

Banana for food and fibre: The position of Uganda's banana smallholder farmers

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Background

- Growing global interest in utilization of agricultural residues for bio-based industries (e.g., Sarangi et al., 2023).
- Uganda, with over 80% of farmers producing bananas, is scaling up its level of banana fibre production.
- But, due to potential risks such as food insecurity and barriers like insufficient information, not all farmers may be positioned to benefit or actively engage in fibre production.

Research Aim

1. To characterize the underlying socio-economic factors that could motivate banana farmers' engagement in banana fibre production.
2. To assess the potential implication of banana fibre production on household food self-sufficiency (FSS) and income of different farm types.

Materials & Methods

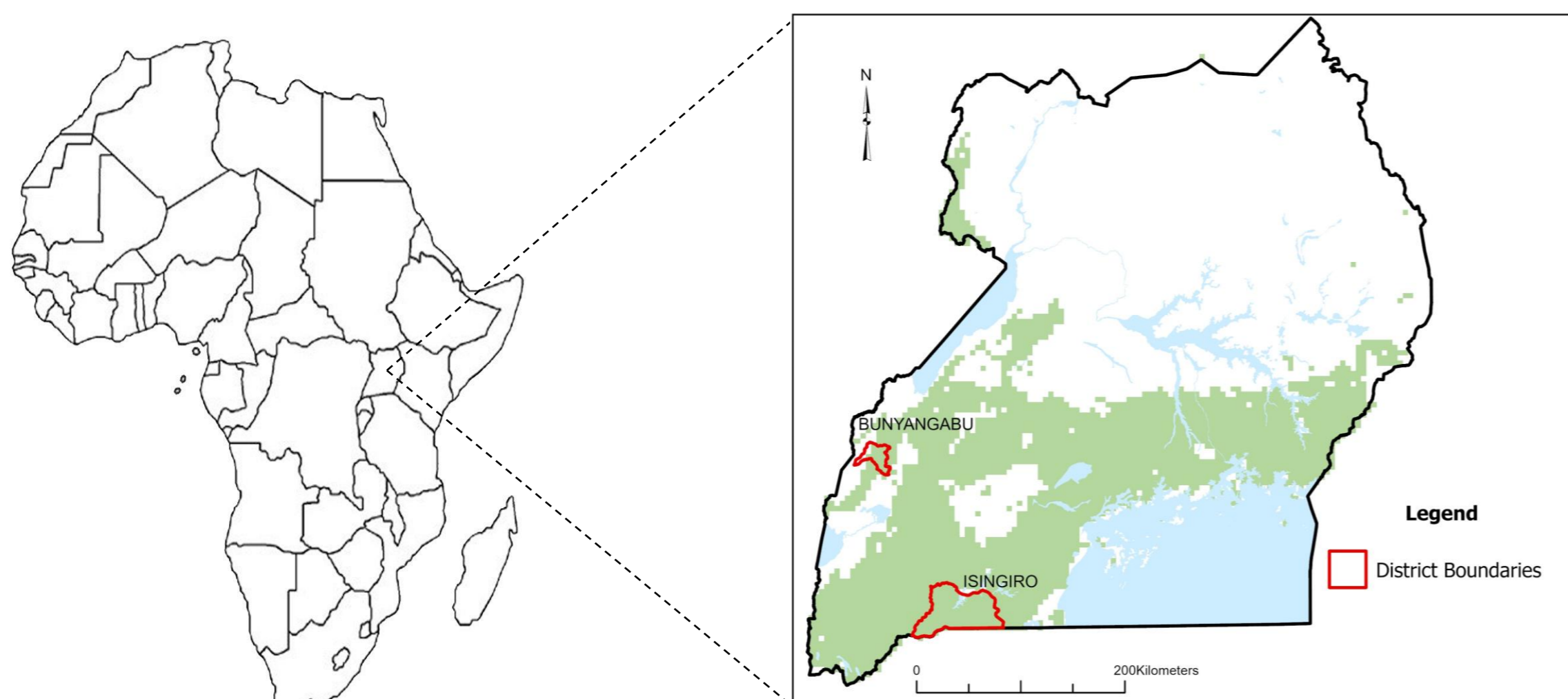


Fig. 1: Study areas (red) located in major banana growing areas (green) of Uganda. Source: Ochola et al., 2022

