50x2030
DATA-SMART AGRICULTURE

STRENGTHENING PARTNERSHIPS

50x2030 ANNUAL REPORT
FY23: JULY 1, 2022 TO JUNE 30, 2023

50x2030 INITIATIVE

BRIDGING THE AGRICULTURAL DATA GAP

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Cover image by Elaine Casap via Unsplash.
This page: man sowing soil in Hingoli, Maharashtra, India. Photo by Amol Sonar via Unsplash.

MESSAGE FROM THE PROGRAM MANAGEMENT TEAM

PMT at the European Commission's HARDs Event in Berlin, Germany

PMT inception mission in Liberia

PMT meeting at FAO Headquarters

50x2030 Retreat

PMT inception mission in Angola

Agriculture remains a major contributor to economic growth globally. Growth and development in the sector can significantly lift incomes of poor populations across developing countries and has the potential to end extreme poverty. However, the Covid-19 pandemic, the invasion of Ukraine, climate change and environmental risks, among other factors, have adversely affected global agricultural production in recent years. This, in turn, has impacted global food security and sustainability, and the extent of impact is difficult to measure on a country-by-country basis due to a lack of reliable, high-quality agricultural data. Thus, the 50x2030 Initiative becomes even more relevant to supporting countries in producing the needed data to inform policies that would address these global challenges.

In FY23, the 50x2030 Initiative embarked on an expansion strategy and made great strides in achieving its targets. It initiated and strengthened partnerships with a total of 29 countries, which represents about 60 percent of the target number of countries to be engaged through 2030. Intensive implementation of activities continued in existing partner countries (i.e., data collection, data dissemination, support in data analysis and use of data in policy making, monitoring and targeting) and launched in

new ones (i.e., needs assessment, training, survey design, program planning, etc.).

In FY23, the Initiative also continued the development of global public goods, which contributed to improved survey data collection and innovative strategies on data production. Refinements in survey instruments and tools were undertaken (i.e., mixed-mode survey, recall bias in fisheries, survey management system, 50x2030 reference questionnaire instruments, protocols for georeferencing) and advances in research and studies on survey methodologies and data integration were achieved (i.e., WEMNS tool, measurement of land area, post-harvest crop losses, georeferencing protocols, etc.).

Notwithstanding the expansion in country engagement, implementation of activities and development of global public goods, the Initiative simultaneously intensified its outreach within the World Bank, establishing important partnerships with key groups, such as the Poverty and Equity Global Practice, to mainstream 50x2030 programming in Bank operations. A total of US$197 million of World Bank International Development Association (IDA) financing was mobilized to co-finance 50x2030 activities from eight IDA projects that will run for 2-5 years. The Initiative likewise strengthened its partnership with

existing donors and further intensified resource mobilization efforts, reaching out to potential new donors with interest in agricultural statistics.

Regarding management and governance, following the external review of the Initiative and the 50x2030 Retreat in 2022, the Program Management Team (PMT) commenced with the revision of the Governance and Operations Framework (GOF)—the Operations Document— to align it with the new strategy and practices of the Initiative, incorporating the recommendations from the Partnership Council. The revised Operations Document is anticipated to be finalized in FY24.

The milestones achieved by the Initiative in FY23 would not have been possible without the commitment of its partner countries, the strong partnership with the World Bank Operations, the continuous and generous support of its donors, namely the United States Agency for International Development, the Bill and Melinda Gates Foundation, Germany's Federal Ministry of Economic Cooperation and Development, Australia's Department of Foreign Affairs and Trade, Italy's Ministry of Foreign Affairs and International Cooperation and the European Union, and the technical and operational capabilities of its key multilateral partner implementers, such as the World Bank

With the Minister of Environment of Nigeria, Mohammed Hassan Abdullahi.

PMT at the ICAS IX in Washington DC

(WB), the Food and Agriculture Organization (FAO) and the International Fund for Agricultural Development (IFAD).

Looking onward to FY24, the 50x2030 Initiative will strive to bring the program to more countries and steadfastly support them in developing national agricultural data systems, ensuring that the data generated informs key national agricultural policies that address country priorities, such as food security and improved rural livelihoods.

ABOUT 50x2030

OUR MISSION

Our mission is to leverage the expertise of our collaborative multi-agency partnership to empower and support 50 low and lower-middle income countries in building strong national data systems that produce and use high-quality and timely agricultural data through survey programs.

Women in Hingoli, Maharashtra, India.
Photo by Amol Sonar via Unsplash.

OUR VISION

We envision a future in which low and lower-middle income countries have high-quality, timely agricultural data to inform the development of policies that enable effective planning, financing and implementation of agricultural development strategies that yield food security, sustainability and improved rural livelihoods.

50x2030 IN NUMBERS

MILESTONES AS OF JUNE 2023

Photo by Patrick Perkins via Unsplash.

INDICATORS & DATA SETS PRODUCED

4
SDG INDICATORS GENERATED

17
TOTAL DATA POINTS AVAILABLE FOR SDG 2 & 5 INDICATORS

7
COUNTRIES PRODUCING SDG 2 INDICATORS

SDG 2.3.1	Volume of production per labor unit by classes of farming/pastoral/forestry enterprise size	7 data points
SDG 2.3.2	Average income of small-scale producers	5 data points
SDG 2.4.1	Proportion of agricultural area under sustainable agriculture	1 data point
SDG 5.a.1	Women's and men's land rights	4 data points

- Cambodia
- Ethiopia
- Georgia
- Malawi
- Nigeria
- Senegal
- Uganda

8
COMPREHENSIVE AFRICA AGRICULTURE DEVELOPMENT PROGRAMME (CAADP) INDICATORS MONITORED

Indicator:	ETHIOPIA	MALAWI	NIGERIA	SENEGAL	UGANDA
3.1i				✓	
3.1ii	✓	✓	✓	✓	✓
3.1iv	✓	✓	✓		✓
3.1vi	✓	✓	✓		✓
3.2i				✓	
3.2ii	✓	✓	✓	✓	✓
3.2iii				✓	✓
4.1i				✓	✓

9
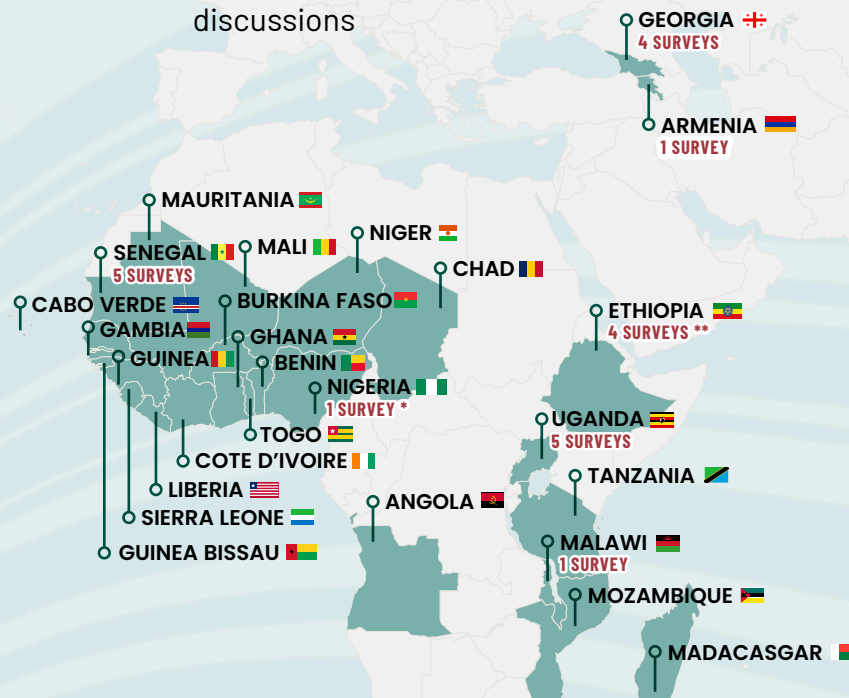**COUNTRIES WITH 50x2030 INITIATIVE AGRICULTURE DATA SETS PRODUCED**

- Armenia
- Cambodia
- Ethiopia
- Georgia
- Malawi
- Nepal
- Nigeria
- Senegal
- Uganda

REACH

29
COUNTRIES ENGAGED

The Initiative has reached out to and engaged with these countries to implement activities and/or start onboarding discussions

