AGRICULTURAL PUBLIC EXPENDITURE ANALYSIS: INDIA, ETHIOPIA, NIGERIA, AND TANZANIA

C. LEIGH ANDERSON, TRAVIS REYNOLDS, PIERRE BISCAYE, MATTHEW FOWLE, ANDREW ORLEBEKE, AND BEIJIE WANG
Questions: Expenditure Levels & Trends

1. What has been the budget allocated to agriculture?
2. What has been the actual spending on agriculture?
3. What has been the trend in the spread between budgeted and actual expenditures?
4. What are the trends in actual spending on agriculture and as a percentage of total government budgets?
5. How do these trends compare with other select comparable countries/states and in the region?
Questions: Sources & Stability of Funding

6. What are the trends in breakdown between government and donor/other sources of funding?
7. For government funding, what have been the primary sources?
8. For donor/other funding, who have been the primary funders and at what levels?
9. How stable have both government and donor/other funding to agriculture been (can this be assessed as a measure of volatility or using another metric)?
Questions: Budget Allocations

10. What has been the allocation (budgeted and actual) to primary commodity groups?
11. What are the key funding areas in public agriculture budgets, and what has been the allocation across these investment areas?
12. For government funding, what have been the main areas of funding?
13. Within government funding, is there devolution of tax revenue from center to states with tied and untied components? If so, what are these implications from center to regional budgets (e.g. India from center to states)?
Questions: Budget Allocations

14. For donor/other funding (e.g., loans, grant aid, etc), what have been the main expenditure areas for each?

15. What has been the allocation (budgeted and actual) of the agriculture budget per capita (specific categories, and denominator by farmer, rural population or total population)?

16. Are there specific indicators that are relevant for individual countries (e.g. in India, can you estimate out “government subsidy per ton of cereal produced”)?
Expenditure Levels & Trends: Government Spending on Agriculture

- Total Budgeted vs Actual Spending Figure Numbers
  - 1: Tanzania
  - 2: Ethiopia
  - 3: Nigeria
  - 4-8: India
    - 4: Central Government
    - 5: All States
    - 6: Bihar, 7: Odisha, 8: Uttar Pradesh

Addresses Questions:
1. What has been the budget allocated to ag?
2. What has been the actual spend on ag?
3. What has been the trend in the spread between budgeted and actual?
Government Spending on Agriculture: Tanzania

1) Tanzania Total Budgeted vs. Actual Government Agriculture Expenditure, 2007-2014

Data Source: MAFAP
Government Spending on Agriculture: Ethiopia

2) Ethiopia Total Budgeted vs. Actual Government Agriculture Expenditure, 2006-2013

Data Source: MAFAP
Government Spending on Agriculture: Nigeria

3) Nigeria Total Budgeted vs. Actual Government Agriculture Expenditure, 2008-2012

Data Source: World Bank Nigeria Agriculture Public Expenditure Review
Government Spending on Agriculture: India

4) India Central Government Total Budgeted vs. Actual Agriculture Expenditure, 2007-2015


Budgeted:
- 2007: ₹21.1
- 2008: ₹1.5
- 2009: ₹7.3
- 2010: ₹2.2
- 2011: ₹41.5
- 2012: ₹27.4
- 2013: ₹13.3
- 2014: ₹116.6

Actual:
- 2007: ₹21.1
- 2008: ₹7.3
- 2009: ₹33.9
- 2010: ₹2.2
- 2011: ₹41.5
- 2012: ₹27.4
- 2013: ₹13.3
- 2014: ₹116.6

Gap:
- 2007: ₹0
- 2008: ₹0
- 2009: ₹0
- 2010: ₹0
- 2011: ₹0
- 2012: ₹0
- 2013: ₹0
- 2014: ₹0

Government Spending on Agriculture: India

5) India 29 State Estimated and Revised Budget Agriculture Expenditure Trend, 2011-2016

Data Source: A Study of Budgets by Reserve Bank of India

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY OF WASHINGTON
Evans School Policy Analysis and Research (EPAR)
Government Spending on Agriculture: India

6) Bihar Total Estimated vs. Revised Government Agricultural Expenditure, 2011-2016

Data Source: A Study of Budgets by Reserve Bank of India
Government Spending on Agriculture: India

7) Odisha Total Estimated vs. Revised Government Agricultural Expenditure, 2011-2016

- **Agriculture Expenditure (Rupee, Billion)**
  - 2011-12: ₹27.6
  - 2012-13: ₹(1.0)
  - 2013-14: ₹(32.0)
  - 2014-15: ₹4.4

- **Budgeted-Actual Gap (Rupee, Billion)**
  - 2011-12: ₹27.6
  - 2012-13: ₹(1.0)
  - 2013-14: ₹(32.0)
  - 2014-15: ₹4.4

Data Source: A Study of Budgets by Reserve Bank of India
Government Spending on Agriculture: India


Data Source: A Study of Budgets by Reserve Bank of India
Expenditure Levels & Trends: Regional Comparison

- Agricultural Spending as a Proportion of Total Spending Figure Numbers
  - 9: Tanzania, Ethiopia and Nigeria Comparison using MAFAP data
  - 10: Tanzania, Ethiopia and Nigeria Comparison using MAFAP, ReSAKSS & SPEED data
- Agricultural Spending as Proportion of Total Spending & Government Spending Figure Numbers
  - 11-14: East and West Africa Regional Comparison using ReSAKSS data
  - 15,16: Sub-Saharan Africa Regional Comparison using SPEED data
  - 17,18: South Asia Regional Comparison using SPEED data

Addresses Questions:
4. What are the trends in actual spend and as a % of total budgets?
5. How do these trends compare with other select comparable countries/states and in the region?
Regional Comparison: TZ, ET, NG

