

Exploring opportunities for development of cacao agroforestry in Uganda

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Background

Cocoa Sector in Uganda

- From 2,130 MT in 2001, up to 44,500 MT in 2021 (worth USD 105.8m)
- 80,000 - 100,000 farmers
- Historical cocoa production is in the district of Bundibugyo (> 70% Prod)
- Emerging cocoa production and expansion in various regions

Objectives of the study

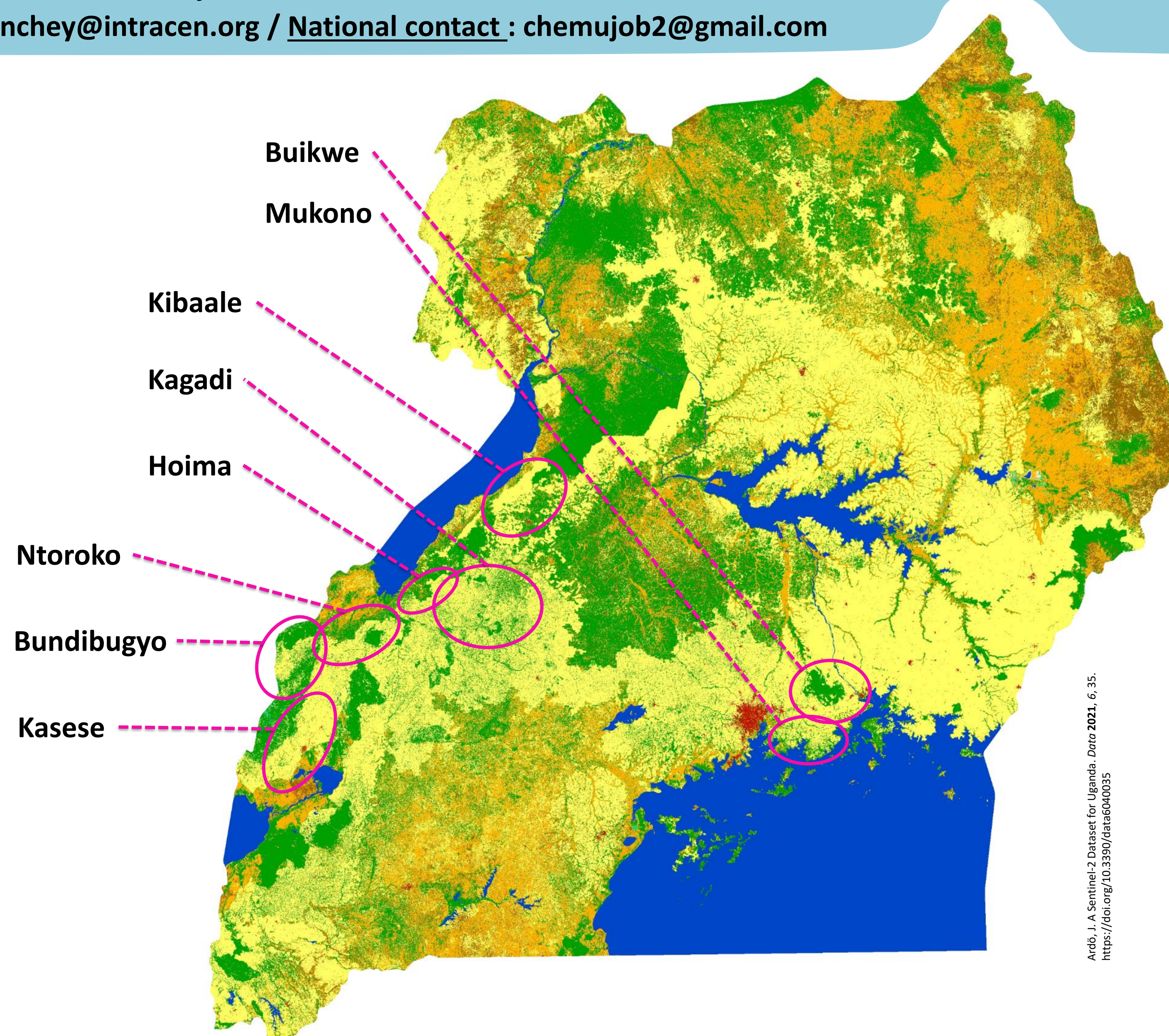
- Supporting development of sustainable cacao farming
- Exploring levers for improvement of agroforestry management of cacao

