

# Improving livestock fodder production through greater inclusion of women and youth

## Results from the 'Realizing the full biomass potential of mixed crop-livestock systems in rapidly changing Sahelian agro-ecological landscapes' project.

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WOMEN SELLING A VARIETY OF LIVESTOCK FEEDS IN BOLGATANGA, GHANA. PHOTO: SOLOMON KONLAN

The Sahel is a semiarid region of north-central and western Africa, from Senegal to Sudan. It forms a transitional zone between the arid Sahara desert to the north, and the humid savannas to the south. Communities living in this region are economically dependent on agriculture and livestock production. They are being increasingly affected by competing demands and climate change which both reduce their access to land and water resources. Studies on land use change in the region have shown a decline of at least 15% in grazing areas in Sahelian countries over the past 30 years. This has serious implications for fodder and feed production. Sustainable and effective production of biomass, such as fodder and feed for livestock and fuel for household use, is crucial to livelihoods, food security and environmental health and resilience. A study in 2004 by the International Livestock Research Institute (ILRI) in Fakara in western Niger found rapid changes taking place in key grazing areas of savannah grasslands, in 1950 these covered between 44-70% of the area but have now largely disappeared due to the expansion of crop farming.

### KEY RECOMMENDATIONS

- Implement initiatives enhancing women's and youth's control of, and access to, fodder production and supply value chains and ensure that their access and control are key factors when introducing improved fodder production technologies and practices
- Strengthen local institutions to foster greater participation of women and youth
- Promote innovative ways to communicate good practices in fodder production and management in local languages
- Facilitate the creation, or strengthening, of multi-stakeholder platforms for managing fodder and feed production (in ways that consider the short and long-term environmental aspects of land and water resources and ecosystem services)

The critical question is how to improve the management and production of fodder in ways that are sustainable and which ensure the resilience of the ecosystem rather than undermining it. Women and youth are key actors in these production systems but currently not always included in production cycles due to cultural (traditional) and social-institutional practises. Enhancing the production and management of fodder by increasing the involvement of woman and youth in decision making offers important opportunities to improve the sustainability and productivity of the fodder value chain.

### Methods and approach

The main objectives of the research was to better understand the gender-differentiated access to, and control over, resources, and the constraints to, and involvement in, activities relating to fodder production. The research team aimed to investigate the separate responsibilities of men, women and youth in the fodder production process, identifying gaps and opportunities for improved fodder production and management.

The project focused on two sites in the semi-arid north of the Volta and Niger River basins. One site included four villages in Yatenga province in northern Burkina Faso, and the other included four villages in Fakara district in south-western Niger. These have annual approximate rainfalls of 650mm and 450mm respectively. Both sites are increasingly under pressure, due to population growth, to intensify crop and livestock production whilst at the same time meeting the challenges of increasing rainfall variability and temperature changes.

The research project involved a diverse range of community members and approaches to data collection. Women, men and youth were randomly chosen from each of the four villages in the study sites and interviewed using semi-structured questionnaires on fodder production and management practices. They also participated in facilitator led focus group

discussions. In Burkina Faso 20 women, 20 men and 20 youth were involved. In Niger, 28 women and 12 men were involved. Gender roles in fodder production and management were analyzed through an assessment of perceptions about the degree of involvement of each gender category (men, women and youth) in the fodder value chain. At local and national levels, institutions engaged in promoting gender equality in fodder value chains were also consulted. The information obtained was analysed to understand the division (between men and women) of; labour, control over access to resources, sharing of resources, benefits, power and decision making, varying practical and strategic needs and influencing factors.

### Results and conclusions

The results revealed similarities and differences in gender participation in, and access to the benefits from, fodder production.

#### Differences in fodder production inputs access and control

In Yatenga province, Burkina Faso, women, men and youth have relatively equitable access to uncultivated communal land (fallow/bush) and to the fodder products available from it. Access to, and control of, land (and other requirements for production) are deciding factors when

it comes to the type of investments made, crops produced and the size of land allocated for specific crops. There are a number of opportunities for the development of fodder value chains through market innovations and the enhancement of organizational and institutional capacity.

Women face a number of challenges in accessing and having control over the resources that are linked to fodder and feed production. These barriers stem from a number of cultural and socio-economic barriers. For example, cultivated land in much of the Sahel is inherited from father to son. Women usually gain access to land through marriage. At the household level, cultivated land resources are also under the control of the head of the household, which is usually a man. Because women don't own the land that they work on, their access to it can be uncertain and problematic. This, among other factors such as access to funds to invest, restricts them from applying certain measures to improve the land or its use for their purposes such as planting trees, for fuel and fodder production, or making stone bunds to enhance water capture. In addition, women are often constrained by the availability of manual labour. Women's access to agricultural equipment and inputs such as seeds and fertilizer can also

TRANSPORTING COWPEA HAY TO SELL FOR LIVESTOCK CONSUMPTION, NAIMEY, NIGER. SOURCE: AUGUSTINE AYANTUNDE



be limited due to lack of finance, and few opportunities for them to access credit. Access to training can also be problematic either because of their existing workloads or because they require consent from their husbands to participate.

