BUILDING ON LEARNINGS
BENCHMARKING THE BUSINESS OF AGRICULTURE
GROWTH OF FOOD DEMAND
ROLE OF GOVERNMENT POLICIES & REGULATIONS

- Promote food production
- Facilitate access to ag inputs
- Encourage competitiveness
- Regulate competition
- Include small & local players
You [Socrates] have discovered the reasons why some farmers are so successful that husbandry yields them all they need in abundance, and others are so inefficient that they find farming unprofitable. I should like to hear the reasons in each case, in order that we may do what is good and avoid what is harmful.

Xenophon, 4th Century BC
THE VALUE OF BENCHMARKING
Benchmarking the Business of Agriculture aims to identify and monitor policies and regulations that can foster an enabling environment for the local and regional business of agriculture and encourage and inform policy changes that support inclusive participation in agricultural markets.

- Comparable and actionable indicators
- Identify good practices
- Motivate reforms
TIMELINE

- **2013-2014**: Concept development, consultations & preparation
- **2014-2015**: 10 pilot countries + 30 new countries
- **2015-2016**: 40 initial countries + 40 new countries
TIMELINE

Concept development, consultations & preparation

10 pilot countries

10 pilot + 30 new countries

40 initial + 40 new countries

PILOT PHASE

Research
Preparation
Data Collection
Data Coding & Analysis
Pilot reporting
Consultations

2014-2015
2015-2016
Access to Agricultural Inputs (Seeds, Fertilizer, Machinery)
Access to Agricultural Finance
Access to Transport & Storage
Access to Agricultural Land
Access to Markets (Domestic, Regional, Contract Farming)
Access to Water
Rural Electricity & ICT

Benchmarking the Business of Agriculture
THEMATIC COVERAGE

**CORE TOPICS**

LAND  
AG FINANCE  
SEED  
FERT  
AG TRANSP  
MARKET

**INITIAL TESTING**

ICT  
RURAL ELECTR  
AG MECHAN  
CONTR FARM
INDICATOR AREAS /
DATA POINTS
QUESTIONNAIRES
COUNTRY SELECTION

Ag employment / Total employment

Ag GDP / Total GDP
CONTRIBUTORS

- Government institutions
- Companies
- Associations
- Academia
- Research institutions
- NGOs/farmer organizations
<table>
<thead>
<tr>
<th>Date</th>
<th>Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2013</td>
<td>Guatemala</td>
</tr>
<tr>
<td>December 2013</td>
<td>Morocco, Ukraine, Rwanda</td>
</tr>
<tr>
<td>February 2014</td>
<td>Ethiopia, Philippines, Mozambique</td>
</tr>
<tr>
<td>March 2014</td>
<td>Nepal, Uganda, Spain</td>
</tr>
</tbody>
</table>
DESIGN TO ANALYSIS

- Literature review & expert consultations
- Identification of indicators and data points
- Questionnaire draft, review & translation
- Administer questionnaires to local experts
- Collection & verification of data
- Data gaps filled through desk research
- Internal data review
- Final data analysis & report
DATA COLLECTION CHALLENGES

- **Unavailability** of data (laws, regulations, metrics)
- Statistical **unreliability** or weakness of data
- **Incomparability** of data (varying collection methodology)
- **Reluctance** to provide certain information
- **Limited contributor base** to verify data (time & motion)
- Specific **case study assumptions** need to be refined for time and motion indicators
- **Extensive follow up** to obtain data
LEARNINGS

VOLUME OF DATA POINTS

The important vs. the most important
LEARNINGS

ROBUST AND COMPARABLE MEASUREMENTS

Leaders heights and average height over the last 40 years

- 6ft
- 5'10
- 5'5
- 5'9
- 5'7
- 5'10
- 6'1
- 6'0
- 6'1

- Average German leader
- Angela Merkel
- Germany
- Average French leader
- Francois Hollande
- France
- Average UK leader
- David Cameron
- UK
- Average US leader
- Barack Obama
- US

GUARDIAN RESEARCH
LEARNINGS

DATA COLLECTION WISDOM

- Interaction/relationship with contributor
- Length of questionnaire
- Prepopulating surveys
LEARNINGS

- Measurability/Robustness
+ Relevance

Diagram showing a scatter plot with points distributed across different quadrants based on Measurability/Robustness and Relevance.
### LEARNINGS: AG TRANSPORT
(TRUCKING SERVICES)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting trucking company</td>
<td>✔</td>
</tr>
<tr>
<td>Licensing requirements/procedures</td>
<td>✔</td>
</tr>
<tr>
<td>Market structure</td>
<td>✗</td>
</tr>
<tr>
<td>Pricing regulation &amp; freight allocation</td>
<td>✔</td>
</tr>
<tr>
<td>Transport prices and costs</td>
<td>✗</td>
</tr>
<tr>
<td>Axle-load regulation and inspections</td>
<td>✔</td>
</tr>
<tr>
<td>Road blocks, tolls and fees</td>
<td>✗</td>
</tr>
<tr>
<td>International agreements</td>
<td>✔</td>
</tr>
<tr>
<td>Foreign trucking competition</td>
<td>✔</td>
</tr>
<tr>
<td>Accessing appropriate vehicles</td>
<td>✗</td>
</tr>
<tr>
<td>Road quality, access and density</td>
<td>✔</td>
</tr>
<tr>
<td>Rural roads financing</td>
<td>✗</td>
</tr>
<tr>
<td>Agricultural storage</td>
<td>✔</td>
</tr>
</tbody>
</table>
LEARNINGS: AG TRANSPORT
(TRUCKING SERVICES)

