losses and fill data gaps; and (iii) the measurement of losses during storage using model-based approaches.

WOMEN'S EMPOWERMENT IN AGRICULTURE:

As planned, the PIAs participated in a workshop on women's empowerment in agriculture in July 2019 designed to discuss how a potential **Women's Empowerment Metric for National Statistical Systems (WEMNS)** could be developed for inclusion in the 50x2030 Initiative. They concluded that while the Initiative could not guarantee that the resulting survey tools for WEMNS will be implemented by Initiative-supported countries, the Initiative will recommend them

to countries. During the reporting period, IFPRI and Emory University were engaged in planning activities to develop a WEMNS. The IFPRI/Emory team participated in a **series of technical workshops hosted by IFPRI**, with invitees from the World Bank, FAO, IFAD, BMGF, USAID, and the German Corporation for International Cooperation (GIZ), among others. The sessions were held following the completion of a set of stakeholder interviews conducted by IFPRI/Emory. The technical sessions were aimed at reviewing the results from the stakeholder consultations, examining definitions and measures of empowerment, reviewing questionnaire modules, and initiating the development of a draft instrument for cognitive interviewing, and included a presentation of the **50x2030 reference questionnaires and coverage of topics related to women's empowerment**.

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Pillar 3: Integration with other data sources

INTEGRATION OF SURVEYS WITH SATELLITE AND EARTH OBSERVATION DATA:

The World Bank identified and contracted the earth observation partner Atlas AI to collaborate on the development of a data collection protocol. This aims to define the minimum **georeferenced survey data required for integrated survey-satellite applications for high-resolution crop type mapping and crop yield predictions**. Analysis of the available data is underway, and will continue in the next reporting period, resulting in a technical report.

Additional activities were ongoing at the close of the reporting period. These include the design of a methodological study aimed at addressing research questions that cannot be addressed with currently available data, and research on **methods for crop type mapping and yield estimation** using LSMS-ISA data from Ethiopia and Malawi.

