

Social perception of smallholder farmers on the uptake of organic fertilizers in Kigumo sub-county, Kenya

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Background

- Declining soil health and fertility is a serious problem across the Sub-Saharan Africa posing a major threat to food security and the environment (Amos et al., 2021)
- In Kenya, this problem has led to reduced crop yields and affected rural livelihoods (Chathin et al., 2019)
- Using organic fertilizers (OF) has a huge potential impact of reversing the deteriorating soil fertility and improving soil health (Ameeka and Sonak, 2017)

Research aims

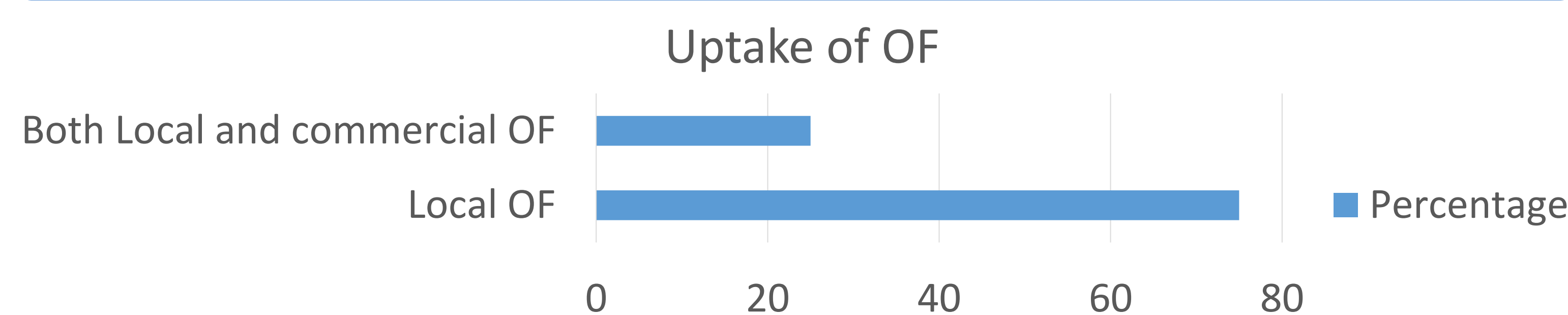
- Analyse how social perception affects the uptake of OF in Kigumo sub-county.
- Identify gaps on OFs uptake to leverage and improve on OF uptake
- Hypothesis: Small holders' social perception influence the uptake of organic fertilizer (Commercial and farm-level)

Materials and Methods

- A survey with statements grouped in 4 subtopics was administered to 100 respondents with a 5 Likert scale on each statement (VH-Very high=5, H-High=4, N-Neutral=3, L-Low=2, VL-Very low=1).
- Where:** Commercial OF: OF that are processed and nutrient content controlled and known.
- Local OF: no processing done in farm level and nutrient content not controlled and not known.