28
AGRICULTURAL SURVEYS CONDUCTED

(As of March 2023)

Map labels:

- GEORGIA — 4 SURVEYS
- ARMENIA — 1 SURVEY
- NEPAL — 2 SURVEYS
- CAMBODIA — 5 SURVEYS ***
- INDONESIA
- MAURITANIA
- SENEGAL — 5 SURVEYS
- MALI
- NIGER
- CHAD
- CABO VERDE
- BURKINA FASO
- GAMBIA
- GHANA
- GUINEA
- BENIN
- NIGERIA — 1 SURVEY *
- ETHIOPIA — 4 SURVEYS **
- TOGO
- COTE D'IVOIRE
- UGANDA — 5 SURVEYS
- LIBERIA
- TANZANIA
- SIERRA LEONE
- ANGOLA
- GUINEA BISSAU
- MALAWI — 1 SURVEY
- MOZAMBIQUE
- MADACASGAR

* National Agricultural Sample Census
** Including Ethiopia Pilot NLS (1) and Ethiopia Pilot UAS (1)
*** Including Cambodia CAS2022

CAPACITY BUILDING/TRAINING

66
LOCAL RESEARCHERS SUPPORTED THROUGH RESEARCH GRANT COMPETITION

83
TRAININGS ORGANIZED IN TOTAL OF WHICH:

74
DATA PRODUCTION TRAININGS ORGANIZED IN 8 COUNTRIES

(Armenia, Cambodia, Ethiopia, Georgia, Malawi, Nepal, Senegal, Uganda)

- Sampling: 3
- QX Dev: 10
- CAPI: 14
- Data Cleaning: 17
- Tabulation Calculation: 12
- Anonymization: 6
- Dissemination: 12

9
DATA USE TRAININGS ORGANIZED IN 4 COUNTRIES

(Cambodia, Ethiopia, Georgia, Uganda)

- Statistical Concepts
- Data Analysis
- Results-based M&E and Impact Assessment

1097
INDIVIDUALS TRAINED

(Data Production: 962; Data Use: 135)

TOOLS & PUBLICATIONS

18
JOURNAL AND WORKING PAPERS PUBLISHED

13
METHOD-OLOGICAL PAPERS UNDER DEVELOPMENT

7
TECHNICAL NOTES AND GUIDANCE DOCUMENTS PUBLISHED AND 4 UNDER DEVELOPMENT

16
SURVEY INSTRUMENTS PUBLISHED

29
RESEARCH GRANT PAPERS AWARDED

WEBSITES

16,000
MORE THAN 16,000 UNIQUE VISITORS ON 50x2030 WEBSITE

13,864
DATASETS DOWNLOADED

13,582 from WB Microdata Library and 282 from national NADAs (6 countries: Cambodia, Ethiopia, Malawi, Nigeria, Senegal, Uganda)

FINANCING

$197M USD
IDA FINANCING MOBILIZED TO CO-FINANCE 50x2030 ACTIVITIES FROM 8 WORLD BANK IDA PROJECTS

$49M USD
OVERALL DONOR CONTRIBUTIONS RECEIVED

(US$31 million received through the 50x2030 MDTFs and US$18 million received through Other Funding Mechanisms (direct contributions to the PIAs))

27
IDA BENEFICIARY COUNTRIES

The milestones achieved by the Initiative were possible thanks to the commitment of its partner countries, the strong partnership with the World Bank Operations, the continuous and generous support of its donors (USAID, BMGF, Germany – BMZ, Australia – DFAT, Italy – MAECI, EU) and the technical and operational capabilities of its key multilateral partner-implementers (WB, FAO, IFAD).

Photo by Christian Joudrey via Unsplash.

PERFORMANCE

2022
2023

FY23 IN BRIEF

A B C D E F G	COUNTRIES
○○○○●○○	ANGOLA 🇦🇴
○●○○●○○	BENIN 🇧🇯
✦●○○●○○	BURKINA FASO 🇧🇫
○●○○●○○	CABO VERDE 🇨🇻
●○○●○●○	CAMBODIA 🇰🇭
○○○○●○○	CHAD 🇹🇩
✦●○○●○○	CÔTE D'IVOIRE 🇨🇮
●○○●○○●	ETHIOPIA 🇪🇹
○○○●●○○	GAMBIA 🇬🇲
●●○○○●○	GEORGIA 🇬🇪
✦●○○●○○	GHANA 🇬🇭
○○○○●○○	GUINEA 🇬🇳
○○○○●○○	GUINEA BISSAU 🇬🇼
○●○○○○○	INDONESIA 🇮🇩
✦●○○●○○	LIBERIA 🇱🇷
○○○○●○○	MADAGASCAR 🇲🇬
○○○●○○○	MALAWI 🇲🇼
○○○○●○○	MALI 🇲🇱
○○○○●○○	MAURITANIA 🇲🇷
○○○○●○○	MOZAMBIQUE 🇲🇿
○○○○●○○	NEPAL 🇳🇵
○○○○●○○	NIGER 🇳🇪
○○○●●○○	NIGERIA 🇳🇬
●○○●●○●	SENEGAL 🇸🇳
✦●○○●○○	SIERRA LEONE 🇸🇱
○○○○●○○	TANZANIA 🇹🇿
✦●○○●○○	TOGO 🇹🇬
●○○●●○○	UGANDA 🇺🇬

COUNTRY ENGAGEMENT

6 (A)

new countries formally joined and signed 50x2030 Program Implementation Plans in FY23, bringing the total to:

11 (A)

countries engaged as of June 2023

9 (B)

countries established their Country Coordination Groups

SURVEYS & DATA SETS

8 (C)

agricultural surveys conducted in 6 countries:

- Cambodia CAS2022
- Ethiopia AgSS22-23
- Ethiopia Pilot NLS
- Ethiopia Pilot UAS
- Georgia GSAH 22
- Nigeria NASC 2022*
- Senegal EAA 2022/23
- Uganda UHIS 21-22

* Sample Census

4,578 (D)

datasets downloaded (4,434 from WB Microdata Library and 144 from NADA)

22 (E)

new countries started preparatory technical work (Specifying needs, designing and building an integrated agricultural survey system, integrated household survey and panel survey)

4 (F)

new multi-dimensional files and microdata available on national data portals

- Cambodia 2020
- Georgia 2020, 2021
- Senegal 2021

KNOWLEDGE PRODUCTS

20 Knowledge Products produced:

4 Methodological papers published
4 Data Use Needs Assessments (G)
12 Data Use policy briefs

10

new Research Grant papers awarded and produced benefitting

24 local researchers

CAPACITY BUILDING & OUTREACH

145

participants in 5 Data Use advocacy and awareness workshops

135

government staff trained in data analysis

133

organizations engaged in Data Use activities

COUNTRY HIGHLIGHTS

The Initiative continued to engage with new countries in FY23 as part of its expansion strategy. Onboarding activities were launched in new countries, which involved pre-onboarding discussions with national stakeholders and focal persons from the Ministry of Agriculture and National Statistics Office, among others. Preparation of Program Implementation Plans commenced, defining the survey design, multiyear work plan, budget and financing strategy. Interagency coordination was facilitated on the ground with other agency stakeholders in the agriculture sector. In some countries, inception missions have been organized to discuss and align with high-level representatives on 50x2030 program support. Furthermore, the Initiative widely implemented programming supporting countries in their survey activities and in building their capacities. Data Use activities were launched with the aim of assisting countries to maximize the use of survey data in policy making, monitoring and targeting and to foster advocacy on the value of using data.

50x2030 PARTNERSHIP WITH MINISTRIES OF AGRICULTURE IN WEST AFRICA

The 50x2030 Program Management Team's visit to West Africa on November 27 – December 8, 2022 and February 25 – March 9, 2023 aimed to launch country partnerships with the Ministries of Agriculture and National Statistics Offices in Benin, Liberia, Sierra Leone and Togo. These countries are part of the World Bank IDA project on Harmonizing and Improving Statistics in West Africa (HISWA).

Technical discussions were held during the visit in preparation for the drafting of Program Implementation Plans tailored to each country's needs, specifically detailing the proposed survey program, monitoring indicators, training activities and governance modalities of the project.

> "The Initiative is coming at a critical time, as without data there would/could be challenges in the delivery or implementation of programs, in engaging partners, and in having concrete and realistic information to help in the decision-making process."
>
> — Dr. Abu Bakarr Karim, Minister of Agriculture and Forestry of Sierra Leone, February 2023

Photo by ©PMT.

