• Who thinks the goal of FISP is

  – A) Poverty reduction?
  – B) Increasing maize production?
  – C) Both?
  – D) Neither?
WHAT ARE THE FARM-LEVEL IMPACTS OF MALAWI’S FARM INPUT SUBSIDY PROGRAM?
A CRITICAL REVIEW

By

Rodney Lunduka, Jacob Ricker-Gilbert and Monica Fisher.

Capital Hotel, Malawi.
19th September, 2013.
Objectives of FISP in Malawi

- The official aim is to “increasing maize productivity”, “enhancing rural incomes”, and “promoting food security”.
The objective of this review

To provide a critical analysis of the current frontier of research evaluating Malawi’s Farm Input Subsidy Program (FISP).

- We make policy recommendations for improving the nation’s largest agricultural and social development program.

- We also identify key gaps in the current literature and provide suggested areas for future research.
Presentation layout

i. Background of Fertilizer subsidy in Malawi.

ii. Implementation and design issues of FISP.

iii. Farm level impacts of FISP.

iv. Conclusions and implications for research and policy.
Fertilizer subsidy timeline

1980 - 1985
Smallholder Credit Association (SACA) until 1995

1990
DRIP 1992-1993
1.3 mill. HH
Free maize seed & fert

1995
SIP 1994-1996
800k HH
Free maize seed & fert

2000
universal
15 kg fert
2 kg seed
1 kg legume seed

2005
TIP 2001-2005
1-1.5 mill. HH
10 kg fert
2 kg maize seed
1 kg legume seed

2006 - now
FISP
more than 1/2 population
100 kgs fert, 2-4Kg maize seed
The program background from 2005-2010

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<tbody>
<tr>
<td>Total fertilizer subsidized (MT)</td>
<td>131,388</td>
<td>179,000</td>
<td>216,553</td>
<td>202,278</td>
<td>160,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Fertilizer subsidy (%)</td>
<td>64</td>
<td>72</td>
<td>79</td>
<td>91</td>
<td>95</td>
<td>90</td>
</tr>
<tr>
<td>Total maize seed subsidized (MT)</td>
<td>n/a</td>
<td>4,524</td>
<td>5,541</td>
<td>5,365</td>
<td>8,652</td>
<td>8,000</td>
</tr>
<tr>
<td>Total legume seed subsidized (MT)</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>n/a</td>
<td>1,551</td>
<td>1,600</td>
</tr>
<tr>
<td>Redemption price (MK/50kg bag)</td>
<td>950</td>
<td>950</td>
<td>900</td>
<td>800</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Total program cost (MK million)</td>
<td>7,200</td>
<td>12,729</td>
<td>16,346</td>
<td>39,847</td>
<td>17,140</td>
<td>19,600</td>
</tr>
<tr>
<td>Total cost as % agricultural budget</td>
<td>n/a</td>
<td>61</td>
<td>61</td>
<td>74</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td>Total cost as % of national budget</td>
<td>5.6</td>
<td>8.4</td>
<td>8.9</td>
<td>16.2</td>
<td>8.2</td>
<td>6.5</td>
</tr>
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</table>
## Profitability of the FISP

<table>
<thead>
<tr>
<th>Year</th>
<th>(A) Market price of maize (US$/kg)</th>
<th>(B) Market price of fertilizer (US$/kg)</th>
<th>(C) Subsidized price of fertilizer (US$/kg)</th>
<th>(D) B/C ratio (market price fertilizer) Maize</th>
<th>(E) B/C ratio (subsidized fertilizer price)</th>
<th>(F) B/C ratio (subsidized fertilizer price) (Dorward et al., 2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/06</td>
<td>0.14</td>
<td>0.39</td>
<td>0.15</td>
<td><strong>0.98</strong></td>
<td>3.10</td>
<td>1.12</td>
</tr>
<tr>
<td>2006/07</td>
<td>0.15</td>
<td>0.49</td>
<td>0.13</td>
<td><strong>0.85</strong></td>
<td>3.81</td>
<td>1.06</td>
</tr>
<tr>
<td>2007/08</td>
<td>0.25</td>
<td>0.59</td>
<td>0.12</td>
<td><strong>1.14</strong></td>
<td>6.95</td>
<td>1.54</td>
</tr>
<tr>
<td>2008/09</td>
<td>0.28</td>
<td>1.25</td>
<td>0.07</td>
<td><strong>0.60</strong></td>
<td>13.39</td>
<td><strong>0.90</strong></td>
</tr>
</tbody>
</table>
FISP DESIGN AND IMPLEMENTATION ISSUES
Politicization of input subsidies
Targeting issues

• Poor household frequently excluded (Holden and Lunduka, 2012a).