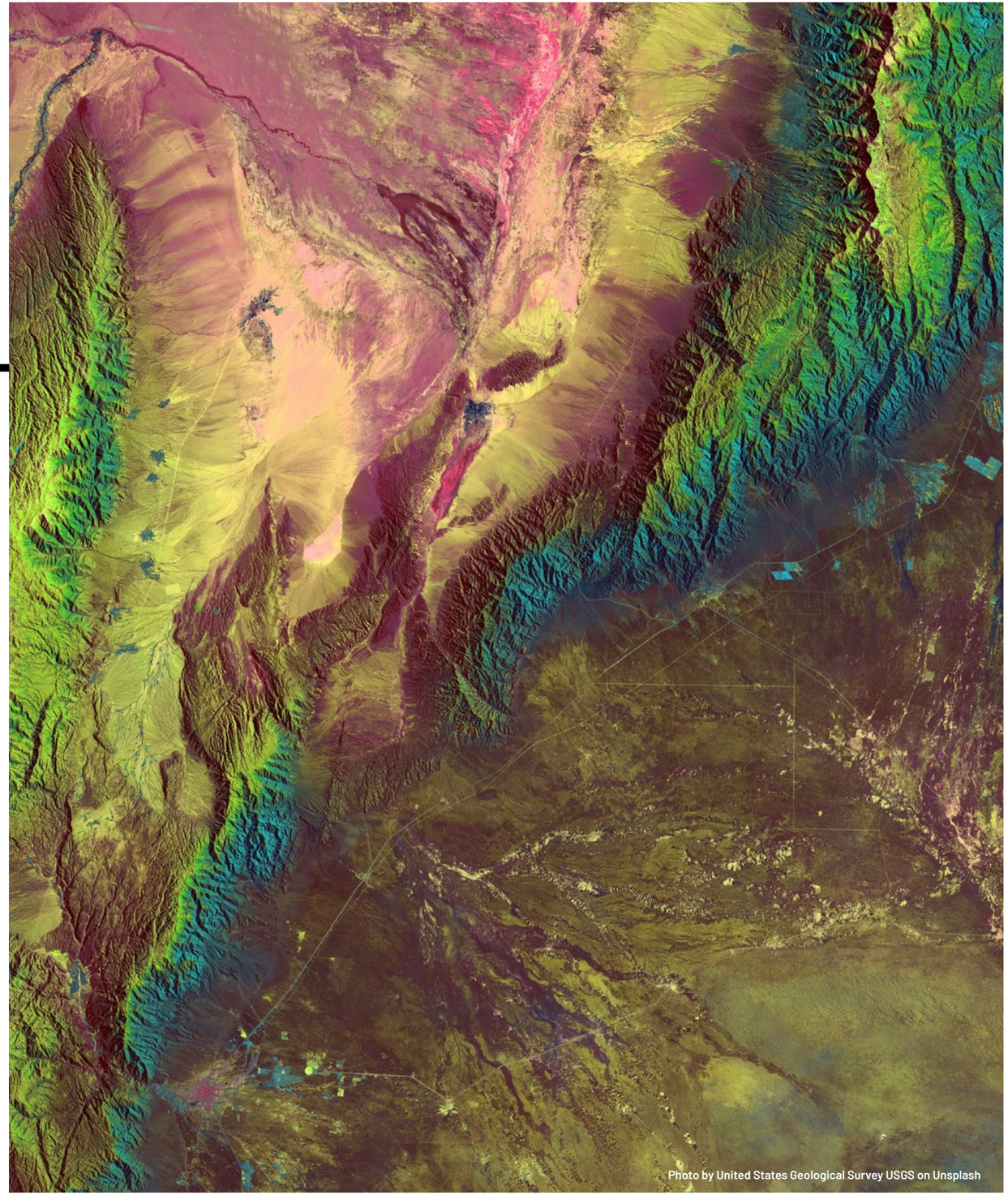

Photo by United States Geological Survey USGS on Unsplash

KNOWLEDGE GENERATION

Annex 1 lists **methodology-related** research papers of the LSMS-ISA team published during the reporting period.

Initiative staff made presentations or references (in sub-bullets) were made on Initiative work at the international **conferences** listed at right. Additional presentations were planned for conferences that were subsequently cancelled due to COVID-19 related restrictions.

Photo ©FAO

- ***European Survey Research Association (ESRA) Conference (July 2019)***

- ***ISI World Statistics Congress (August 2019)***
  - » A thing of the past? Household surveys in the new global data ecosystem
  - » Private Public Partnerships to Improve Capacity to Measure SDG's
  - » Data Integration in The Production of Official Statistics: Progress, Opportunity and Challenges
  - » AGRISurvey around the world

- ***21st William T. Pecora Memorial Remote Sensing Symposium/38th International Symposium on Remote Sensing of Environment (Pecora 21/ISRSE-38; October 2019)***
  - » Eyes in the Sky, Boots on the Ground: Integrating Satellites and Surveys for Improving Crop Yield Measurement

- ***IEEE International Workshop on Metrology and Forestry (October 2019)***
  - » Sensors for Soil Health: The Evolution of Soil Technologies and Integration with Household Surveys
  - » Eyes in the Sky, Boots on the Ground: Latest Advances in Integrating Satellites and Surveys for Improved Crop Yield Measurement
  - » Land area measurement in household surveys: Integrating self-reported, GPS and satellite-imagery-based measures in low-resource settings

- ***University of Michigan's Sustainability and Development Conference (October 2019)***
  - » Understanding the Data Curation Choices Behind the Indicator: SDGs and LSMS-ISA Measures of Progress
  - » Measuring Individuals' Land Tenure Security: A Simultaneous Approach to SDG 1.4.2 and 5.a.1

- ***UNECE-Eurostat Work Session on Statistical Data Confidentiality (October 2019)***
  - » Challenges and experiences in anonymizing and disseminating micro-data from agricultural surveys in the context of FAO AGRISurveys

- ***Eighth International Conference on Agricultural Statistics (ICAS-VIII) (November 2019)***
  - » Need for Timely and Accurate Agricultural Statistics
  - » Innovation in Agricultural and Household Surveys
    - Comparative Analysis of the Self-Reported, GPS-Based, Digital Map Based, and Paper-Based Area Measurements at the Plot Level: Evidence from Ecuador
  - » Fostering Innovation and Use of Agricultural and Rural Development Data

- ***Fifty-first Session of the United Nations Statistical Commission (March 2020)***
  - » UNSD-hosted side event: Assessment of Progress Towards Gender Equality in Beijing+25
  - » Presentation of findings from the Armenia Land Tenure and Area study, particularly related to the measurement of SDG indicators 5.a.1 and 1.4.2

RESOURCE MOBILIZATION

Initial 50x2030 contributions from the Bill & Melinda Gates Foundation (BMGF), the United States Agency for International Development (USAID) and the Government of Australia have entered the **Integrated Household and Agricultural Surveys in Low and Middle-Income Countries Multi-Donor Trust Fund (MDTF) at the World Bank**. The Italian Ministry of Foreign Affairs and International Cooperation (MAECI) also contributed to 50x2030 activities through FAO.

As of 1 July 2019, part of the previous funding from USAID and the BMGF to FAO and the World Bank was set aside for 50x2030 activities in pre-approved partner countries.

All three PIAs are also providing in-kind contributions.

Collaboration also was initiated, pursued and finalized with the Federal Ministry for Economic Cooperation and Development, Germany (BMZ). This resulted in the signing of the Administration Agreement with the World Bank in December 2019, relating to BMZ's contribution to the MDTF for 50x2030 activities.

