



Adoption of conservation farming practices for sustainable rice production among small-scale rice farmers in Barotse floodplains in western Zambia <u>Makumba Kasonde¹</u>, Vraj Ureshkumar Thakar², William Nkomoki³, Vladimir Verner⁴

INTRODCUTION

Conservation farming practices (CFP) provide various economic, social, and cultural benefits to the welfare of smallscale farmers.

□ 3.5 billion people depend on rice at a global level.

RESULTS

□ Results show that farmers are using a wide range of rice varieties, traditional and improved, to deal with weather conditions and meet food security and reach the market. □ Nevertheless, despite the promotion of conservation and

sustainable practices, the adoption rate remains rather low.

CONCLUSION

Improving accessibility to conservation mechanical services and implements, accessibility to conservation practices information among small scale rice farmers can increase adoption of conservation agriculture practices and promote sustainable use of resources in

□ The use of CFP also contributes to

combating climate change.

- □ Rice represents a traditional crop for many African countries, including Zambia. Local farmers plant traditional and improved rice varieties, taking advantage of their characteristics.
- □ Population pressure, structural changes commercialisation tendencies and endanger the sustainability of local rice farming systems.

Nalolo district rice farmers



Zambia. Rice grown from CAP



AIMS

□ To provide an overview of policy papers

Focus group discussions with Limulunga district rice farmers

and current development efforts in western Zambia towards sustainable rice production and document which local rice varieties farmers prefer and what conservation techniques are applied for rice varieties.

□ To identify he main drivers and barriers to the adoption of sustainable practices.

METHODOLOGY

Data for the first aim were collected through the relevant internet sources and government institutions.

Data on profitability, perceptions and sustainable practices through keyfocus persons interviews, group discussions, and household surveys among rice farmers in five districts of Barotse floodplains.



References

- 1. Ali S, Ghosh BC, Osmani AG, Hossain E, Fogarassy C. (2021). Farmers' climate change adaptation strategies for reducing the risk of rice production: Evidence from Rajshahi district in Bangladesh. Agronomy 11(3): 600.
- 2. Björklund J, Araya H, Edwards S, Goncalves A, Höök K, Lundberg J, Medina C. (2012). Ecosystem-Based Agriculture Combining Production and Conservation—A Viable Way to Feed the World in the Long Term? Journal of Sustainable Agriculture 36: 824-855. 3. Connor M, Quilloy R, de Guia AH, Singleton G. (2022). Sustainable rice production in Myanmar impacts on food security and livelihood changes. International Journal of Agricultural Sustainability 20(1): 88-102. 4. Mishra B, Gyawali BR, Paudel KP, Poudyal NC, Simon MF, Dasgupta S, Antonious G. (2018). Adoption of sustainable agriculture practices among farmers in Kentucky, USA. Environmental management 62(6): 1060-1072. 5. Nagarajan R, Aravind J, Ravi R, Venkatesh A. (2013). Improved measures for conservation agriculture practices in rice farming system. Indian Journal of Hill Farming 26(2): 26-31. 6. Nkomoki W, Bavorova M, Banout J. (2018). Adoption of sustainable agricultural practices and food security threats: Effects of land tenure in Zambia. Land use policy 78. 532-538.

The study appreciates the support of Faculty of Tropical Agrisciences, Czech University of Life Sciences Prague for Funding the data collection under the Internal Grant Agency (grant number:20223113)