The 50x2030 Initiative

Data-smart agriculture to improve production and build resilience

March 6th, 2024

Session 10:
Closing the Agricultural Data Gap

50x2030 DATA-SMART AGRICULTURE

THE WORLD BANK
IBRD · IDA | WORLD BANK GROUP

Food and Agriculture Organization of the United Nations

IFAD

What

A multi-agency partnership of the World Bank, FAO and IFAD for data-smart agriculture to strengthen national agricultural data systems in 50 L/LMICs by year 2030

Why

To bridge agricultural data gaps and promote evidence-informed decision making

How

By developing a fit-for-purpose, integrated and financially sustainable agricultural and rural survey program that meets country data needs and fosters a culture of data use for decision-making

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

50x2030 Components

Data Production

Survey Program Design

- Questionnaires and manuals
- Cognitive and pilot tests
- Sampling design
- Training of field staff
- Use of advanced data-collection technologies

Data collection and processing

Data Dissemination

- Tabulation plans and dissemination programs for both macro- and micro-data
- Technical support on data curation, documentation and preservation, data anonymization

Methods and Tools

Questionnaire Development/Design

Tests new and better methods for agricultural and rural surveys

- Integration of survey approaches: Sampling, thematic coverage
- Integration of technology, updating of methodologies: CAPI, sensors, key thematic areas (e.g. PHL, land tenure, NRM, women's empowerment)
- Integration with other data sources: satellite imagery

Develops and promotes new cost-effective, high-quality tools for national survey programs

Data Use

National data ecosystems assessment and development of strategic plans to address most critical gaps

Training of NSO, MoA, and others to better analyze, interpret, and present relevant agricultural data

Provides advocacy, sensitization, and training to decision makers on the value of evidence-informed decision making

Supports data and knowledge sharing events and communication strategies at the country and regional level

The 50x2030 Initiative offering

Technical assistance

- Data production/ag survey program (FAO and WB)
- Data use activities (IFAD)
- Tool and methodology development and research/studies (World Bank)
- Governance and coordination facilitation (Program Management Team - World Bank)
- TA costs funded through the 50x2030 MDTF

Capacity building

- Training (data production and data use)
- Workshops, seminars (country, regional, global)

Leverage partnership and funding opportunities

- Explore potential financing and co-financing resources (ex. National/IDA allocation, TA cost)
- Facilitate in-country collaboration with relevant partners

Role of national lead agencies

National Statistics Office (NSO)

Spearhead the implementation of the agriculture survey program in collaboration with other agencies

Ministry of Agriculture (MoA)

Lead in the implementation of data use activities in coordination with other data stakeholders; provide inputs/advise on the agriculture survey program

Both NSO and MoA to co-lead in the governance and coordination of the 50x2030 country program

Country Coordination Group

An inter-agency collaborative body responsible for planning, coordination and implementation of the 50x2030 Initiative activities

