



INTERNATIONAL FOOD
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Research Workshop: Agricultural Public Investments,
Policies and Markets for Mozambique's Food Security
and Economic Transformation
20. November 2014, VIP Hotel, Maputo, Mozambique

Unpacking the 'Black Box' of Public Expenditure Statistics in Agriculture

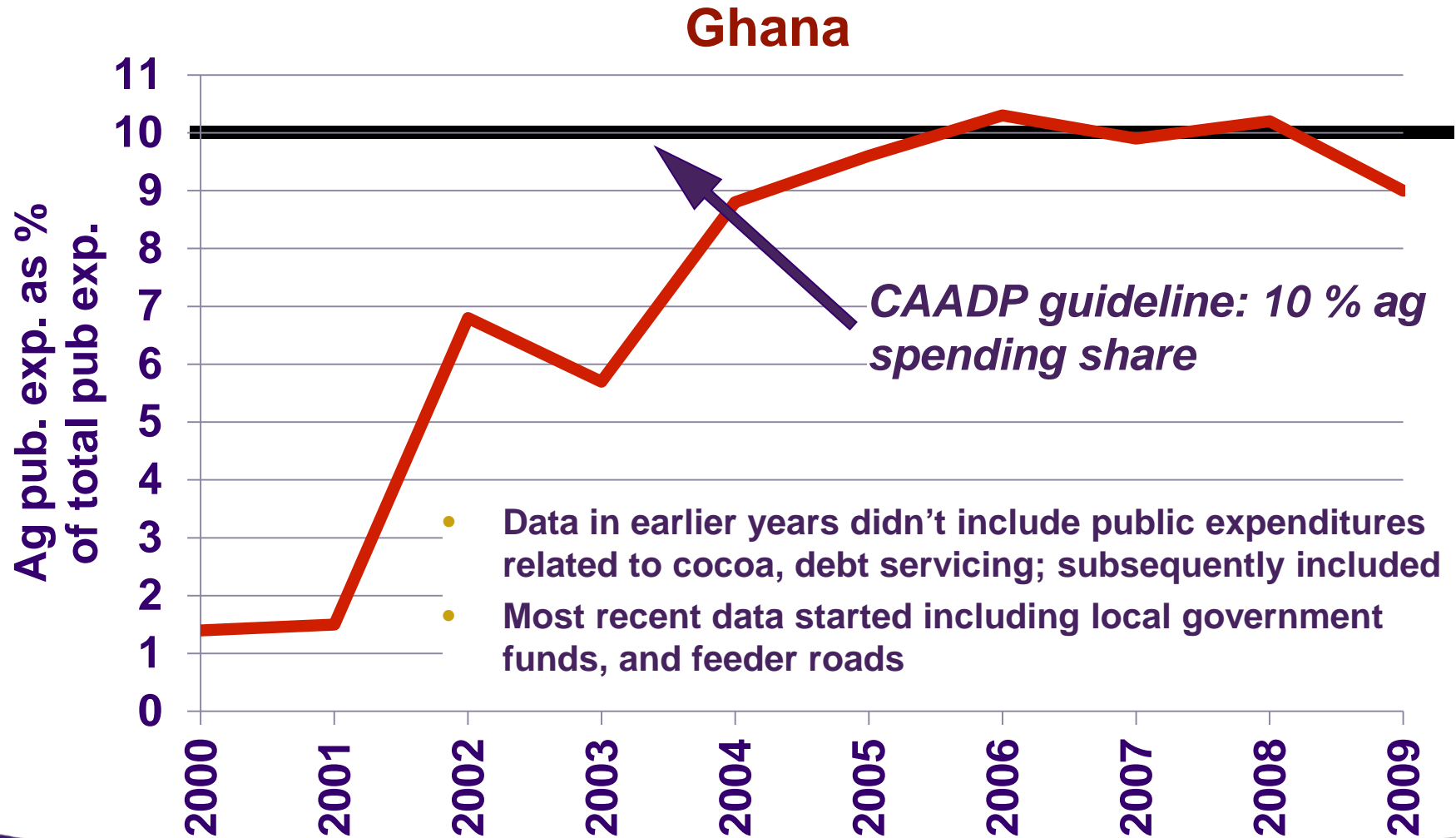
Lessons from a Diagnostic Analysis of Agricultural Sector Public Expenditures