Methodology of the Survey

216 farmers in 7 traditional cocoa growing districts

Interviews with cocoa farmers and fields visits

- Farm components (cultivated crops & allocated areas)
- Species associated to cacao (crops & trees)
- Experience & interest in agroforestry
- SWOT analysis of developing cocoa production



Ando, J. A Sentinel-2 Dataset for Uganda. Data 2021, 6, 35. <https://doi.org/10.3390/data6040035>

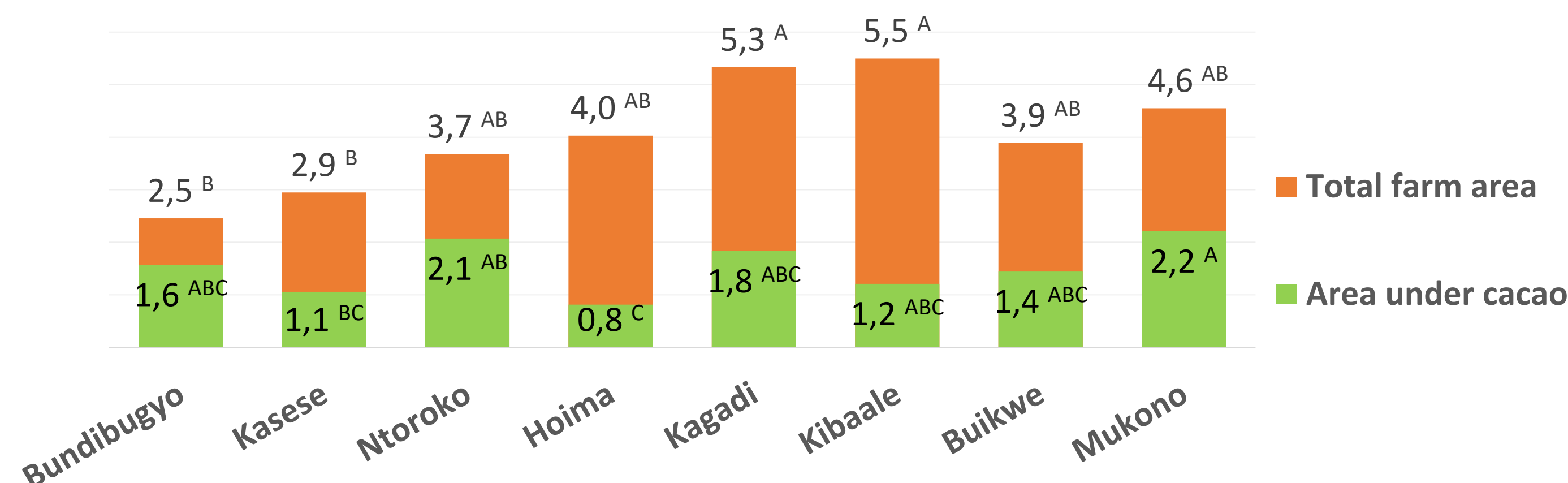
Results: Cacao farms features in Uganda

Farm characteristics and cacao component