Membership

- Government agencies involved in 50x2030 implementation and major agricultural data stakeholders users (e.g., National Statistics Office, Ministry of Agriculture, Ministry Planning/Economy/Finance, etc.)
- Program Implementing Agencies (WB, FAO, IFAD) HQ and country offices
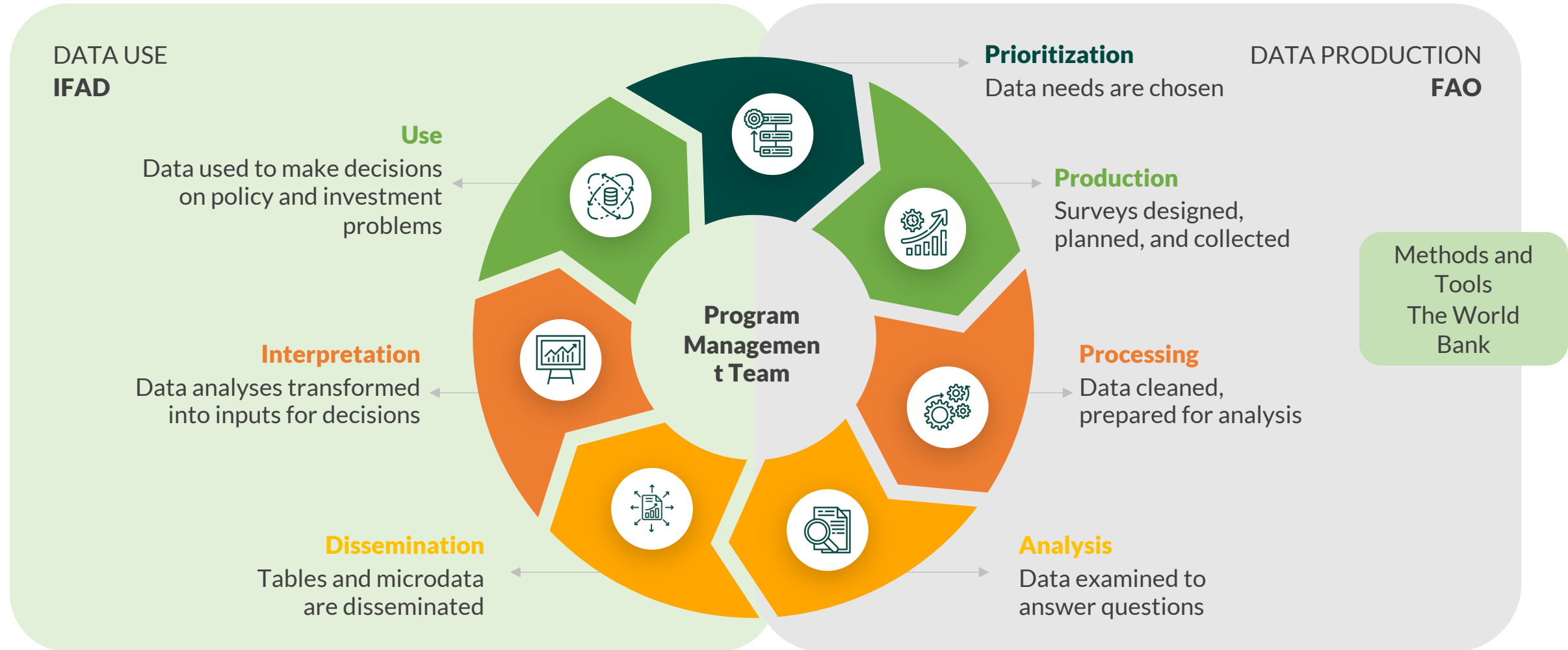- Program Management Team

Role/responsibility

- Participate in the country onboarding process
- Assist in the implementation of Initiative activities
- Review Initiative documents at country level
- Provide logistics support (organizing events, participating in the activities)
- Facilitate dialogue with local stakeholders
- Provide inputs to the Initiative country reports

50x2030 across the data cycle

DATA USE
IFAD

Use
Data used to make decisions on policy and investment problems

Interpretation
Data analyses transformed into inputs for decisions

Dissemination
Tables and microdata are disseminated

Program Management Team

Prioritization
Data needs are chosen

DATA PRODUCTION
FAO

Production
Surveys designed, planned, and collected

Methods and Tools
The World Bank

Processing
Data cleaned, prepared for analysis

Analysis
Data examined to answer questions

50x2030 approach
Two models of implementation

Ag. Survey Program

Integrated Ag. & Rural Survey Program

Years	1	2	3	4	5	6	7	8	9	10
CORE - Core Agriculture Module	●	●	●	●	●	●	●	●	●	●
ILP – Income, Labor and Productivity	●			●			●			●
PME – Production Method and Environment		●			●			●		
MEA – Machinery, Equipment and Asset			●			●			●	
ILS – Income and Living Standards - Household	●			●			●			●

Farms:
Ag. households & non-household holdings

Farms:
Ag. households & non-household holdings

Rural households
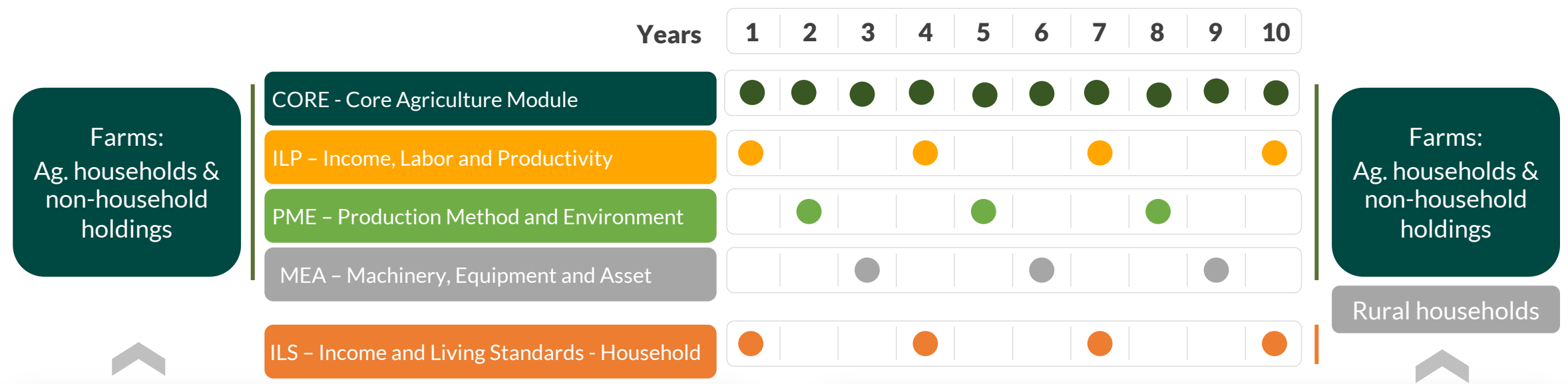
An **annual core survey** on crop, livestock, aquaculture, fishery and forestry production complemented by a set of **specialized tools in rotation:** costs and agricultural income; labor and productivity; gender decision-making in agriculture; production practices and environmental aspects of farming

