

SAFE-World Project/Initiative Summary

Country: Tanzania

Project/Initiative Title: Small Scale Dairy Development Project (SSDDP) - Iringa and Mbeya Region.

Nos. farmers: 2300

Hectares: 3000

Agro-Ecological Zone: V

Improvement types

| | | | | | | | | |
|----|---|----|---|----|----|----|---|---|
| 1x | 2 | 3x | 4 | 5x | 6x | 7x | 8 | 9 |
|----|---|----|---|----|----|----|---|---|

Success and Limits to spread

| | |
|---------------|--------|
| Success | Limits |
| 1b, 3e, 5b, 7 | 3a, 5a |

A. Key Impacts

A1 - Productivity

| | Before/Without | After/With | % change |
|--------|----------------|----------------|----------|
| Cattle | 700 kg/animal | 1800 kg/animal | 157 |

A2 - Impacts on natural capital

- ?? As farmers stop grazing animals and move to stall feeding this has positive impact on environment (less soil erosion, improved use of manure). As the villages are scattered and average number is 8-10 farmers per village, no visible impact can be seen.
- ?? Few farmers plant fodder crops on contour lines.
- ?? Because of improved manure collection, less fertilizer is used in dairy farms. No exact figures available at this time.
- ?? Increasing number of farmers plant fodder trees (Serbania, heuceana, Calliandra).

A3 - Impacts on local community (social capital)

- ?? Zero-grazing is labour intensive - (i) farmers productive hours increase (ii) employment opportunities for labourers increase.
- ?? Increased farmer income - there is evidence that proceeds of sales of dairy were used to make other agricultural investments (buy land).
- ?? Few managed to purchase additional dairy cow with own means.

A4 - Impacts on households and individuals (human capital)

- ?? Fresh milk is now easily available for the rural population. In fact some areas have surplus milk. It has not yet been assessed whether this is due to poor purchasing power or the market for 'milkdrinkers' is saturated.
- ?? In some areas where this occurred farmers embarked on organizing the milk market through grouping and are now selling milk at milk shops in urban areas.
- ?? Highly appreciated by farmers is the regular income they get from milk sales. This allows them to enjoy a more stable financial position throughout the year.
- ?? We have to admit that the poorest category has benefited least from the program, as

dairy is capital intensive. However since the introduction of Heifer in Trust Scheme (HIT) whereby the farmer receives a Heifer on loan basis, which he repays with handing over the first female off-spring, we are better able to assist the poorer category farmers.

A5 – Key changes in farm / regional system

?? Since 1987 SSDDP has diffused graded dairy cows to small holders in the Southern Highland. In total 1700 FI (Boran x Ayrshire) Heifers. Estimated contribution of 3.5 million kg milk 1 year by subsequent herd. Milk production per cow increased from 700 kg/cow/year (Tz. Shorthorn Zebu) to 1800 kg/cow/year (FI).

?? Presently 75% of project farmers (= 1500 farmers) are practicing Zero-grazing. The impact goes beyond projects farmers however. Only we do not have figures on adoption of the technology outside project farmer.

ZERO-GRAZING.

?? External: increase of chemical fertilizer prices makes zero-grazing more attractive - cheap source of fertilizer.

?? Methodological: Heifer In Trust Scheme. Credit in kind is a very attractive option or small scale farmers who have no access to credit from banks.

?? Institutional: practical approach. Try out things together with farmers and learn from it. as an institution (project) you have to adjust continuously according t emerging needs. (E.g. First it was tried to diffuse graded Bulls. However it takes 5 years before you observe increased production. This proved not to be a good activity. Then the heifer approach was developed. Later on complete integration into arming system was focussed on).

?? Dairy provides regular, additional income- Economic feasibility improves adoption rate significantly!

?? Tanzania has T & V. this is the framework we have to work in. this is at the same time a shortcoming. Extension staff are very much 'message oriented' and not 'listening' enough. However they facilitate also farmer to farmer learning, which proves often to be the best option.

B. Types of Sustainable Agriculture Improvements

Type 1: Better use of available renewable natural capital

Type 2: Intensification of single sub-component of farm system

Type 3: Diversify by adding new productive natural capital and regenerative components

Type 4: Better use of non-renewable inputs and technologies

Type 5: Social and participatory processes leading to group action for making better use of natural capital

Type 6: Human capital building through training-learning programmes

Type 7: Access to Finance

Type 8: Add value by processing to reduce losses and increase returns

Type 9: Add value by direct or organised marketing of produce to consumers

| | Yes/No | Narrative |
|--------|--------|--------------------------------|
| Type 1 | x | Zero grazing, contour cropping |
| Type 2 | | |
| Type 3 | x | |
| Type 4 | | |

| | | |
|--------|---|---------------------------|
| Type 5 | x | Farmer to farmer learning |
| Type 6 | x | 65 farmer groups formed |
| Type 7 | x | Heifer in trust scheme |
| Type 8 | | |
| Type 9 | | |

C. Key Lessons: Success, Spread and Constraints

C2 – Aspects of local/national context contributing to success

- ?? The project has embarked on a long term commitment (20 years), which is a prerequisite for livestock development. There are quite a few initiatives in Tanzania with similar set-ups. It is important (and we do) to maintain contacts with other projects and farmers groups
- ?? Structural adjustments are not only negative. In Tanzania this reduces the role of government and manmade fertilizers to appear on the market at real cost price. Hence room for private initiative and increased interest of farmers for manure.

C3 – Limitations preventing spread

- ?? Poor infrastructure, especially roads.
- ?? Political issues force projects to operate in remote areas. For economy of scale, concentrated production areas would be more feasible (close to urban areas!)
- ?? It takes time for government workers to shift from traditional role (centralized ruling) to the new role of attending to local needs.
- ?? Market liberalization will make it difficult to compete for small holders with specialized countries. However, the present local market offers enough potential. In future this may become problematic.
- ?? T & V as extension methodology is too rigid.
- ?? Sustainable, participatory agriculture development needs a lot of human resources (qualified, regular trained staff). The privatization trend shows less staff available.

C4 – Policy issues

- ?? It takes time for government workers to shift from traditional role (centralized ruling) to the new role of attending to local needs.

D. Contact Point for Project/Initiative

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| Willem van Weperen SSDDP PO Box 252 Iringa Tanzania |
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E. Project Narrative

The Small Scale Dairy Development Project started its activities in Tanzania in 1979. It was initiated within the framework of the bilateral development co-operation between the governments of Tanzania and Switzerland. Its initial objective was to improve the nutritional status of the rural population of the Southern Highlands. Later on income

generation was added.

In Iringa Region, around 1000 farmers who were trained under the project, are keeping 1200 dairy animals. In Mbeya Region 1100 farmers keep 1300 dairy animals. This has increased the milk production in both Regions significantly (estimated yearly milk production of project animals 3.5 million kg). Annual production stands at 1800 kg/cow/day (305 days) and increases with 5% per year. Calving interval is with 497 days, still far away from the ideal of 365