INTSORMIL Supported Sorghum Technology Transfer in Uganda

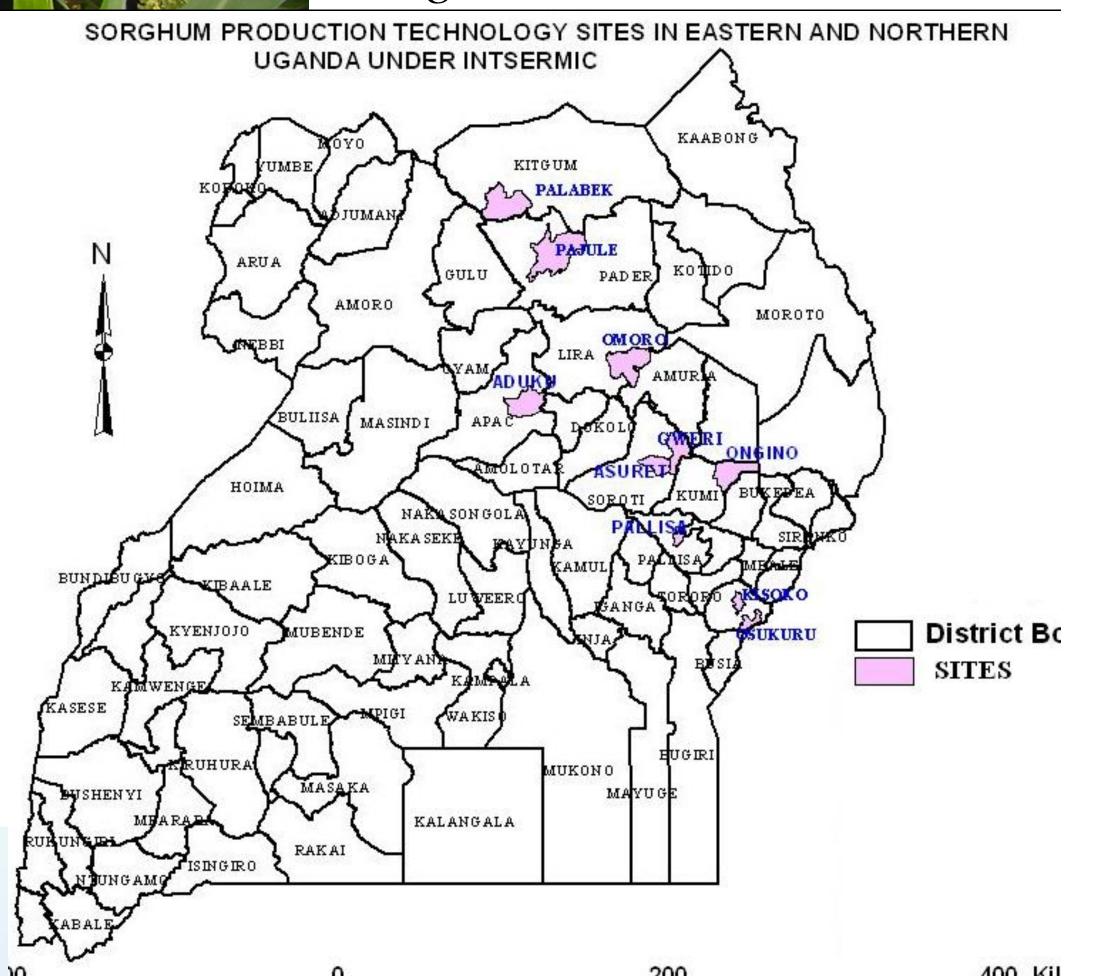
Fig. 1. Dr. Kaizzi (middle) and colleagues in eastern Uganda. Angela (left) is an INTSORMIL-supported MSc student.



Led by Dr. Kayuki Kaizzi

- •17 sub-counties in 6 districts (Fig. 2)
- •Initiated in 2010
- •215 demonstrations with yield data
- •~1600 farmers attended field days
- •Leaflets/posters in 4 languages on two topics (Luganda, Langi, Teso, Japadhola)
- Radio announcements

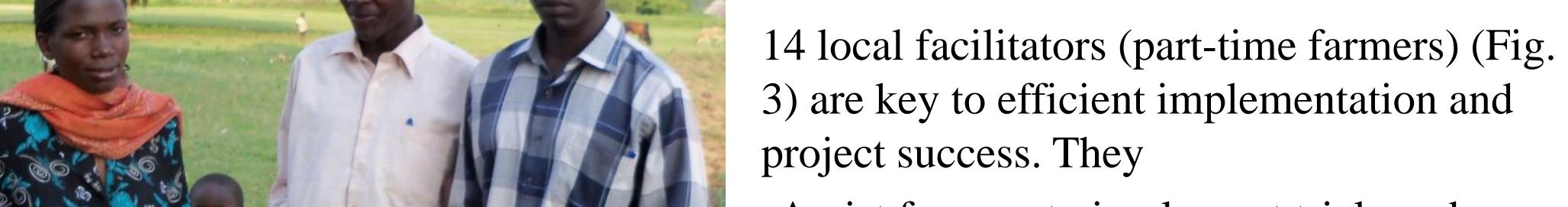
Fig. 2. TOT sites in 2011.



