

# Communication Channels for Accessing Horticultural Knowledge among Smallholder Farmers in Kilifi County, Kenya.

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## BACKGROUND

Access to timely knowledge on horticultural practices is limited among smallholder farmers growing fruits and vegetables in Kilifi County, Kenya. This results in low horticultural productivity. The AfriNutriForest project promotes intensified, agro-ecological fruit-vegetable agroforestry systems using participatory, innovative methods such as Farmer Fields Schools (FFS). However, preferred communication channels of the participants were not yet identified.

**Objective:** To document the preferred communication channels for accessing horticultural knowledge of smallholder farmers in Kilifi County, Kenya.

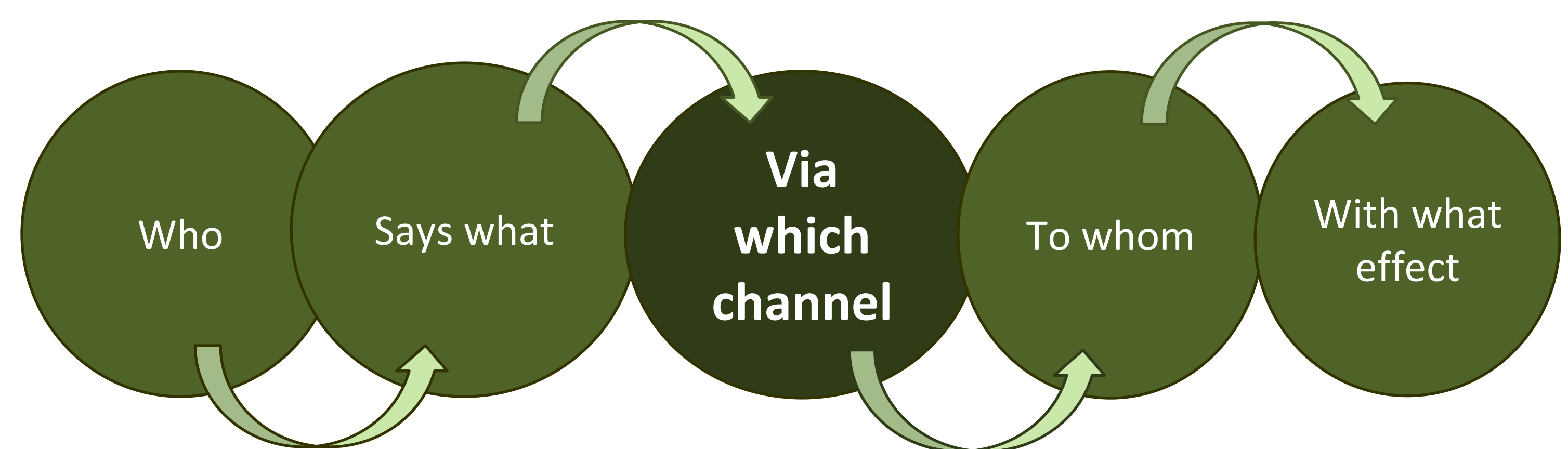
## METHODS

**Study area:** Kilifi County, coastal Kenya (Malindi, Takaungu, Mtwapa, Mavueni).  
**Design:** Descriptive cross-sectional mixed-methods study.  
**Theoretical framework:** Lasswell's 'model of communication', focusing specifically on the factor 'channel' (1).  
**Sample:** 100 smallholder farmers, selected by multi-stage quota sampling.  
**Data collection:** Semi-structured questionnaire for individual farmer interviews; seven key informant interviews; four focus group discussions with farmers.  
**Analysis:** Descriptive data analysis including frequencies and percentages.

## CONCLUSION

- ❖ Strengthen trusted interpersonal channels and radio.
- ❖ Integrate digital tools slowly and carefully, but do not completely replace the traditional channels.
- ➔ Support inclusive and effective horticultural knowledge dissemination.

