

# Implications of the introduction of forage chopper machines

Gundula Fischer<sup>1</sup>, Jacqueline Rugalabam<sup>2</sup>, Gabriel Malima<sup>3</sup>, Simon Wittich<sup>1</sup>, Ben Lukuyu<sup>4</sup>, David Ngunga<sup>4</sup>, Leonard Marwa<sup>4</sup>, Gregory Sikumba<sup>4</sup>

<sup>1</sup>International Institute of Tropical Agriculture (IITA)

<sup>2</sup>Department of Development Studies, University of Dodoma

<sup>3</sup>School of Business Studies and Humanities, Nelson Mandela African Institute of Science and Technology

<sup>4</sup>International Livestock Research Institute (ILRI)

#### Key messages

- ✓ Innovations and their potential for scaling should be assessed through gender analysis (as the example of forage choppers shows below).
- ✓ Gender analysis investigates implications of an innovation for men and women's access to and control over resources, the division of labor, benefit sharing and other aspects of household and community relations.
- ✓ Insights from one context may support gender-sensitive work in other locations. However, gender relations are contextual and linked to diverse socio-cultural norms.

### Objectives and approach

In an effort to improve feed quality and curb the labor and time consumed in manual feed processing, Africa RISING introduced forage chopper machines in seven villages in Babati (Tanzania) in 2015. The machines were distributed to livestock keepers' groups ready to engage in R4D activities. A gender analysis of the new processing practices was conducted in 2016. Data were collected through gender-separate focus group discussions including participatory exercises. Respondents were selected from among the groups that were formed for the management and use of the chopper machines.

## Key results

The innovation reduces women's labor burden and decreases the time needed for livestock feeding. However, women's access to the choppers is influenced by various factors - among others gender dynamics in the groups hosting the machines. Men tend to have greater access, which they in part justify by claiming "lower technical skills" of women. On the other hand, the benefits from improved feeding through increased sale of milk and eggs have allowed some women - as they say - to become financially more independent.

## Significance and Further Research

Gender analysis revealed changes in labor and income women may benefit from. However, focus groups methodology did not allow to further investigate group dynamics. Through other methods the team will explore which types of farmer groups (composition, leadership, rules) are most promising for an equitable introduction of this innovation on a broader scale.



Figure 1. A woman processes maize stover through manual chopping. Mechanization has prompted a greater involvement of men in this activity.



Figure 2. Demonstration of grinding different ingredients for feed rationing with a chopper machine.











We thank farmers and local partners in Africa RISING sites for their contributions to this research. We also acknowledge the support of all donors which globally support the work of the CGIAR centers and their partners through their contributions to the CGIAR system