Lomé, Togo - at Presidential Palace, March 3, 2023. Government officials and PMT during the inception meeting. [M. Simféitchéou Pré, *Ministre, Conseiller du Président de la République*; M. Alex Kouassi Kouame, *Directeur Général, Institut National de la Statistique et des Etudes Economiques et Démographiques*; M. Bouwassi Kedessa Datcha, *Directeur, Direction des Statistiques Agricoles, de l'Informatique et de la Documentation, Ministère de l'Agriculture, de l'Elevage et du Développement Rural*

Background photo by David Wirzba via Unsplash.

COUNTRY OUTPUTS & ACTIVITIES

The Initiative's work in countries has intensified in FY23 as more and more countries were engaged. Survey activities, research and studies on survey methodologies and tools, publication of technical papers, dissemination of outputs, capacity building support, and technical assistance in data use, among others, have expanded over the period.

Photo by Rafid Tahmid via Unsplash.

SNAPSHOT OF SURVEY ACTIVITIES:

- Survey microdata files disseminated in 3 countries (Cambodia, Georgia, Senegal)
- SDG indicators estimated:
  - 2.3.1 and 2.3.2 (Ethiopia and Senegal)
  - 5.a.1 indicator (Senegal)
  - 2.4.1 main sub-indicators (Georgia)
- Rotational modules implemented:
  - Machinery, Equipment and Assets (Cambodia, Georgia, Senegal)
  - Production Methods and Environment (Cambodia, Georgia, Uganda)
  - Testing of the ILP module (Nepal)
- Pilot surveys conducted:
  - Urban agriculture and nomadic livestock (Ethiopia)
  - Commercial livestock sector survey completed (Nepal)
- Household survey conducted (Malawi)
- Technical assistance on the preparation and implementation of the agricultural sample census (Nigeria, Kenya)
- Technical assistance in the design of agriculture survey systems in new countries, which encompasses activities like the design of questionnaires, analysis and dissemination tools, training and know-how transfer activities and implementation of pilot-tests if needed

IMPLEMENTATION OF ACTIVITIES IN COUNTRIES

BURKINA FASO

SURVEY OPERATIONS
- Design of survey methodology for livestock productivity parameters
- Revision of annual agricultural survey instruments integrating key elements of the Production, Methods and Environment module
- Preparation of the *Enquête Harmonisée sur les Conditions de Vie des Ménages* (EHCVM-2)[1] including data curation, data analysis and report writing, and preparation for data dissemination
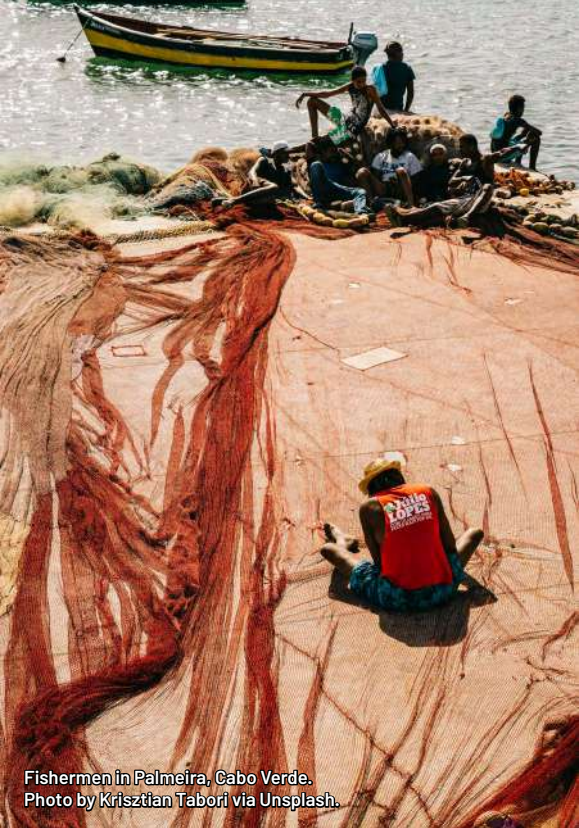
DATA USE ASSESSMENT
- Rapid Needs Assessment: Key informant interviews within the Burkinabe Ministry of Agriculture

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1 Support provided through the LSMS-ISA grant

Goats, Burkina Faso. Photo by Jet Stouten via Unsplash.

Fishermen in Palmeira, Cabo Verde. Photo by Krisztian Tabori via Unsplash.

CABO VERDE

ONBOARDING
- Program Implementation Plan preparation: survey design, multiyear work plan and budget, interagency coordination, technical discussions with the Ministry of Agriculture and Environment and *Instituto Nacional de Estadística*

SURVEY OPERATIONS
- Technical mission in June 2023 to finalize sampling strategy using Population and Housing Census 2021 enumeration areas and data set
- Listing questionnaire drafted (paper and CAPI versions); Core questionnaire for post planting finalized

DATA USE ASSESSMENT
- Rapid Needs Assessment: key informant interviews from Cape Verdean Ministry of Agriculture and Environment, *Instituto Nacional de Estadística* and Ministry of Fisheries

Angkor Thom, Siem Reap, Cambodia. Photo by Angkor Feel via Unsplash.

CAMBODIA

SURVEY OPERATIONS

- Recalculation of the Cambodia Intercensal Agriculture Survey 2019 tables with adjusted sampling weights from the 2019 population census estimates
- Cambodia Agricultural Survey (CAS) 2021 data cleaning, estimation and tabulation with Income, Labor and Productivity module completed
- CAS 2022 data collection with Productivity, Methods and Environment module; data cleaning activities started
- CAS 2023 questionnaire finalized; CAPI programming started

DATA DISSEMINATION

- CAS 2020 survey report released

CAPACITY BUILDING

- Training on data estimation and tabulation (1 round), data dissemination (3 rounds)
- Online and on-the-job training sessions on CAPI programming and data cleaning
- Data Use training on basic statistical concepts, automated data analysis

and data visualization using Power BI, and results-based M&E and Impact Assessment methodologies [2]
- Data awareness and data analysis workshop for government officials

DATA USE

- Technical Assistance to the Ministry of Agriculture, Forestry and Fisheries on analysis of livestock data to inform the Cambodia National Policy for Agricultural Development 2022 – 2030: focus on livestock production towards increasing productivity of the sector, reducing Cambodia's dependency on imported meat, ensuring stable supply of high quality locally raised livestock, and improving income of Cambodian farmers
- Technical assistance on analysis of crop data particularly specialty crops with export potential such as cashews to inform national policy on promoting agricultural sector growth through competitive trade and increased exports of agricultural products.

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2 i.e: the Cambodian Ministry of Agriculture, Forestry and Fisheries, the Ministry of Planning, the Cambodian Agricultural and Development Institute (CARDI), the Cambodian Action for Research and Development (ARD) organization and the Cambodian Royal University of Agriculture (RUA)

ETHIOPIA

SURVEY OPERATIONS

- Ethiopia Agricultural Sample Survey (AgSS) 22-23 data collection
- Cost of Production report from AgSS 2021/22 finalized containing national and subnational cost estimates for a wide range of crops, by type of costs (i.e., labour, fertilizers, etc.)
- Design, implementation and analysis of the first pilot study on Nomadic Livestock completed which covers four arid and semi-arid regions in Ethiopia. The study generated an estimate of the Nomadic Livestock population which will serve as input for calculating the recommended sample size for future surveys.
- Design and implementation of the pilot study on Urban Agriculture which estimates the household farms in urban areas. The results will serve as input in calculating the recommended sample size for future surveys.
- Fifth Ethiopian Socioeconomic Survey (ESS5) data curation; data analysis and report writing

CAPACITY BUILDING

- On-the-job training for the Ethiopian Statistical Service in the analysis of economy data and deriving cost of production statistics
- Training on Report Writing with modules on data visualization and preparing analytical briefs, jointly organized by FAO and IFAD for Ethiopian Statistical Service staff aimed at improving skills and techniques on effective presentation and communication of agricultural data in publications
- Data Use Awareness workshop for Parliamentarians

DATA USE

- Data use workplan finalized with the Ministry of Agriculture, the Ethiopian Statistics Service and the Agricultural Transformation Institute
- Findings of Data Use Assessment presented and finalized

Man carrying herbs in Addis Ababa, Ethiopia. Photo by Erik Hathaway via Unsplash.

