SoL3 Mid-Term Survey

November 2013
Content

• Methodology
• Main findings: adoption, perception of productivity, food-shortage, familiarity, groups and agricultural extension
• Recommendations
METHODOLOGY
Main methodology

- **672** respondents (5% margin of error)
- **13** districts, **55** sucos (14%)
- Questionnaire survey and **6** focus groups

**Data quality control:**
- Variety check cards
- GPS locations
- Measuring areas with GPS
- Weighing local measurement units
- 30% of farmers were revisited

- Double data entry and analysis on SPSS
Variety check cards
Example: Sele

- Batar musan bo’ot no koor kinur
- Batar fulin bo’ot
- Ai-horis nia aas iha tempu koileta 2 metru (200cm)
- Presiza tempu 115-120 loron para koileta
Variety check cards
Example: Hohrae 3

- Koor kulit hudi fehuk: mean
- Koor isin laran hudi fehuk: sorin balun laranza
- Koor tahan nurak: matak ho roxo
- Fehuk tahan hanesan koraun
- Prehiza mais ou menus fulan 4 para bele kolleta
Taking GPS points and measuring plots

Measuring rice field under Nakroma in Aileu

Training
Feedback on Measuring Plot Sizes with Tablet

• Used android application
  *Distance and area measurement*

• Point 2

• Point 3
  ✓ Sub-point 1
  ✓ Sub-point 2
Interviews locations
Weighing maize grains from a cob

Weighing “Bote” filled with padi
Main Findings
Adoption rate

Baseline survey (2011): 17.9% rural households
Mid-term Survey (2013): 24.6% rural households

Target at End of Program (July 2016):
50% of crop farmers = 65,000 rural households
Discussion on adoption rate

• Statistically no difference between adoption rate among male and female headed households
• Margin of error: 23.4% to 25.8%
• Difficulties encountered with the identification of varieties:
  - *Farmers do not recall the varieties' names*
  - Varieties’ names may be misleading
  - Loss of genetic purity for maize
  - Similarities with local varieties
  - Variations
Example of some difficulties in identification of varieties
Adoption per region

**East**: mainly Nakroma (Lautem, Baucau and Viqueque) and Sele (Manatuto, Baucau and Viqueque)

<table>
<thead>
<tr>
<th>Region</th>
<th>Baseline</th>
<th>MTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>Center</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>West</td>
<td>12%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Adoption by length of involvement in the MAF/SoL program

<table>
<thead>
<tr>
<th>Districts</th>
<th>Baseline</th>
<th>MTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;5 years</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
<td>26%</td>
</tr>
</tbody>
</table>

- > 5 years: 36% adoption (+6%)
- Other districts: 20% adoption (+9%)
Adoption per variety

<table>
<thead>
<tr>
<th>Crop/Variety</th>
<th>Baseline survey</th>
<th>MTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sele</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Noi-Mutin</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Nakroma</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Utamua</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Hohrae</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Ai-luka</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>
“Single” and “Multiple” adopters

- Sele/Nakroma: 17%
- Sele/Utamua: 5%

- 1 variety: 76%
- 2 varieties: 17%
- 3 varieties: 5%
- 4 varieties: 1%
- 6 varieties: 1%
## Details of adopters

<table>
<thead>
<tr>
<th>Location</th>
<th>Main sources of seeds/cuttings</th>
<th>Average area grown / adopter</th>
<th>Proportion of crop area grown / adopter</th>
<th>Average harvest / adopter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sele</td>
<td>52% government, 15% NGOs</td>
<td>0.5 ha</td>
<td>85%</td>
<td>382 kg</td>
</tr>
<tr>
<td>Noi-Mutin</td>
<td>44% government, 14% NGOs</td>
<td>0.8 ha</td>
<td>95%</td>
<td>328 kg</td>
</tr>
<tr>
<td>Nakroma</td>
<td>61% government, 18% NGOs</td>
<td>0.8 ha</td>
<td>43%</td>
<td>779 kg</td>
</tr>
<tr>
<td>Utamua</td>
<td>41% government, 32% own seeds</td>
<td>0.3 ha</td>
<td>94%</td>
<td>29 kg</td>
</tr>
<tr>
<td>Hohrae</td>
<td>60% government, 13% relatives</td>
<td>0.6 ha</td>
<td>86%</td>
<td>180 kg</td>
</tr>
<tr>
<td>Ai-luka</td>
<td>59% government, 22% relatives</td>
<td>0.3 ha</td>
<td>86%</td>
<td>266 Kg</td>
</tr>
</tbody>
</table>
Factors influencing adoption

