Strengthening Supply Chains to Meet the Needs of Women

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WE ASK...
So what would a good supply chain adapted to the needs of women look like??

- First, characterize supply chains for common bean
- Then, explore why supply chains that work efficiently might be different for women (than men)

- Specific limitations / specific positive effects

- Implications for bean seed buying
- Implications for bean selling
- Implications for new seed distribution
- Implications for innovation
So, what would a good supply chain adapted to the needs of women look like?

- Supply chains typically are geographical in scope
- Women face constraints on mobility:
  - imposed by caregiving
  - lack of reliable assets to get places (e.g., bikes)
  - social norms/religion
  - safety
Make it more challenging to buy/sell at a distance.
Networks and geographical scope – Mozambique site
(sample = women reporting own ag sharing in village)
Compare to Mozambique site – male respondents (sample = men reporting own ag sharing in village)
<table>
<thead>
<tr>
<th>Received from</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relatives</td>
<td>21.1</td>
<td>14.7</td>
</tr>
<tr>
<td>Relatives outside village</td>
<td>21.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Extension workers</td>
<td>35</td>
<td>27.3</td>
</tr>
<tr>
<td>Farmer organizations</td>
<td>0</td>
<td>3.0</td>
</tr>
<tr>
<td>Friends and neighbors in village</td>
<td>20</td>
<td>12.1</td>
</tr>
<tr>
<td>Friends outside village</td>
<td>5.3</td>
<td>0</td>
</tr>
<tr>
<td>Traders / in market</td>
<td>31.6</td>
<td>52.9</td>
</tr>
<tr>
<td>NGOs</td>
<td>0</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Large inter-site variation for NGO, Extension, farmer orgs, outside friends NGOs,
So, what would a good supply chain adapted to the needs of women look like?

Would have:

- PROXIMATE trustworthy suppliers of good seed (two-way flows)
- PROXIMATE trustworthy demanders of bean output
- Provide ability to buy and sell from homestead (to reduce transactions costs – time and money)
- Provide ability to access new improved seed *readily*
What else will be needed??

A few more considerations:

- Time constraints – sharing ‘work’ time with child care, elder care, cooking, cleaning, etc.
- Farm work time reported high among women – ALL months in many African regions

Thus, participation in supply chain could not be time intensive beyond work already undertaken ....

UNLESS coupled with development of basic infrastructure and services that save time (Chan & Barrientos 2010)
What else will be needed??

A few more considerations:

- Language constraint – farm women more likely than men not to speak dominant language(s)
- Native language often reported as different than village-dominant language
- Numeracy constraint
- Raises issue of education

So, what else will be needed??

A few more considerations at village level:

- Women as good bargainers with traders? With marketers in village?
- Leveling the playing field – Iowa State project in Uganda
  - information-based tools to ensure that the paid price is a good one
  - tools to ensure that weight is correct
I. Implications for bean seed purchasing

NEED ABILITY TO ACQUIRE GOOD SEED -

- From a trusted person – local dealers and brokers who women trust in their networks (SOCIAL CONTRACT)

- Access to seed in appropriate batch sizes delivered to farmstead or readily available (when needed) in frequently-accessed market

- Access to seed that match taste preferences of household (particularly children), and other stated and revealed preferences of women and children

- Access to information on seed – in forms that overcome language/illiteracy/numeracy barrier
Will involve linking village households up broadly -- internally and externally

- Develop cell/ttech tools designed to meet needs of women now in the villages
- Ensure testing and broad distribution of tools

Source: R.A.Smith, CIDD, Penn State
II. Any implications for new bean introduction??
3 questions worth asking........

1. Do women believe that they are able to engage in agricultural enterprise? Willing to adopt / try??
2. Do women perceive that community networks will provide them support; problem solve?
3. Do women farmers perceive that local leadership will provide them support; problem solve?

Literature indicates that 1, 2, and 3 interact, reinforcing each other.
## Perceptions of self efficacy, by gender – Mozambique Region 1

<table>
<thead>
<tr>
<th>% agree / strongly agree</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Able to ask Extension to help me farm better</em></td>
<td>95</td>
<td>77.1</td>
</tr>
<tr>
<td><em>Able to be part of seed fairs, trials and other events</em></td>
<td>90</td>
<td>71.4</td>
</tr>
<tr>
<td><em>Can use new seeds if they are given to me</em></td>
<td>100</td>
<td>97.2</td>
</tr>
<tr>
<td><em>Can market my household crops to others locally</em></td>
<td>95</td>
<td>88.6</td>
</tr>
<tr>
<td><em>Can market my household crops to far away markets</em></td>
<td>94.8</td>
<td>48.6</td>
</tr>
<tr>
<td><em>Can sell crops to traders myself</em></td>
<td>100</td>
<td>82.9</td>
</tr>
</tbody>
</table>
Perceptions of village community network – Mozambique Region 1

<table>
<thead>
<tr>
<th>% disagree or strongly disagree</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>People in this community can rely on each other to get access to new things that can help me</td>
<td>30</td>
<td>31.5</td>
</tr>
<tr>
<td>People can take action to help me avoid bad situations</td>
<td>25</td>
<td>62.9</td>
</tr>
<tr>
<td>People in this community can show me how to use new things well</td>
<td>20</td>
<td>34.1</td>
</tr>
<tr>
<td>People in this community can get help from Extension to help them farm better</td>
<td>14.3</td>
<td>20.5</td>
</tr>
<tr>
<td>People are able to work together to solve probs.</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>In this community we are able to mobilize resources to change the problems affecting us</td>
<td>10.5</td>
<td>51.5</td>
</tr>
<tr>
<td>People are able to join in and do their share of the work to help people in need</td>
<td>10</td>
<td>45.7</td>
</tr>
<tr>
<td>% disagree or strongly disagree</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Community leaders can help me get access to new things that help me</td>
<td>10</td>
<td>31.5</td>
</tr>
<tr>
<td>Community’s leaders are able to help me avoid bad situations</td>
<td>10</td>
<td>57.1</td>
</tr>
<tr>
<td>Community leaders can show me how to use new things well</td>
<td>10</td>
<td>51.4</td>
</tr>
<tr>
<td>Community leaders can mobilize resources to change a bad situation affecting this community</td>
<td>5</td>
<td>57.2</td>
</tr>
<tr>
<td>Community leaders can help us get our farm work done if affected by malaria</td>
<td>20</td>
<td>62.9</td>
</tr>
<tr>
<td>Community leaders can ensure that everyone benefits equally from activities</td>
<td>10</td>
<td>62.8</td>
</tr>
</tbody>
</table>
Implications for new bean development & introduction

- New seed traits -- matched to preferences and food security of women and children? Key given reliance on beans for household nutritional status.

- Use of first wave infusion (FWI) – i.e., broad distribution of small packets of new seed – will include more women at start.

- Reliance on local leadership potentially problematic for assuring involvement of women. Demonstration plots, FFS, etc. may not involve community to optimal extent.

- Development of mobile phone techs has potential to allow access of information from homestead; reduce barriers of literacy; can allow two-way interaction, etc. Hurdles now high.
III. What this means for bean selling

NEED ABILITY TO SELL BEAN OUTPUT -

- At a price that is competitive (and likely arrived at near the homestead or locally)
- Sold using tools to assure accurate weight
- Such that she can control timing – balancing nutritional needs of children vs. return in market
- Through channels that build on strength in numbers – e.g., cooperatives broadly inclusive of men and women in decision-making
- Using mobile phones (or similar devices) that allow contact with multiple buyers from homestead
Thank you.

Questions?
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