Flock of sheep, Abano Pass, Georgia.
Photo by Hans Heiner Buhrvia Unsplash.

FIRST 50x2030 PME SURVEY INFORMS SUSTAINABLE AGRICULTURE PROGRAM

The results of the survey covering the Production, Methods and Environment (PME) module conducted in 2021 in Georgia have improved the monitoring of key sustainable development programs in agriculture. The data from the survey enables the identification of obstacles and potential opportunities to increase food security, benefits to the economy and improved rural livelihoods in the country.

New data generated on sustainable agriculture and the environment from this survey include land use, crop production, irrigation methods, energy use and fertilizer methods, among others. It is noteworthy that SDG 2.4.1 (Proportion of agricultural area under productive and sustainable agriculture) was produced in Georgia for the first time using the survey results. These data will support continued research on soil health and environmental sustainability while informing recommendations for future sustainability efforts in the country.

To view the Statistical Publication, please visit: https://www.geostat.ge/media/52012/Agriculture-of-Georgia%2C-Production-Methods-and-Environment-2021.pdf.

GEORGIA

SURVEY OPERATIONS

- Estimation/calculation of SDG 2.4.1 and SDG 5.a.1 indicators completed
- Production, Methods and Environment and Machinery, Equipment and Assets survey modules conducted

DATA DISSEMINATION

- Georgia Survey of Agricultural Holdings (GSAH) 2020 microdata files released
- Preparation of the leaflet on sustainable agriculture and calculation of SDG 2.4.1
- Data Dissemination Workshop on GSAH2021 results

CAPACITY BUILDING

- Training on data cleaning and analysis with SPSS and R, data anonymization and calculation of SDGs
- Training on data visualization and automation of data analysis using Power BI (3 rounds) for GEOSTAT, Ministry of Environmental Protection and Agriculture (MEPA) and Rural Development Agency
- Data dissemination workshop and data use work planning
- Workshop on data awareness and data use for governmental organizations and non-governmental organizations, including media[3]
- Data use workshop for government and non-government organizations[4] on Measuring Results for Development, presenting different methodologies on measuring impacts of agricultural programs using 50x2030 survey data

DATA USE

- Technical Assistance to prepare Annual Report of the Agrarian Issues Committee of the Georgian Parliament
- Technical Assistance to MEPA to develop factsheets on annual agricultural products

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3 (I.e., MEPA, GEOSTAT, FAO, USAID, the Georgia Institute of Public Affairs (GIPA), Agronews Georgia, Agrokavkasis, Agrogaremo YV, Rustavi 2, ifact Georgia)
4 (I.e., MEPA, FAO, GIPA, Agrarian issues Committee of Parliament, USAID, Office of Prime Minister, ALTE University, Save the Children, Local Action Groups and consultants working on Monitoring and Evaluation in Georgia)

GHANA

ONBOARDING

- Program implementation plan finalized

SURVEY OPERATIONS

- Sampling frame development and design of survey instruments/questionnaires completed

Kejetia Road, Kumasi, Ghana.
Photo by Kojo Kwarteng via Unsplash.

GUINEA

ONBOARDING

- Program Implementation Plan preparation: survey design, multiyear work plan and budget, Agriculture Census complementary modules and the *Agence française de développement* activities, interagency coordination, technical discussions with the *Agence Nationale des Statistiques Agricoles et Alimentaires ANASA* and the *Institut National de la Statistique*
- Technical mission to develop sampling strategy based on the Agricultural Census 2021 data set

Child in Nairobi, Kenya. Photo by Glenn Horgan via Unsplash.

Market in Monrovia, Liberia. Photo by Dominic Chavez via World Bank.

KENYA

TECHNICAL ASSISTANCE

- Assistance to Kenya's Bureau of Statistics to finalize the sampling design of the Agricultural Sample Census in preparation for future thematic surveys, including sample census preparation at different levels

LIBERIA

ONBOARDING

- Program implementation plan finalized

SURVEY OPERATIONS

- Preparation of sample frame, design and selection of sample for household and community surveys
- Development and validation of survey methodology and instruments for 2023 planned activities
- Field work on listing of non-household farms

MALAWI[5]

SURVEY OPERATIONS

- Stakeholder workshop for Integrated Household Survey 6 (IHS6)
- Household listing

5 The IHS6 activity was included in the FY23 Annual Work Plan. However, the country is not considered for onboarding in 50x2030.

Tea farm, Malawi. Photo by Maria Zardoya via Unsplash.

Kindia, Guinea. Photo by Tim Oun via Unsplash.

Harvester in Danapur-Kuchira, Nepal. Photo by Kabita Dariami via Unsplash.

NEPAL

ONBOARDING
- Program Implementation Plan preparation: survey design, discussion on multiyear work plan and budget, and technical discussions with the Badan Pusat Statistik

SURVEY OPERATIONS
- Revision of the draft economic module questionnaire

DATA DISSEMINATION
- Dissemination of the Commercial Livestock Integrated Survey (CLIS) 2021 report

CAPACITY BUILDING
- Online training on data dissemination processes for thematic tables and microdata

NIGERIA [6]

TECHNICAL ASSISTANCE
- National Agricultural Sample Census (NASC) preparation: questionnaire structure design, development of manual and sampling plan, two pilot surveys including a version for the non-household sector farms
- Development and testing of questionnaire on prices of agricultural commodities to generate data for national accounts
- Household listing and community-level data collection; data cleaning of the listing and community-level data sets
- Data collection for the Structure and Production questionnaires[7] for household and non-household sectors, including agricultural prices
- Validation workshop with the National Bureau of Statistics (NBS), other departments of the Federal Ministry of Agriculture and Rural development (FMARD) and National Population Commission
- Data analysis and preparations for the publication of the NASC report

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6 The technical assistance to the NASC was part of the preparations for the Annual Agricultural Survey.
7 The Structure and Production questionnaires are derived from the 50x30 Core questionnaire.

Tilling fields in Nigeria. Photo by Yosef Hadar / World Bank.

Senegal "Data Awareness Workshop". Photo by 50x2030.

SENEGAL

SURVEY OPERATIONS
- Data collection and data processing for the survey cycle 2022-2023

DATA DISSEMINATION
- Dissemination of the survey report, annex tables, open data tables and microdata associated with the Annual Agricultural Survey (*Enquête Annuelle Agricole, EAA*) 2021/22

CAPACITY BUILDING
- Data awareness workshop to inform stakeholders[8] on data availability and access, understanding constraints to data use and identification of areas of collaboration among stakeholders for better data use

DATA USE
- Data use work plan preparation

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8 28 institutions participated: the Ministry of Agriculture Departments (DAPSA, DPV, DPM, DMER, gender unit, etc.), the Universities (Cheikh Anta Diop University, University of Gaston Berger of Saint-Louis, Université Virtuelle of Senegal, University of Bambey), FAO, Departments from Ministry of Planning and Cooperation (CEPOD, DPEE), SODEFITEX, ENSA, UNHCR, CSE, GSDP, CNCR, DASYCWA, CPSE/EEC, ISRA-BAME, ANSD, the Italian Cooperation (AICS), SECNSA, SAED, AMSA, CNAAS and IPAR.

SENEGAL RELEASES MICRODATA ON THE FIFTH ANNUAL AGRICULTURAL SURVEY

The Senegalese Ministry of Agriculture, Rural Equipment and Food Sovereignty (MAERSA) recently released microdata from the latest Annual Agricultural Survey (*Enquête Annuelle Agricole, EAA*) 2021-2022 which contains indicators on farm income, labor and productivity, allowing the calculation of SDG 2.3.1 and 2.3.2.

The EAA is the national survey carried out during the main agricultural season in Senegal with the goal of generating data on rainfed agricultural production. The adoption of the modular survey since 2017-2018 which continued under 50x2030 Initiative, significantly improved the coverage of the agricultural survey in the country to include non-rainfed activities of farm households (livestock, horticulture, fishing/aquaculture and agroforestry) as well as technical, economic, environmental and social dimensions of farms.

Agricultural data collected through the EAA are regularly providing data users, analysts and policy makers with up-to-date information for data analysis and informed decision-making. To request access to the 2021-2022 EAA microdata, visit: http://anads.ansd.sn/index.php/catalog/272/data-dictionary.