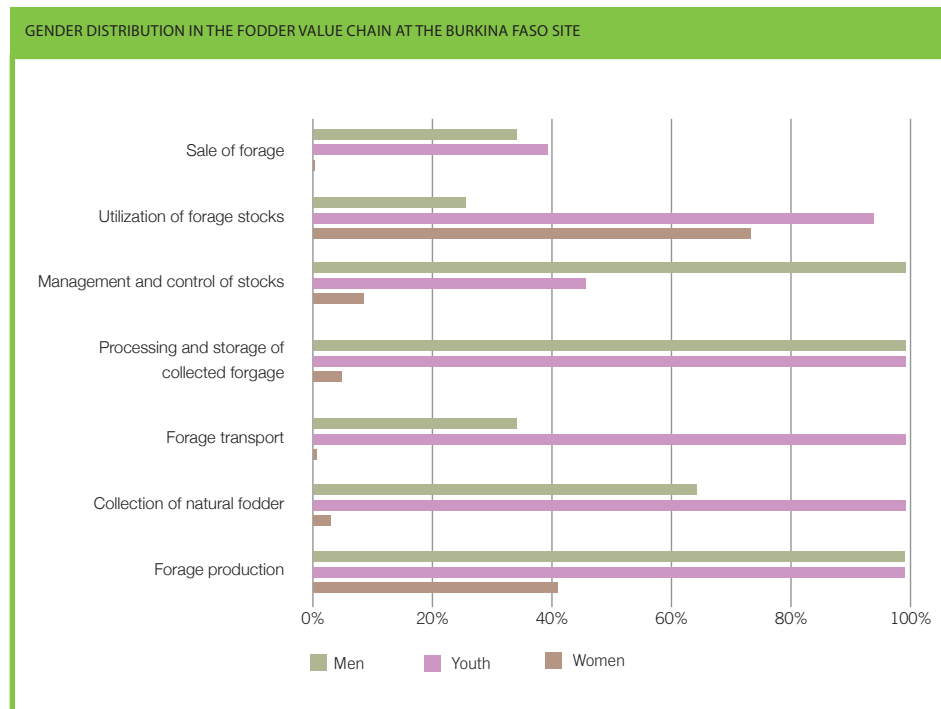
### Gender and decision making in fodder production and management

Fodder production is one of the many strategies developed by farmers and agro-pastoralists to cope with seasonal feed shortages. Having a forage reserve is important to maintaining and improving livestock nutrition and productivity. Interviews and focus group discussions conducted by the research team at the Burkina Faso site revealed the production and use of three types of fodder, and the differing gender roles involved:

- Collection and storage of crop residues - primarily conducted by women but with little decision making power over the crops grown
- Collection from natural pastures and/or involving direct grazing of natural pastures- relatively balanced decision making between women, men and youth
- Cultivated fodder produced mainly in the Burkina Faso village sites (there was no mention of cultivated fodder in any of the communities of the Niger sites) - men are the sole production decision makers on types of crops, area of land involved, and input investments (fertilizers and pesticides)

The situation is slightly different in the Niger locations studied. Here, although the decision to produce fodder is mainly controlled by the male head of household, women and youth do have a say in whether to pursue it, what fodder to grow and on what scale.

The participation of women and youth in the fodder decision making process is currently limited, as is their access to critical productive resources such as land. Only around 20% of those interviewed in the Niger site responded that women



and youth were involved in decision making on fodder biomass production. 60% confirmed that the male head of households were largely responsible for this decision making.

### Gender distribution of labor in biomass production

The traditional gender patterns around fodder production are changing in the sites studied. Women are now more engaged in fodder production, but still face limitations when it comes to equal participation in this activity and the related decision making processes. For example in one community, women have (traditionally) not participated in farming activities, instead focusing on tending to livestock. This is now changing as the women in the community become more involved in fodder production and management, supporting family incomes and wellbeing alongside the men of the community.

### Policy implications

A number of opportunities exist to increase sustainable productivity, enhance equity, improve incomes and spread the benefits of fodder and feed production more widely in both Burkina Faso and Niger.

- Implement initiatives enhancing women's and youth's control of, and access to, fodder production and supply value chains

Women and youth play an important role in fodder and feed production and management. Despite this, they have limited access to, or control over, land and other resources such as water, forests, equipment, training, credit and market information. These limitations hold women back from equal participation in the fodder value chain, and the benefits it can bring.

- Strengthen local institutions to foster greater participation of women and youth and ensure that their access and control are key factors when introducing improved fodder production technologies and practices

The establishment of local incentives to encourage women and youth to take up fodder and feed production, processing and marketing activities, and which improve their access to new technologies and practices, also have the potential to significantly improve and diversify their incomes and raise overall productivity.

- Promote innovative ways to communicate good practices in fodder production and management in local languages.

Policies and initiatives that support the establishment of a mechanism for collecting and disseminating market information via mobile phone or local radio would greatly enhance opportunities for all farmers to benefit financially from participating in the fodder value chain. This mechanism could also serve as a

tool for local authorities to share information on the forage potential of an area, as well as offering an early warning system when fodder begins to become scarce.

- Facilitate the creation, or strengthening, of multi-stakeholder platforms for managing fodder and feed production (in ways that consider short and long-term environmental aspects of land and water resources and ecosystem services)

Creating, and strengthening existing, livestock related multi-stakeholder platforms would facilitate better linkages among actors along the fodder value chain and enable coordination between inputs such as water and land resources, to support sustainable production approaches. This would help improve market access and provide opportunities for co-learning and knowledge exchange among all those involved in fodder production and management.

## Further information

- About the project:
  - <https://wle.cgiar.org/project/v8-realizing-full-biomass-potential-mixed-crop-livestock-systems-rapidly-changing-sahelian>
  - <http://www.snv.org/project/realising-full-biomass-potential-mixed-livestock-crop-systems>
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- Hiernaux, P. and Ayantunde, A. 2004. The Fakara: a semi-arid agro-ecosystem under stress. Report of research activities (ILRI). <https://cgispace.cgiar.org/handle/10568/1550>

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