

Improving small ruminant productivity and livelihood through feed and health interventions in northern Ghana

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Key messages

Integrated technological options are necessary for improving livestock production. Therefore, feed interventions for improving small ruminant production have to be associated with health interventions. Supplementary feeding did not only lead to improved performance of sheep and goat in terms of weight gained and manure production, but it was reported by the farmers to reduce animals' losses through theft and accidents.



Traditional methods of field-drying & storage of crop residues \checkmark reduces their nutritional value through increased leaf loss & leaching of nutrients. These losses can be reduced by ensiling.

Objectives and approach

- \checkmark The objectives of the studies were to improve small ruminant productivity through feed and health interventions, and to improve conservation and use of crop residues.
- \checkmark The feed and health interventions study was conducted in 6 communities between 2013 and 2014, and expanded to 9 communities in late 2014 to 2016 in Northern, Upper East and Upper West regions of Ghana. Feed supplement was a mixed ration fed at 200 g DM/day. Health treatments included vaccination against PPR, deworming and antibiotic treatments. For

Fig 1. Average daily gain of sheep and goats in 2013-2014 & 2014-2016





ensiling of cassava peels and groundnut haulms, farmers were first trained and the ensiling was done in large bag silos.

Key results

- ✓ Growth rate and manure of treatment animals was higher than that of control animals (Fig 1 & Fig 2).
- ✓ Farmers in the treatment groups had lower mortality rates and higher offtake compared to those in the control which suggests more income through offtake for those with interventions.
- ✓ Sheep that received ensiled cassava peel diets had greater average daily gain (Fig 3).

Significance and scaling potential

- ✓ There is high potential for scaling up of the feed and health interventions for improved small ruminant production. More than 6,000 sheep and goats from about 500 households in 9 communities in Northern Ghana have benefited.
- Given the significant involvement of women in raising small \checkmark ruminants, feed-health package can enhance the livelihood of women and the household in general.



Fig 3. Average daily gain of sheep fed dried and ensiled cassava peels



Partners



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