9) National Agriculture Expenditure as a Proportion of Total Public Expenditure for Tanzania, Ethiopia, and Nigeria, 2007-2012

Data Source: MAFAP and SPEED
Regional Comparison: TZ, ET, NG

10) National Agriculture Expenditure as a Proportion of Total Public Expenditure for Tanzania, Ethiopia, and Nigeria, 2007-2012

Data Source: MAFAP and SPEED
Regional Comparison: East Africa


% of Total Government Spending

Data Source: ReSAKSS
Regional Comparison: East Africa

12) Government Agriculture Spending in East Africa, 2003-2014

Govt Ag Spending (2010 USD, Million)


Eastern Africa Average  Ethiopia  Tanzania

Data Source: ReSAKSS
Regional Comparison: West Africa


Data Source: ReSAKSS
Regional Comparison: West Africa


Data Source: ReSAKSS

Western Africa Average  |  Nigeria
Regional Comparison: Sub-Saharan Africa

15) Government Agriculture Spending in Sub-Saharan African Countries, 2003-12

Data Source: SPEED
Regional Comparison: Sub-Saharan Africa

16) Government Agriculture Spending as a Proportion of Total Government Spending in Sub-Saharan African Countries, 2003-12

Data Source: SPEED
Regional Comparison: South Asia

17) Government Agriculture Spending in South Asian Countries, 2003-2012

Data Source: SPEED
Regional Comparison: South Asia

18) Government Agriculture Spending as a Proportion of Total Government Spending in South Asian Countries, 2003-12

Data Source: SPEED
Sources & Stability of Funding

- Government vs Donor Spending Figure Numbers
  - 19: Tanzania
  - 20: Ethiopia

Addresses Question:
6. What are the trends in breakdown between government and donor/other sources of funding?
Government vs Donor Spending: Tanzania

19) Tanzania Agriculture Funding Sources, Donor & National Government, 2007-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Agriculture Spending (Constant 2011 USD, Million)</th>
<th>National Gov</th>
<th>Donor</th>
<th>Ratio of Donor to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>47</td>
<td>85</td>
<td>99</td>
<td>0%</td>
</tr>
<tr>
<td>2008</td>
<td>159</td>
<td>50</td>
<td>91</td>
<td>10%</td>
</tr>
<tr>
<td>2009</td>
<td>215</td>
<td>82</td>
<td>50</td>
<td>20%</td>
</tr>
<tr>
<td>2010</td>
<td>189</td>
<td>85</td>
<td>50</td>
<td>30%</td>
</tr>
<tr>
<td>2011</td>
<td>185</td>
<td>94</td>
<td>50</td>
<td>40%</td>
</tr>
<tr>
<td>2012</td>
<td>219</td>
<td>66</td>
<td>50</td>
<td>50%</td>
</tr>
<tr>
<td>2013</td>
<td>315</td>
<td>34</td>
<td>50</td>
<td>50%</td>
</tr>
</tbody>
</table>

Data Source: MAFAP
Government vs Donor Spending: Ethiopia

20) Ethiopia Agriculture Funding Sources, Donor & National Government, 2006-2013

Data Source: MAFAP

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY of WASHINGTON
Evans School Policy Analysis and Research (EPAR)
Budget Allocations

• Key Government Agricultural Funding Areas Figure Numbers
  • 21: Tanzania, 22: Ethiopia, 23: Nigeria, 24: India
• Key Donor Agricultural Funding Areas Figure Numbers
  • 25: Tanzania, 26: Ethiopia
• Key Government & Donor Agricultural Funding Areas Figure Numbers
  • 27: Tanzania, 28: Ethiopia

Addresses Questions:
  11. What are the key funding areas in public agriculture budgets, and what has been the allocation across these investment areas?
  12. For government funding, what have been the main areas of funding?
  14. For donor/other funding (e.g., loans, grant aid, etc), what have been the main expenditure areas for each?
Key Government Funding Areas: Tanzania

21) Tanzania Key Governmental Agricultural Funding Areas, 2007-2014

Data Source: MAFAP

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY OF WASHINGTON
Evans School Policy Analysis and Research (EPAR)
Key Government Funding Areas: Ethiopia

22) Ethiopia Key Government Agricultural Funding Areas, 2006-2013

Data Source: MAFAP

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY OF WASHINGTON
Evans School Policy Analysis and Research (EPAR)
Key Government Funding Areas: Nigeria

23) Nigeria Governmental Key Funding Areas, 2008-2010

Data Source: World Bank Nigeria Agricultural Public Expenditure Review
Key Government Funding Areas: India

24) India Central Government Agriculture Expenditure Areas, 2002-2015

Data Source: Plan Documents and Budget Documents of India
25) Tanzania Key Donor Agricultural Funding Areas, 2007-14

Data Source: MAFAP
Key Donor Funding Areas: Ethiopia

26) Ethiopia Key Donor Agricultural Funding Areas, 2006-2013

Data Source: MAFAP
Key Government & Donor Funding Areas: TZ

27) Tanzania Key Agricultural Funding Areas, Gov + Donor, 2007-2014

Data Source: MAFAP
Key Government & Donor Funding Areas: ET

28) Ethiopia Key Gov + Donor Agricultural Funding Areas, 2006-2013

% of Total Agricultural Expenditure

Data Source: MAFAP

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY of WASHINGTON
Evans School Policy Analysis and Research (EPAR)
EPAR uses an innovative student-faculty team model to provide rigorous, applied research and analysis to international development stakeholders. Established in 2008, the EPAR model has since been emulated by other UW schools and programs to further enrich the international development community and enhance student learning.

Please direct comments or questions about this research to Principal Investigators C. Leigh Anderson and Travis Reynolds at epar.evans.uw@gmail.com.