



Photo by Neil Palmer/CIAT

# Adoption factors of forage innovations in cattle production systems in the northwest highlands of Vietnam

Aura Bravo<sup>1</sup>, Fernando Florez<sup>1</sup>, Hang Thi Dao<sup>1</sup>, Thinh Nguyen<sup>4</sup>, Mary Atieno<sup>1</sup>, Natalia Triana-Angel<sup>1</sup>, Xuan Thao Hoang<sup>2</sup>, Thi Bich Ngoc Tran<sup>3</sup>, Michael Peters<sup>1</sup>, Stefan Burkart<sup>1</sup>.

<sup>1</sup>International Center for Tropical Agriculture, Tropical Forages Program. <sup>2</sup>Northern Mountainous Agriculture and Forestry Institute. <sup>3</sup>National Institute of Animal Science. <sup>4</sup>International Livestock Research Institute.

Contact: s.burkart@cgiar.org

## INTRODUCTION

- Cattle systems in Vietnam are increasingly moving towards intensification (Ba et al., 2012); however, farmers in Northwest Highlands face several challenges to fulfilling the demand for cattle feed and increasing yields demanded by an evolving market (Atieno et al., 2021).
- Different initiatives from the government (National Target Program for Livestock Development) and NGOs (Li-Chan Project and recently SAPLING) have actively promoted and disseminated improved forage varieties to address cattle nutritional management challenges.

## OBJECTIVE

To discern the preferences among forage varieties promoted over the past five years and identify encouraging factors among farmers.

## METHODOLOGY

- Employing a qualitative approach based on what Tim et al. (2022) outlined, we explore encouraging factors, most adopted forage technologies (FT), perceived benefits, and other factors that might evolve a challenge for FT adoption.
- A purposive sampling method was employed to ensure representation of both men and women farmers, adopters and non-adopters.
- Then, 42 semi-structured interviews were conducted in six villages in Chieng Luong and Chieng Chung communes within the Mai Son district.

### REFERENCES

Atieno, M., Mai, T., Douxchamps, S., Peters, M., & Duncan, A. (2021a). Rapid survey of livestock feed resource availability and use in Mai Son district, Son La Province, Vietnam, using the Gendered Feed Assessment Tool (G-FEAST). Hanoi, Vietnam: International Center for Tropical Agriculture & International Livestock Research Institute. 23 p.

Ba, N.X., D.V. Dung, N.T. Mui, N.H. Van, P.H. Son, H.T. Mai, T.T. Hai, R. Smith, D. Parsons, & J. Corfield (2015). Cow-calf production systems in households in Vietnam South Central coastal region. Vietnam Journal of Agriculture and Rural Development, 2015(21), 109-117. <http://ecite.utas.edu.au/106457>

Tim, H., Schuler, J., Nkwain, V., Nzogela, B., Mangesho, W., Mollé, R., Loina, R., Zander, P., & Paul, B. (2022). Determinants for smallholder farmer's adoption of improved forages in dairy production systems: the case of Tanga Region, Tanzania. Agronomy, 12, 305. <https://doi.org/10.3390/agronomy12020305>