During the reporting period, the World Bank explored different options to transfer part of the funding received through the MDTF to FAO and IFAD in ways that would be viable for all, given the individual requirements in force within each institution involved. The only applicable solution was the Transfer Out modality, an arrangement under which the World Bank, in exceptional circumstances, transfers funds to eligible transferees. The exceptional nature of this modality required a process which entailed that i) the Transfer Out modality also had to be discussed and agreed with the World Bank's Development Finance (DFi) Vice Presidency, which granted its agreement in early February 2020; ii) all MTDF donors had to agree on the modifications proposed to the existing Administration Agreements and, once in agreement on one text, to sign new ones; and iii) FAO and IFAD had to discuss and agree the text of Transfer Out Agreements with the World Bank in order to become eligible transferees. By the end of the reporting period, this overall procedure was not yet complete, resulting in the need for FAO and IFAD to postpone some of the planned activities.

Advanced discussions were held with the European Commission's Directorate-General for International Cooperation and Development (DG DEVCO), which, in November 2019, approved a contribution of EUR 5 million to the Initiative's MDTF. This was to be disbursed by the end of 2020 through a specific Action named "Investing in data and indicators to end Hunger and Malnutrition (SDG 2)", approved within the EU's Multiannual Indicative Programme (MIP) for the period 2018-2020 that sets priorities for food and nutrition security and sustainable agriculture. However, the European Union and the World Bank Group have been negotiating a new Financial Framework and Partnership Agreement (FFPA), pending which the signing of any Administration Agreements has been suspended. At the end of the reporting period, the FFPA had not been signed. In addition, as the MDTF was undergoing restructuring on the WB side to accommodate the Transfer Out possibility, new development partners, such as the European Union, had to wait to adhere for the signature of all previous donors.

Also, as part of a larger investment to the World Bank, the Department for International Development of the United Kingdom (DFID), recently replaced by the Foreign, Commonwealth and Development Office (FCDO), had been exploring options to make a substantial three-year investment in the Initiative's Methods and Tools Development component.

In the second semester of the reporting period, resource mobilization was hindered. This was due to the slower pace of activities in the partner countries, especially due to COVID-19 related restrictions, but also due to the setting up of the above-mentioned procedures for the transfer of funds to the implementing agencies.

Concrete steps were taken to leverage complementary funding from IDA/IBRD resources available to those countries that so require them, within a broader statistical or subject matter-related support portfolio. In particular, working relations were established with the Poverty and Equity Global Practice and Agriculture and Food Global Practice of the World Bank. These were based on the WB's commitment to building capacity to reduce gaps in the availability of core data for evidence-based policy making during the IDA19 development process. These collaborations aim to identify potential IDA projects that can include a 50x2030 component and ways to coordinate this potential source of funds. Potential collaborations were initiated as part of the preparation of projects in Burkina Faso, Ghana and Senegal.

IDA'S WEST AFRICA PROJECT ON DATA

On 26 May 2020, the Board of the World Bank Group allocated U$ 379 million in International Development Association (IDA) credits and grants to help harmonize and strengthen statistical systems in seven West African countries (Burkina Faso, Cabo Verde, Cote d'Ivoire, Ghana, Liberia, Sierra Leone and Togo), and to support the African Union (AU) and the Economic Community of West African States (ECOWAS) in their efforts to deepen regional integration in Africa.

The new project **Harmonizing and Improving Statistics in West Africa (HISWA)** aims to strengthen the statistical systems of participating countries and regional and subregional bodies, in order to help them harmonize, produce, disseminate and enhance the use of core economic and social statistics —aims that are entirely shared by the **Initiative**.

HISWA is a regional project that will stimulate demand for data and increase the capacity of National Statistics Offices to support the production of quality data that is essential to addressing crucial socio-economic development challenges. **It constitutes an important source of funds to leverage Initiative resources in our partner countries**.