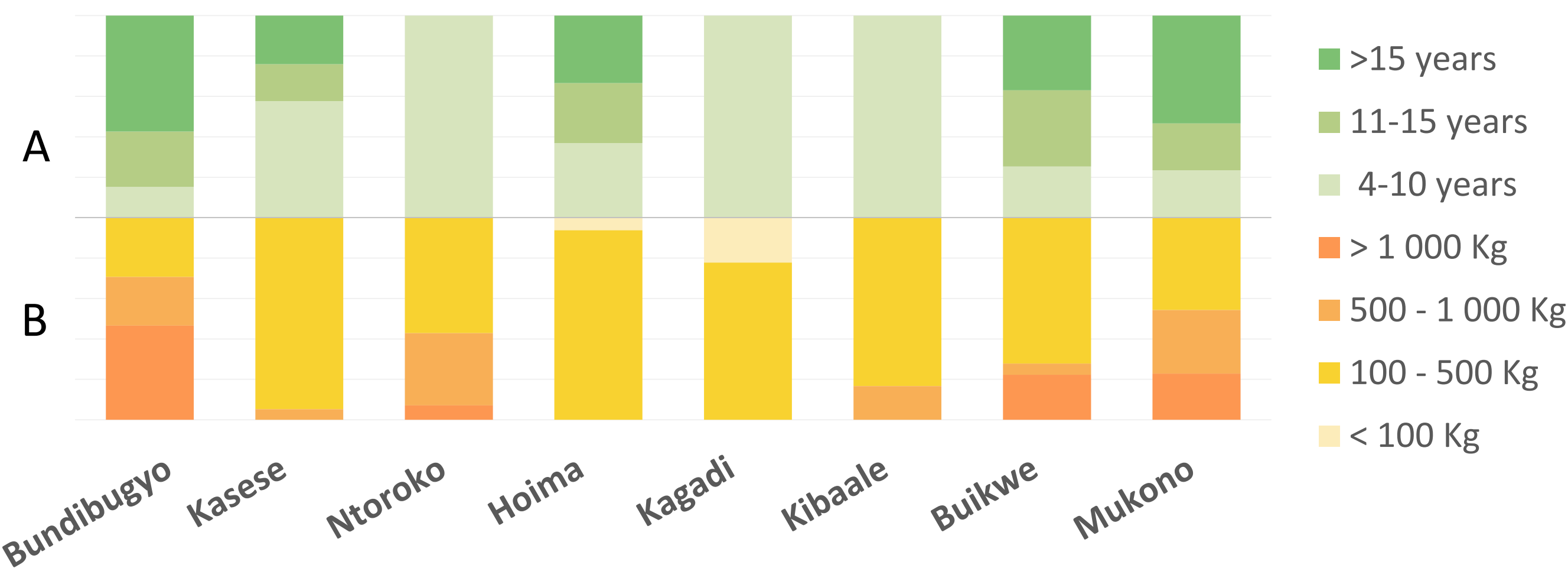
- Diversified farms associating cacao, cash-crops & food-crops
- Area dedicated to cacao vary significantly between districts
- Homogeneous farming strategies within districts (Mix of crops, land use)

Mean Area (Acres) of average cultivated land and cacao orchard

Means with different letters are significantly different at $p < 0.05$ according to Tukey HSD.



Distribution (frequencies) of (A) cacao orchards in age classes And (B) farms according to annual cocoa production