Integrating household survey tool and broadening target population to incorporate a sample of rural, non-agricultural households into the system every three years

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

50x2030
DATA-SMART AGRICULTURE

Data covered by the <u>Agricultural Survey Program</u>
Annual

Core module

Crops
- Area planted, harvested
- Production (quantities, value)
- Crop yields/farm losses
- Harvest destination (own consumption, sale, etc.)
- Input use (seeds, fertilizers, chemicals)
- Sales – Quantities and Farm-gate prices
  (efforts will be made to collect it annually)

Livestock
- Animals in stock and changes in stock
- Livestock production (quantities)
- Sales – Quantities and Farm-gate prices
  (efforts will be made to collect it annually)

Aquaculture, Forestry and Fisheries
- Production (quantities, value, sales)

Farm labor (number of workers)

Main household characteristics and housing conditions

- Provides information for better **monitoring of food security policies** and availability of non-processed commodities
- Gives accurate basis for calculation of the agricultural value added in the National GDP and main economic indicators

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Data covered by the [Agricultural Survey Program](#) Periodically

Farm Income, Labour, Productivity module (ILP)

- Revenues
- Costs (fixed & variable)
- Investments
- Other income
- Access to finance for agricultural activities
- Access to markets and storage facilities
- Farm labour input (time)
- Land tenure

- Computation of main indicators
- Income by type of farms
- Indicators measuring Productivity and profitability of farms, incl. Labour Productivity
- Cost of Production Statistics
- Links to indicators on Women's rights

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Data covered by the [Agricultural Survey Program](#) Periodically

Production Methods and Environment module (PME)

Crop-related practices
- Land use
- Soil conservation methods
- Irrigation methods
- Soil fertilization
- Seed types used
- Plant protection products

Energy use

Agroforestry

Livestock-related practices
- Animal reproduction methods
- Veterinary products used
- Animal housing
- Manure management

Organic farming

Services, infrastructure used by the holding

Adaptation to climate change

Shocks and strategies

Coping strategies

- Assessing the impact of agricultural activities on the environmental, the social and economic sustainability of farming;
- Provides elements for the GHG emissions calculations

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Agricultural risks and shocks
Data needs

Evidence and data are critical to understand how agricultural risks and shocks affect farmers, and provide needed intervention