SIERRA LEONE

ONBOARDING
- Program implementation plan finalized

SURVEY OPERATIONS
- Preparations for the annual survey: sampling methodology and survey instruments validation

CAPACITY BUILDING
- Training of enumerators for listing and post planting survey

Weeding in Sierra Leone. Photo by Annie Spratt via Unsplash.

Zanzibar, Tanzania. Photo by Anil Reddy via Unsplash.

TANZANIA

ONBOARDING
- Program Implementation Plan preparation: survey design, discussion on multiyear work plan and budget, technical discussions with Tanzania National Bureau of Statistics (TNBS) and Office of Chief General Statistician (OCGS) on the agricultural survey program

SURVEY OPERATIONS
- Preparations for the first annual agricultural survey and non-standard unit of measurement: sampling design, sample extraction, review and validation of survey tools
- Preparations for the 2023/24 National Panel Survey (NPS)

TOGO

ONBOARDING
- Program Implementation Plan finalized, approved and signed

SURVEY OPERATIONS
- Preparation for first agricultural survey: specification of needs; technical discussions for the two pilot surveys in Sep/Oct 2023 and alignment between the agricultural census and the agricultural survey (CORE and ILP) in 2024; discussion on the proposed light agricultural census covering only structural items combined with the future 50x2030 CORE module

Woman smoking fish in Katanga, Togo. Photo by Stephan Gladieu / World Bank.

UGANDA

SURVEY OPERATIONS
- Agricultural Annual Survey (ASS) 2020 report and related interactive aggregated tables finalized
- Uganda Harmonised Integrated Survey (UHIS) 2021/22 data collection and data processing
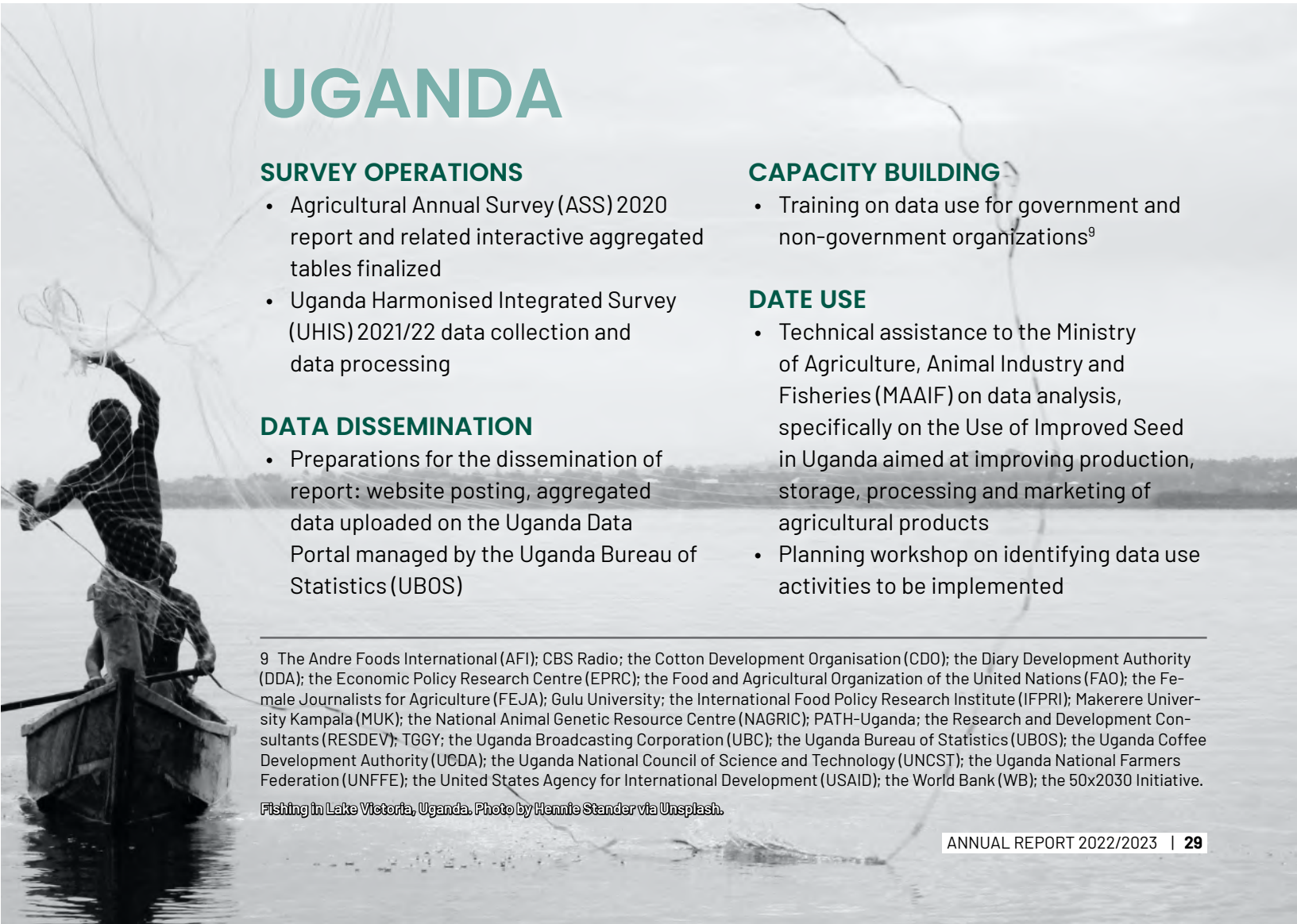
DATA DISSEMINATION
- Preparations for the dissemination of report: website posting, aggregated data uploaded on the Uganda Data Portal managed by the Uganda Bureau of Statistics (UBOS)

CAPACITY BUILDING
- Training on data use for government and non-government organizations[9]

DATE USE
- Technical assistance to the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) on data analysis, specifically on the Use of Improved Seed in Uganda aimed at improving production, storage, processing and marketing of agricultural products
- Planning workshop on identifying data use activities to be implemented

9 The Andre Foods International (AFI); CBS Radio; the Cotton Development Organisation (CDO); the Diary Development Authority (DDA); the Economic Policy Research Centre (EPRC); the Food and Agricultural Organization of the United Nations (FAO); the Female Journalists for Agriculture (FEJA); Gulu University; the International Food Policy Research Institute (IFPRI); Makerere University Kampala (MUK); the National Animal Genetic Resource Centre (NAGRIC); PATH-Uganda; the Research and Development Consultants (RESDEV); TGGY; the Uganda Broadcasting Corporation (UBC); the Uganda Bureau of Statistics (UBOS); the Uganda Coffee Development Authority (UCDA); the Uganda National Council of Science and Technology (UNCST); the Uganda National Farmers Federation (UNFFE); the United States Agency for International Development (USAID); the World Bank (WB); the 50x2030 Initiative.

Fishing in Lake Victoria, Uganda. Photo by Hennie Stander via Unsplash.

METHODOLOGICAL & RESEARCH WORK

The Initiative has continued to recognize the importance of sound survey methodology and, in an effort to ensure 50x2030 is collecting high-quality, cost-effective, and relevant data, has prioritized methodological research and the development of survey-related tools. A summary of the achievements of the Methods & Tools Development component for FY23 is presented below, for each of its three pillars: survey tools, survey methods, and data integration methods.

DEVELOPMENT AND REFINEMENTS OF SURVEY INSTRUMENTS & TOOLS

- Methodological research on the magnitude and implications of recall bias in the estimation of fisheries production (Cambodia)
- Review of experiences on the use of mixed-mode surveys (phone and in-person) for agricultural data collection
- Development of a survey management system to complement Survey Solutions which will facilitate real-time and post-facto data monitoring and improvements
- Periodic review and update of 50x2030 reference questionnaire instruments, including updating and harmonization protocols for georeferencing

ADVANCEMENT IN SURVEY METHODOLOGY

- Continued development and validation of the Women's Empowerment Metric for National Statistical Systems (WEMNS) tool in collaboration with the International Food Policy Research Institute (IFPRI), Emory University and Oxford University
- Development and piloting of new tools for the measurement of land area, directly embedded in the Survey Solutions interviewer application
- Methodological fieldwork on the measurement and estimation of post-harvest crop losses (Mali)
- Fieldwork completed for the Uganda National Study on Objective Measurement in Agriculture (UNOMA) to validate integration of surveys and satellites, crop variety identification, damages and losses, and production measurement
- Preparations for the following studies: local climate and weather (Uganda), soil health (Uganda), land area measurement (Uganda), mixed-mode implementation for input use (Nigeria), agricultural labor (Zimbabwe) and commercial farms methods (Ethiopia).