### Laswell's model of communication (1):

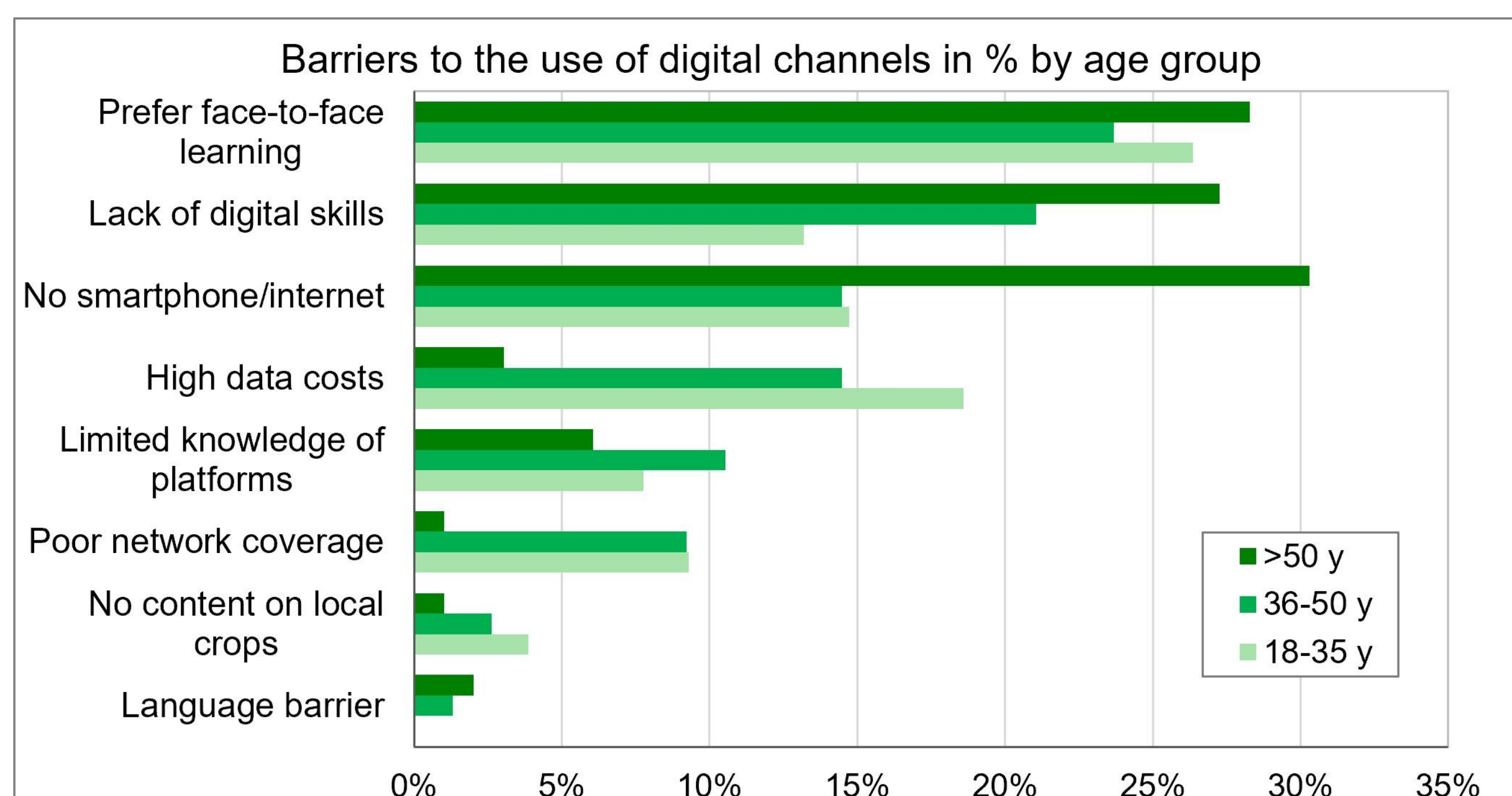


## RESULTS AND DISCUSSION

### 1. Socio-demographic characteristics of the respondents

**Gender:** 73% female and 27% male.  
**Age:** 45% youth (18–35 years), 22% middle-aged (36–50), 33% elderly (50+)  
**Education:** 32% no formal education, 40% primary, 17% secondary, 9% tertiary.

### 3. Barriers to the use of digital communication channels



- Digital communication mostly limited by farmers' preference for face-to-face learning (Fig. 8), confirming the preferred interpersonal communication channels.
- Limited digital skill and lack of smartphones also constrain use of digital channels, particularly of the elderly and middle-aged.
- High costs further restrict digital access, particularly of the youth.