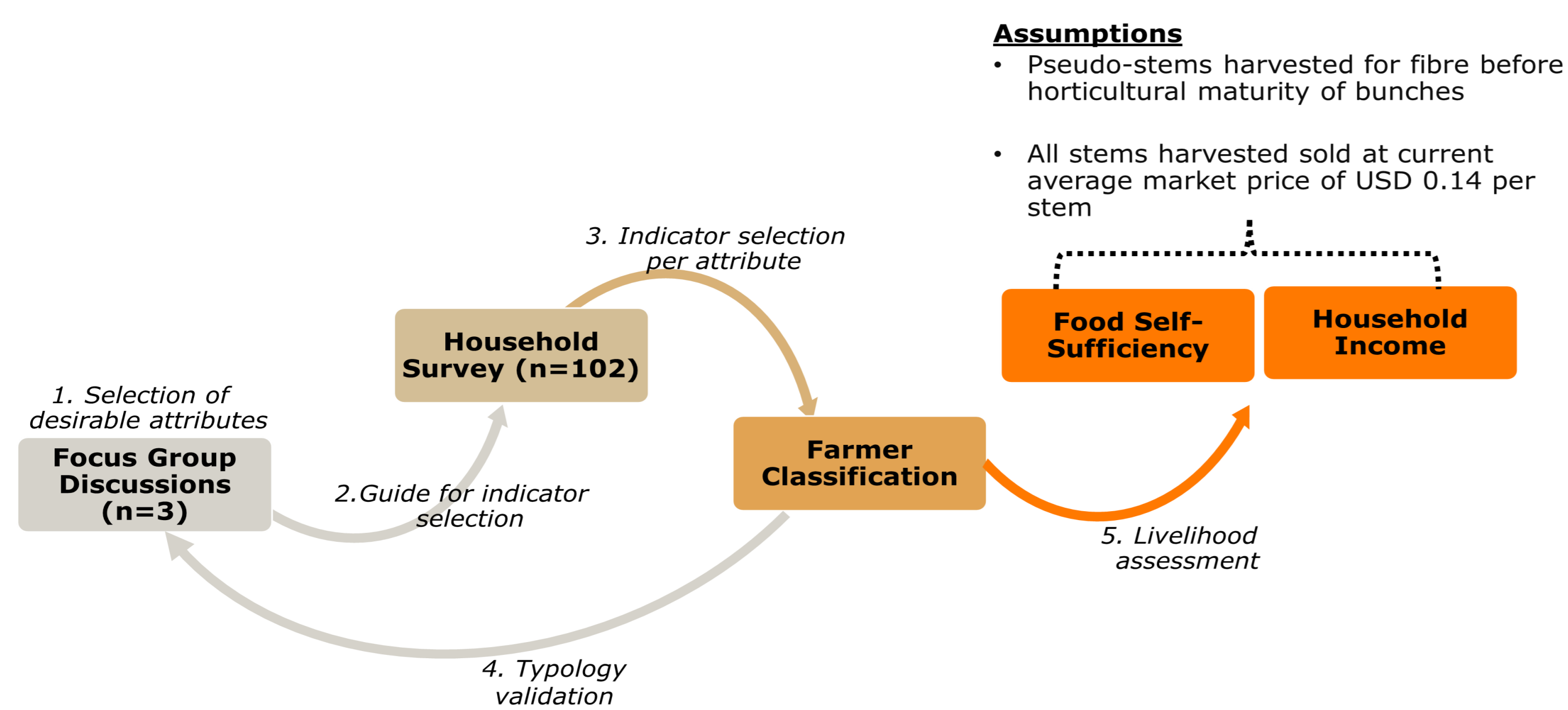


Fig. 2: Data collection and analysis process. The survey based on secondary data. Livelihood assessment based on assumptions that could arise during large-scale fibre production.

