## Beekeping in Ethiopia: history, status and outlook

Lecture by Dr Jürgen Greiling given on the 12th December 2001

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Anyone living in Ethiopia is aware of the importance of honey but somehow fails to realise how complex and fascinating its production by bees actually is. Despite an absence of an overhead projector Jürgen Greiling managed to keep his audience enthused by a detailed review of the subject in a very relaxed atmosphere.

Annually 24,000 tons of honey are produced in Ethiopia, 24% of the African production, and representing a value of about 450 million Birr. However, the potential of the industry is much greater, but the resource is under-utilised because of the traditional beekeeping methods used in Ethiopia. These methods also affect honey quality which is often poor and thus makes export difficult or even impossible. Fortunately quality problems do not affect wax and Ethiopia is a leading exporter of this product. Historically honey production has been highly connected with the Orthodox church, supplying candles and honey wine.

Honey is actually a very complex mix of over 200 components including various types of sugars. Thus a variation in the relative proportion of these components will result in very different types of honeys and this was illustrated by a few jars of honey. Unfortunately, we did not get a chance to have a honey testing session, probably a wise decision in order not to make a sticky mess of the Ethiopia Hotel room. The huge amount of effort invested by bees to produce 1 kg of honey is difficult to imagine. It basically requires 60,000 trips covering over 200,000 km and involves the visit of three to five million flowers to collect the necessary nectar. Many crops also benefit from bees as they perform the essential task of pollination, for instance in oilseeds like Noug yields may be increased by as much as 40% when honeybeees visit the flowers.

Jürgen Greiling is clearly enthused by his work on bees and honey and he is obviously lucky to be able to link his interest with a professional career in the subject. He is sponsored by German technical cooperation agency (GTZ) and is working for a private company Harmony. This highlights an interesting change in the approach adopted by aid agencies in agricultural development, i.e. a shift from

sponsoring government organisations to helping private companies. Jürgen acts as an Agricultural Advisor to Harmony, a company founded in 2000 and established in the Gurage Zone of the Southern Regional State. One of the aims of Harmony is to establish modern beekeeping practices including the promotion of good crop pollination and biodiversity conservation as well as ensuring additional nonagricultural income to the local farmers. The company is also involved in the production of tree seedlings as the existence of a large number of pollen and nectar producing trees in the countryside is essential for honey production.

Although there is a large internal market for crude honey, by using modern beehives honey production could be increased by as much as five times to reach 30-40 kg per hive per annum. This obviously requires the use of modern beehives which cost around 400 Birr whereas the traditional hives so frequently seen hanging in trees is free. A major drawback of traditional beekeeping is the use of fire and smoke to stun the bees, but this essential procedure does affect the quality of the honey. Furthermore traditional practices are destructive.

Using a wooden beehive Jürgen described all its different components as well as explaining their importance to bees and to honey production. The major drawback of these wooden boxes is their weight thus rendering their transport rather difficult especially if no modern transport is available. Beehives using other, much lighter materials, are now been promoted.

During a lively discussion session it was pointed out that much has yet to be achieved. Apart from the need for better material, especially in relation to extraction, attracting women and children to beekeeping and honey production is a challenge which has yet to be met. Finally the diseases affecting bees in Europe is obviously is great potential threat to the future of beekeeping in Ethiopia and it is of the utmost importance to keep it out of the region.

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