Presented by
Tewodaj Mogues, IFPRI

Objective of this Research Project

- **Several major policy initiatives requiring measurement and tracking of public expenditures in support of the agriculture sector (e.g. CAADP, country strategies, IDPs)**
- **However, how to measure the quantity of agricultural expenditures?**
 - **Inconsistencies: Different reports and databases report different figures (for the same country and year)**
 - **Non-transparent aggregates: Not always clear what “ingredients went into the soup”**
- **This research programme seeks to offer approaches for country analysts to quantify agPEs in a consistent and transparent way**
- **4 country cases: Mozambique, Ghana, Kenya, Malawi**

Tracking Aggregate Ag. PE over Time – Growth of Funds or of Coverage?



What the Research Project Is Not

- **What this research project is not about:**
 - **Econometric analysis of the returns to and impact of public expenditures in agriculture**
 - other longstanding research on this in IFPRI and elsewhere
 - **A database or dataset of public expenditures in agriculture**
 - several initiatives have generated such datasets (especially cross-country), by IFPRI, IMF, FAO, OECD, etc.
 - **Descriptive review of trends and patterns of agricultural expenditures**
 - other well established work on this through World Bank AgPERs, and through other initiatives

Different figures in different reports

Mozambique Analysis of Public Expenditure in Agriculture

Volume I: Core Analysis

February 19, 2011

Agricultural and Rural Development Unit
Sustainable Development Department
Country Department AFCS2
Africa Region

**World Bank AgPER:
PE in Ag. 2007
3,281 MMT
2,773 MMT (excluding OIL)**



Table 4
Public Expenditures in Agriculture - Summary Table (by institution)

A. Actual Expenditures

	million MT						
	act. 2001	act. 2002	act. 2003	act. 2004	act. 2005	act. 2006	act. 2007
GRAND TOTAL excl. OIL	503.7	1,655.1	1,470.3	2,040.5	2,794.6	2,679.3	3,280.6 2,772.8

Different figures in different reports

**IMF Article IV Consultation:
PE in Ag. & Rural Dev't 2007
2,067 MMT**

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July 2009
IMF Country Report No. 09/227

Republic of Mozambique: 2009 Article IV Consultation, Fourth Review Under the Policy Support Instrument, and Request for a Twelve-Month Arrangement Under the Exogenous Shocks Facility—Staff Report; Public Information Notice and Press Release on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Mozambique

Table 9. Mozambique: Expenditure in PARPA Priority Sectors, 2007-2009 1/

(Millions of meticalais, unless otherwise indicated)

	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture and rural development	1,243	1,275	1,373	1,290	1,522	2,067	2,302	4,803

**Proposal to undertake a “DIY”
approach, using the existing
government public accounts**



Understanding expenditure data along the budget process

Document/Report	2010	2011	2012	2013
LOE (Release date: December of Year t-1)				
Budget [9]	6,177	6,396	5,155	8,124
REO (Release date: Quarterly Year t)				
Initial budget allocation [10]	6,177	6,396	5,155	8,124
Final budget allocation [11]	5,210	7,742	6,104	6,633
Budget Execution [12]	4,045	4,013	3,817	4,938
Execution rate (in %) [12/11]	77.63	51.83	62.52	74.44
CGE (Release date: in May of Year t+1)				
Initial budget allocation* [13]	6,177	6,396	5,155	8,124
Final budget allocation [14]	5,703	5,666	5,420	6,331
Budget Execution [15]	4,283	4,092	3,906	5,045
Execution rate (in %) [15/14]	75.10	72.23	72.07	79.70

Understanding the types and quality of the classification systems in use



A multiplicity of classification systems: Too much of a good thing?

