



Women improve food and livelihood security through cheese-making in South and West Kordofan, Sudan

1. Background

Food security and livelihoods in South and West Kordofan states are dependent on livestock and crop farming. Over the years, the people here have experienced massive stresses and shocks resulting from protracted conflict in the region forcing pastoralists to migrate from their natural and traditional grazing fields. This disruption of nomad migration and the worsening conflict situation in the two states have led to increased competition over limited natural resources.

Hundreds of thousands of people have been internally displaced or severely affected by the conflict in South Kordofan between the Sudan Armed Forces (SAF) and the Sudan People’s Liberation Movement-North (SPLM-N). The security situation in West Kordofan is

relatively calm but unpredictable. In addition, South and West Kordofan are entry points to Sudan for returnees and refugees from South Sudan. People from South Sudan continue to cross into Sudan as a result of the ongoing violence and instability in South Sudan which puts further stress on the limited resources in the region.

Livestock herders have been blocked from accessing their traditional dry season grazing lands and water sources in Bahr el-Ghazal and Unity states due to the conflict in South Sudan. Vulnerable groups like returnees and internally displaced people (IDPs), especially female-headed households, are badly affected by food insecurity.

Poor livestock management and animal health services provide a favourable environment for disease transmission, exacerbated by high livestock densities. In addition, West and South Kordofan also suffer from extreme fluctuations in rainfall, which can vary from 150 to 450 mm/year. Severe climatic conditions and

land mismanagement have caused the vegetation cover in the region to become very sparse with the loss of many endemic species. Water and pasture in the area will soon be exhausted, increasing the stress on animals and making them even more susceptible to disease.

2. Cheese-Making Projects

South and West Kordofan States are known to have surplus milk production during the rainy season from August to December when pastoralists accumulate in the northern parts of the States. Most of the produced milk is, however, not consumed either because of inaccessibility to markets due to the roads being closed during heavy rains, or because some local markets cannot accommodate the produced quantities.

Handling of milk and milk products is the business of women according to the local culture and tradition. To empower women pastoralists, two cheese-making initiatives took place in South and West Kordofan States under projects implemented by *Vétérinaires sans Frontières-Germany (VSF-G)* and partners, funded by *USAID/OFDA*, between 2013 and 2015. Other project partners were: National NGOs *SIBRO*, *Altamas* and *Mubadiroon*; and South and West Kordofan State Ministries of Agriculture and Animal Resources; and the Ministry of Social Welfare and Humanitarian Aid Commission at the federal and state levels.

The two projects were the South Kordofan Integrated Livestock and Livelihood Support (SKILLS) and West and South Kordofan Integrated Livestock and Livelihood Support Program (WSKILLS). These were targeted at people affected by conflict, climate change and natural resource degradation. The interventions were aimed at mitigating chronic vulnerabilities among the poor communities, restoring and protecting the target communities' livelihood assets, and addressing inadequate responses to food and livelihood insecurity.

Cheese can easily be stored for long-term household consumption, and also easily transported to markets. The by-product of cheese making can be used as a feed supplement for fattening calves because it is rich in protein and effectively and quickly builds up muscle. The implemented projects represented an integrated response to effectively protect livestock

assets, improve animal production, upgrade the value of animal products, and improve pasture management of the target communities.

The projects were designed to enable women in the targeted communities to transform milk into cheese for household food and sale. All the selected participants were women with a background in local milk processing for livelihood. They came from vulnerable pastoral, conflict-affected communities in South and West Kordofan States and included internally displaced people (IDP), returnees, nomads and destitute resident communities.

Training on cheese-making was provided to 300 women: 100 were trained in 2013 and 2014 under SKILLS and 200 were trained between 2014 and 2015 under WSKILLS. They received three days of theoretical and intensive practical training in milk safety, hygiene, the clean cycle of milk processing, cheese processing methods, production of white cheese and cooked cheese, cheese packing and transport, and small business management.



Cheese making trainee

Each trainee was provided with start-up kit comprising wooden tables, wooden frames, wooden covers, knives, buckets, cloth, containers, rennin sachets, salt, coagulation pots, soap, disposable gloves, and a work

apron. The practical sessions used the start-up kits to teach the participants the proper and hygienic way to utilise the materials. All trainees produced cheese on their own during the training.

Phase 1



Women are provided with 3 day training on cheese making and taught how to use the start-up kits, hygienically handle and store the cheese.

Phase 2



VSF-G distribution of cleaning and packaging materials and start-up kits are handed to the women after completion of training session. Shelving units are among these items to ensure minimum standards for storage are maintained.

Phase 3



Beneficiaries conduct practical session & make their own cheese. VSF-G will monitor and ensure that cheese making hygienic standards are maintained. Beneficiaries who require additional training will be identified at this stage.

3. Outcomes

A key benefit of the projects has been increased food and nutrition in the target communities as a result of the new knowledge and skills in terms of milk hygiene and processing. The new methods save time as compared to the traditional methods and there are also reductions in milk losses. In addition, the communities are able to feed their calves with whey protein, a by-product of the cheese-making.

Women are working in groups to improve milk production, reduce costs and increase their incomes. The project participants have increased their incomes.

On average, a cheese-maker can produce two kilograms of cheese per day within the milking season which lasts for three months. Two kilograms of cheese can be sold in the local market for \$12 with inputs for producing the cheese (salt, packaging and cleaning materials) costing \$2, meaning the net daily income can reach

almost \$10, with the income generated during the milking season reaching as much as \$900. Of course, these figures depend entirely on sale and exclude the cheese kept for household consumption. The women only sell the excess in the market, after household consumption.



“My daily production of cheese reached 13 kg; making and selling cheese has enabled me to support the education of my children and pay for food and healthcare,” says Bakheita Abdalla, from Aldalanj Town, South Kordofan State.

4. Opportunities for Upscaling and Challenges

In Aldebaibat, the closing training session was attended by the Commissioner of the locality and representatives from micro-finance institutions. During the event, the Commissioner announced that all trainees would be exempted from taxes and government fees, and each would be provided with two milking cows on loan from micro-finance institutions immediately, with the cost of the animals to be recovered within two years. Meanwhile, beneficiaries from Aldalanj participated in the Knowledge Share Fair organized by the Federal Ministry of Agriculture, FAO, IFAD and other INGOs in February 2015 in Khartoum.

The projects have shown that small-scale cottage industries like cheese-making and agro-food processing have the potential to be upscaled. More and more women from the communities are requesting for similar interventions after seeing the benefits enjoyed by first batches of trainees. Interviews with some of the women trainees revealed that they had great interest to train others. Two challenges, however, are the fluctuation of market prices of supplies and the devaluation of the Sudanese currency.

5. Conclusions

Empowering women through capacity-building is a good strategy for addressing food insecurity and poverty. The two projects have successfully empowered women pastoralists with the knowledge and skills to improve community food security and livelihoods.

Supported by:



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