Results

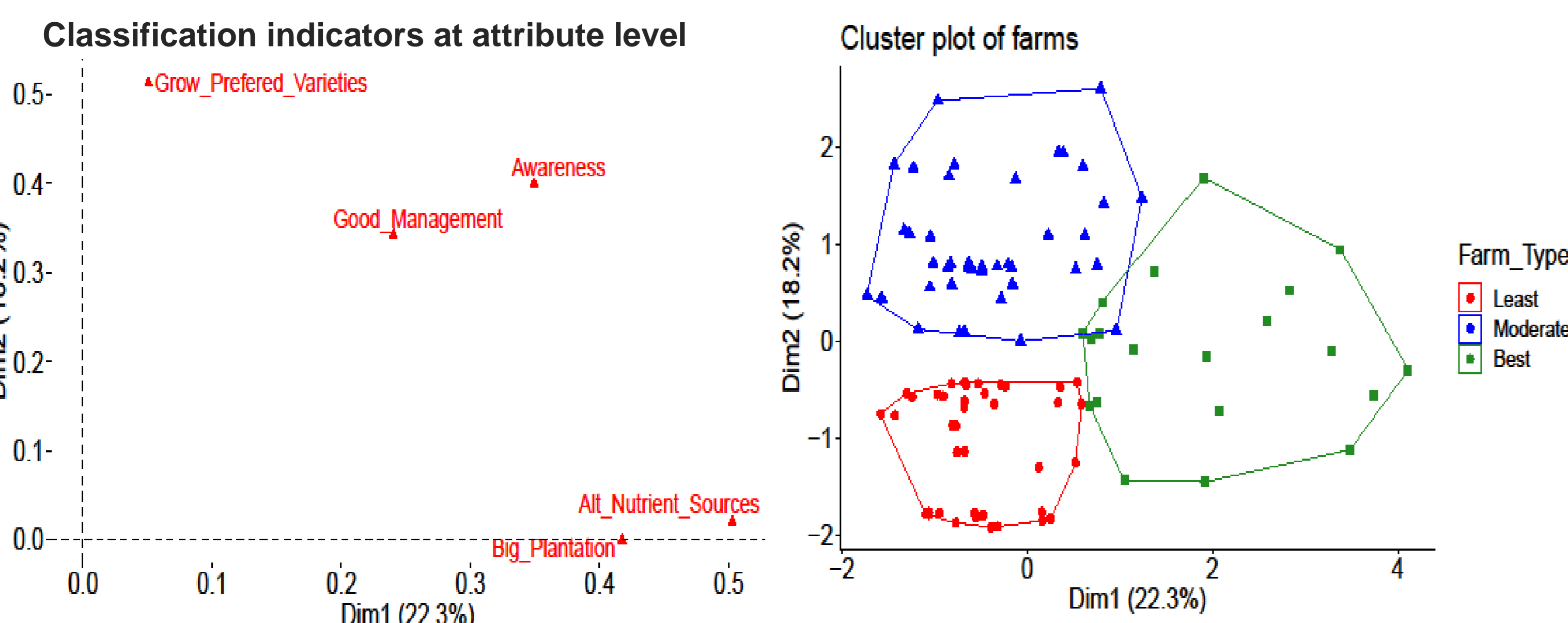


Fig. 3: Unique attributes defining farm types (left) & classification output (right) showing 3 farm types: Least (n=39), Moderate (n=43) and Best (n=20) positioned farmers.

