

## WOMEN PARTICIPATION IN BEEKEEPING IN ZAMBIA THROUGH THE USE OF TECHNOLOGICAL INNOVATION

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### SUMMARY

Beekeeping in Zambia has traditionally been a predominantly male occupation, due to a mix of cultural and social factors, as well as practical constraints, that limit women's participation. A value chain study conducted by SNV in collaboration with other partners in 2005 revealed that despite its potential for enhancing rural livelihoods, limited value addition was being realised in prevailing beekeeping practices. Building on the study findings and comparative experiences in Ethiopia, SNV saw an opportunity to explore ways of stimulating technological and market innovations that would also contribute to the goals of encouraging women's participation and poverty reduction.

In collaboration with the North-Western Beekeepers Association (NWBKA) and Mpongwe Beekeepers Enterprise (MPE), the SNV intervention introduced modern top-bar beehives that can be installed close to the household and are easily managed by women. Linked to this, SNV facilitated awareness raising on the importance of enhancing women's involvement in the sector and supported the two associations to mobilise women beekeepers to form groups to facilitate access to credit as well as technical and management support. With funding from Cordaid, NWBKA and MPE established revolving funds to make the modern beehives affordable to the women groups.

One of the immediate outcomes of the intervention has been an increase in the number of women beekeepers, from virtually none to around 450 women beekeepers at present in North-Western province alone. Based on its experience in implementing honey supply contracts with both men and women producers MPE decided to focus on supporting women beekeeping with its input service provision facility as it is more likely to recoup its investments. Currently, MPE has achieved 33% women participation in its supply chain, of which slightly more than 60% are organised in producer groups.

The use of top-bar beehives has contributed to higher household incomes not only due to the higher yields achieved but the higher quality of the honey produced, which is leading to growing demand in the market and opening up opportunities for up-scaling this intervention model into areas beyond North-Western and the Copperbelt Provinces in Zambia.

Nevertheless, the key is to ensure that the technology continues to stay affordable for the women beekeepers and that adequate capacity development is provided for the correct management of the modern beehives. These challenges are partly responsible for the marginal adoption of this technology in the country in comparison to traditional beehives.

Beekeeping in Zambia has been predominantly a male occupation. This can be explained by several factors. Beekeeping is generally considered to be a man's occupation, and male beekeepers sometimes even object to women becoming beekeepers. There are also a number of practical constraints that hinder women from participating in this economic activity. Firstly, the traditional bark hive requires physical strength and since climbing is often required for the collection of honey, beekeeping is not considered suitable for women for modesty reasons. Secondly,

### CONTEXT

harvesting honey from traditional beehives also requests long absences from home, which competes with women's domestic chores.

In 2005, SNV in collaboration with other research partners conducted a study of the honey value chain to identify how SNV could position itself in the development of this sector. The study revealed that limited value addition was being realised due to minimal investment in technological and market development initiatives. The study further found that the low priority given to the sector had also affected the scale of production and productivity of beekeeping. Based on this study and building on the experiences in Ethiopia, SNV decided to explore ways to encourage technological innovation in the honey sector as a means of alleviating rural poverty. It is within this context that SNV saw an opportunity for women to participate in the honey value chain by introducing modern top bar hives as an appropriate beekeeping technology for women as they require less physical activity and can be installed closer to their homes. As a result, women are now better integrated in the honey value chain and have started to benefit from this additional income source. At the household level, men have also welcomed women's participation in beekeeping as it contributes towards food security and improved income for the family.

## KEY PARTNERS

The key stakeholders that SNV has partnered with on promoting women beekeeping in Zambia include Mpongwe Beekeeping Enterprise (MBE), which has been promoting top bar hive beekeeping since 1997, and the North-Western Bee Keepers Association (NWBKA). MPE's approach since 1997 has been to encourage honey production through modern bee hives because of their export market requires good quality honey. Modern top bar bee hives produce combs which are easy to process and do not compromise quality as much as with traditional beehives. SNV has also collaborated with two other partners to enhance women's technical and management skills, namely Cordaid and the Forestry Department of Zambia. In addition to supporting exposure visits, Cordaid has also played a key role in providing financial support to both MBE and NWBKA for the purchase of this modern beehive technology.

## SNV INTERVENTION

SNV's strategy on social inclusion in beekeeping targets two clients, NWBKA and MBE. Firstly, SNV conducted training on governance for the NWBKA and MBE which also introduced the importance of enhancing women's involvement in the sector. SNV lobbied for women positions in the structure of the associations and in NWBKA two women became executive members. This alone, rejuvenated their interest in being actively engaged in beekeeping regardless of the methodology.

