



FAO-OEA/CIE-IICA WORKING GROUP ON AGRICULTURAL AND
LIVESTOCK STATISTICS FOR LATIN AMERICA AND THE CARIBBEAN
Twenty-sixth Session

FAO Statistical Initiatives in Measuring Investment in Agriculture: Global Investment dataset and Country Investment profiles

FAO Statistics Division



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FAO Investment Dataset Initiative

- Creating a pro-investment climate conducive to investment by private agents, in particular the farmers, continues to be a principal policy challenge
 - Continued **need to raise productivity** so as to realize necessary structural changes for generating additional food supplies and generate incomes necessary for access to food
- The international financial crisis may result in important adjustments in many countries in the form and level of overall resource flows to agriculture;
 - reduced access to credit,
 - a generally shrinking public sector resource base, and
 - new international conditions that constrain investment



FAO Investment Dataset: Why?

- To adequately **mobilize resources** and to **measure the impact on development** of investments in agriculture requires a comprehensive dataset
 - Must encompass resources for agricultural investment from **private and public as well as internal and external** sources
 - Must be **internationally comparable**
 - Must support **analysis** of the related resource flows
- **Achieved through a combination of five components:**
 - Capital Stocks Accumulation - CSA
 - Credit to Agriculture - CA
 - Government Expenditure on Agriculture - GEA
 - Official Development Assistance to Agriculture - ODAA
 - Foreign Direct Investment in Agriculture - FDIA



Agricultural Investment Framework

Agricultural Capital Formation

$$ACF_t = ACS_t - ACS_{t-1}$$

Domestic Investment

Foreign Investment

Private Domestic
Credit + Private
Equity

Public Domestic
Government
Expenditure

Private Foreign
Foreign Direct
Investment

Public
Foreign
ODA + Other
Official Flows



Agricultural Capital Stock (ACS) accumulation

- **FAO approach to measuring ACS data:**
 - concept of agriculture refers specifically to the activity of crop and animal husbandry for primary agriculture and includes :
 - land development, plantation crops, machinery and equipments, livestock, and structures for livestock
 - ACS estimates exclude forestry and fishery subsectors, Investment Dataset initiative will seek to address
- **FAO Statistics Division undertaking several additional actions to improve the quality of ACS data:**
 - Use of System of National Accounts (SNA)-based approach



Credit to Agricultural

- **Investment oriented loans** provided by the **banking sector** directly relate to the rate at which, inter alia, ACS is being accumulated and food security is enhanced
 - Inclusive credit flows aimed at improving the productivity of land, water, livestock and labor support income generation
- **Benchmark indicator of private sector (primarily domestic) investment activity**
 - data on credit extended to agriculture (emerging farmers, commercial farmers as well as to agricultural cooperatives and agri-related businesses) is generally available through monetary and financial statistics
 - FAO Statistics Division is now compiling these data



Government Expenditure on Agriculture

- The public sector — **general government units and public (financial and nonfinancial) corporations** — remains critical
 - can create a conducive environment for private investment (economic incentives) and can ensure sufficient availability of public goods (basic rural infrastructure and market openness)
- **FAO Statistics Division and the IMF Statistics Department developed a new questionnaire based on GFSM 2001**
 - Extension of **Table 7: Outlays by Function of Government** from the IMF's annual questionnaire on fiscal statistics
 - FAO launched questionnaire in 2012, requesting a **General Government (and its subsectors) time series: 2001 to 2011**



External Assistance to Agriculture

- **Official Development Assistance to Agriculture** by the major bilateral and multilateral donors is an important complement to domestic resources
 - accounts for much of gross domestic investment in some countries
 - may particularly benefit when an increasing share is directed towards the agricultural sector and other related areas
- **OECD Creditor Reporting System** records ODA and Other Official Flows at the project level in a comprehensive manner
 - Details the allocation of assistance to agriculture as well as other relevant sectors by recipient country and region:
 - Complements existing FAO database on External Assistance
 - FAO will augment the CRS data with non-CRS reporters (multilateral donors) included in the FAO broad definition of agriculture



Foreign Direct Investment in Agriculture

- Principles for **Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources**, promoted by FAO, IFAD, the **UNCTAD Secretariat** and the World Bank Group
 - Monitoring all countries from which investment initiatives are emanating and towards which investments are directed
- Improving data/analysis aimed at maximizing the economic value-added and job creation potential arising from private investment in sustainable agriculture value chains
 - FAO Statistics Division is elaborating an Agri-specific questionnaire that would disaggregate the sector/industry series collected by UNCTAD
 - **Disaggregation according to ISIC Rev 4** strengthens the potential for establishing linkages with the other Investment Database