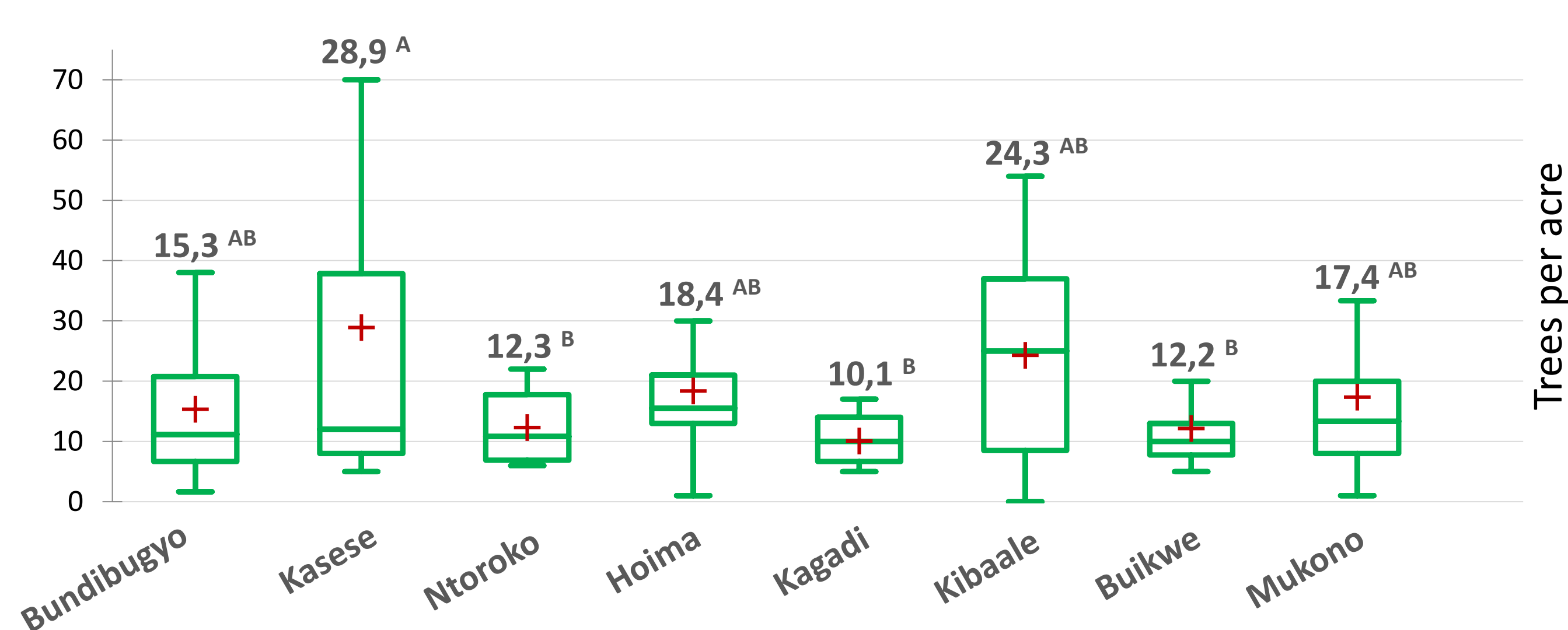


Agroforestry knowledge & practices

- Farmers aware of the concepts & acknowledge the benefits of agroforestry
- Cacao always associated with forest/fruit tree species (average 18 trees/acre)
- Low diversity of associated trees in the surveyed areas
- Strong common preference for shade species most adapted to cacao

