

European beekeeping at a crossroads

Strategic plan proposed by European beekeepers

Working Party on Honey; Copa-Cogeca, Brussels

1. Bees are a vital part of our society and our environment

The honeybee is a social insect of vital **importance to the environment**:

- throughout a day a bee collects hundreds of micro samples from the environment; they are recognised as a guardian of the environment and sometimes used as such by research laboratories to study pollution
- they are an integral part of indigenous ecosystems and biodiversity
- and play an essential role in the pollination of wild flora

Its **specific role in agriculture** is essential.

As such, through the “assisted” pollination of crops (seeds, fruit, vegetables, arable crops and underground crops, etc), they have a positive impact in terms of yields, in quantity as well as quality, of fruit and grain production, in addition to the speed with which they mature. The activities of pollinating insects, including honeybees, ensures the pollination of 84% of the 264 species grown. In Europe this represents 14.4 billion euros (= 10% of the turnover in European agriculture) in 2005 (Programme ALARM source: INRA France). This figure does not take into account the impact that pollinators have on the production of animal fodder or seeds used for the production of grains of several vegetables.

It is mainly the high-value agricultural products particularly sought after by consumers (fruit, vegetables, etc) that are mainly affected by pollination.

Honeybees ensure **the production of beehive products: 60% of the honey consumed in the EU, pollen, royal jelly, wax, etc** which result in an impressive number of derivative products in the domains of food, cosmetics, medicines, etc.

2. Fact: Bees are under threat now more than ever

Beekeepers have witnessed some alarming developments over the past few years.

a. In terms of bee numbers:

- They have been observing **bee blight** and consequently a growing and considerable **drop in productivity and profitability** in certain regions for over ten years. In 2008, a 30 – 50% bee mortality rate meant that enormous efforts were required to reconstitute bee colonies. In several areas, mortality is no longer below 25% whereas an acceptable mortality rate does not exceed 5% (10% in particularly difficult years for beekeeping).

- The **climatic changes** that we have witnessed are having potentially serious repercussions on colonies as they have a direct impact on quality and flowering periods which then go on to have a direct influence on the bee life cycle, the possibilities of harvesting honey and pollen, even in certain cases (droughts, etc) leading to famine or at least doubling the cost of food. These changes are also set to influence pathologies (parasite cycles such as *Varroa destructor*) which could begin to develop more rapidly and threaten the survival of colonies.
- There is a trend within agricultural species to move towards **more commonplace areas** and areas which are considerably less rich in terms of bee forage. It is especially the lower mountainous areas (Jura, North Italy, etc.), which traditionally have a great wealth of flora that are affected by this development.
- Agricultural practice which is more respectful of the environment and bees is not yet properly developed.

b. In the honey market, there has been:

- volatility in honey prices on the market
- disparity and therefore inefficiency in the level of border controls which is probably allowing some types of honey to be brought to the European market which do not meet the standards in the honey directive or the hygiene standards imposed upon European producers
- within Member States a lack of honey labelling controls, labels which do not always fully correspond to the products being marketed (increasing presence of adulterated honey).

All of these points have a direct impact on the economy of beekeeping farms.

c. At beekeeper level:

Demographic changes are alarming: a drop in the number of beekeepers and ageing which in many Member States is translating into a loss of around 10-15 %/year in numbers.

d. In health terms:

- It has also been noted that there is a lack of **availability of veterinary medicines** to combat bee diseases/parasites and *varroa* in particular.
- Measures have been taken to avoid the emergence of **new pathogens** (for example *Aethina tumida*) but what of **invasive species**? A species of Asian hornet (*Vespa velutina*) is rapidly becoming more widespread in the south of France and could invade a large part of Europe if appropriate measures are not quickly put in place. Where it is present, it can destroy 20 to 30% of colonies in a year.

This being so, never before has a real **strategy for stimulating beekeeping** in Europe been so essential.

This must take into account the specific characteristics of the beekeeping sector.

3. Analysis: Specific characteristics to bear in mind

a. Need for recognition of *bee specificities* and *preservation of colony numbers*

Beekeeping is the only form of insect-breeding which results in a foodstuff. Contrary to all other breeding forms, the animal in this instance is a colony made up of a number of individuals which vary in time and position within a beehive.

Although beekeeping is considered a form of breeding, bees still remain wild animals which follow their instincts and which cannot be domesticated as other animals can for breeding purposes. As such, they select their food sources in their environment and grow according to their biological cycle which is directly linked to the local climate and flora. This explains the wide diversity of situations between different European countries.