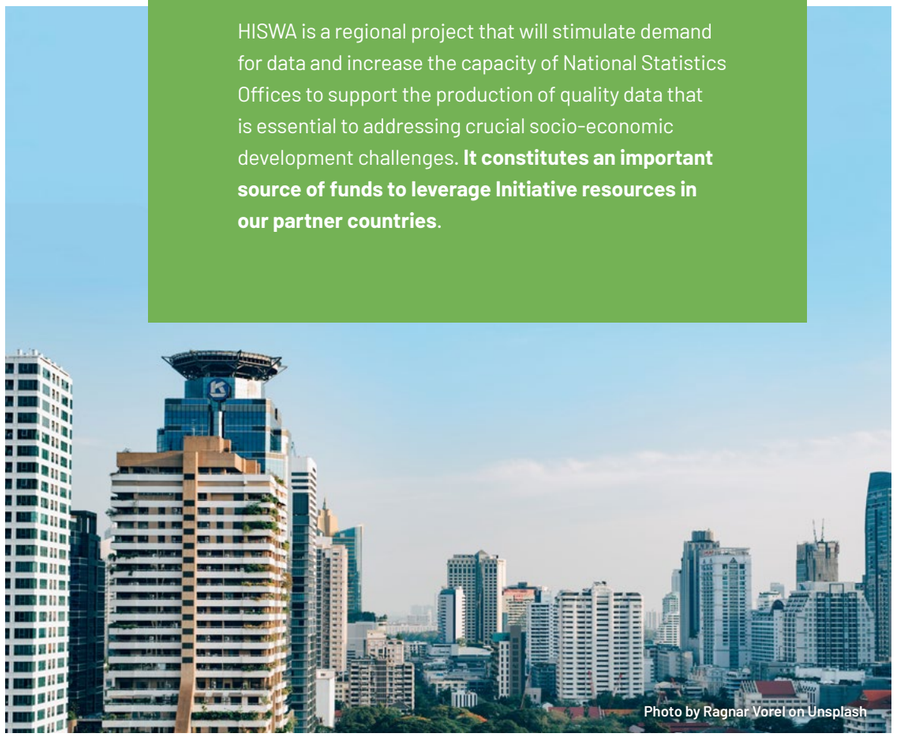

Photo by Ragnar Vorel on Unsplash

PRIVATE SECTOR ENGAGEMENT

Photo by Space X on Pexels

50x2030 Initiative resources were allocated prior to the Initiative's official kick-off to begin private sector engagement and profiling. Activities were developed to identify (i) areas from which the private sector can benefit from the Initiative's objectives and outputs; (ii) initial opportunities for corporate partnership; (iii) identification of data or technology companies interested in the use and promotion of technology transfer; (iv) identification of other private sector companies interested in the Initiative's activities for other common benefits; and (iv) corporate social responsibility opportunities for private sector companies and corporations, etc.

This was due to the need to present advanced results from program implementation, which are forthcoming; additionally, COVID-19 related constraints did not allow for the establishment of a concrete and powerful private sector relations campaign.

MONITORING OUR IMPACT

A provisional Results Framework has been developed. It will be finalized and accompanied by a Monitoring plan. The Results Framework will allow the Initiative to identify and focus on key objectives within a complex program environment. It will be used for both planning and management as it allows the Initiative to monitor the achievement of results and to adjust programs and activities as necessary.

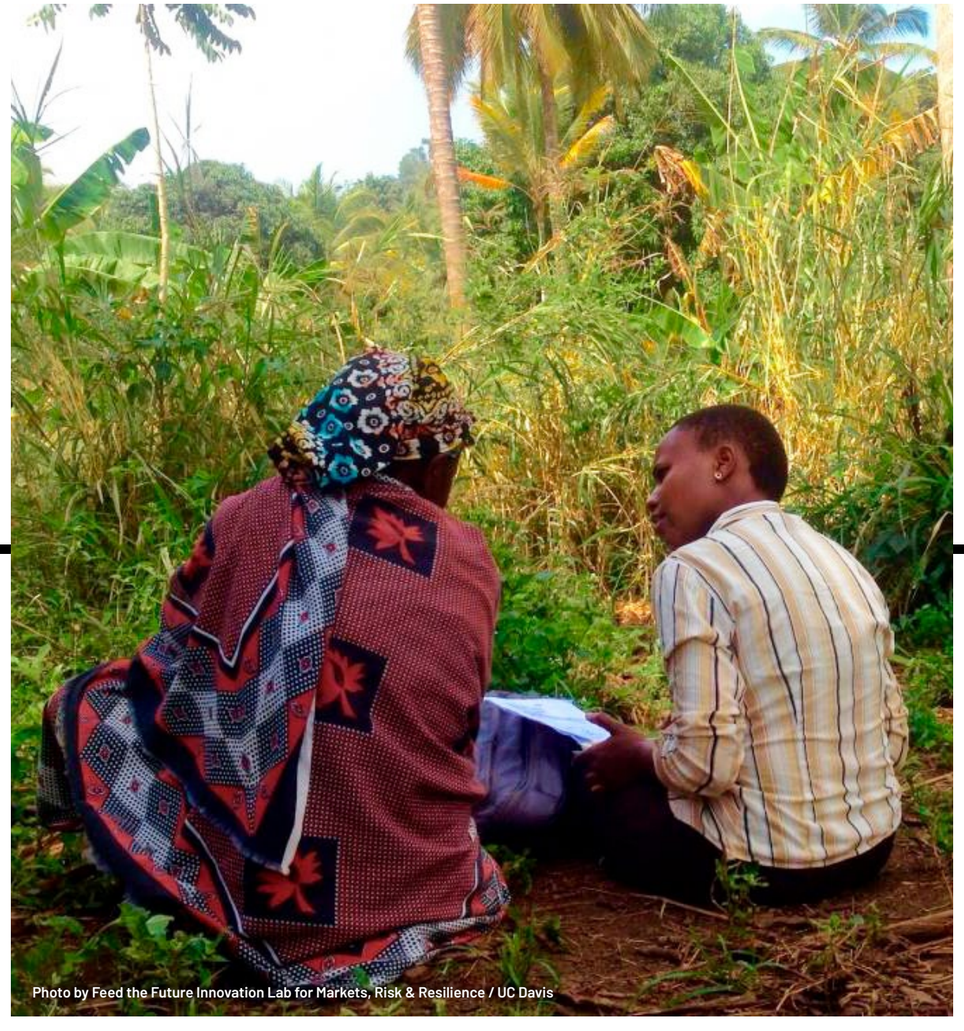

Photo by Feed the Future Innovation Lab for Markets, Risk & Resilience / UC Davis

SUPPORTING SDGs AND CAADP WITH 50x2030 DATA

The Global indicator framework for Sustainable Development Goals (SDGs) and targets of the 2030 Agenda for Sustainable Development were agreed upon at the 2017 United Nations Statistical Commission as an urgent call for action by all countries to end poverty and other deprivations to improve health and education, reduce inequality, and spur economic growth. It includes 17 goals, 169 targets and 231 indicators; 21 of the latter are focused on agriculture and food security.