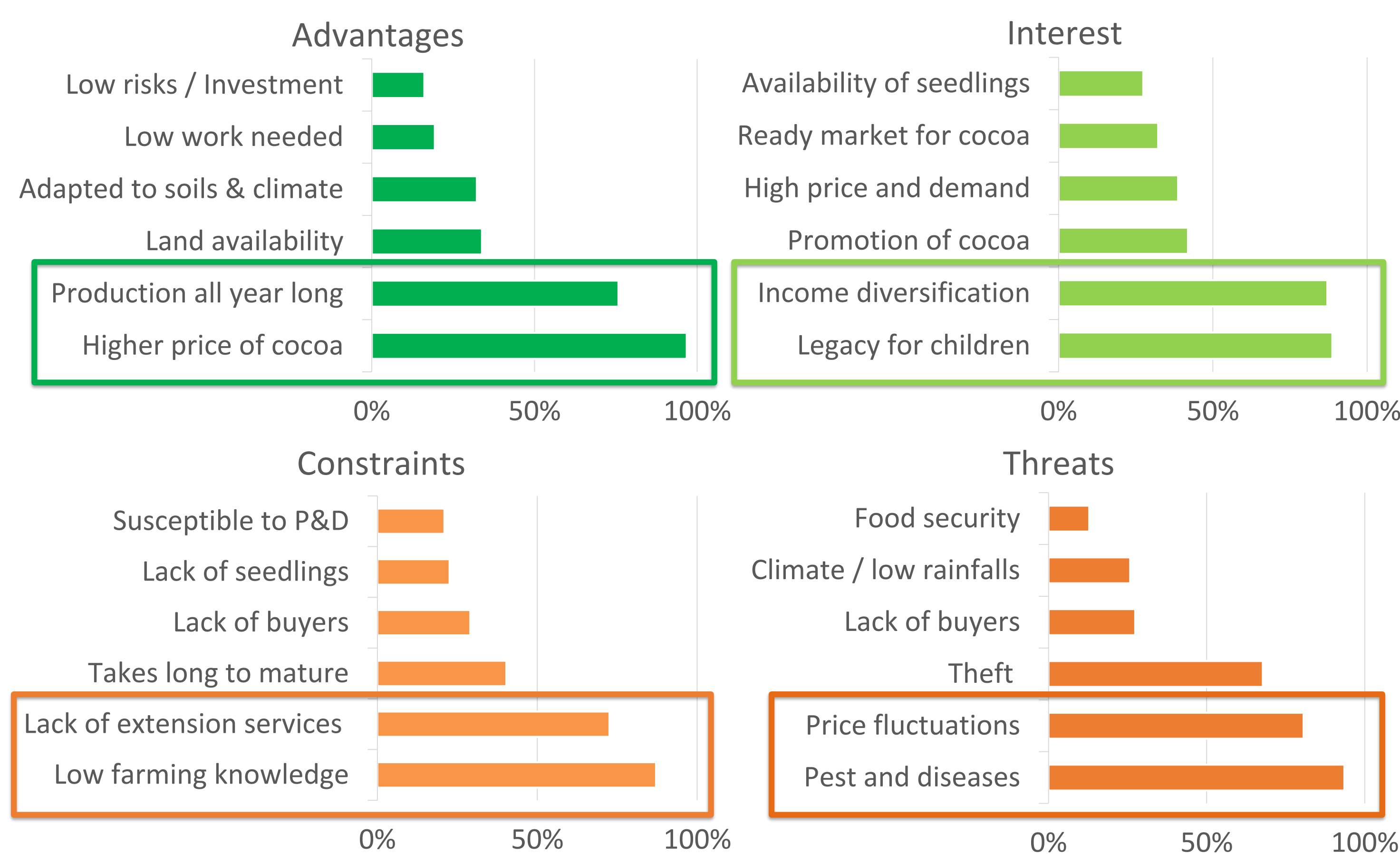
Densities of Associated trees in cacao plots (Number of trees per acre)

Means with different letters are significantly different at $p < 0.05$ according to Tukey HSD.



Results : SWOT of cacao farming in Uganda

Frequencies of topics quoted by farmers during interviews on SWOT of cacao cultivation



Summary of the results

Development of cocoa cultivation in Uganda

- Strong interest in experimenting cocoa production in all visited districts
- Farmers are cautious about cacao production and rely on a mix of crops
- Need for diffusion of agronomic skills and improved support services
- Long-term strategies of farms & willingness to experiment shade associations.

Development of agroforestry practices

- Cacao agroforestry already prevailing in Uganda
- Agroforestry practices inherited from recommendations for coffee management
- High tree densities, but low intra-regional diversity of associated tree species.

Conclusion

- ▶ Strong potential of development for Ugandan cacao sector
- ▶ Should rely on diffusion of Good agronomic practices
- ▶ High potential for promotion of associated tree diversity
- ▶ Promotion of tree species providing long-term benefits

EU-EAC Market Access Upgrade Program

- ✓ Four-year program to support SMEs in East African Community (EAC).
- ✓ Increase exports of agricultural products, improve competitiveness and promote regional integration for coffee, cocoa, tea, spices, avocado & horticulture products.
- ✓ Implemented by the International Trade centre (ITC), Funded by the European Union