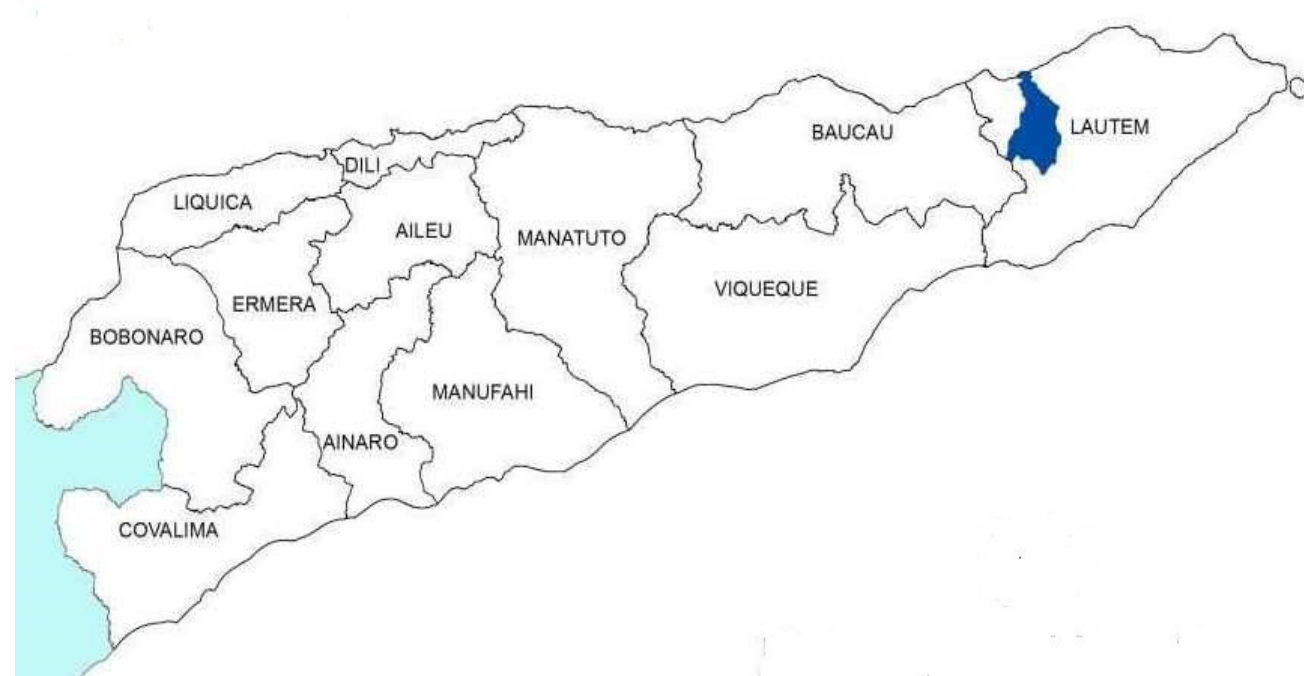




Seeds of Life
Fini ba Moris

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Aid



Maize storage in drums in the Raumoco watershed area

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Context

- Maize is grown by 88 % of all crop growing households in the country (NSD 2011).
- Losses of maize stored in traditional ways (cobs in bundles above the kitchen fire; in traditional grain storage houses; suspended from trees) can be more than 30% (TLMSP 2011). Most of the damage is caused by weevils.
- If maize is stored in air-tight containers – like a properly closed drum – there are no losses.
- The MAF-IFAD Timor-Leste Maize Storage Project offered maize farmers 200 l drums at a cost of \$10 per drum. A farmer could buy up to a maximum of four drums.
- The Ministry of Agriculture, through the Seeds of Life program, provided a 1,5 liter water bottle of improved maize seed and extension booklet on good practices for growing and storing maize with every drum.
- Between June and September 2014, 1,800 drums were distributed to 819 households in 9 sucos in the Raumoco watershed of Lautem municipality.



Aim of survey

- To determine whether the farmers planted the improved maize seed of Sele or Noi Mutin which was distributed with the drums?
- And whether the farmers who have bought drums store their maize harvest in the drums?



Survey method

- Interviews with 148 farmers in six sucos (18% of the farmers who had bought drums). These farmers had in total 349 drums between them (19% of the drums distributed). The interviews were conducted in Sep-Oct 2015, a year after the drums and the maize were distributed.
- The survey was conducted electronically, using tablets.

Advantages:

- Data from the survey was immediately available at the end of the survey.
- Less risk of mistakes as data does not have to be transferred from paper to electronic format
- **Short** questionnaire (focusing only on the drums): 77 farmers.
- **Long** questionnaire (same as short + questions on use of drum, planting of maize): 71 farmers.



Results

Use of improved seeds

- 92% of the farmers who had bought drums had planted maize in the last season. Of these farmers, 95% had received improved maize with their drums.
- 97% of the farmers who had received improved maize had planted all of it.
- One farmer had only used part of the improved seed, because there was too much seed for his plot. Half of all farmers planted only improved maize; the other half also planted a local maize variety.