The Comprehensive Africa Agriculture Development Programme (CAADP) is Africa's policy framework established in 2014 through the Malabo Declaration to improve food security and nutrition and increase incomes aiming at agricultural transformation, wealth creation, economic growth and prosperity.

Below are the high priority SDG indicators the 50x2030 Initiative contributes to (2.3.1, 2.3.2, 2.4.1 and 5.a.1) and additional SDG indicators (1.4.2, 1.5.2, 2.1.2 and 12.3.1) and CAADP indicators that the Initiative aims to produce.

Sustainable Development Goals (SDGs)

GOALS		TARGETS		INDICATORS	
SDG 1	END POVERTY IN ALL ITS FORMS EVERYWHERE	SDG 1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	SDG 1.4.2	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
		SDG 1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	SDG 1.5.2	Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)

Sustainable Development Goals (SDGs)

GOALS		TARGETS		INDICATORS	
SDG 2	END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE	SDG 2.1	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	SDG 2.1.2	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
		SDG 2.3	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	SDG 2.3.1	Volume of production per labour unit by classes of farming/ pastoral/forestry enterprise size
				SDG 2.3.2	Average income of small-scale food producers, by sex and indigenous status
		SDG 2.4	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	SDG 2.4.1	Proportion of agricultural area under productive and sustainable agriculture
SDG 5	ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS	SDG 5.a	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	SDG 5.a.1	(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure
SDG 12	ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS	SDG 12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	SDG 12.3.1	(a) Food loss index

SDG source : https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals

Comprehensive Africa Agriculture Development Programme (CAADP)

INDICATORS	
2.4	Proportion of men and women engaged in agriculture with access to financial services
3.1i	Fertilizer consumption (kilogram of nutrients per hectare of arable land)
3.1ii	Growth rate of the size of irrigated areas from its value of the year 2000
3.1iv	Proportion of farmers having access to Agricultural Advisory Services
3.1vi	Proportion of farm households with ownership or secure land rights
3.2i	Growth rate of agriculture value added, in constant US dollars, per agricultural worker
3.2ii	Growth rate of agriculture value added, in constant US dollar, per hectare of agricultural arable land
3.2iii	Growth rate of yields for the 5 national priority commodities, and possibly for the 11 African Union agriculture priority commodities
4.1i	Growth rate of the agriculture value added, in constant US dollars

CAADP source: https://au.int/sites/default/files/documents/32377-doc-technical_guidelines_for_reporting_on_malabo_rev2_eng.pdf

OUTREACH AND ADVOCACY

A major priority was to increase the awareness of and garner interest in the newly launched 50x2030 program. To that end, the Initiative presented 50x2030 technical material at major regional conferences, including the African Commission on Agricultural Statistics (AFCAS) in Libreville (November 2019) and the Asia and Pacific Commission on Agricultural Statistics (APCAS) in Bali (February 2020). At the global level, 70 experts in data, development and agriculture attended a plenary session on 50x2030 at the 8th International Conference of Agricultural Statistics (ICAS) in New Delhi (November 2019), a meeting with 500 delegates representing 120 countries.

The Initiative's Program Manager presented the program at key sector events, including to the Committee on World Food Security (CFS) Advisory Group to the FAO during the BMGF symposium on Bridging the Data Divide: Reaching Zero Hunger Requires Better Agricultural Statistics, in Rome (February 2020); and at the meeting of the World Bank Household Surveys Working Group (HSWG) in Washington DC (March 2020). Similarly, she presented the Initiative together with World Bank, FAO, and representatives from Cambodia and Uganda at a side event of the United Nations Statistical Commission (UNSC) in New York (March 2020); with World Bank, FAO and IFAD at the Data for Accountability Virtual Series organized by BMGF (April 2020); and at the WEMNS technical sessions organized by IFPRI (June and July 2020).

Finally, the Initiative established its digital presence with the launch of the 50x2030 website, which showcases the program, its partners, major news and makes all 50x2030 resources (questionnaires, manuals, etc.) freely available for download.

Photo by Arne Hoel / World Bank

GOVERNANCE

PROGRAM MANAGEMENT TEAM

The Program Manager of the Initiative was recruited and started duty on 1 January 2020. During the reporting period, two of the planned three Program Officers started their work with the Initiative: the Program Officer for Partnership Coordination and Resource Mobilization, who started on 1 April, and the Program Officer for Strategic Planning, who started on 1 May. The Outreach Program Officer started on 1 July , meaning the PMT now functions at full capacity.