Classifier	Objectives/Description
Functional	Aggregates public spending according to government action areas related to the nature of State functions. NB: In accordance with COFOG – OCDE. It's a universal classifier, independent of the government, which allows for budget comparisons at regional, continental and other levels.
Administrative	Identifies the state body or institution responsible for budget formulation and execution. And who is also responsible for managing State assets.
Programmatic	Transforms the government activities into programmes that evidence government objectives and the purpose and programmatic logical of the expenditure, linked to policies, and useful to develop the monitoring (associated results).
Sectoral	It is an extension of the programmatic classifier. It details the actions that are part of sectoral, provincial or local plans.
Sectional	It is an extension of the sectoral classifier. It details the actions that are needed to be implemented by a cost center.
Economic – Expenditure	Allows the identification of the economic nature of the expenditure.
Management	Allows for individual accounts as defined by SISTAFE Law: public institutions, autonomous institutions, municipalities and state companies.
Budget Unit	Identifies the state body or institution responsible for budget formulation and execution.
Budget coverage	According to the legal administration of the institution. Its main objective is to comprehensively incorporate all the State and local institutions, as well as state enterprises.
Financial status	Identifies the financial status according to its financial and administrative autonomy.
Territorial	Allows the registration, according to the territorial division of the country (Central, Provincial and District), of revenue and expenditure.
Priority Sectors	According to government policies, mainly established in the PQG and the PARP.
Origin of resources	Allows the identification of the source of financial resources (treasury, loans, donations, own revenues).
Currency	Coding of the currency used by donor and lenders of the budget state.

Functional classification: COFOG (IMF GFSM 2001)

COFOG Level 1

Code	Description	Relation to agriculture-related functions
01	General public services	Not ag. f.
02	Defense	Not ag. f.
03	Public order and safety	Not ag. f.
04	Economic Affairs	Encompasses ag. f.
06	Housing and community amenities	Not ag. f.
07	Health	Not ag. f.
08	Recreation, culture, and religion	Not ag. f.
09	Education	Not ag. f.
10	Social protection	Not ag. f.

Functional classification: COFOG (IMF GFSM 2001)

COFOG Level 2

COFOG Level 3

No int'l coding for Level 4

041 General economic affairs

Not ag. f.

042 Agriculture, forestry, fishing and hunting

Ag. f

0421 Agriculture

Ag. f

- *Administration of agricultural affairs and services; conservation, reclamation, or expansion of arable land; agrarian reform and land settlement; supervision and regulation of the agricultural industry (includes livestock (0424))*
- *Construction or operation of flood control, irrigation (0425), and drainage systems, including grants, loans, or subsidies for such works*
- *Operation or support of programmes or schemes to stabilize or improve farm prices and farm incomes; operation or support of extension services or veterinary services to farmers, pest control services, crop inspection services, and crop grading services*
- *Production and dissemination of general information, technical documentation, and statistics on agricultural affairs and services*
- *Compensation, grants, loans, or subsidies to farmers in connection with agricultural activities, including payments for restricting or encouraging output of a particular crop or for allowing land to remain uncultivated*

Functional classification: COFOG (IMF GFSM 2001)

0422 Forestry

Ag. f

- *Administration of forestry affairs and services; conservation, extension, and rationalized exploitation of forest reserves; supervision and regulation of forest operations and issuance of tree-felling licenses*
- *Operation or support of reforestation work, pest and disease control, forest fire-fighting and fire-prevention services, and extension services to forest operators*
- *Production and dissemination of general information, technical documentation, and statistics on forestry affairs and services*
- *Grants, loans, or subsidies to support commercial forest activities*

0423 Fishing and hunting

Ag. f

- *Administration of fishing and hunting affairs and services; protection, propagation, and rationalized exploitation of fish and wildlife stocks; supervision and regulation of freshwater fishing, coastal fishing, ocean fishing, fish farming, wildlife hunting, and issuance of fishing and hunting licenses*
- *Operation or support of fish hatcheries, extension services, stocking, or culling activities*
- *Production and dissemination of general information, technical documentation, and statistics on fishing and hunting affairs and services*
- *Grants, loans, or subsidies to support commercial fishing and hunting activities, including the construction or operation of fish hatcheries*

Functional classification: COFOG (IMF GFSM 2001)

043	Fuel and energy	Not ag. f.
044	Mining, manufacturing, and construction	Not ag. f.
045	Transport	Not ag. f.
046	Communication	Not ag. f.
047	Other industries	Not ag. f.
048	R&D economic affairs	Encompasses ag. f.
0481	<i>R&D General economic, commercial, and labor affairs</i>	<i>Not ag. f.</i>
0482	<i>R&D in agriculture, forestry, fishing, and hunting*</i>	<i>Ag. f.</i>

- *Administration and operation of government agencies engaged in applied research and experimental development related to agriculture, forestry, fishing, and hunting*
- *Grants, loans, or subsidies to support applied research and experimental development related to agriculture, forestry, fishing, and hunting undertaken by nongovernment bodies, such as research institutes and universities*
- *Excludes basic research, which is classified under “General Public Services”*

