

Irina Solovyeva¹, Lydia Waswa², Irmgard Jordan¹, Philipp Löw¹, Ernst-August Nuppenau³

¹Justus Liebig University Giessen, Centre for International Development and Environmental Research (ZEU), Germany; ²Egerton University, Department of Human Nutrition, Kenya; ³Justus Liebig University Giessen, Institute of Agricultural Policy and Market Research, Germany

Background

HealthyLAND project was implemented in Uganda, Kenya and Malawi. The aim was to provide evidence of a positive relationship between agricultural and dietary diversity as well as nutrition security. Nutrition education and agricultural intervention were implemented, targeted at smallholder farmers in Teso South, Kenya:

	Nutrition Education (NE)	Agricultural Intervention (AG)
Content	Provision of better knowledge on dietary diversity at the household level.	Promotion of dietary diversity through training on appropriate kitchen garden practices: introducing vegetables and legumes as buffer strips.
Delivered by	Community Health Volunteers (CHVs)	CHVs trained by agriculture experts and Agricultural Extension Officers (AEOs)
Design	12 Information sessions over 4 months: <ul style="list-style-type: none"> > 8 Face-to-face home visits and > 4 Group demonstration sessions 	Over 4 months: <ul style="list-style-type: none"> > Group demonstration sessions using demonstration areas (CHVs) > Monitoring sessions (AEOs)
Eligibility criteria	Random selection	Participation in NE and availability of a kitchen garden

Objectives and Methods

Focus Group Discussions and household surveys were used to evaluate the outcomes of the agricultural intervention related specifically to buffer strips adoption.

The main focal points were:

- > Was the proposed measure (buffer strips) implemented?
- > What are the factors affecting the willingness of farmers to adopt the measure?
- > Were the farmers (correctly) informed about the benefits of the promoted practice?



Fig. 1: Teso South, Kenya: Legume (left); kitchen garden (center); Focus Group Discussion (right).

Results

The household survey (n=352) showed that:

- > 257 households had a kitchen garden; 123 households participated in both interventions (AGNE); 109 received NE only, while 120 received no intervention.
- > Only 33% (86 of 257) of smallholders who had a kitchen garden reported to feel informed about the benefits of buffer strips. Out of these, 53 households participated in AGNE.
- > Participants of AGNE interventions as well as non-participants were informed through various sources (Fig. 2).
- > Farmers still perceived the protection from animals as the main benefit and were less aware of the promoted long-term benefit of improving soil fertility (Fig. 3).