Photo by Dominic Chavez / World Bank

PROGRAM IMPLEMENTING AGENCIES

To progress with the implementation of activities in the initial six-month work plan, each PIA (FAO, the WB and IFAD), designated representatives to an Interim Working Group (ITW) to ensure continuity in activities, until the PMT became fully functioning. The ITW cooperated in drafting the work plan to cover the period from 1 January to 30 June 2020.

After the Program Manager assumed her role, each PIA designated a focal person to serve as liaison between each organization and the PMT.

In parallel, IFAD filled its Data Use component manager position in its Research and Impact Assessment Division for the period of January 2020 to January 2021, by seconding a staff member from USAID's Bureau for Resilience and Food Security. Three staff members will join this team shortly.

FAO did not open any planned positions due to the lack of available funds from the Initiative.

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Photo by ©FAO / K. Pratt

Photo by Curt Carnemark / World Bank

PARTNERSHIP COUNCIL

The Initiative's Partnership Council (PC), which comprised representatives of the donors and implementing agencies at the start of the Initiative, was expanded to include four representatives from partner countries, covering four distinct geographical areas[1]. As agreed during a previous PC meeting, these members were elected by the United Nations High-Level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development (HLG-PCCB) in its November 2019 meeting.

The PC met in October 2019, discussed initial steps of the Initiative and decided on responsibilities, contents and timing of reporting. In December, it also approved the six-month work plan prepared by the ITW.

Another PC meeting was held in April 2020 with the participation for the first time of the HLG-PCCB members, designated to represent the world's geographic regions. Representatives of the European Commission, DFID, the World Bank's Poverty and Equity and Agriculture and Food Global Practices were also invited and attended as observers. The Program manager and PMT staff also participated for the first time, with the exception of the Outreach Program Officer, not yet on board.

1 The GOF clarifies that countries must belong to one of the six World Bank sub-regions defined as follows: "Latin America and the Caribbean (LAC); East Asia and the Pacific (EAP); Central Asia, South Asia; Middle East and North Africa (MENA); and Sub-Saharan Africa (SSA). The approximate distribution across these regions will be: five countries in LAC; 15 countries in EAP, Central and South Asia; 30 countries in SSA and MENA." The HLG-PPCB designates representatives of the partner countries according to four geographical groups, as follows: 1) Central Asia, East Asia and the Pacific, South Asia; 2) Middle East and North Africa; 3) Sub-Saharan Africa and 4) Latin America and the Caribbean.

Photo by Nahuel Berger / World Bank

TECHNICAL ADVISORY GROUP

During the reporting period, the Terms of Reference of the Technical Advisory Group (TAG) were drafted, the list of potential members finalized and approved by the PC, and individuals contacted to seek their agreement and engagement to participate. The list of TAG members can be found in Annex 2.

The 12 members were selected from internationally-renowned experts with strong experience and technical expertise in agricultural or rural statistics, including (i) survey data production; (ii) agricultural measurement and survey methods research; (iii) earth observation experts; (iv) gender; (v) data use for evidence-informed decision-making; and (vi) building sustainable national agricultural data systems.

Photo © LSMS / Talip Kilic - Malawi Mzuzu Tobacco Auction Floor (2013)

CHALLENGES AND MITIGATION

The Initiative encountered several obstacles related to the channeling of funds from the MDTF to the two other implementing agencies. However, by the end of the reporting period, development partners were ready to sign the amended agreements that would enable the transfer of funds to FAO and IFAD.

Another major challenge that affected the Initiative, mainly during the second semester of the reporting period, was the COVID-19 pandemic. In addition to the limitations in daily work activities, COVID-19 hindered the core activities of the Initiative: contact and work with partner countries and, more specifically, the data collection work. The Initiative quickly developed contingency plans to continue business and is providing assistance and support to countries remotely. The sustainability of this way of working needs to be proven over time, and the overall availability of data has diminished.

LOOKING AHEAD

The year covered by this report was the Initiative's first full year of operations. Many foundations have been —and continue to be— established to equip 50x2030 with the operational procedures and leverage needed to fulfill its mandate. In the years ahead, the success of this year will be built upon, the delays made up for, and the lessons applied to creating a more resilient program. Everything will be done to serve the Initiative's ultimate goal: To contribute to measuring increased food security, improved nutrition, reduced hunger, and more sustainable agriculture in support of SDG 2.

Of paramount importance in the months to come will be the promotion of the Initiative and the mobilization of the resources it needs to grow further, in order to implement its activities as planned, to reach and cooperate with partners countries and to catalyze the difference it set out to make.