PROGRESS ON DATA INTEGRATION METHODS

- Draft background papers prepared to inform the guidelines on the collection of training data for satellite-based estimation of crop areas and yields
- Set of training datasets and high-resolution crop area and yield maps focusing on cereal crops (Ethiopia, Malawi and Mali) ready for publication in early FY24
- Recommendations on georeferencing protocol for publication as technical guidance note in FY24
- Working group established to develop protocols for dissemination and use of georeferenced data

PUBLICATIONS AND KNOWLEDGE EXCHANGE

- Papers published in distinguished, peer-reviewed academic journals, including the Journal of Development Economics and Food Policy, and working paper series. See Annex. The Structure and Production questionnaires are derived from the 50x2030 Core questionnaire
- Advanced development of 5 technical notes, guidelines, reports and 13 papers
- Papers presented in international fora (i.e., International Conference on Agricultural Statistics (ICAS) IX conference, CSAE 2023) and in-house World Bank dialogue (e.g., Agriculture & Food Forum Learning Series)
- Internal seminars organized with implementing partners to enhance adoption of best practices (i.e., georeferencing protocols and research on the measurement of damages and losses)
- Consultation with experts in agricultural survey methods or agricultural statistics and potential new streams of work

Photo by Devansh Vermar via Unsplash.

RESEARCH SPOTLIGHT:
TOOL FOR TABLET-BASED LAND AREA MEASUREMENT

Land area is a critical data point for household and agricultural surveys, and the quality of its measurement directly influences fundamental indicators in agricultural statistics, including estimations of crop yields and total cultivated area. Historically, household and agricultural surveys have relied on farmer estimations of land area, though evidence from methodological research points to significant systematic biases present in respondent estimates, at least within the African context (Carletto et al., 2015). Recently, many surveys have adopted the use of handheld GPS devices for more objective land area measurement, validating against the traditional method of compass and rope area measurement. GPS measurement also facilitates georeferencing of survey data, as recommended by the 50x2030 Initiative.

The use of handheld GPS devices for area measurement has been thoroughly validated and scaled up in numerous national survey operations, including those of the 50x2030 Initiative in Uganda, Nigeria, Ethiopia, Senegal, Tanzania and Burkina Faso. Yet, use of handheld GPS devices for area measurement comes with resource requirements and logistical complications, primarily in terms of data management. To address these challenges, the Initiative worked with the World Bank's Survey Solutions team to develop a tool embedded in the Survey Solutions platform that acted as a 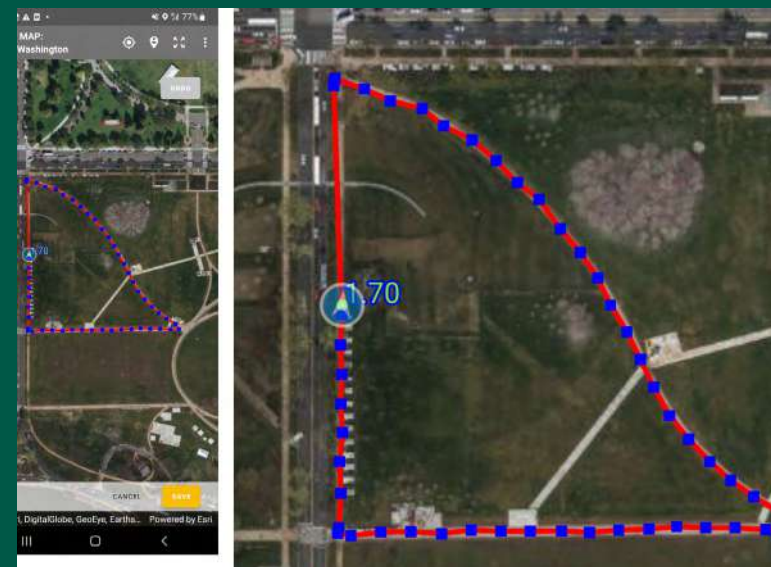handheld GPS device – measuring land area by pacing the perimeter of a parcel or plot using the readily-available CAPI tablet.

Additionally, recent advancements in technology offer further refinements to measurement, such as the possibility to remotely measure land area using satellite imagery. While this tool offers great potential for eliminating the need for physical presence at the plot and time-intensive perimeter pacing, thus reducing time and cost associated with area measurement, it has yet to be thoroughly validated against other measurement methods. Based on a small-scale validation experiment in Ecuador and a methodological study in Armenia supported by the 50x2030 Initiative, improvements to this tool have been implemented to enhance its usability and data quality.

Following the tool's launch in December 2022, significant interest has been stirred in 50x2030 countries and beyond. Prior to recommending scale-up at the national level, the Initiative will validate its use against handheld GPS units to ensure data quality and establish implementation protocols. In June 2023, an initial validation pilot was conducted in Nigeria, building on the pilot study of the Nigeria General Household Survey-Panel. A larger scale validation study on the perimeter-pacing tool is planned in Uganda, and a study on validation of the offline map tool is planned for the commercial farm sector in Ethiopia, both in FY24.

Ivette Contreras, LSMS, with Nigeria NBS team testing the new Survey Solutions area measurement features.

WOMEN'S EMPOWERMENT METRIC FOR NATIONAL STATISTICAL SYSTEMS

The World Bank Living Standards Measurement Study (LSMS) engagement with IFPRI, Emory University and Oxford University to design the Women's Empowerment Metric for National Statistical Systems (WEMNS) continued this FY. In previous reporting periods, the draft tool was developed through semi-structured interviews with gender experts and cognitive interviewing, then piloted in two waves of phone surveys with samples drawn from pre-COVID face-to-face surveys that collected respondent phone numbers in Bangladesh, Malawi and Nepal. In Guatemala, there was a single phone survey wave using a sample drawn from random-digit dialing. In the past fiscal year, the team completed in-person surveys in all four countries, with women and men from approximately 900 households (1,800 individuals) per country.

These multiple waves of data collection allowed the WEMNS team to revise modules that did not work well, drop items that respondents felt were repetitive and test items that might be better suited to in-person data collection, such as a question set on sexual harassment. The team is now using psychometric analysis to test the dimensionality, reliability and validity of each question set, and are also in the process of developing indicators using the Alkire-Foster methodology for the development of multi-dimensional indices.

WEMNS will be launched and presented to the global community at a September workshop hosted by FAO, and then be available for use in October 2023. In the months that follow, a distance learning course will be launched that will instruct learners how to administer WEMNS, construct the indicators and interpret the findings. In 2024, together with FAO, the WEMNS team will provide more intensive technical support for an initial cohort of countries that will be adopting the metric. See our recent blog post here: https://www.ifpri.org/blog/developing-womens-empowerment-metric-national-statistical-systems.

CAPACITY BUILDING

ACTIVITIES:

- Series of trainings organized on statistical concepts and data analysis specifically designed for government officials from Ministries of Agriculture and related agencies, including select participants from research organizations and academia
- Policy brief writing workshop conducted for the 10 qualified local research teams that were awarded with the 50x2030 Research Grant
- Data awareness workshops conducted in Cambodia, Ethiopia, Georgia and Senegal involving data stakeholders from universities, civil society organizations and the media benefiting 145 stakeholders
- Technical assistance provided to the Ministries of Agriculture in Georgia and Uganda to produce policy briefs and/or commodity briefs

- Rapid Needs Assessments conducted in Burkina Faso and Cabo Verde
- Data Use Assessments completed in Ethiopia and Senegal
- Training modules developed on data analysis and interpretation
- Data Production training on data estimation and tabulation, CAPI programming and data cleaning (Cambodia), analysis of economic data and deriving cost of production statistics (Ethiopia), data cleaning and analysis with SPSS and R, data anonymization and calculation of SDGs (Georgia), training on data dissemination (Nepal)
- Data Production training of trainers of enumerators for listing and post planting survey conducted (Sierra Leone)

Photo via 50x2030.