• Respondent knows of a community seed production group in his/her village or is a member of a seed production group

• Respondent knows the Suco Extension Worker (SEO) or received seeds from an SEO
Perception of increased productivity

88%

- Perceive increase in productivity
- Perceive same productivity
- Perceive decrease in productivity

Target at End of Program:
90% of adopters report increased yields

57% yield increase in average: Hohrae (72) > Sele (63) > Noi-Mutin (58) = Ai-Luka (58) > Nakroma (44) > Utamua (36)
Plans for future

• More than 90% want to plant the MAF/SoL variety again:
  - 37% plan to increase the area grown (Noi-Mutin and Hohrae)
  - 59% plan to grow a similar area

• More than 50% will also plant a local variety (taste and post-harvest losses):
  - 62% of Hohrae growers want to plant a larger area of Hohrae than of the local variety
  - Majority of farmers growing other improved varieties want to grow as much area of local than improved varieties.
Food shortage

In questionnaire:

1. Did you experience one or more “hungry season” during the last 12 months? [Y/N]

2. If yes, which months?

3. In the last 12 months, in which months was food available from the crops grown by the household?

4. What did you eat when no self-grown food was available?

5. During the last 12 months, in which months did you buy rice for food? And how much?

6. [For HHs that grow rice]. Why buy rice if you grow it?
Food shortage

84% perceive their family experience a “hungry season”: 3.9 months in average
62% experience one month or more of food shortage: **2.7 months in average**

**Target EoP:** 33% of crop producing farmers experience decrease in food shortage.

**% among all farmers**

- 0 months: 38%
- 1-4 months: 37%
- 5-6 months: 19%
- 7-10 months: 6%
Food shortage

Comparison Food Shortage vs. Hungry Season

% among all respondents

Farmers experiencing food shortage
Farmers declaring experiencing a “hungry season”
Food shortage

Coping strategies:

- Purchase rice: 94%
- Purchase maize: 47%
- Consumption of wild foods: 45%
- Consume other self-grown crops: 68%
- Purchase other food: 46%

From 2.7 months down to 0.2 months when deducting months when rice is purchased
Familiarity with MAF/SoL varieties

- 57% familiar with one or more MAF/SoL varieties (11% familiar with the program during the baseline)
- Sele > Nakroma > Noi-Mutin > Utamua > Ai-Luka > Hohrae
  - 27% 23% 16% 14% 11% 9%
- Source of information: MAF (+50%), Media > NGO > relatives
- Why not planting: More than 90% because no access to seeds/cuttings.
- More than 80% are ready to pay to get improved variety seeds
## Participation in groups

<table>
<thead>
<tr>
<th>Type of group</th>
<th>% among total survey sample</th>
<th>% of corresponding group, by gender of household members included in the group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Farmer groups</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>Seed production group</td>
<td>14%</td>
<td>37%</td>
</tr>
<tr>
<td>Adat</td>
<td>69%</td>
<td>18%</td>
</tr>
<tr>
<td>Religious group</td>
<td>60%</td>
<td>11%</td>
</tr>
<tr>
<td>Youth group</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>Savings &amp; loans groups</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Participation in groups

- 79% of farmers who are members of a seed production group are familiar with at least one MAF/SoL variety
- 25% of respondents know about the existence of a seed production group in their village:
  - 21% of them said the group sold seeds: Sele, Nakroma, Noi Mutin & Utamua.
  - 82% of them are familiar with at least 1 MAF/SoL variety

Establishing a broad network of CSPGs across the country will help familiarizing farmers with MAF/SoL varieties, which is a first step to adoption.
Agricultural extension

- 61% of respondents know their Suco Extension Officer (43% in the baseline):
  - 28% of farmers who know the SEO never talked to him
  - 17% of farmers who know the SEO talk to him every day
  - 67% of farmers who know the SEO are men

- Rating of SEOs by respondents
Agricultural extension

Type of services received by respondents in the past six months:

31% of respondents received seeds in the past six months.
RECOMMENDATIONS
• **Increase access to MAF/SoL varieties:** close monitoring of CSPGs and seed revolving scheme, organize field days in CSPGs, increase efforts for Ai-Luka and Hohrae distribution, target isolated/vulnerable households

• **Strengthening the work of SEOs:** to monitor CSPGs, increase farmer’s awareness/knowledge (technical practices, proper storage, names of varieties), work with women farmers

• **Communication:** label cuttings during distribution, involve radio/TV during events such as community theatre, creating a brand around varieties' names, more extension booklets.
The Report

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Waiting from delivery from the printer.

Obrigada