Photo by Chor Sokunthea / World Bank

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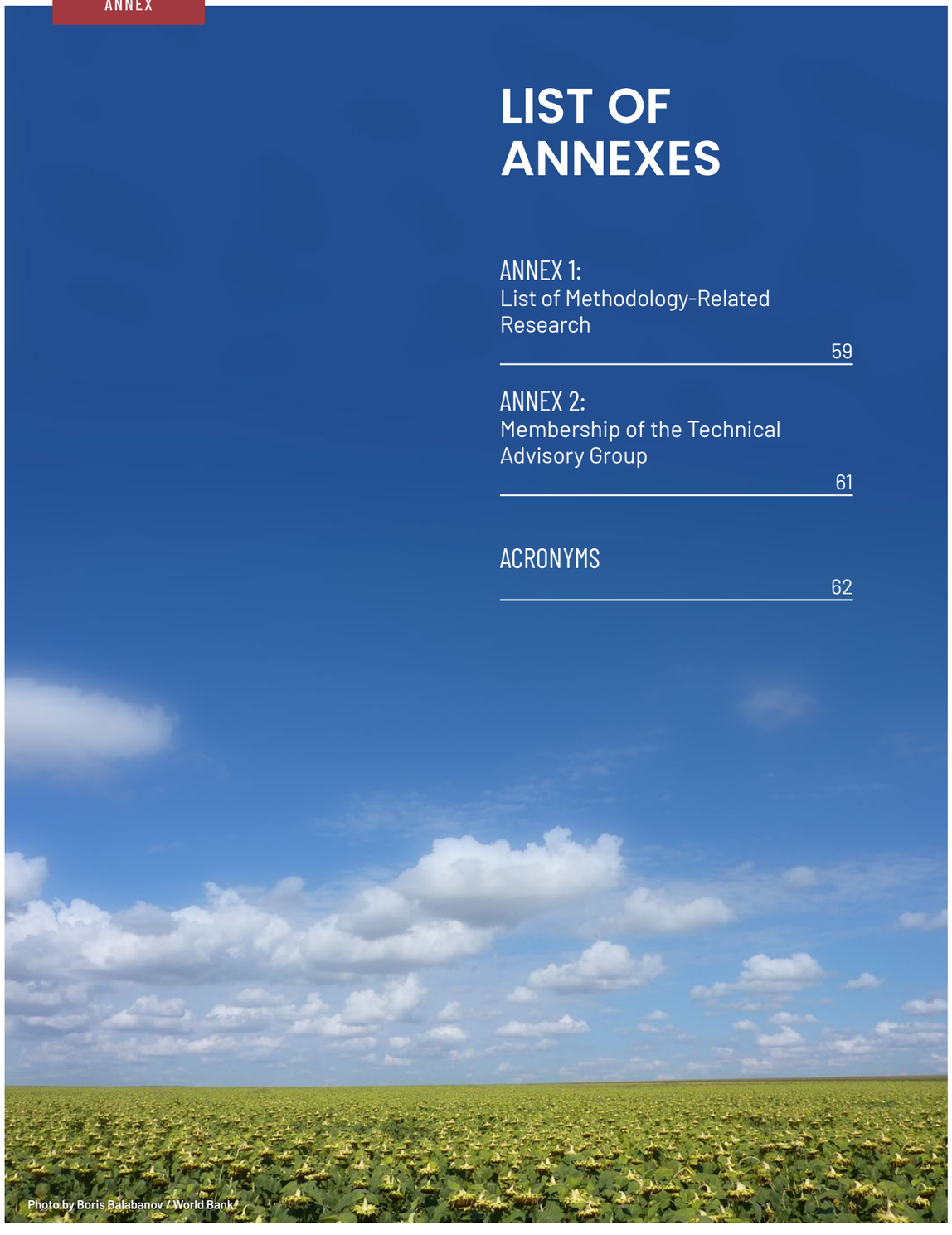

Photo by Boris Balabanov / World Bank

ANNEX 1:

LIST OF METHODOLOGY-RELATED RESEARCH

Below is the list of methodology-related research of the LSMS-ISA team published during the reporting period.

- Carletto, C., & Gourlay, S. (2019). A thing of the past? Household surveys in a rapidly evolving (agricultural) data landscape: Insights from the LSMS-ISA. Agricultural Economics, 50, 51-62. (here)

- Doss, C., Kieran, C., & Kilic, T. (2019). Measuring ownership, control, and use of assets. Feminist Economics, 26:3, 144-168,

- Gaddis, I., Siwatu, G. O., Palacios-Lopez, A., & Pieters, J. (2020). Measuring farm labor: survey experimental evidence from Ghana. The World Bank Economic Review, lhaa012 (Also, World Bank Policy Research Working Paper 8717; here)

- Gourlay, S., Kilic, T., & Lobell, D. B. (2019). A new spin on an old debate: Errors in farmer-reported production and their implications for inverse scale-Productivity relationship in Uganda. Journal of Development Economics, 141, 102376. (here)

- Kilic, T., Moylan, H., & Koolwal, G. (2020). Getting the (Gender-Disaggregated) Lay of the Land: Impact of Survey Respondent Selection on Measuring Land Ownership and Rights. Policy Research Working Paper; No. 9151. World Bank, Washington DC. (here)