## RESULTS

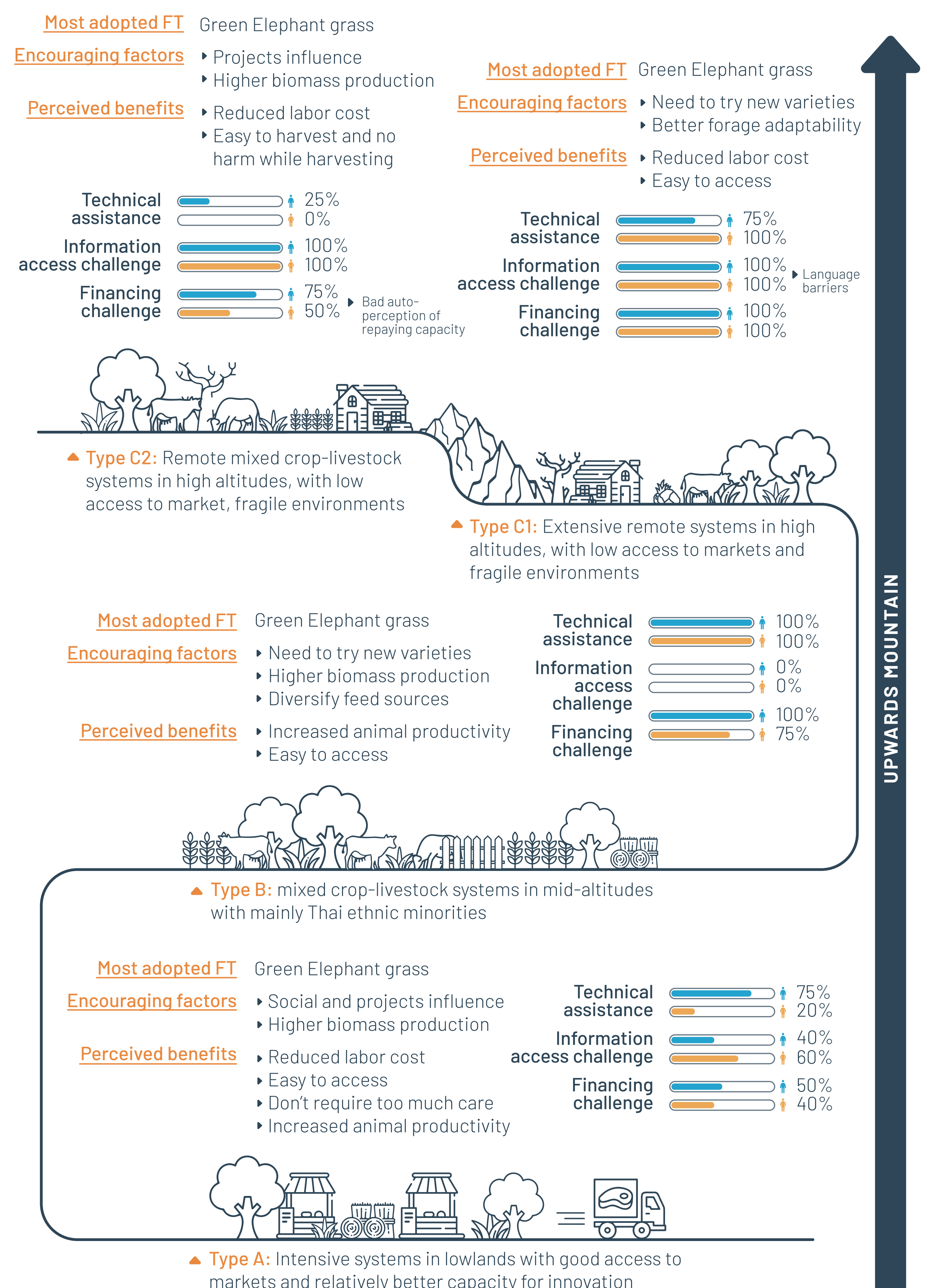


Figure 1. Encouraging and discouraging factors to adopt FT in NWH in Vietnam, by farm typologies.

## CONCLUSIONS & RECOMMENDATIONS

- Information transfer campaigns should continue and be extended since farmers have shown high receptivity to promotion through projects and social networks that have had contact with the projects.
- Type A and B production systems are slightly more market-oriented than C1 and C2. In this sense, encouraging factors for the first ones focused on FT performance and cattle weight gains. Hence, the communication strategy could focus on showing technical results (e.g., farmers' tours and demo farms). While C1 and C2 farmers require greater access to information in general.
- Most financing methods are own savings, although farmers have credit access to sources with relative ease. This means that incentives for any kind of investment are closely linked to the performance of the beef market and cattle sales.
- FTs are still in their initial dissemination phase. Although the demand has not been estimated accurately, it is compulsory to articulate them with current national livestock development programs to reach a broader impact and scope to disseminate promising technologies.

### ACKNOWLEDGEMENTS

This work was conducted as part of the CGIAR Initiative on Sustainable Animal Productivity (SAP). We thank all donors who globally support our work through their contributions to the CGIAR System.



POSTER PREPARED FOR  
Tropentag 2024  
September 11-13, 2024  
Vienna (Austria)