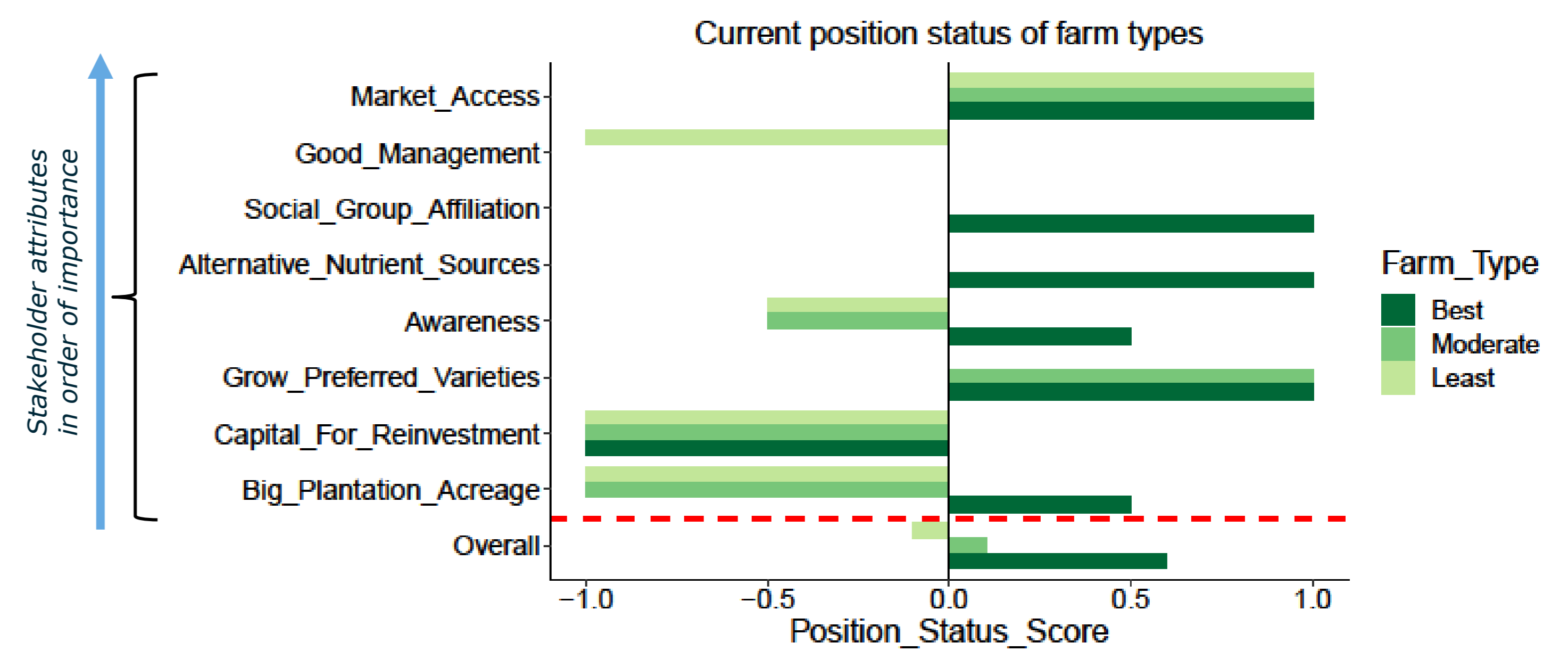


Fig. 4: Position status based on stakeholder attributes desirable for farmer engagement in fibre production. -1 is worst possible score; 0, average & 1, best.

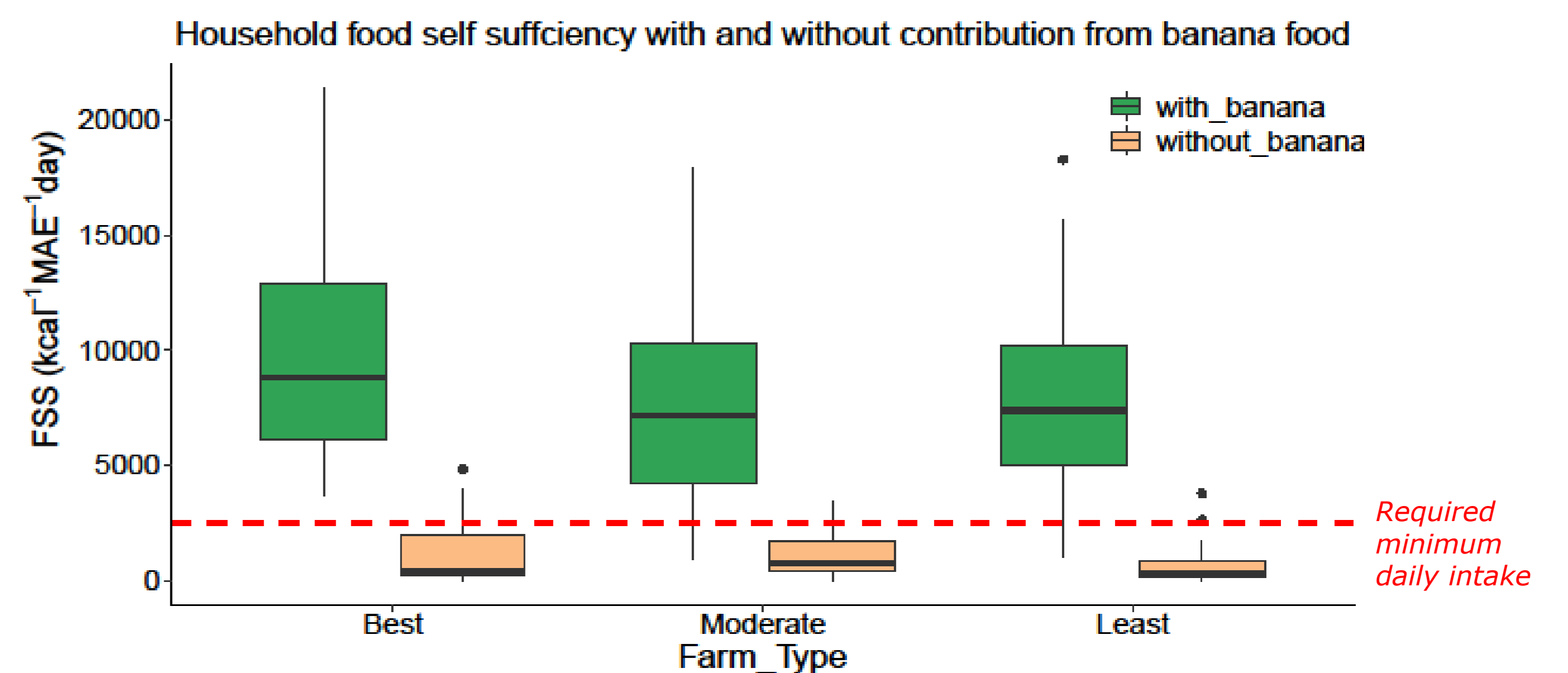


Fig. 5: Almost all farm types couldn't meet the minimum food needs by own farm produce if pseudo-stems were harvested for fibre before maturity of bunches.