- This diversity must absolutely be borne in mind when putting place specific actions for bees. A large degree of flexibility is also needed with regard to support programmes as is already the case for the triennial support programme (Regulations (EC) 797/2004 and 917/2004).
- Their capacity to visit food sources (nectar, honeydew, exudate, pollen, water, propolis, etc) several kilometres away from their hive (up to 6 km) must be taken into account among other aspects when growing or applying products could have an impact on them or their products.
- In terms of animal health, bees are considered a “minor species”. Furthermore, in terms of treatment product residues, there is no metabolic product as opposed to what occurs in animal tissues. Here the notion of a waiting period makes no sense, only the MRLs in terms of beehive product levels are relevant.
- Veterinary legislation is based on traditional types of production and fails to take the specific characteristics of honeybees into account.

b. Need for recognition of *bee specificities* and *preservation of beekeeper numbers*

Aside from the specificities inherent to bees, beekeeping has a whole host of characteristics which need to be borne in mind.

Therefore, beekeeping is a breeding form which plays a central role in the domain of agricultural production which is perfectly in line with the framework of **sustainable agricultural development**.

Beekeeping has always been a feature of our rural lives. It is a perfectly integrated activity. This activity furthermore has been **fully integrated into the social fabric of rural areas** for a long time.

We must not forget that Europe is the **“birthplace” of our bees** and that our bees have been exported to America and Australia. This is due to the fact, among others, that our countries are countries of excellence, traditions and beekeeping know-how. There is a total of 13,602,000 colonies in the EU as opposed to 2,444,000 colonies in the USA, i.e. a density almost 12.5 times higher in Europe.

This activity is practiced by **600,000 beekeepers**, all of whom are very passionate. Beekeeping is mainly a complementary activity which forms a highly-valued source of additional income during this time of crisis. Among them, however, 19,000 are classified as professionals

(more than 150 hives: such a criteria is arbitrary and neither takes into account local specificities nor exists for any other time of production).

c. Need for recognition of **specificity of beekeeping products**

Unlike several agricultural products, we have a **deficit in honey**. European production (12% of world production) does not manage to respond to demand and honey imports from other countries amount to almost 40% of the 340,000 tonnes of honey consumed every year, despite the recent accession of two major producing countries (Romania and Bulgaria). Beekeepers are therefore faced with large quantities of honey on the market from competitors who generally have lower production costs.

The **diversity of the honey** produced in Europe is remarkable and their level of quality is rarely matched on other continents. It is true that the hygiene criteria imposed upon our beekeepers does not really have an equivalent at international level.

Beekeeping products have a robust image with the public at large. Very few agricultural products have an image as positive. They are considered by the public as:

- **natural** products (harvested and selected by bees from nature)
- “**healthy**” products

These two qualities are linked to the lack of residues among other aspects. Everything possible must be done in order to avoid this image being tainted.

If honey receives a **legal definition**, it must be said that all other beehive products such as pollen, propolis, royal jelly and wax do not yet have official definitions.

4. Objectives to achieve: Maintain sustainable development whilst respecting the environment

a. In colony numbers

- In order to **limit mortality** rates in colonies as much as possible and compensate for the losses in income which are associated with it, everything must be put in place in order to:
 - Avoid bee losses linked to the use of **pesticides**. This calls for:
 - fast adaptation of existing bee tests in virtue of Directive 91/414/EEC to the techniques put in place in agriculture in order to study the real risks of active materials used and in their various conditions of use (type and application period, environmental conditions, coupling with other molecules, etc) and taking into account different ways of exposing bees to toxic substances.
 - the putting in place of precautionary measures which are needed to avoid the bees coming into contact with products in concentrations that could threaten colonies' survival and/or productivity during the season; and to check the real feasibility of these measures as well as how they are practiced on the ground.
 - **Encourage restocking** of high-quality colonies

- Put in place specific intervention programmes in the event of **excessive mortality** linked to independent pathological, climatic or environmental problems for beekeepers witnessing excessive mortality rates.
- Guarantee the maintenance of **diversity of local bee breeds** (less productive) but in balance with their environment by promoting special conservation protection areas and by encouraging the beekeepers found in those areas to use local breeds and set up special breeding programmes for these breeds.