Data Compilation - Challenges

- Interrelationships among FAO Investment Datasets are supported by data collection templates that may be linked ACS estimates
 - **FAOSTAT database** would indicate that in Dominican Republic 2007 ACS (excluding forestry and fisheries) increased by 1,546 million USD.
 - **Private Equity** was estimated as a residual (697 mln USD):
 $PEq = \Delta ACS - GEA - ODA - FDI - Credit$
- **Is it true? Answer requires time-series**
 - Providing desired disaggregations supports a robust analysis of the dynamics of capital stock accumulation



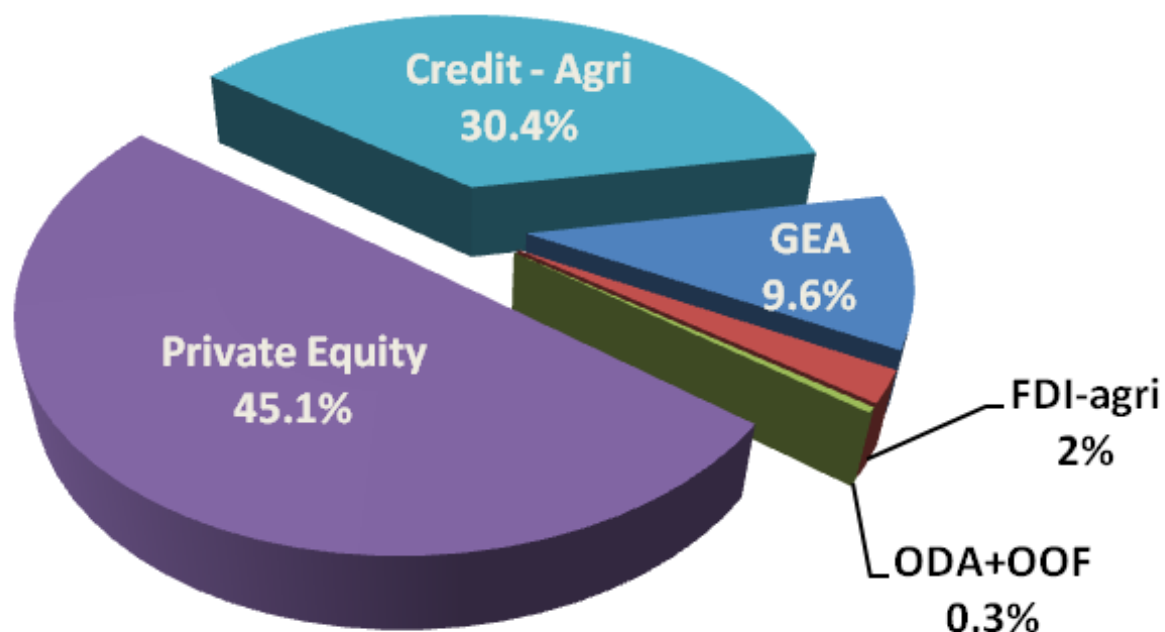
Data Availability

Countries	WB_c	FAO_id	ACS	ODA	FDI	GEA	CRED
Barbados	BRB	14	75-07	78-80	.	01-07	89-11
Chile	CHL	40	75-07	91-11	06-11	01-11	.
Dominican R.	DOM	56	75-07	73-11	93-11	01-10	01-10
Ecuador	ECU	58	75-07	74-11	86-11	08-11	08-12
Jamaica	JAM	109	75-07	74-11	98-10	01-11	01-11
St. Kitts	KNA	188	75-07	spotty	.	03-10	02-12



Components of Investment Flows

Agricultural Capital Formation - Dominican Rep. 2007
(Total = 1,546.25 millions USD)