- Kilic, T., Van den Broeck, G., Koolwal, G., & Moylan, H. (2020). Are You Being Asked? Impacts of Respondent Selection on Measuring Employment. Policy Research Working Paper; No. 9152. World Bank, Washington DC. (here)

- Lobell, D. B., Azzari, G., Burke, M., Gourlay, S., Jin, Z., Kilic, T., and Murray, S. (2019). Eyes in the sky, boots on the ground: assessing satellite- and ground-based approaches to crop yield measurement and analysis. American Journal of Agricultural Economics, aaz051 (here)

- Lobell, D. B., Di Tommaso, S., You, C., Yacoubou Djima, I., Burke, M., & Kilic, T. (2020). Sight for Sorghums: Comparisons of Satellite-and Ground-Based Sorghum Yield Estimates in Mali. Remote Sensing, 2020, 12(1), 100. (here; published December 2019)

- Wollburg, P., Tiberti, M., & Zezza, A. (2020). Recall Length and Measurement Error in Agricultural Surveys. World Bank Policy Research Working Paper 9128. (here) [Submitted to Food Policy]

Photo by A'Melody Lee / World Bank

ANNEX 2:

MEMBERSHIP OF THE TECHNICAL ADVISORY GROUP

Inbal Becker-Reshef	Associate Research Professor and Co-Director, Center for Global Agricultural Monitoring Research; Director (NASA Harvest)	University of Maryland; NASA Harvest Project
Samuel Benin	Deputy Director for Africa	IFPRI
Alain de Janvry	Professor	Center for Effective Global Action University of California, Berkeley
Andrew Dillon	Clinical Associate Professor of Development Economics, Kellogg School of Management; Director, Research Methods Cluster, Global Poverty Research Lab	Northwestern University
Pedro Luis do Nascimento Silva	Former President of ISI	International Statistical Institute
Cheryl Doss	Senior Departmental Lecturer	University of Oxford
Mercy Kanyuka	Commissioner	National Statistical Office of Malawi
Benjamin Koetz	Exploitation Engineer	European Space Agency
Miet Maertens	Professor in Agricultural and Development Economics	University of Leuven, Department of Earth and Environmental Sciences, Division of Bio-economics
José Molinas Vega	Chief Economist and Academic Director	Development Institute Paraguay
Emily Schmidt	Research Fellow	IFPRI
Aberash Tariku	Deputy Director General	Central Statistics Agency of Ethiopia

ANNEX

ACRONYMS

AAS	Annual Agricultural Survey
AGRISurvey	Agricultural Integrated Surveys Programme
ALTA	Armenia Land Tenure and Area
Armstat	Statistical Committee of the Republic of Armenia
BMGF	Bill & Melinda Gates Foundation
BMZ	Federal Ministry for Economic Cooperation and Development, Germany
CAADP	Comprehensive Africa Agricultural Development Programme
CABI	Centre for Agriculture and Bioscience International
CAPI	Computer-Assisted Personal Interview
CGIAR	Consultative Group for International Agricultural Research (former name), today Consortium of International Agricultural Research Centers
CIAS	Cambodia Inter-Censal Agriculture Survey
DDI	Data Documentation Initiative
DFAT	Department of Foreign Affairs and Trade, Australia
DFID	Department for International Development of the United Kingdom
EAA	*Enquête Annuelle Agricole*
EAC-I	*Enquête Agricole Conjoncture Intégrée*
ESS	Ethiopia Socioeconomic Survey
FAO	Food and Agriculture Organization of the United Nations
GHS-Panel	General Household Survey-Panel
GOF	Governance and Operations Framework
GPS	Global Positioning System
GRAInS	Global Rural and Agricultural Integrated Surveys Partnership
HH	Household
HLG-PCCB	High-Level Group for Partnership, Coordination and Capacity-Building for statistics for the 2030 Agenda for Sustainable Development
IFAD	International Fund for Agricultural Development
IHPS	Integrated Household Panel Survey
IHS	Integrated Household Survey
ISP	Integrated Survey Programme
ITW	Interim Working Group
L/LMICs	Low and lower middle-income countries
LSMS	Living Standards Measurement Study
LSMS-ISA	Living Standards Measurement Study - Integrated Survey on Agriculture
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries of Uganda
MAECI	Ministry of Foreign Affairs and International Cooperation of Italy
MDTF	Multi-Donor Trust Fund
MEA	Machinery, Equipment, and Assets
MoA	Ministry of Agriculture / *Ministère de l'Agriculture*
NADA	National Data Archive
NBS	National Bureau of Statistics of Nigeria
NIS	National Institute of Statistics of Cambodia
ODI	Open Data Institute
PC	Partnership Council
PIA	Program Implementing Agencies
PM	Program Manager
PME	Production Methods and the Environment
PMT	Program Management Team
SDG	Sustainable Development Goal
SPIA	Standing Panel on Impact Assessment
SuSo	Survey Solutions
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNPS	Uganda National Panel Survey
USAID	United States Agency for International Development
WB	World Bank

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