- Licensing of truck operations
- Pricing regulation/freight allocation
- Axle load regulations
- Foreign trucking competition
- Monitoring of road access, density and quality
<table>
<thead>
<tr>
<th>LEARNINGS: ACCESSING FINANCIAL SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collateral laws</td>
</tr>
<tr>
<td>Average loan cost</td>
</tr>
<tr>
<td>Average interest rates</td>
</tr>
<tr>
<td>Deposit insurance schemes</td>
</tr>
<tr>
<td># mobile banking users</td>
</tr>
<tr>
<td>% agricultural loans</td>
</tr>
<tr>
<td>E-money regulations</td>
</tr>
<tr>
<td>Asset risk weighting</td>
</tr>
<tr>
<td>Regulation of financial intermediaries</td>
</tr>
<tr>
<td># loans secured by movable collateral</td>
</tr>
<tr>
<td>Warehouse receipt systems</td>
</tr>
<tr>
<td># of bank branches in rural areas</td>
</tr>
<tr>
<td>Microinsurance schemes</td>
</tr>
</tbody>
</table>
LEARNINGS: ACCESSING FINANCIAL SERVICES

- Collateral laws
- E-money regulations
- Regulation of financial intermediaries
- Warehouse receipt systems
DATA CLASSIFICATION

Laws, regulations & institutions

Policy performance & market metrics

Policy

Regulatory

Market/Practice
CONSULTATIVE/FEEDBACK PROCESS

- Methodological approach
- Analysis of indicators
- Contributor strategy

June 2014: Technical experts

Report review
- Peer reviewers
- Country offices
- Donors

Sept 2014: Technical experts

CSOs
LOOKING FORWARD

DUE CONSIDERATION
OF SMALL FARMERS
Build & Refine Indicators

Challenge of choosing indicators that are:

- most relevant in determining “enability” of environment
- measurable and statistically robust
- fully comparable
- distinctively address market linkages/opportunities for smaller farmers
PROCESS IN MOTION

TECHNICAL NOTE

INDICATORS / DATA POINTS

QUESTIONNAIRES
PROCESS IN MOTION

2014-2015 IMPLEMENTATION

Preparation
Remote data collection
Remote + In country data collection
Data coding & analysis
THE AGRICULTURAL TRANSFORMATION MATRIX (ATM)

Agriculture VA as % of GDP vs Economically Active in Ag as % of Total Economically Active Population

- Developed
- Urbanizing
- Transition
- Pre-Transition

- Agri-Based
- Agri-Base

25.0%
## ATM Segment Parameters

<table>
<thead>
<tr>
<th></th>
<th>Ag-Based</th>
<th>Pre-Trans</th>
<th>Trans</th>
<th>Urbanising</th>
<th>Developed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ag VA % Tot</strong></td>
<td>40 %</td>
<td>11%</td>
<td>12%</td>
<td>9 %</td>
<td>2 %</td>
<td>5 %</td>
</tr>
<tr>
<td><strong>Ag Empl % Tot</strong></td>
<td>72%</td>
<td>59 %</td>
<td>40 %</td>
<td>19 %</td>
<td>4 %</td>
<td>42 %</td>
</tr>
<tr>
<td><strong>AG VA/cap PPP$</strong></td>
<td>387</td>
<td>521</td>
<td>514</td>
<td>682</td>
<td>519</td>
<td>533</td>
</tr>
<tr>
<td><strong>Other VA/cap</strong></td>
<td>588</td>
<td>4,369</td>
<td>3,836</td>
<td>6,577</td>
<td>27,467</td>
<td>9,346</td>
</tr>
<tr>
<td><strong>Tot GDP/cap</strong></td>
<td>975</td>
<td>4,879</td>
<td>4,350</td>
<td>7,256</td>
<td>27,986</td>
<td>9,879</td>
</tr>
<tr>
<td><strong>Ag VA/Ag wrkr PPP$</strong></td>
<td>1,236</td>
<td>1,727</td>
<td>2,868</td>
<td>8,770</td>
<td>30,588</td>
<td>2,747</td>
</tr>
<tr>
<td><strong>AG Cap Stk/Ag wrkr</strong></td>
<td>715</td>
<td>658</td>
<td>1,408</td>
<td>5,436</td>
<td>37,711</td>
<td>1,710</td>
</tr>
<tr>
<td><strong>% at/ below $2 IPL</strong></td>
<td>36 %</td>
<td>32%</td>
<td>14 %</td>
<td>6 %</td>
<td>0 %</td>
<td></td>
</tr>
</tbody>
</table>
Sub Saharan Africa

Graph showing the Economically Active in Ag as % of Total Economically Active Population for 1980.
South Asia

Economically Active in Ag as % of Total Economically Active Population

1980
AGRICULTURAL VA AND AGRIBUSINESS VA
(AS % OF GDP, AND THEIR RATIO TO ONE ANOTHER)
POLICY IMPLICATIONS FROM THE ATM

- **AgBiz Growth** – contract farming, PPP D, larger more professional farms, great skills, farm mechanization
- **Urban Demand Growth** – need for basic infrastructure, roads, market linkages, market IQ, productivity e.g. access to seed, fertilizer, finance, etc.
- **Continued Urban Demand Growth** – beginnings of agribusiness sector
- **Developed**
- **Urbanising**
- **Transition**
- **Pre-Transition**

Expanding Export Markets – food safety, international standards, processed foods
Rural population & travel time to the nearest city over 250 k in population

UGANDA

46% with 4 hours

MOROCCO

69% with 4 hours
BUILDING ON LEARNINGS

BENCHMARKING THE BUSINESS OF AGRICULTURE

Thank you