Financial benefit to farmers

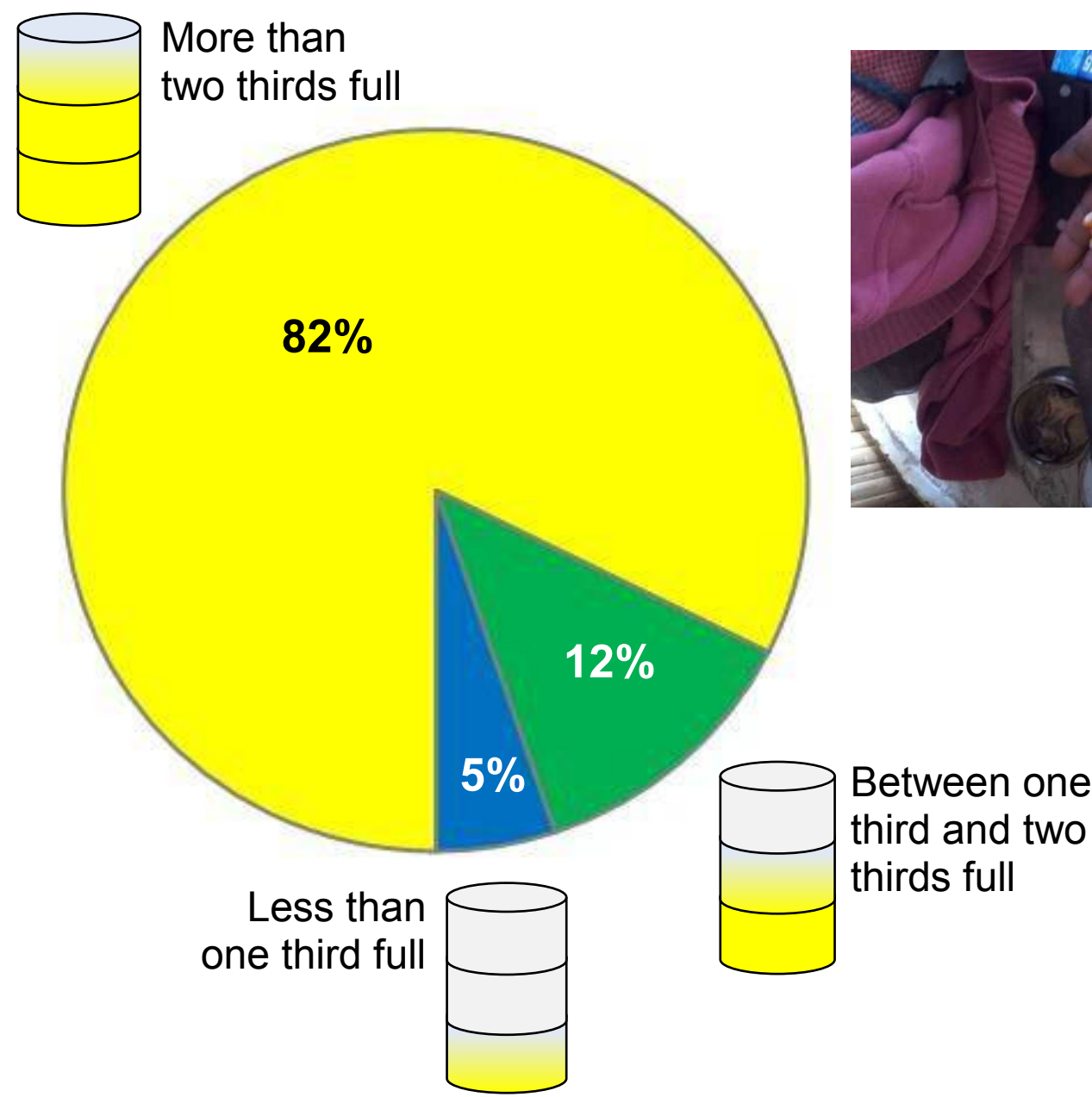
Drums are sold to farmers at \$ 10/drum. One drum can store 180 kg maize.

In the survey there were 250 drums that were 84% full.

Total maize stored in the drums	► 250 drums x 180 kg/drum x 84% full = 37,800 kg of stored maize.
Amount of maize saved by the storage in drums	► 30% of 37,800 kg = 11,340 kg of maize saved.
Value of the saved maize (1 kg maize = \$ 0.75)	► 11,340 kg x \$ 0.75/kg = \$8,505.00
Value of the saved maize per drum	► \$8,505.00/250 drums = \$34.02/drum

Maize stored in drums

Of the 349 drums in the survey, 250 (72%) had maize in them. These 250 drums were on average 84% full. Another 18 drums (5%) had stored maize before, but were empty during the survey.



Conclusion

- A farmer pays \$10.00 for a drum, and in the first year already saves maize to the value of \$34.00.
- Every year thereafter, the savings are three times what the farmer paid for the drum. With some protection against rust, the drums could be used for 20 years.



References

NSD (National Statistics Directorate) 2011. Population and housing census of Timor-Leste, 2010, Volume 4: Suco report, National Statistics Directorate and United Nations Population Fund, Dili.

TLMSP (Timor-Leste Maize Storage Project) 2011. Working Paper 3: Technologies for reducing maize storage losses

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