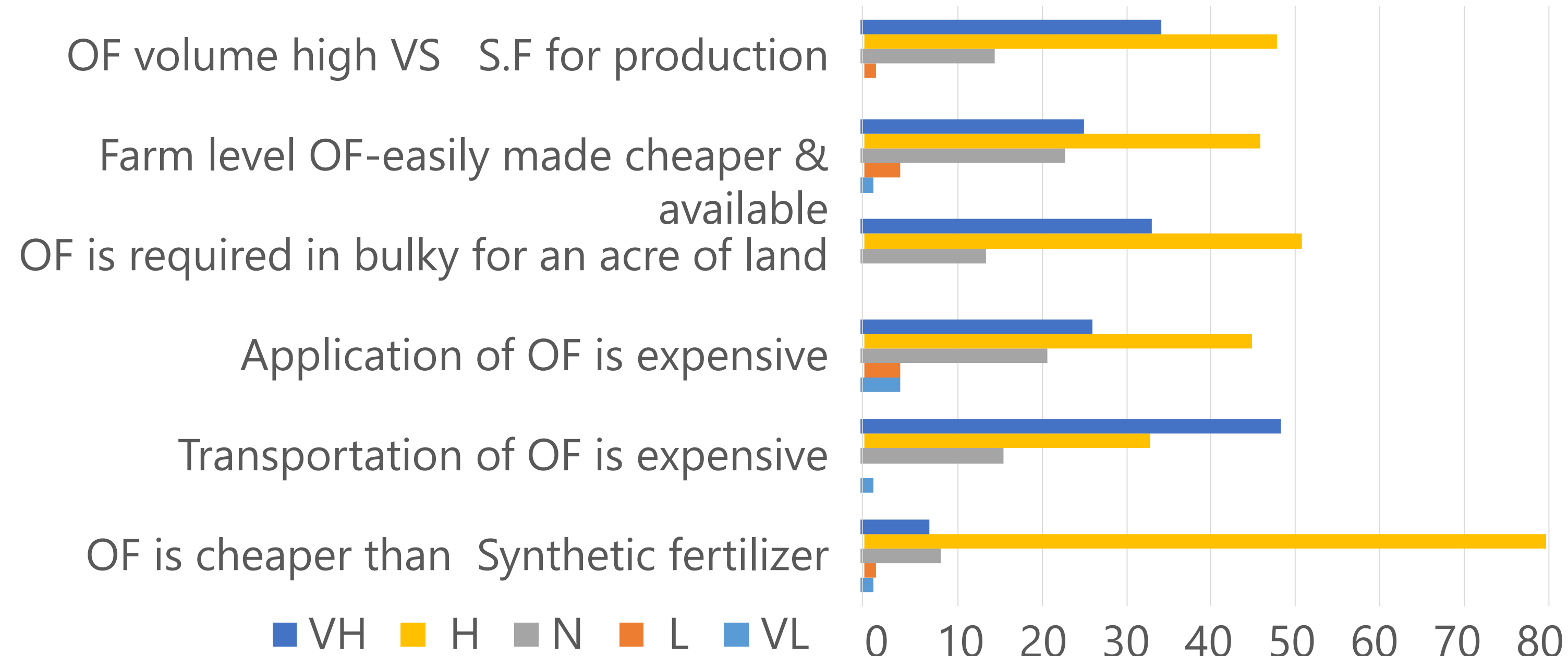
Major results and Discussion



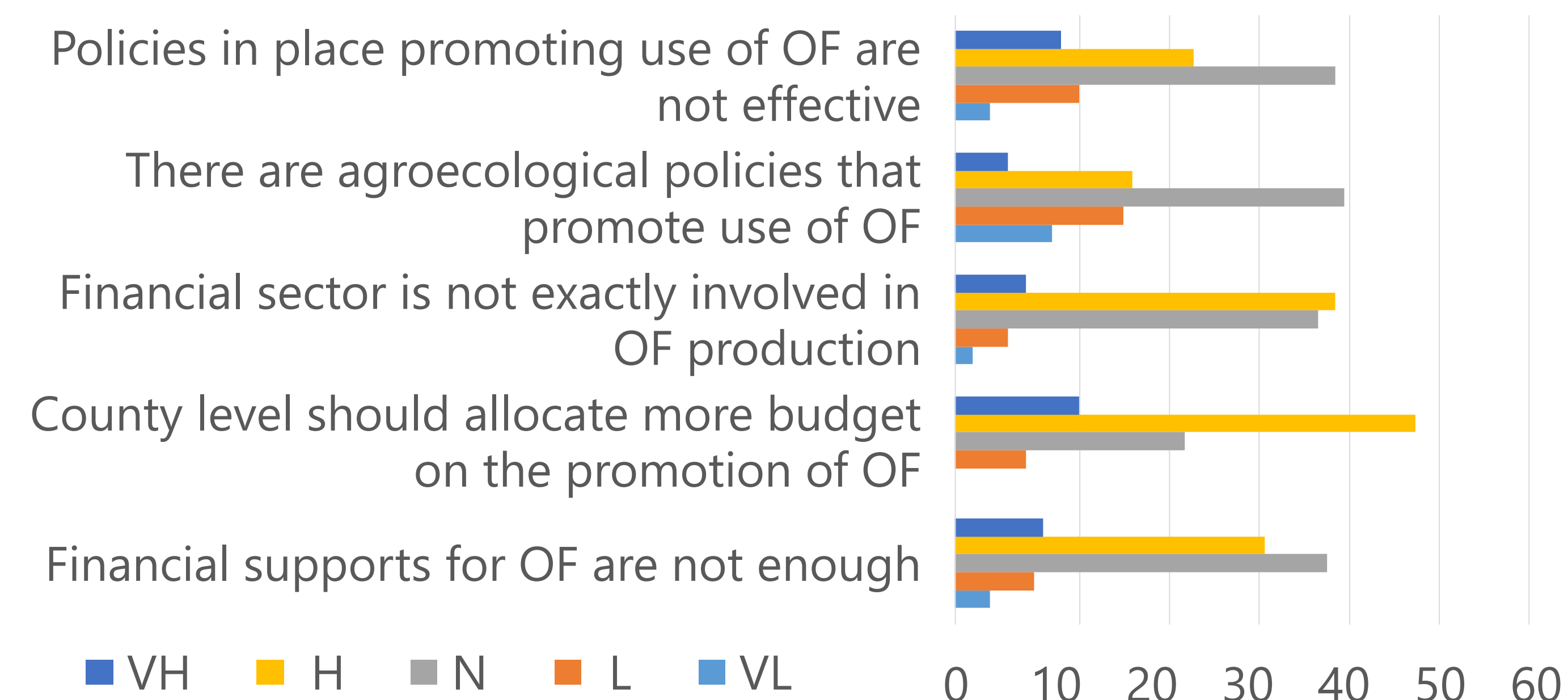
Pearson correlation between OF uptake and social perception p. value = 0.05