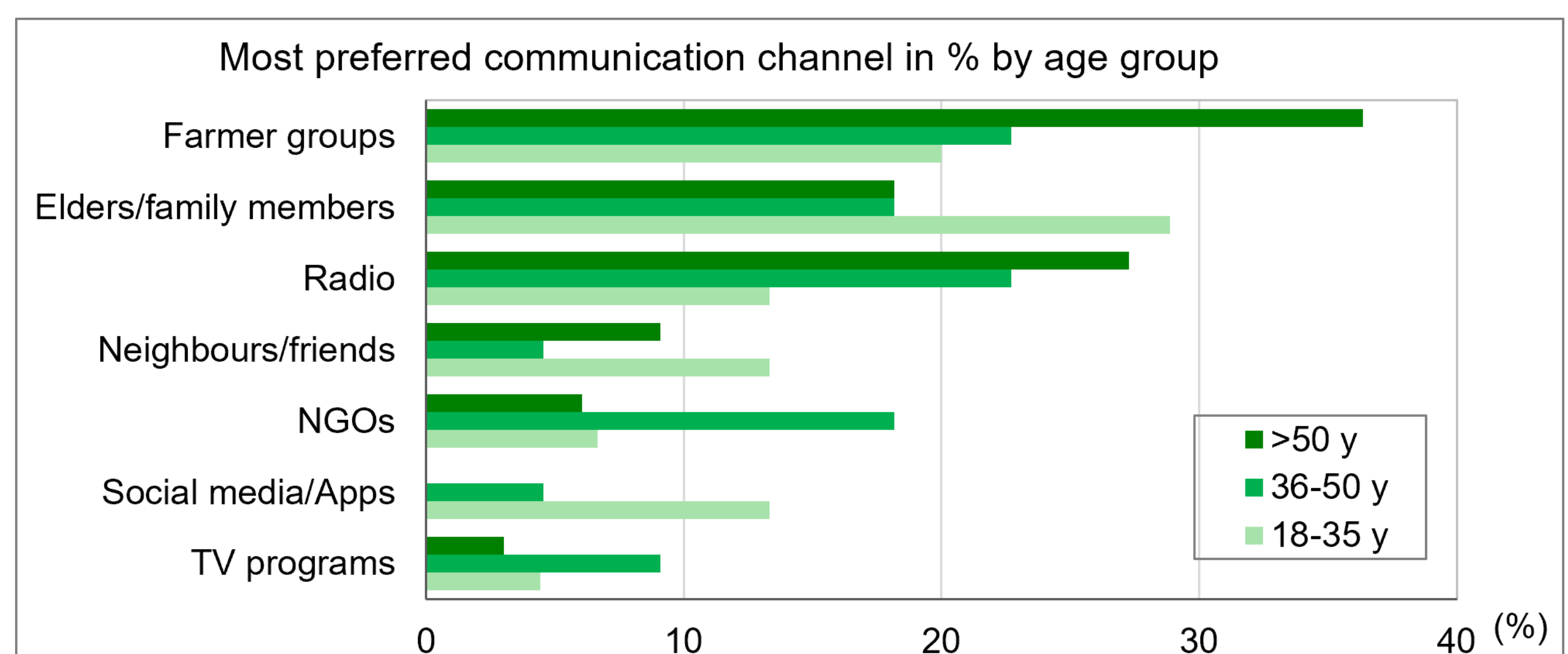


**Fig 8:** Farmers of the FFS group in Mshongoleni during a face-to-face training with an expert.

*"I don't know how to use a phone, so I cannot access the information sent through it on my own. I have to depend on a neighbor or my children to read the messages and explain them to me because I did not go to school"*

Elderly participant of one of the FFS groups

### 2. Preferred communication channels



- Interpersonal channels remain central to horticultural knowledge access.
- Farmer groups highly preferred by the elderly and middle-aged → practical and hands-on experiences (Fig. 6).
- Radio second most important for the elderly and middle-aged → affordability, portability (Fig. 7), in local language.
- Youth mostly prefer elders/family members → familiarity and trust.
- Digital channels only used by some youth and middle-aged, not by elderly.



**Fig 6:** FFS group of the AfriNutriForest project in Malindi during a lesson on use of a power.



**Fig 7:** Farmer listening to the radio while working on the farm in Kilifi county.

### 4. Integration of rural youth

#### 1. Trusted Messengers

- Youth leaders and village elders talk to youth directly.

#### 2. Involve youth as community journalists

- Empower youth with hands-on digital skills in photography and videography.

#### 3. Accessible and suitable channels

- Provide content using digital channels.
- Use innovative methods to reach youth.

*"Teach youth on importance of farming; Record drama and create poems about farming; Use Tiktok to post recorded videos; Use social media such as Facebook; Cook children home-grown vegetables; Show youth how to grown own vegetables; Teach youth that they are the future farmers"*

Voices from FDG groups on how to better involve the youth

## References

1. Lasswell, H. D. (1948). The structure and function of communication in society. In L. Bryson (Ed.), The Communication of Ideas (pp. 37-51). New York: Harper and Row.