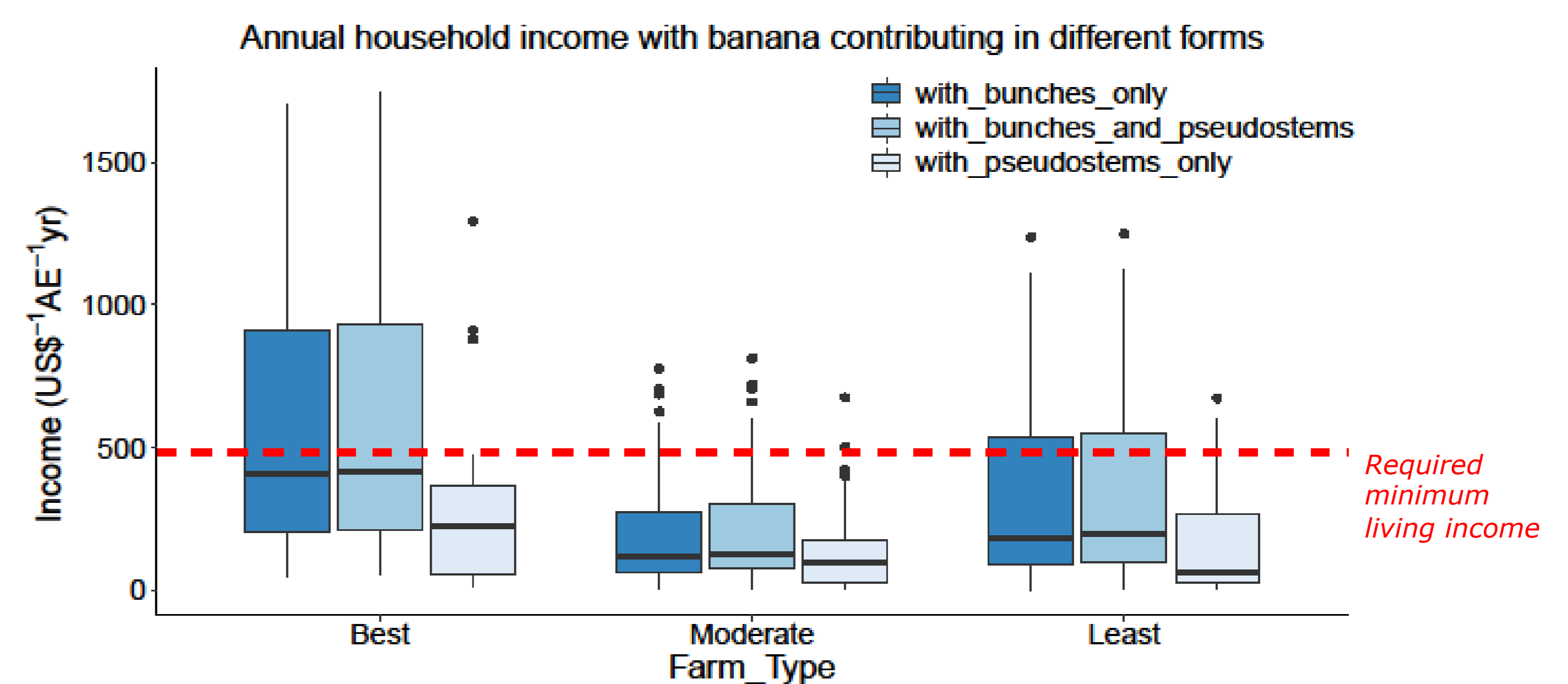


Fig. 6: Harvesting pseudo-stems for fibre before maturity of bunches reduced total household income (on and off farm) of all farm types by about 40%.

Key Messages

- Market access, agronomic management & group affiliation most important farmer attributes required.
- Better stem prices could enhance position status of all, especially Best and Moderate farm types.
- Fibre production business could enhance farmer livelihoods but only after bunch harvest.
- The Least positioned farmers could profit more in other fibre activities than stem production.

Acknowledgements

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