Functional classification: Great in principle ... but limited usefulness as practiced

Mozambique applies Level 4 codes

Functional code	Description	2010	2011	2012	2013
04212	Agrarian Reform	50	975	59	14
04213	Prices and Agricultural Productivity	3	4		
04214	Rural Extension	99	320	367	490
04215	Veterinary	90	163	93	61
04216	Pest Control	40	25		132
04219	Other Services N.E.C	335	282	269	180
04221	Forestry			11	
04231	Fishing	900	986	887	1,003
04241	Livestock	44	18	6	6
04251	Irrigation	625	301	504	438
04291	Agriculture, Forestry, Fishing and Hunting N.E.C	2,554	2,483	2,595	3,496
042	Agriculture, Forestry, Fishing, and Hunting	4,741	5,558	4,792	5,820

Not used in the budget data, but only in the execution and actual expenditure data; very large “other” category

Administrative classification: Detailed, and of relevance to government for its operations

Description	Coding Structure	
	Until 2012	In 2013
Ministry of Agriculture	35	35
<i>Ministry of agriculture</i>	3501	35A 00 0141
<i>Food and Nutritional Security Technical Secretariat</i>	3503	35A 00 1541
<i>National Institute of Irrigation</i>	3505	35A 00 5041
<i>Provincial Directorate of Agriculture*</i>	3521(01-11)	35(B-L)00(0141/2141)
<i>Cotton Institute delegation</i>	3522	35(C-I) 00 1941
<i>Delegation of the Institute of promotion of cashew nuts</i>	3528	35(C-K)00 2041
<i>Provincial Delegation of Agriculture Promotion</i>	3529	35(D-J)00(1241/1341/1541)
<i>Mozambique Cotton Institute</i>	3581	35A 00 1641
<i>Institute of promotion of cashew nuts, INCAJU</i>	3582	35A 00 2141
<i>Agrarian Research Institute of Mozambique</i>	3586	35A 00 3641
<i>Agriculture Promotion Center</i>	3590	35A 00 4341
<i>Training Institute on land and cartography administration</i>	3591	35A 00 3341
<i>National Center for Cartography and Remote Sensing</i>	3592	35A 00 4841
<i>Agricultural Development Fund (FDA)</i>	3593	35A 00 4941

**However, changing coding system over time,
and no dedicated codes for units *within* a ministry**

Programmatic classification

Level	Code	Description	2010	2011	2012	2013
OCPQG Objective	DEC ¹	Combating Poverty and Promoting the Culture of Work - Economic Development	38,580	50,371	69,305	61,427
Strategic Area (AE)	DEC-AGR	Agriculture, Livestock, Forestry and Wildlife	3,163	2,731	3,019	5,435
Strategic Subarea (SAE)	DEC-AGR-00	Agriculture, Livestock, Forestry and Wildlife	2,207	2,731	3,019	5,435
	<i>DEC-AGR-00-AGR01</i>	<i>Administrative institutional support</i>		68	353	299
	<i>DEC-AGR-00-AGR02</i>	<i>Agricultural production and productivity</i>	199	2,396		121
	<i>DEC-AGR-00-AGR03</i>	<i>Management of natural resources</i>	2,008			
	<i>DEC-AGR-00-AGR04</i>	<i>Production oriented market</i>		245	3	12
	<i>DEC-AGR-00-AGR06</i>	<i>Use and Utilization of Land</i>		22	270	
	<i>DEC-AGR-00-AGR11</i>	<i>Agricultural Production</i>			1,424	4,266
	<i>DEC-AGR-00-AGR12</i>	<i>Agricultural productivity</i>			90	172
	<i>DEC-AGR-00-AGR13</i>	<i>Natural resource management</i>			879	565
	DEC-AGR-01	Food Security	956			
	<i>DEC-AGR-01-AGR02</i>	<i>Agricultural Productivity</i>	929			
	<i>DEC-AGR-01-AGR03</i>	<i>Natural Resource Management</i>	27			