The 50x2030 Initiative provided technical assistance and built the capacity of decision makers in Georgia as part of its Data Use support to the country. Leveraging the 50x2030 data sets generated from the Annual Agricultural Surveys, the Initiative, through IFAD, organized trainings on data analysis to help the Georgian Parliament Committee on Agrarian Issues produce the 2021 Report on Agriculture with improved policy analysis and visuals.

Additionally, the Initiative assisted the Policy and Analysis Department of Georgia's Ministry of Environmental Protection and Agriculture (MEPA) in developing and automating high-quality product factsheets which aim to promote exports and investments in Georgia's agriculture sector.

RESEARCH GRANT COMPETITION

The 50x2030 Initiative annually holds the Research Grant Competition aimed at promoting the use of data in rural and agricultural sector decision-making and also provides mentorship to the awardees. In FY23, a special seminar on writing effective policy briefs was organized for the 10 research teams that qualified for the Grant. Interestingly, the research topics for the year's competition included the following: information diffusion and adoption of agricultural technologies; crop commercialization and land productivity; roads and household income in rural areas; youth employment in rural non-farm enterprises; gender inequalities in income and land access; state support for wheat production; resilience strategies to agricultural shocks; seed and fertilizer subsidies in rice farming; antibiotics use in livestock production; and climate-smart agricultural practices and food security in maize farming.

Two of these research papers are highlighted on the following pages:
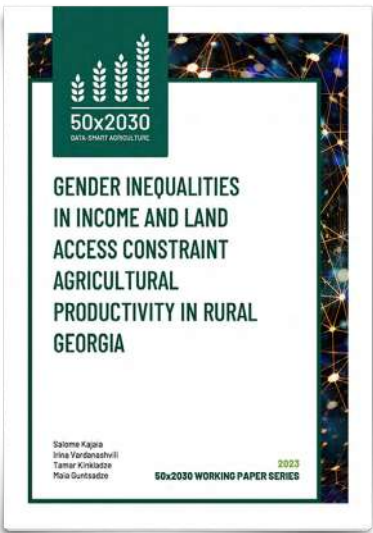
RESEARCH GRANT PAPER 1

Title:
Gender Inequalities in Income and Land Access Constrain Agricultural Productivity in Rural Georgia

Authors:
Salome Kajaia,
Irina Vardanashvili,
Tamar Kinkladze,
Maia Guntsadze

Main findings and policy recommendations:
The study focuses on gendered inequalities in income and land access and its implications for women's economic empowerment and overall social and economic development. It utilized the 2020 Agricultural Integrated Survey (AGRIS) dataset combined with qualitative data from interviews with female farmers. Key findings were (i) male-led households earn 4.8 times more income from selling agricultural products compared to female-led households, indicating significant profit disparities; and (ii) women farmers own 2.8 times less land than their male counterparts, hindering their economic opportunities.

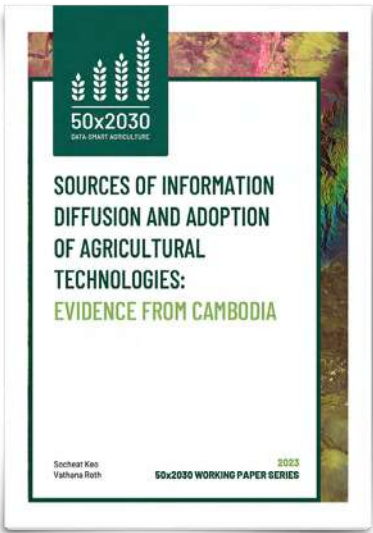The research posits that heavy workloads faced by women were due to family care responsibilities that prevented them from dedicating sufficient time and resources to agricultural production. An example is the limited engagement in lucrative activities, such as animal husbandry. Policy recommendations of the study to address the challenges include i) increasing women's access to information, vocational education and modern technologies to reduce inequality and create better work opportunities in agriculture; ii) promoting access to markets and finance for women, as well as supporting their ownership of land, as essential steps towards empowering rural women; and iii) increasing governmental support through state-funded resources, insurance schemes and tailored program arrangements to enable women's eligibility in state programs to enhance their resilience in the face of natural disasters.

RESEARCH GRANT PAPER 2

Title:
Sources of Information Diffusion and Adoption of Agricultural Technologies: Evidence from Cambodia

Authors:
Socheat Keo,
Vathana Roth

Main findings and policy recommendations:
The study focuses on examining the sources of information diffusion and adoption of agricultural technologies in Cambodia utilizing the data from the 2019 Cambodia Intercensal Agriculture Survey (CIAS) which includes over 13,326 agricultural households across 25 provinces. Key findings reveal that access to agricultural extension services plays a crucial role in promoting the adoption of new technologies among farmers. The study found that lack of knowledge is a significant barrier to the competitiveness and modernization of Cambodia's agriculture. The study highlights that information obtained from peers and traders significantly enhances farmers' willingness to adopt aromatic rice varieties, while the influence of agricultural information from the government and groups is limited.

Policy recommendations of the study include prioritizing the strengthening of social networks and relationships among farmers and other actors in the agricultural value chain. Specifically, through promoting the adoption of agricultural technologies with focus on leveraging the informal channels of information diffusion, such as peers and traders and promoting extension services through these alternative channels. By emphasizing the exchange of agricultural information and building trust among farmers, these strategies can effectively facilitate the adoption of new technologies and contribute to the sustainable development of Cambodia's agriculture.

MANAGEMENT

FINANCES

8

PARTNERSHIPS FORGED WITH 8 IDA PROJECTS TO PRODUCE USABLE, HIGH QUALITY AGRICULTURE DATA

- Harmonizing and Improving Statistics in West Africa (HISWA)
- Harmonizing and Improving Statistics in West and Central Africa (HISWACA SOP 1 and 2)
- Agro-Climatic Resilience in Semi-Arid Landscapes (ACReSAL)
- Eastern Africa Regional Statistics Program-for-Results
- Southern African Development Community (SADC) Regional Statistics Project
- Angola Strengthening Statistical Capacity
- Food System Resilience Program for Eastern and Southern Africa (Phase 4)

$197M USD

OF IDA RESOURCES HAVE BEEN MOBILIZED TO SUPPORT 27 COUNTRIES IN AFRICA TO REGULARLY PRODUCE AGRICULTURE DATA FOR 2–5 YEARS

Photo by Casey Horner via Unsplash.

A number of the World Bank's large-scale investments in its International Development Association (IDA) and IBRD countries have scope for supporting data production in the agricultural sector. The 50x2030 Initiative, through the Program Management Team, focused its efforts to establish and strengthen partnerships with these World Bank country operations, especially with the Agriculture and Food and Poverty and Equality Global Practices to mainstream 50x2030 activities in the IDA/IBRD projects.

An important partnership was established by the Initiative with donors and bilateral development partners to meet the financing needs for technical assistance related to program implementation in countries. Engagements with bilateral as well as multilateral agencies ensued and negotiations for long-term

partnerships were forged. The Initiative raised awareness of the program through global platforms, knowledge exchange and communication of results.

Priority action in FY23 was to reinforce ties with existing donor partners to renew their commitment to the Initiative while at the same time expanding the current donor base by aligning its geographical expansion plans with strategic presence and priorities of bilateral development agencies. The Program Management Team launched dialogues with Italy, Portugal and France development cooperations for potentially supporting Portuguese- and French-speaking African countries. In addition, the Initiative has initiated communications with Japan, Australia and New Zealand for its targeted expansion in Pacific Islands, Southeast and South Asian countries.

✓ **USAID, BMGF and Germany renewed their commitments for an additional three to five years, supporting key program activities in countries**

✓ **USAID Headquarters mobilized several USAID missions for financial as well as policy advocacy support to the program in countries with confirmed World Bank budgetary allocation through its lending operations for agricultural survey programs**

KEY EVENTS

During FY23, the Initiative organized and/or was involved in the following events:

2022

2023

October 2-4

50x2030 Retreat in Todi, Italy

November 18

Africa Statistics Day

December 7

50x2030 Methods & Tools outreach presentation as part of the Agriculture & Food Forum Learning Series hosted by the World Bank's Agriculture and Food Global Practice

December 16

Presentation of 50x2030 at HARDs meeting (EU Heads of Agriculture, Rural Development and Food security) organized by the European Commission

February 13

A donor consultation event called "Assessing the data 'quantum' leap in agriculture and food systems," jointly organized by the European Commission, IFAD, the Global Donor Platform for Rural Development (GDPRD) and the Global Partnership for Sustainable Development Data (GPSDD)

March 19-21

Multiple presentations at the Center for the Study of African Economies (CSAE) Conference, including presentation of Methods & Tools research on the use of phones surveys for agricultural data collection and measurement of damages and losses

March 23

50x2030 Partnership Council Meeting

March 30

Presentation of 50x2030 at the Infopoint organized by the European Commission

May 17-19

50x2030 at the ICAS IX Conference:
- Methods & Tools Component Session and additional individual presentations
- 50x2030 Session on Data Use for Decision Making

June 13

"Data production component of the 50x2030 Initiative: producing more and better data for policy making", organized by FAO.