Secondly, SNV carried out a value chain analysis of the bee sector and shared the findings with sector stakeholders, including the women members of the beekeeping associations. Based on this research, SNV facilitated awareness raising, together with NWBKA and MBE, for the association members on the viability of the sector and the benefits thereof in terms of income margins as compared to other rural activities such as maize production: return on investments is five times more in comparison. The women members of the association expressed particular interest in how to further increase their household incomes through beekeeping, which is how SNV decided to explore possibilities for them in this market.

The third element of the intervention focused on the empowerment of women with appropriate beekeeping equipment and supporting the creation of women groups within the associations. The reason for encouraging women to work in groups was because modern beehives require intensive monitoring and management which is better manageable in a group. Also the high costs of the technology (50 US\$ per hive in comparison to 2US\$ for a traditional beehive) would be more affordable for a group than an individual.



Finally, this approach was encouraged since the incomes and expenditures made by the women would be managed as a group. In this way, they are able to hold each other accountable and generate independent incomes to boost their existing household income sources. NWBKA in collaboration with the Forestry Department and SNV facilitated training for women beekeepers in North-Western Province on group management and modern beekeeping skills.

In order to address the challenge of the high cost of modern beehives, SNV supported NWBKA and MPE to source additional funding for the intervention. In 2009, the two organisations, together with their producer associations in the Copper-belt and Central provinces, acquired a grant from Cordaid to support capacity development for beekeepers.

Cordaid's support was provided in the form of a capital injection to enable the two associations to generate their own resources. Using the Cordaid funds, NWBKA and MPE established revolving funds to make the modern beehives affordable to the women groups. Each group is provided with a top bar hive and is expected to pay the loan in honey to the association over a 5-year period. With time, this will free up funds to enable more women to participate in the intervention.

## OUTCOMES

One of the immediate outcomes of the intervention has been an increase in the number of women beekeepers. There are currently around 450 women beekeepers in North-Western province who are engaged in beekeeping and generating their own incomes through women groups.

MPE has honey supply contracts with both men and women producers and in turn the enterprise provides them with input technology services. From its experience, MPE has found that women's groups are consistent in honouring their contractual obligations and avoid side selling in comparison to individuals, mostly men, who have a tendency to sell their honey quickly even at a lower price to the competition for short term gain. It is for this reason that MPE decided to focus on supporting women beekeeping with its input service provision facility as it is more likely to recoup its investments. In its business strategy, MPE has formulated an objective to enhance women participation from 10% to 40%. So far 33% women participation has been achieved, of which slightly over 60% have established themselves in producer groups within the value chain. Currently, each group produces about 20 kg of honey per season.

The modern top-bar bee hive generates higher incomes from beekeeping than the traditional bee hives due to its higher yield. During harvest time the selling price of comb honey is 0.50 US\$ per kg regardless of the quality of honey. Still, the average gross profit for one modern beehive is higher, 13 US\$, in comparison to a profit of 6 US\$ for one traditional hive. Furthermore, the technology provides the women with higher quality honey which is more in demand by the market than the honey from the traditional hives. Therefore the introduction of this technology to women is slowly spreading to the men as well.

Most female beekeepers through the women groups now sell their honey when prices are higher and not in the harvest period when prices are low, so they are able to re-invest more income in food production. The increased participation of women in beekeeping through the modern technology has also been appreciated by men since it results in increased household incomes and has therefore contributed to improved food security.

## LESSONS LEARNED

This intervention shows that integration of women into the beekeeping value chain has a positive effect on household income and employment. Furthermore, the relationships established between the women producer groups and the processors' associations have strengthened the value chain as a whole. The provision of input technology service through a revolving fund and embedded management skill trainings by the associations to the women has been the key driver of success of this model. It has provided the women with the opportunity to access technology in a more affordable manner and therefore the ability to contribute to economic development in the beekeeping sector. Furthermore, the use of the top bar beehive has also been appreciated by men in the beekeeping sector since it contributes to household requirements such as health and education, while men spend their incomes on other purposes.

Still, the key challenge is to ensure that the technology continues to stay affordable for the women beekeepers and that adequate capacity development is provided for the correct management of the modern beehives. These challenges are partly responsible for the marginal adoption of this technology in the country in comparison to traditional beehives.

That being said, the market trends indicate that the demand for the modern top bar hives is growing driven by rising demand from processors for more and better quality honey. Consequently, the market is driving the possibility of up-scaling this model into areas beyond North-Western and the Copperbelt Provinces in Zambia.