Food and Agriculture Organization of the United Nations

GENDER AND RESILIENCE GOOD PRACTICES

NATURAL HAZARDS

Beekeeping to buffer against economic shocks caused by natural hazards in Somaliland

Generating income for men and women to strengthen the resilience of livelihoods


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→ Context

Somaliland has the world's fourth-lowest gross domestic product per capita, according to the World Bank, and the population is at risk of different types of climate-related shocks such as droughts and dry spells, with detrimental effects on crops and livestock. In this backdrop, bees can resist a dry season with very little water, foraging in the numerous wild tree species even when it has not rained.

In order to improve and increase their honey production, the Reddin Beekeeping Group at Beer village, in the Burao District of Somaliland, received support by FAO through the Sustainable Employment and Economic Development Programme (SEED). SEED is funded by the Department for International Development of the United Kingdom (DFID).

→ Challenges

The income generated from the selling of honey and other bee products stabilizes the annual flow of income during the meager months. Nevertheless, people still often lack knowledge, skills, and technologies to manage hives, increase production, and produce good quality honey, suitable for export. In addition, beekeeping has been a predominantly male occupation, as honey hunting often requires climbing onto trees and is not considered suitable for women.

To address these challenges, the project started in 2013 with the introduction of Top-Bar and Langstroth hives and related equipment (see case study on page 2). Over 50 percent of the group members were women.

→ Methodological Approach

- A group is identified or formed, ensuring equal representation of men and women;
- All group members are trained in every aspect of beekeeping: from catching swarms to good hive management, disease control, processing of honey and beeswax, and hygiene;
- Suitable hive models are identified and purchased or constructed together with the group, bearing in mind the possibility to upscale and expand business later on;
- Market linkages are facilitated, and training provided on market standards, regulations, and quality controls, with sensitivity to different kinds of learning needs (e.g. illiterate participants).

What is beekeeping and how does it contribute to increasing the resilience of livelihoods in a context of natural hazards?

Honey hunting, or plundering the nests of wild honeybees to obtain honey and beeswax, is practised throughout the world wherever colonies of wild nesting honeybees are abundant. The housing of bees in a container is true "beekeeping", but the term is used loosely to describe all the techniques involving bees and the harvesting and processing of their products. Beekeeping can generate income within a few months' time, with relatively small investments in labour and resources, making it an excellent way to diversify livelihoods and build economic resilience for rural women and vulnerable households. Beekeeping is an especially convenient opportunity for those living in drought-affected areas considering that bees can resist dry seasons.

Key facts

Food systems highly depend upon bees. Out of the 100 crop species that provide 90% of the world's food, over 70 are pollinated by bees. Moreover, these crop species provide greater nutritional value. Improved skills and technologies in beekeeping can multiply honey yields .

Environment → *Bees are excellent pollinators and increase the yields of vegetables and other food crops. They are essential to pollinate a wide range of wild flowers and trees to maintain and protect biodiversity.*

Nutrition and health → *Honey and its byproducts are considered to have medicinal value and are a source of energy for the beekeepers and their families. The income generated from honey and other bee products can be used to improve family diets.*

Gender equality → *Beekeeping provides men and women with the opportunity to supplement their income, while also creating a platform for social change. Both can learn technical skills in beekeeping and in business development, and can make decisions on an equal footing, thus transforming a culture where men are considered major decision-makers.*

→ Impact

Through improved beekeeping technologies and skills, the capacities of local men and women were strengthened, leading to an annual increase from 5 to 31 kg of honey per bee hive. Furthermore, thanks to the improved quality of the honey, it can be sold to traders at Berbera port at a competitive price now that the market is accessible. Additional income is being generated by processing honey and wax to prepare other products such as soap, body creams and candles. **Women in the community have become more involved in beekeeping activities than before, and now benefit from a more consistent income flow from the sales of honey and other bee products. The group provided a platform for women to make decisions on an equal basis with men** on the activities and on their lives, resulting in improved food and nutrition security. The income generated serves as a safety net against shocks from food shortages.

The productivity and profitability of beekeeping increased compared to the traditional methods, generating additional income. Women – traditionally not beekeepers – are satisfied with the new livelihood and the skills they have acquired.

→ Sustainability

The sustainability of beekeeping interventions is ensured by (1) building on the local knowledge of bees, (2) the available resources and local materials and (3) by taking on a socially equitable approach. Beekeeping offers a way to generate new income and diversify agricultural activities with minimal investment. It is not labour-intensive and requires minimal water or land, making it an accessible source of income for women and vulnerable households with limited access to resources. Honey, properly and hygienically collected and stored, will keep well as long as it is needed without spoilage and requires little space, so it can be sold when additional cash is needed. Value can be added by producing candles, soaps and creams from beeswax. Bees also play an important role by pollinating crops and thus contribute to increased food production. Investment into developing capacities of local craftsmen and women to manufacture beekeeping equipment such as hives, protective gear and smokers from locally available materials can increase the sustainability even further.

Gender-responsive beekeeping interventions can provide a feasible and empowering diversification strategy for rural households also in other risk-prone contexts, as bees can be found everywhere.

→ Replicability and upscaling

This practice provides good possibilities for upscaling and introducing it in other parts of Somalia, with a similar culture, land terrain and vegetation for bee forage, and where there is an undisputed demand for bee-products for domestic consumption. Gender-responsive beekeeping interventions could provide a feasible and empowering diversification strategy for rural households also in other risk-prone contexts, as bees can be found everywhere as long as there is forage (nectar and pollen from blooming plants within their flight range of 2 km radius). **Beekeeping can also be taken up by displaced people or people with no permanent settlement** to gain benefit in a relatively short time. Whereas in Somalia the market exists and the focus is to increase production, an important consideration for replicating elsewhere is to ensure market access by conducting comprehensive market feasibility analyses.

SELECTING A HIVE MODEL

Two types of hives were promoted for the Reddin group: the Langstroth and Kenyan top-bar hives. The selection of the hive depends on the circumstances. Whereas the Langstroth hive tends to provide better honey yields, it requires a centrifugal honey extractor, and other specialized equipment; whereas the top-bar hive can be managed with simple kitchen tools, and constructed from locally available materials. The precise frame dimensions of a Langstroth hive requires a high degree of craftmanship, and thus it is about 30-50% more costly than the Kenyan top-bar hive. These differences should be taken into account at the start of the intervention, to ensure beekeepers will have realistic possibilities for upscaling the activities at the end of the funding cycle. A good starting point is to develop artisanal skills of some community members to be able to make the hives locally.


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→ More information

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On resilience good practices:

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- www.fao.org/in-action/kore/good-practices/en/

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I6429EN/1/11.16