June 30

5th African Union (AU) — European Union (EU) Agriculture Ministerial Conference

VOICES

Some Countries' and Donor's Voices on the collaboration with the 50x2030 Initiative during the Ninth International Conference on Agricultural Statistics (ICAS IX), May 17-19, 2023, Washington DC

FROM COUNTRIES

"[The 50x2030 Initiative] brought innovation when we are looking into the Initiative organizing the different modules."

— Mr. Carlos Pedro (Head of the National Statistics Department), **ANGOLA**

"Every year, at the sub-regional level, consultations are held on the food situation. And data such as agricultural production and other information relating to agriculture are used within this framework to assess the national and sub-regional situation, and data such as post-harvest losses can be integrated into this framework to have much more accurate statistics on the real production generated by the country."

— Mr. Eric Kabore Nongdo (Head of Data Processing, Analysis and Management Unit | Ministry of Agriculture, Animal and Fisheries Resources), **BURKINA FASO**

"The initiative will enable us to set up and operationalize a permanent agricultural statistics system, i.e., the annual livestock and crop production survey, as well as other surveys in agricultural sub-sectors such as fishing and aquaculture, and the forestry sector."

— Mrs. Joceline Julie Solonitompoarinony (Head of the Agricultural Statistics Department | General Secretariat - Ministry of Agriculture and Livestock), **MADAGASCAR**

FROM DONORS

"Analysis and use of agricultural data is a priority for USAID. The other priority area of work that we're investing in is really building local capacity to collect, analyze and use agricultural data." "The 50x2030 Initiative to fill the agricultural data gap, is a key mechanism in which we want to see others invest with us."

— Mrs. Isobel Coleman (Deputy Administrator for Policy and Programming), **USAID**

UP AHEAD

The period FY23 is a turning point for the 50x2030 Initiative as it implemented major changes in its operations and engagements. Focusing on building its resource base and expanding country reach, the Initiative, through its implementing partner agencies and the Program Management Team, has considerably delivered on its targets and priorities.

The Initiative will continue to expand the implementation of program activities and deepen engagement and partnerships with stakeholders in FY24. In particular, the Initiative will prioritize the following:

Implement survey activities in 14 partner countries (i.e., preparatory activities, data collection and processing, data/microdata dissemination) and support 5 partners countries in building data use practices through training, advisory support and awareness building, among others

Launch and continue engagement with 18 new countries, specifically to complete the formal onboarding process towards finalizing Program Implementation Plans and launching of survey preparatory activities

Mobilize new/additional regional and/or country IDA resources with the aim of mainstreaming the 50x2030 Initiative as a subcomponent of IDA projects

Cultivate partnerships with new donors and continue fundraising with existing ones

Implement methodological studies to inform new guidelines for data production in 50x2030 countries and beyond

Strengthen coordination and launch new partnerships with different organizations to broaden linkages and influence of 50x2030 Initiative

Photo by Gabriel Jiménez via Unsplash.

ANNEXES

ANNEX 1.
METHODOLOGY-RELATED
RESEARCH PAPERS &
PUBLICATIONS

The following research papers and technical documents have been developed under the Methods & Tools component during the reporting period (July 1, 2022 to June 30, 2023):

PUBLISHED IN FY23

#	TYPE	PROVISIONAL TITLE OR DESCRIPTION	COMPLETION/DISSEMINATION STATUS
1	PAPER	Review: Purchased Agricultural Input Quality and Small Farms	Food Policy (also WB Policy Research Working Paper Series and 50x2030 website)
2	PAPER	From Necessity to Opportunity: Lessons for Integrating Phone and In-Person Data Collection*	ERAE (also WB Policy Research Working Paper Series and 50x2030 website)
3	PAPER	Nonclassical Measurement Error and Farmers' Response to Information Reveal Behavioral Anomalies	JDE (also WB Policy Research Working Paper Series and 50x2030 website) [1]
4	PAPER	Measuring Land Tenure at the Individual Level: Lessons from Methodological Research in Armenia*	WB Policy Research Working Paper Series, 50x2030 website

1 This paper was previously published in a working paper series in a prior FY. Peer-reviewed journal publication achieved in FY23.

* Note: Papers indicated with an * were presented in an international conference in FY23.

UNDER DEVELOPMENT IN FY23

#	TYPE	PROVISIONAL TITLE OR DESCRIPTION
1	TECHNICAL/GUIDANCE NOTE	Technical guidance note on georeferencing in household and farm surveys
2	TECHNICAL/GUIDANCE NOTE	Technical guidance note on area measurement
3	TECHNICAL/GUIDANCE NOTE	Guidelines for collection of training data for satellite-based estimation of crop areas and yields
4	TECHNICAL/GUIDANCE NOTE	Guidelines on Survey Management System
5	REPORT	Report on experience with using DNA fingerprinting for crop variety identification at national-scale - jointly with SPIA
6	PAPER	Research paper on integration of surveys and satellites for high-resolution crop area mapping
7	PAPER	Research paper on integration of surveys and satellites for high-resolution crop yield estimation
8	PAPER	Paper on measuring land tenure, with an emphasis on implications of respondent selection
9	PAPER	Paper produced jointly with WEMNS team to serve as an input to WEMNS Survey Tools and Protocols
10	PAPER	Research paper on satellite-based methods for crop area/yield estimation based on UNOMA/UHIS data
11	PAPER	Yield measurement on intercropped plots*
12	PAPER	Measurement of disaster-related crop losses*
13	PAPER	Imputing crop-cut yields using self-reported yields from Mali LSMS-ISA
14	PAPER	Paper on the imputation of soil properties for improved soil health data at scale*
15	PAPER	Feasibility study and paper on soil sampling strategies for agricultural surveys*
16	PAPER	Paper assessing feasibility and accuracy of land area measurement via satellite image
17	PAPER	Improving the Quality of Survey Estimates from Longitudinal Studies: An Application to UNPS
18	PAPER	Review of approaches to measuring digital agriculture access and use

* Note: Papers indicated with an * were presented in an international conference in FY23.

ANNEX 2.
LIST OF ABBREVIATIONS

AGRIS	Agricultural Integrated Survey
AgSS	Agricultural Sample Survey
BMGF	Bill & Melinda Gates Foundation
BMZ	Federal Ministry for Economic Cooperation and Development, Germany
CAADP	Comprehensive Africa Agriculture Development Programme
CAS	Cambodia Agricultural Survey
CLIS	Commercial Livestock Integrated Survey (Nepal)
EAA	Enquête Annuelle Agricole (Annual Agricultural Survey)
ESS	Ethiopian Socioeconomic Survey
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GEOSTAT	National Statistics Office of Georgia
GPS	Global Positioning System
GSAH	Georgia Survey of Agricultural Holdings
HISWA	Harmonizing and Improving Statistics in West Africa
HISWACA	Harmonizing and Improving Statistics in West and Central Africa
ICAS	International Conference on Agricultural Statistics
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILP	Farm Income, Labor and Productivity Questionnaire
LSMS	Living Standards Measurement Study
LSMS-ISA	Living Standards Measurement Study-Integrated Survey on Agriculture
M&E	Monitoring & Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MAPS	Micronutrient Action Policy Support
MEPA	Ministry of Environmental Protection and Agriculture
NASC	Nigeria Agricultural Sample Census
NBS	National Bureau of Statistics
PME	Production Methods and Environment
PMT	Program Management Team
SDG	Sustainable Development Goal
UBOS	Uganda Bureau of Statistics
UHIS	Uganda Integrated and Harmonized Survey Programme
UNOMA	Uganda National Study on Objective Measurement in Agriculture
USAID	United States Agency for International Development
WB	World Bank
WEMNS	Women's Empowerment Metric for National Systems

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