

**PROJECT SCHEDULE**

Name	Beekeeping Development in Angola
Intervention Area	Africa - Angola - Kuando Kubango Province
Partner Institutions	1. Region of Veneto 2. UNIDO-ITPO 3. Kuando Kubango Province
Local Operational Actor:	Associazione di Solidarietà Sociale Kulikwassa
Local beneficiary:	Cooperativa Polivalente Tussinguimi-Keny
Supporting Actor	Associazione Regionale Apicoltori del Veneto
Objectives and Modalities:	Support the beekeepers of the Kuando Kubango Province (Angola) to implement the value of honey local production and honey derivatives as well as its export trade, accordingly creating a favourable environment for circular economy. Objective: <ul style="list-style-type: none"> • Training programmes for young local beekeepers conceived in order to improve and qualify honey production and derivatives techniques; • Local honey and derivatives production efficiency support through, but not limited to, technological and instrumental supply; • Honey by-products production, such as beeswax, enhancement support; • Definition of a new cooperation design that will involve Veneto for-profit sector within the economic enhancement framework in Angola, specifically targeting the agricultural and environmental domains.
Project and Target Areas:	Currently, beekeeping in Angola, especially in the targeted Kuando Kubango Province, is carried out through inefficient and sub-optimal practices in terms of production and quality. The inefficiency is deemed to be mainly related to the sub-optimal traditional techniques. Indeed, honey production mainly relies on honey extraction through the compression of tree barks within which broods have been directed. However, this technique bears a qualitative final product setback that relates to two main factors: on one hand, a very high level of humidity, on the other, the presence of many impurities, wax residues, and others. Therefore, besides lowering honey quality, it represents a major concern as it prompts its rapid fermentation. Moreover, this kind of honey extraction carries with it several critical issues. On one hand, it has been noted that tree barks compression leads to high bacterial load due to the compression of broods. On the other, it involves the loss of genetic (brood and bees) and particularly valuable (beeswax) material, which is not possible to recover. Beeswax, specifically, thanks to its purity derived from the absolute absence of residues from pesticides, has a considerable potential for its use in various supply chains. Since a tout court transfer of the beekeeping culture applied in Europe is not conceivable, it is deemed necessary to propose a step-by-step process as briefly described below.

	<p>1° STEP</p> <p>Analysis and examination of the current situation from:</p> <ul style="list-style-type: none"> - Angolan bees' types and biology, including specific functional and genetic characteristics (i.e. cell size of the comb ...); - examination the local flowering and pollen potential, nectariferous flows, tendency to swam ...; - detailed analysis of current farming methods, including materials and products employed (e.g. type of hive...); - analysis of the production chain as well as of the sales channels of the products obtained. - analysis of training needs, starting from the local knowledge and typology of the historically practiced beekeeping models in the province and in Angola. Therefore, to prepare a training course that takes into account the development of local bees, periods brood development, nectariferous collections, methods of honey extraction, characteristics of honey, honey defects in order to form group of trainers; - analysis of the wax to understand its potential on the international market made by beekeeper's pharmaceutical companies, etc. For the purposes of the analysis, it is necessary to check for possible polluting elements such as pesticides, present in local crops, or those deriving from wax processing (e.g. use of contaminated mosquito nets). <p>The described phases will mainly address and analyse the current situation and the elements of improvement on which to intervene through, but not limited to, consultations and involvement of local actors. The strategy aims to define plausible and desirable areas of intervention to improve beekeeping management in Angola.</p> <p>2° STEP</p> <p>Structuring of a plan dedicated to the advancement of the beekeeping activity in Angola which is fundamentally based on two pillars:</p> <ol style="list-style-type: none"> 1. training activities planning; 2. project coordination and development initiatives' planning based on the necessary technical/technological support. <p>Activities related to training:</p> <ul style="list-style-type: none"> - create a training course for local beekeepers to teach honey production practices and transfer knowledge to other beekeepers in the area, with particular reference to the themes of in-depth knowledge of the honey qualities and the importance of production other hive products such as royal jelly, propolis and pollen; - provide functional instructions for the use of modern tools while safeguarding the genetic heritage;
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	<p>- provide functional instructions for the creation of production structures capable of producing hives (i.e. carpentry) and working in an optimized fashion beekeeping products (honey, wax, pollen, propolis ...).</p> <p>In parallel with the first one, the second pillar's activities are conceived as to stimulate the modernization of local production starting from:</p> <ul style="list-style-type: none"> - supply of presses for squeezing the honey to be used as an alternative to manual squeezing, the aim of which will be recovering the beeswax; - supply of special filters for honey filtering to eliminate as many impurities as possible; - supply of stainless steel containers for the decantation and maturation of the honey (honey ripener), which will contribute to the dehumidification, and consequentially, to a better conservation of the product. - supply of solar wax removers aimed at recovering the wax. <p>These supplies will be complemented by the creation of a honey extraction room, which will guarantee a suitable environment, a higher hygiene level and an overall enhanced process and finished food.</p> <p>3° STEP</p> <p>The last phase of the intervention includes some actions that aim to consolidate the effectiveness of the project by integrating it with economic development initiatives in broader terms. In this phase, an overall analysis of the potential for cooperation will be carried out, particularly in the agricultural, food and environmental sectors, verifying the possibility of developing specific initiatives with the involvement of the Veneto for profit partnership. In particular, a special attention will be attributed to the potential of the supply chains (and consequently actions for the repositioning of the production segment) located both in a local context and in the perspective of international cooperation.</p> <p>All activities will be complemented by the continuous attention to communication and information systems on the various segments, so as to ensure adequate dissemination of project progress at each stage.</p>
<p>ESTIMATED BUDGET</p>	<p>€ 250.000,00 (of which 120,000.00 financed by the Veneto Region)</p>
<p>ESTIMATED DURATION OF THE WHOLE PROJECT</p>	<p>3 years</p>
<p>REGIONAL CONTRIBUTION FOR PREPARATORY ASSISTANCE (1st STEP)</p>	<p>€ 40.000,00 – to start in 2022</p>
<p>REGIONAL REFERENCE STRUCTURE</p>	<p>International Relations Directorate - U.O. International cooperation</p>