

In the context of food security, agriculture and beekeeping play a vital role in improving food systems and strengthening the position of SMEs across the value chain. PUM experts in these closely linked sectors bring deep, practical experience and valuable sector-specific knowledge. They offer tailored advice from sowing to harvest, provide technical guidance, and consult on input use, farm management, and sustainable methods to boost productivity and resilience.



### **Agriculture & Beekeeping**

The Agriculture & Beekeeping experts offer a wide range of knowledge, each specialising in their own area of expertise. Their agricultural skills cover the entire chain of agricultural plant production, ranging from plant breeding and variety selection to seed production, field cultivation, irrigation, crop protection, fertilisation, harvesting of arable crops, as well as the logistics and storage of the commodities produced. Beekeeping is another field where PUM holds solid expertise. While it is a distinct field, it also complements agricultural practices through pollination, biodiversity, and sustainable land use.

PUM's Agriculture & Beekeeping sector focuses on the sustainable and profitable production of healthy food and feed crops for human consumption and animal feeding. The expertise of our experts is based on the efficient use of water and soil nutrients, alongside the reduced input of chemical fertilisers and crop protection products. Analysis of the entire value chain may identify opportunities for farmers and beekeepers, including related cooperatives and companies, to improve their products and increase their revenues.

The Agriculture & Beekeeping sector works with a diverse range of clients across the agricultural sector, including farmers, beekeepers, foresters, plant breeders, seed suppliers, and machinery providers.

#### Agriculture - From seed to harvest

PUM's Agriculture experts share their expertise across a wide range of field crops; from plant breeding, and the testing and multiplication of sowing seeds, seed potatoes, paddy, and young trees, to the harvesting and cleaning of products ready for human consumption, animal feed or downstream processing. Their expertise spans all geographic production areas including tempered, subtropic and tropical growing conditions. The range of plant species includes all cereals, oil crops, tissue crops, potatoes, onions, tree fruits, nuts, timber and shrubs like coffee and tea.



**Prakash Kanta** owner Abloom - Nepal

"PUM has helped my business move forward by developing and improving our skills and production methods. PUM expert Ton offered me the technical knowledge I need to improve my production techniques and in the end improve overall quality."



# Beekeeping – Pollination, cultivation and income

PUM's beekeeping experts contribute to sustainable agricultural practices and collaborate with farmers to increase their income through beekeeping. Honeybees play a vital role in agriculture through the pollination of crops and trees such as mustard, rapeseed, cashew, and Brazil nuts. Beekeeping requires relatively low investment, making it an accessible and attractive option, especially for farmers living in or near forested areas. In addition to boosting crop yields, beekeeping provides farmers with a direct source of income and a strong incentive to preserve and protect their natural environment.

Beyond agriculture, beekeeping unlocks opportunities across multiple sectors. With its cross-sector value, beekeeping is a powerful tool for sustainable development and rural entrepreneurship.

- Tourism & Hospitality: Local, artisanal honey products
- Health Care: Apitherapy and other bee-based health practices
- Food & Beverages: Honey-based drinks, sweets, and culinary products
- · Cosmetics: Beeswax and other bee-derived ingredients

#### Areas of expertise

#### Agricultural advice

- Crop rotation: planning of all field crops
- Soil fertility: choice and application of fertilisers, conventional and organic
- Crop protection: choice and application of all products, conventional and organic
- Water management: storage, irrigation and drainage
- Post harvest handling: transport, cleaning, storage
- Seed and planting material, species, varieties, cultivars of arable crops
- Farm mechanisation: choice of machinery, calibration and operation
- Farm Business Planning: operations, finance and marketing

#### **Agricultural crops**

- All cereals
- Tubers and bulbs
- Oil crops
- Tree fruits & nuts
- Bush crops
- Tissue crops
- Timber
- · Propagation products

## Training and advice on improving the quantity and quality of bee products

- Bee hive management
- Pests and diseases
- Honey harvesting and processing, focusing also on the quality of the honey
- Harvesting and processing of other bee products like beeswax and propolis.
- Analysis of the beekeeping value chain identify opportunities for beekeepers and related cooperatives and companies to improve their products and increase their revenues.