Only presented for budget, not for actual expenditures

Illustration of reconstruction using a combination of classifications

Administrative units	2010	2011	2012	2013
Agriculture	6,173	7,132	12,458	15,136
01 Office of the President ¹	134	660	5,740	7,123
<i>0122 District Administrations</i>	<i>134</i>	<i>660</i>	<i>5,740</i>	<i>7,123</i>
03 Office of the Prime Minister ¹	111	49	0	0
<i>0311 Development Agency of the Zambezi valley</i>	<i>111</i>	<i>49</i>	<i>0</i>	<i>0</i>
26 Ministry of Planning and Development ^{1, 3}	225	757	1,298	1,682
<i>2601 Ministry of Planning and Development</i>	<i>225</i>	<i>419</i>	<i>191</i>	<i>268</i>
<i>2607 National Institute of Statistics</i>	<i>0</i>	<i>0</i>	<i>280</i>	<i>0</i>
<i>2609 Millennium Challenge Account Program</i>	<i>0</i>	<i>338</i>	<i>642</i>	<i>548</i>
<i>2628 Special Economic Zones</i>	<i>0</i>	<i>0</i>	<i>18</i>	<i>0</i>
<i>2681 Development Agency of the Zambezi valley</i>	<i>0</i>	<i>0</i>	<i>67</i>	<i>764</i>
<i>2683 Centre for Investment Promotion</i>	<i>0</i>	<i>0</i>	<i>47</i>	<i>0</i>
<i>2685 Office for Accelerated Development Economic Areas</i>	<i>0</i>	<i>0</i>	<i>51</i>	<i>0</i>
<i>2687 Fund for Economic Rehabilitation</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>102</i>

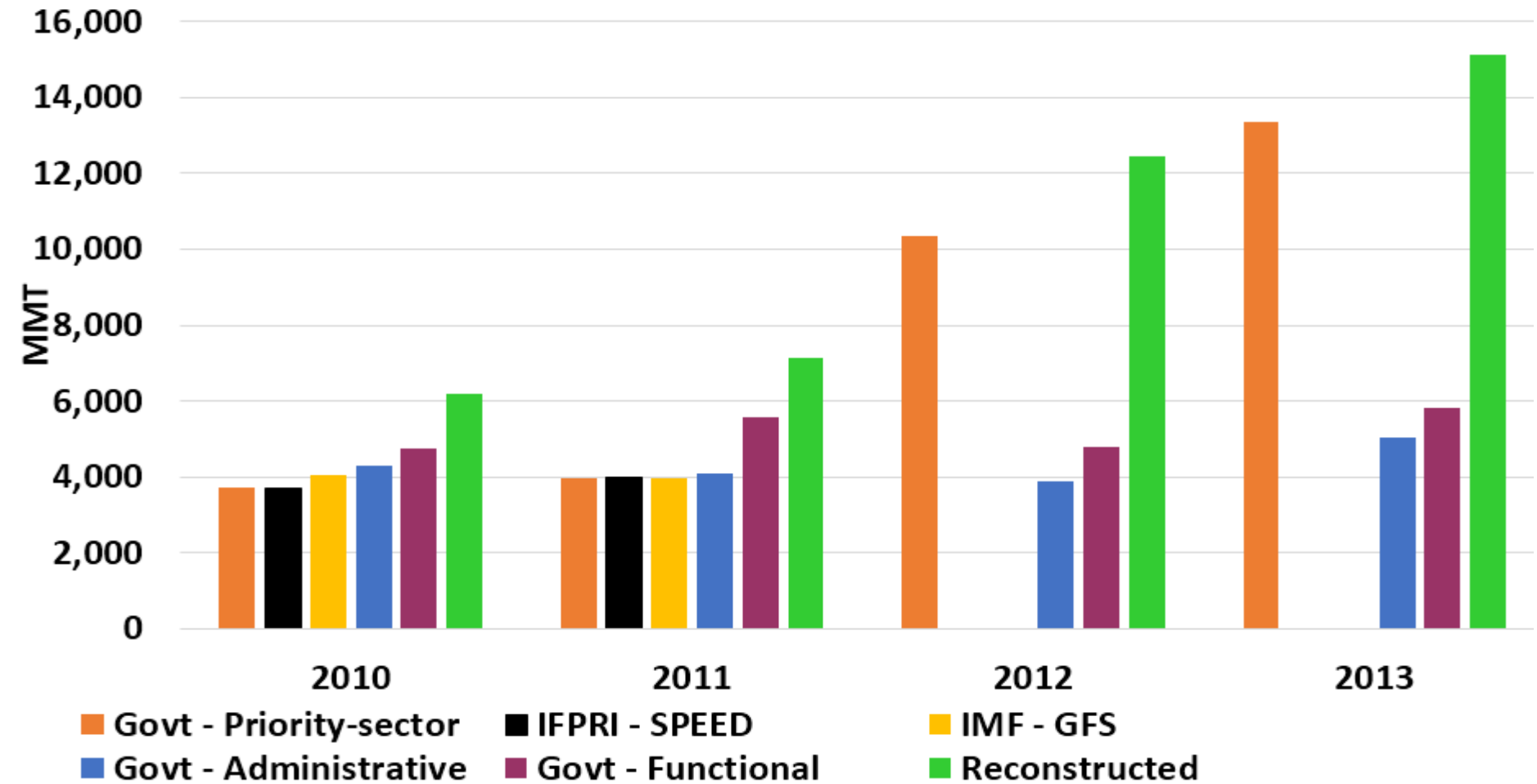
Illustration of reconstruction using a combination of classifications