• Female headed household excluded (Chibwana et al., 2012a).

• Male households with more physical assets targeted (Ricker-Gilbert et al., 2011).

• Egalitarian distribution of the subsidy reported in many villages.
Leakages

• Illegal markets for coupons and subsidized fertilizer (Dorward et al 2008).

• In 2007- one third of subsidies fertilizer leaked into secondary market (Holden and Lunduka, 2012).

• Leakage suspected from the administration process.
Issues with the timely delivery of FISP coupons

- Coupons distributed very late to farmers.
- Contracts for delivery of fertilizers done very late (end of November).
- Late delivery of fertilizer.
- Late application of fertilizer.
- Poor yields- Maize sensitive to timing of fertilizer application.
FARM-LEVEL IMPACTS OF THE FISP
Maize production and prices

- Impact on yield.
  - 1kg fert = 1.82kg maize and 3.16 if hh received in previous year. (Ricker-Gilbert, & Jayne 2011).
  - Receipt of complete package (Maize + fertilizer coupons = 447kg/ha and 249kg/ha if received on fertilizer coupons (Chibwana et al. 2012).
Demand for commercial fertilizer, seed, and organic manure

- Subsidies fertilizer is crowding out commercial fertilizer. 1kg sub fert reduce 0.22kg of commercial fert. (Ricker-Gilbert et al, 2011)

- In 2010 Sub total sub fert=160,000MT reduced commercial fertilizer by 32,000MT

- 1 kg subsidised maize seeds reduce maize seed purchase by 0.58kg (Mason and Ricker-Gilbert (forthcoming))

- Very small crowding out of organic manure (Holden and Lunduka, 2012b).
Household economic well-being

- Over all poverty incidence in Malawi fell from 52.4%-50.7% between 2003/04 and 2009/10. but ultra poor rose to 25%. (World Bank)

- Has FISP made substantive contribution towards poverty reduction?


- No significant contribution to asset wealth.

- Chirwa (2010) found full package recipient had US$11.19 per-capita expenditure or 8.2% increase.
CONCLUSIONS AND IMPLICATIONS FOR RESEARCH AND POLICY
Who should get the subsidy?

• Targeting the poor with subsidized input coupons, as FISP aims to do, may in fact preclude increasing maize productivity if poor farmers are unable to use modern seed and fertilizer effectively, because they lack complementary resources of labour, land, and managerial skills.
<table>
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<tr>
<th>TARGET</th>
<th>OBJECTIVES</th>
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<tr>
<td>The poor and vulnerable households</td>
<td>Increase productivity</td>
</tr>
<tr>
<td>Productive farmers</td>
<td>Input support</td>
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<td></td>
<td>Subsidy programmes</td>
</tr>
<tr>
<td></td>
<td>Output support</td>
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<td></td>
<td>Improve market access</td>
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</table>
Policy recommendations

- Increase private sector in sourcing, transportation and final retailing of fertilizer.

- Improve timely delivery of input (more and free private sector) and hence Timely application of fertilizer to maize.

- Consider trade-offs when determining distribution of fertilizer. Can targeting the poor increase productivity?
• Extra administrative cost could be better spent directly on subsidy inputs.
  – A general subsidy??

• Additional programs aimed at assisting the poor e.g. improving agricultural extension, safety nets e.g. cash transfer to the poor.
Research

• Why has there been an increase in maize price when production is said to have increased?

• The linkage between food and nutrition security and FISP.

• What other alternatives or complimentary strategies can be more productive and efficient than the FISP?

• What incentives can be given to the private sector to increase their participation?
THANK YOU!!