Subtopics	Negative	Positive
ORGANIC FERTILIZER COST	-0.069 <R>	0.276
CROP PRODUCED WITH OF	-0.008 <R>	0.028
IMPACT ON ENVIRONMENT	-0.031 <R>	0.098
CREDIT /POLITICAL GOOD WILL	-0.231 <R>	0.162

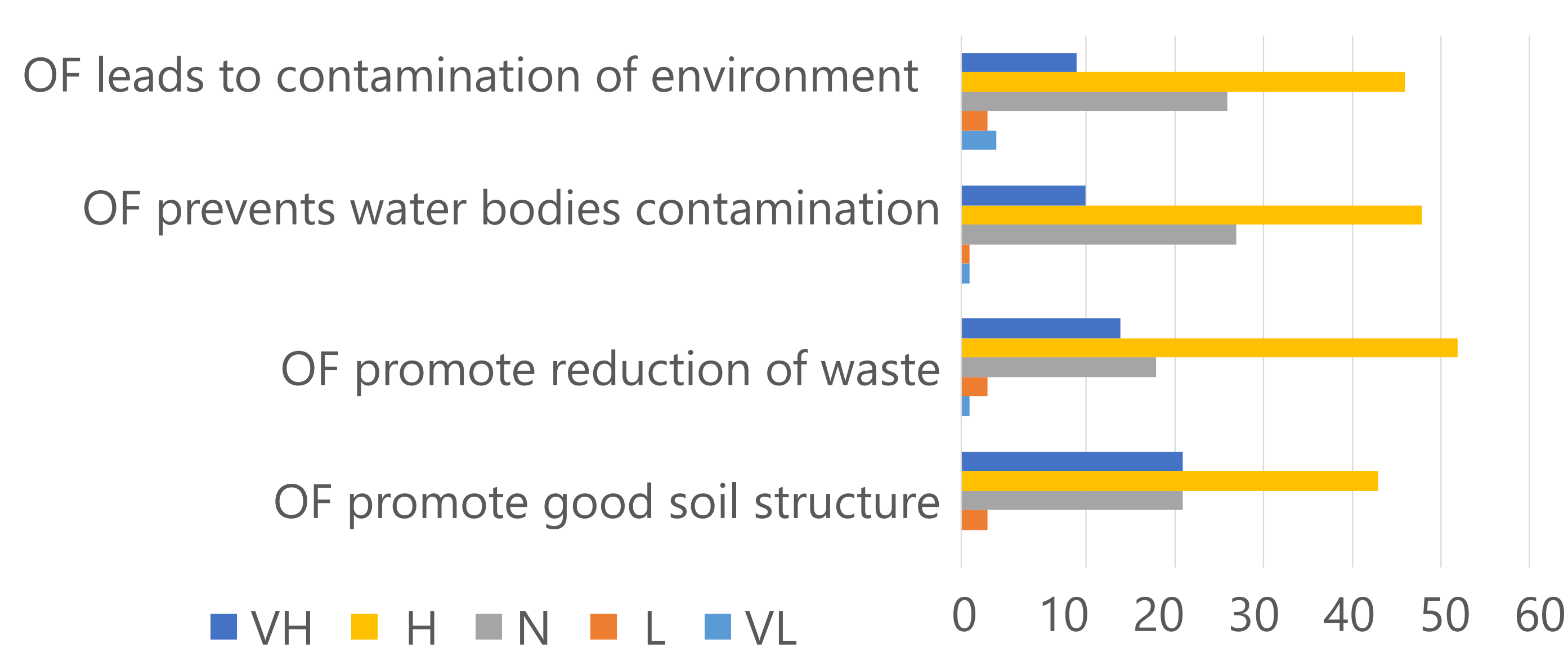
ORGANIC FERTILIZER COST



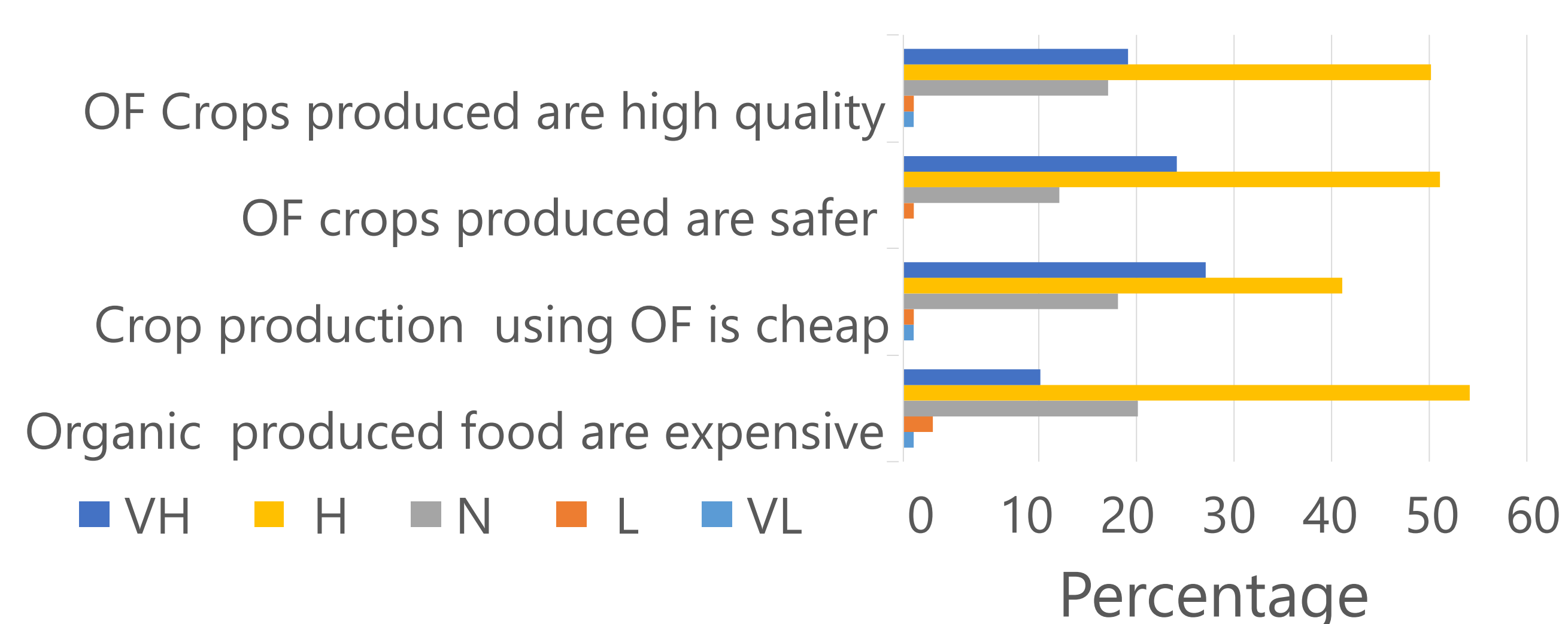
CREDIT /POLITICAL GOOD WILL



OF IMPACT ON ENVIRONMENT



CROP PRODUCED WITH ORGANIC FERTILIZER



Conclusion

- Promoting awareness of political good will and OF cost will improve on commercial organic fertilizers uptake
- Allocating more financial assistance on subsidy of commercial OF will greatly promote their uptake