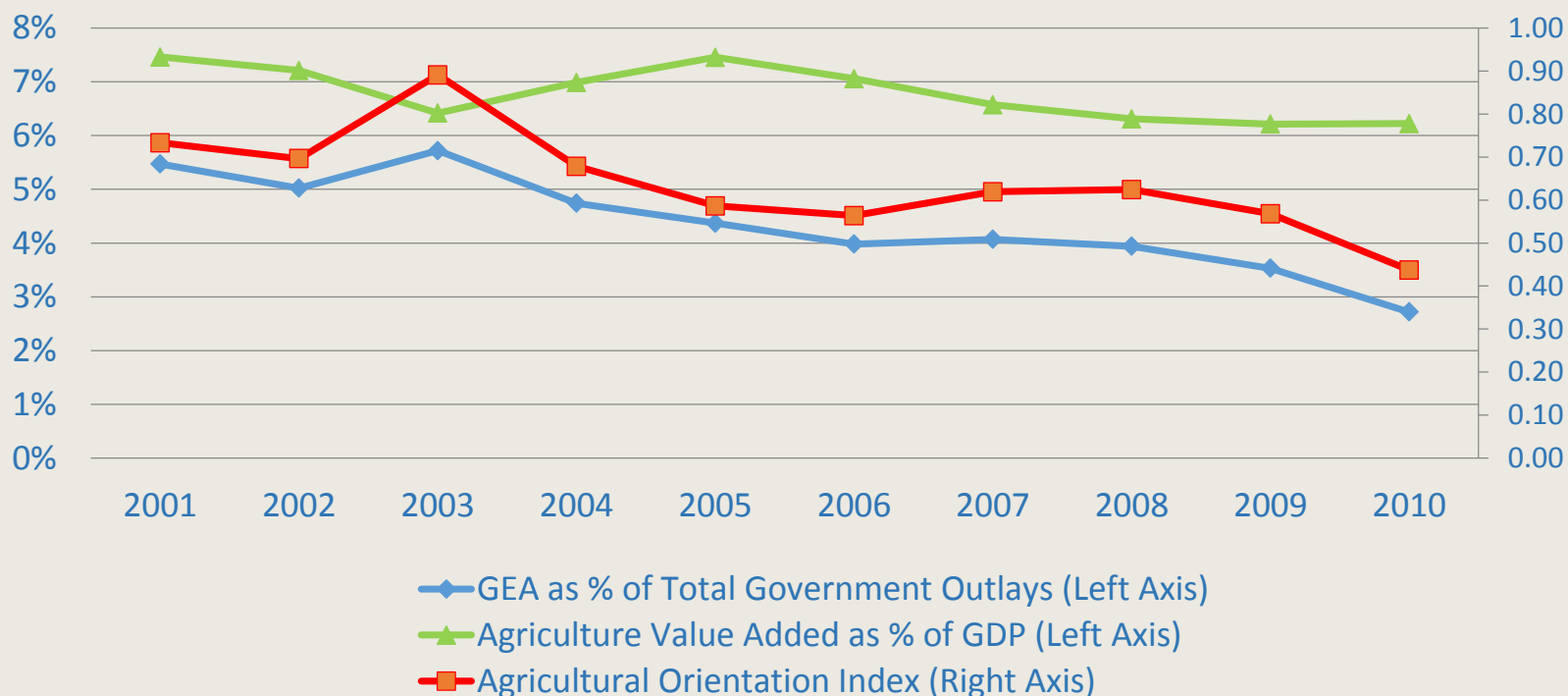
* Private Equity was estimated as a residual ($PEq = \Delta ACS - GEA - ODA - FDI - Credit$)



Agricultural Orientation Index

It is defined as the ratio between the share of GEA over Total Government Outlays (source: FAOSTAT) and the share of Agricultural Value Added over GDP (source: World Bank's World Development Indicators).

Dominican Republic





Points for discussion

- Ability and willingness to report ACS estimates that incorporate data on private investment, where available, and forestry and fisheries, where relevant.
 - Do IICA countries compile such data?
 - How could these be provided to FAO Statistics Division?
- Data from National websites
 - When FAO compiles country-specific Investment Datasets derived from national websites, should these be reviewed by the national authorities **before being used for analysis by FAO staff and dissemination on FAOSTAT?**
- Availability of the allocations of ODA to Agriculture for capital purposes (acquisition of nonfinancial assets)
- Ability and willingness to report detailed annual data according to the FAO prescribed breakdowns.
 - Are each of the **breakdowns described** maintained by Ministries of Agriculture?



Recommendations

- We suggest the Working groups considers recommending that FAO continues its work on measuring agricultural investment, and requests member countries to review and **provide feedback** to FAO on the Country Investment Profiles before dissemination on FAOSTAT.



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Thanks!

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