Risk profile data are sparce and/or incomplete for evidence-informed decisions and intervention
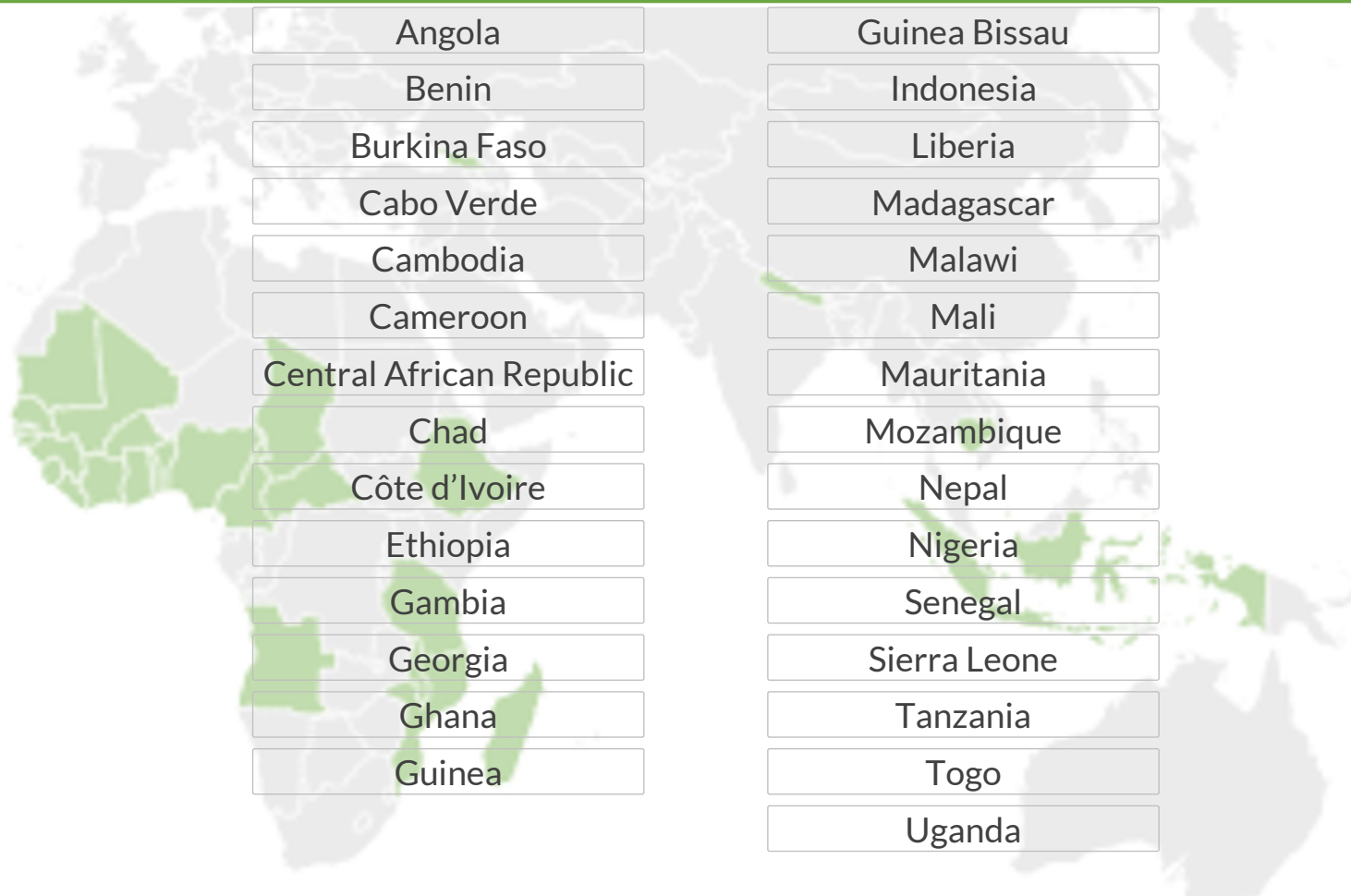
50x2030 Initiative can help fill this data gap

- Production and stock (area, quantities, value)
- Sales, Loss, and damages
- Production practice, input use
- Climate data
- Shock coping strategy
- Access to finance
- ....and much more

50x2030 countries

Already engaged as of February 2024: 29

Angola	Guinea Bissau
Benin	Indonesia
Burkina Faso	Liberia
Cabo Verde	Madagascar
Cambodia	Malawi
Cameroon	Mali
Central African Republic	Mauritania
Chad	Mozambique
Côte d'Ivoire	Nepal
Ethiopia	Nigeria
Gambia	Senegal
Georgia	Sierra Leone
Ghana	Tanzania
Guinea	Togo
	Uganda

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Examples of 50x2030 results

National agriculture strategies such as Sierra Leone's "Feed Salone" and Ghana's "Planting for Feed and Jobs phase 2" are planning to use 50x2030 datasets for the monitoring framework

Georgia's Ministry of Environmental Protection and Agriculture has developed new production factsheets aiming to increase exports and investment

The Cambodia's Ministry of Agriculture, Forestry and Fisheries uses new statistics toward reducing import dependency by improving livestock production

Steps to join 50X2030

Indication of interest to 50x2030 Program Management Team

◢ Explore potential financing and co-financing resources (ex. National/IDA allocation, TA cost)

Pre-onboarding – preparatory stage

◢ Introduction of the 50x2030 to national lead agencies

◢ Set-up a country coordination group/national project management team12

◢ Confirmation of financing and co-financing resources (e.g., IDA/national allocation, TA costs)

◢ Understand data needs and constraints

Onboarding

◢ Official launch of the 50x2030 Initiative

◢ Preparation and signing of Project Implementation Plan (PIP)

Implementation

50x2030
DATA-SMART AGRICULTURE

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Food and Agriculture
Organization of the
United Nations

IFAD

USAID
FROM THE AMERICAN PEOPLE

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

BILL & MELINDA
GATES foundation

AUSTRALIA

ITALIAN AGENCY
FOR DEVELOPMENT
COOPERATION

Bundesministerium
für Wirtschaft
und Energie

www.50x2030.org   @50x2030

16