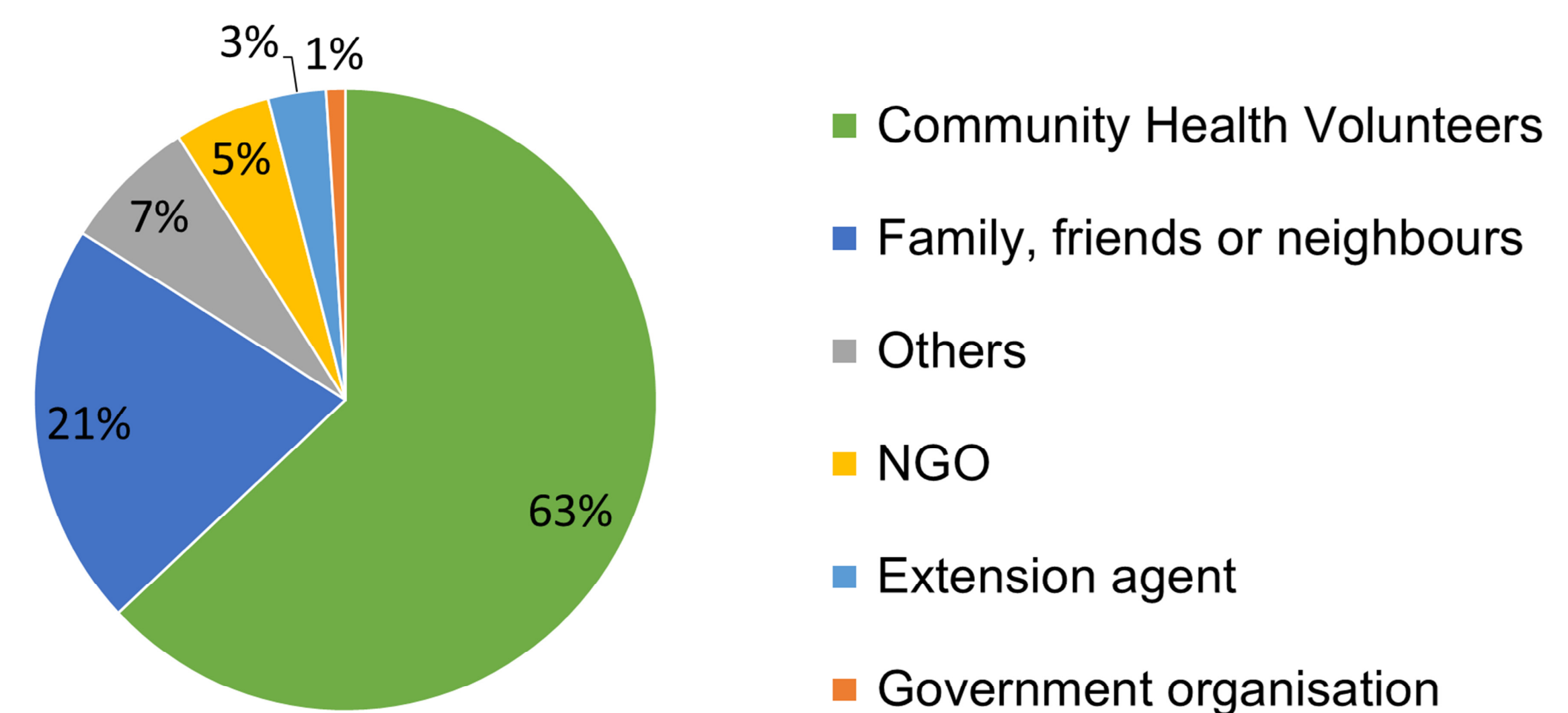


Fig. 2: Source of information on buffer strips (n=86).

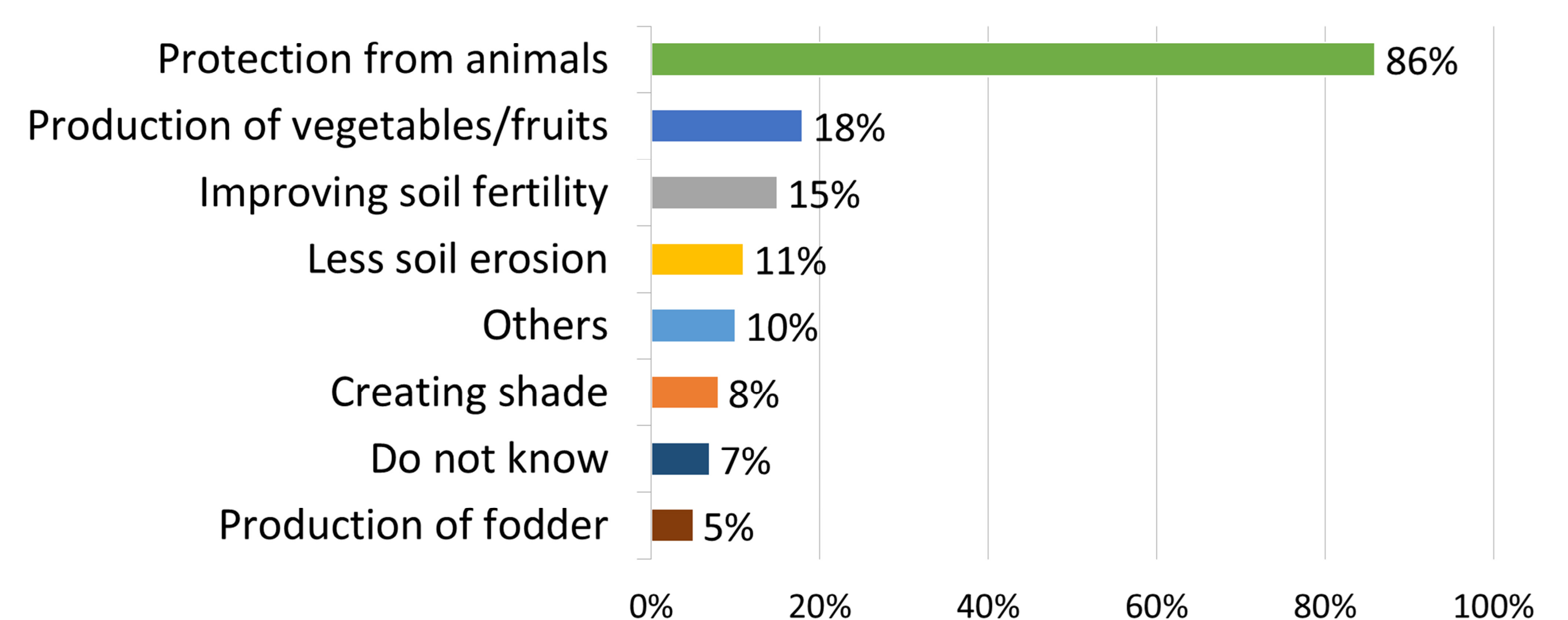


Fig. 3: Benefits of buffer strips as perceived by the farmers who have ever heard about buffer strips (n=142).

Discussion and Implications for the Future

Farmers were more likely to adopt the innovation if they felt well-informed about the context and content. Knowledge transfer could also have been hindered by the lack of agricultural experience and/or insufficient training of the CHVs.

- > Appropriately designed **packaging of the information** is important to ensure the adaptation at end user level.
- > The information should be **easy to understand** (for both farmers *and* trainers), complete, context specific and focussed to achieve the attended purpose.
- > The way how the information is transferred is crucial: A **participatory approach** should be followed, involving farmers more in the deliberate implementation of the innovation. Demonstration fields can improve the information uptake.
- > Successful dissemination of information is highly dependent on the **qualification and experience** of the one who conveys the information to the farmers.
- > **One intervention alone is insufficient** to shift the farmer's focus away from traditionally pursued short-term benefits towards sustainable, long-term solutions.

Contact Address:

Irina Solovyeva, Justus Liebig University Giessen, Center for International Development and Environmental Research, Senckenbergstr. 3, 35390 Giessen, Germany. Email: Irina.Solovyeva@agr.uni-giessen.de