TOT components include:

- •Information transfer
- Enabling fertilizer supply
- Support to variety release
- Seed increase and dissemination
- •Studies of: baseline situation, marketing, and adoption

Fig. 3. Local facilitators



- •Assist farmers to implement trials and demonstrations
- Organize field days and other meetings
- Advise farmers

AKOT A WOMEN
FARMER FIELD SCHOOL
Participatory Knowledge & Development on
Agricultural Livelihoods
Agricultural Livelihoods
ADUKU S/C, APAC DIST. 30 m

The project builds on other successes such as by working with farmer field school groups (left).

Information dissemination

Emphasizes soil fertility management, water production, and striga-resistant varieties

- •Enhanced water productivity is addressed through reduced tillage and improved soil fertility; reduced tillage increased yield by 37% and greatly increased profitability in farmer managed trials.
- •Options for improved soil fertility management include application of moderate rates of N and P, mucuna as a green manure cover crop that also suppresses weeds (Fig. 4), and efficient use of manure (Fig. 5).

Fig. 5. Results from 215 on-farm sorghum demonstrations.

| | 2010A | 2010B |
|--|-------|--------|
| No. of demos | 118 | 97 |
| Control | 0.98a | 0.90a |
| 2.5 t/ha FYM | 1.95b | 1.37b |
| $(15 \text{ kg N} + 7.5 \text{ kg P} + 2.5 \text{ t FYM}) \text{ ha}^{-1}$ | 2.58c | 1.79cd |
| $(30 \text{ kg N} + 15 \text{ kg P}) \text{ ha}^{-1}$ | 2.69c | 1.91de |
| $(30 \text{ kg N} + 15 \text{ kg P} + 30 \text{ kg K}) \text{ ha}^{-1}$ | 3.56d | 2.12e |
| Mucuna | 2.05b | 1.69c |

Fig. 7. three varieties submitted for release.







The project supported multilocation and on-farm varieties trials

- •3 striga resistant or tolerant varieties submitted for release (Fig. 7): SRN 39; M91057; and IS 25403.
- •The two white grain varieties were tested by Nile Breweries and verified for commercial lager beer brewing quality.
- •Seed increase in 2010 included: 400 kg basic and 1700 kg foundation seed. Another 400 kg was obtained from farmer multiplication for dissemination.
- •NaSECO Seed Company plans to market SRN 39 and IS 25403.



Fig. 4. Mucuna: an easily managed cover crop for weed suppression, reduced tillage, and soil fertility improvement.

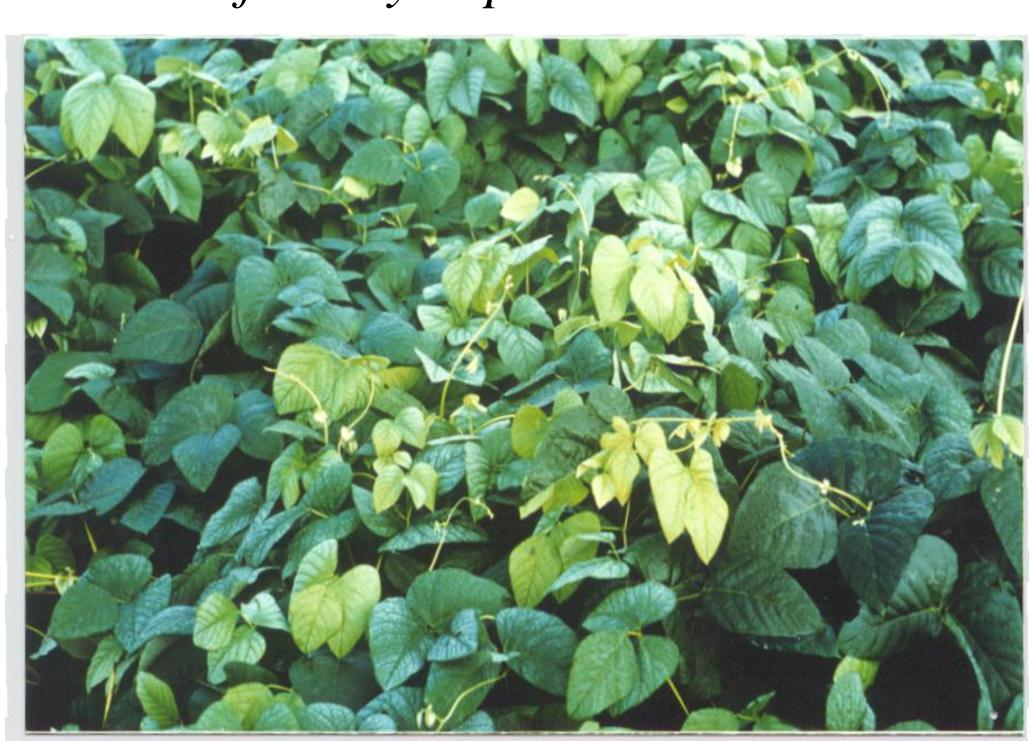


Fig. 6. Farmer training on soil fertility management.



Fig. 8. Women and childre are beneficiaries of TOT project.