35	Ministry of Agriculture²	4,176	4,105	4,134	5,012
3501	<i>Ministry of Agriculture</i>	1,353	1,464	1,766	1,508
3503	<i>Food and Nutritional Security Technical Secretariat</i>	0	13	7	17
3505	<i>National Institute of Irrigation</i>	0	0	0	38
3521	<i>Provincial Directorates of Agriculture</i>	1,508	1,149	982	1,428
3522	<i>Cotton Institute delegation</i>	1	9	15	21
3528	<i>Delegation of the Institute of prom. of cashew nuts</i>	29	37	52	98
3529	<i>Provincial Delegation of Agriculture Promotion</i>	0	9	24	27
3581	<i>Mozambique Cotton Institute</i>	65	67	92	180
3582	<i>Institute of promotion of cashew nuts, INCAJU</i>	271	335	175	200
3586	<i>Agrarian Research Institute of Mozambique</i>	305	265	177	299
3590	<i>Agriculture Promotion Center</i>	194	248	129	159
3591	<i>Training Inst. on land and cartography administration</i>	22	23	20	25
3592	<i>National Center for Cartography and Remote Sensing</i>	26	72	59	48
3593	<i>Agricultural Development Fund (FDA)</i>	403	415	636	961

Illustration of reconstruction using a combination of classifications

37	Ministry of Fisheries²	1,527	1,561	1,286	1,318
3701	<i>Ministry of Fisheries</i>	265	393	281	220
3702	<i>National Board of Fisheries</i>	0	80	68	74
3707	<i>School of Fisheries</i>	23	28	22	54
3721	<i>Provincial Fisheries</i>	64	75	69	46
3726	<i>Delegations of the National Aquaculture Develop.</i>	3	9	8	45
2681	<i>Fisheries Development Fund</i>	780	330	309	175
2682	<i>National Institute for Fisheries Research</i>	95	103	123	132
2683	<i>National Inst. for Develop. of Small Scale Fisheries</i>	195	234	274	365
2684	<i>National Institute of Fish Inspection</i>	57	67	79	93
2686	<i>National Institute of Aquaculture Development</i>	47	240	52	113
Actions for Rural Development		0	0	456	273
25	Ministry of State Administration¹	0	0	338	158
2501	<i>Ministry of State Administration</i>	0	0	334	146
2509	<i>National Institute of Disaster Management (INGC)</i>	0	0	4	8
2521	<i>Provincial Directorate of Support and Control</i>	0	0	0	4
41	Ministry of Industry and Trade¹	0	0	118	115
2501	<i>Ministry of Industry and Trade</i>	0	0	110	109
2521	<i>Provincial Directorate of Industry and Trade</i>	0	0	0	0
2585	<i>Institute for Promotion of SMEs</i>	0	0	7	5
Total		6,173	7,132	12,913	15,408

Comparison with international and national expenditure data sources



Some key take-aways

- **Analysts and others wanting to obtain time-consistent information on how much public expenditures is going to agriculture need to work with the appropriate classification and coding systems of public accounts**
- **The administrative system of classification tends to be most versatile for reconstruction of agricultural public expenditures—but reconstruction requires combination of classifications**
- **Coding system should be more detailed, follow a clear logic, and be consistent over time**
- **Be aware of capacity constraints, and asking for too many classification systems reduces their quality**



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