With regard to health

- Improve the **availability of veterinary medicines** in terms of quantities as well as accessibility to beekeepers. Rotation in the use of medicines must be a possibility in order to avoid problems associated with resistance. The process to centralise the recognition of veterinary medication used in beekeeping should be strongly encouraged. Resistance surveillance systems must be put in place. Research aimed at making new molecules available to beekeepers must be financed by the Union.
- Set up a network to **monitor colony losses** and any sanitary problems, with an alert system (health watch).

b. At market level

- Improve **border controls** for honey. These are a priority for European beekeepers who are asking that imported products respond to the same quality standards that are imposed upon them in Europe and also that this is verified.
- Improve internal controls to prevent the sale of adulterated honey or honey that does not match its designation.
- Better inform consumers and have a better definition of the quality and specificities of certain botanical or geographical origins through the annexes of the current directive or by introducing new quality indicators (PDO, PGI, TSG). Honey's inclusion in **promotion programmes** must be maintained.
- Give related products (wax, propolis, pollen, royal jelly) a **definition** that takes into account, as is the case with honey, not only their botanic and/or animal origin and their composition but also their main biological properties especially if they can be used to this end. Without these definitions, the door is left wide open to fraud.

5. Beekeeping in conjunction with sustainable rural development

As we have seen, beekeepers have a role to play in the economic and social development of rural areas in Europe.

a. Bee numbers

- In order to maintain a sufficient **colony density** for ensuring good pollination: A sufficient number of **beekeepers** must be maintained and they must be evenly distributed over areas. Amateur beekeepers are indispensable in this sense. To this end, efforts will be aimed at:

- providing instruments (information, training, etc) to beekeepers to allow them to **adapt rapidly** to new environmental and economic conditions at the risk of disappearing.

- encouraging beekeepers to practice **migratory beekeeping**. This is carried out mainly by beekeepers of economic importance, including professionals, who are the only ones able to provide a large number of pollinators at any one time (even early on in the season). As such, areas where migratory beekeeping is banned in the event of a disease which must be declared are a considerable hindrance and do not seem justified in countries where the disease is endemic.

- allowing the maintenance of **rich and diverse flora** to ensure the presence of permanent hives. To this end, it is essential to include bees and biodiversity in agri-environmental programmes. Multiannual rural development initiatives that impact upon the quantity and quality of honey resources and pollen must be planned in the various Member States.

- Beekeepers should be involved in farm policies that develop **large-scale honey crops**. This is particularly true for oilseeds. We know just how dependent Europe is in this area (around 40,000 tonnes currently imported). The redeployment of oilseeds in the EU, currently made possible through the decoupling of aid, would provide farmers with the added value they currently lack. This is of interest to beekeepers too, in the sense that most oilseed crops are excellent bee crops. We would welcome cooperation between the farming and beekeeping communities on the way in which this revival might take place.

A large number of the initiatives included in the tri-annual beekeeping support programme are essential in all of these areas. The programme must therefore not only be maintained but also developed by adapting budgets to real needs.

b. At beekeeper level:

*Maintain and sustainably develop the **profitability of beekeeping**.*

-Maintain a production framework based on local diversities by making sure bee farms are profitable and by fostering the development of **beekeeping which pays** (thus ensuring dynamism). In the context of rural development, we should, for example, try to help beekeepers organise themselves into marketing ventures (association-based groupings).

-Maintain and even encourage the **diversification** and quality of bee products in relation to imported products whose quality is difficult to control, in order to better respond to consumers' expectations. This is where, in addition to the specific beekeeping measures already announced, the beekeeping support programme (technical assistance, analysis support, applied research), remains crucial.

-We must **maintain the positive image of bee products**. This is illustrated by the simple fact that the presence of GMOs in pollen completely destroys its commercial value. Coexistence measures must be taken.

-Equip beekeeping with networks as well as monitoring and research tools designed to help it **adapt properly to new realities** on the ground and to help **beekeeping acquire a better political foundation**. We must help to ensure that beekeeping is

better incorporated into both the objectives of the Common Agricultural Policy and the other EU policies applying to bees and beekeepers:

- animal and plant health;
- authorisation for the placing of veterinary medicines on the market;
- import controls at EU borders;
- food safety and traceability – e.g. residue problems, etc.

These sometimes complex policies do not always take the specificities of beekeeping into consideration, which complicates their implementation.

6. Towards a flourishing European beekeeping sector within the CAP

Several forms of action must be seriously considered to attain this objective:

- a. We must optimise the use of all the tools available in the current CAP while at the same time respecting the complementary nature of support:
 - The tri-annual European beekeeping support programme
- b. We should therefore consider increasing the budget as well as the scope of this precious tool while at the same time improving its flexibility (for example the use of 'restocking' budgets in order to analyse the origin of bee blight, etc) and scope in terms of statistics on beekeeping in Europe (surveillance network, etc.)
 - Regional rural development programmes: such programmes will play an increasing role in the future. We must therefore insist that the various Member States integrate beekeeping by making use of the new tools available to them.
 - Programmes to promote and market European products

**Together let us put our hats on and
act responsibly
to protect bees and their environment!**