

SCOPE OF WORK

Consultant Name:	TBD				
Project/Activity Name:	USAID/Sweden FARMA II Project {Bosnia}	Activity #			
Assignment Title:	Strengthening the Beekeeping Value Chain through Product Diversification – with focus on Royal Jelly				
Position Type:	Full Time		Part Time		STTA X
Consultant Nationality:			TCN	X	CCN
Engaged By:	Cardno Emerging Markets USA, Ltd.				
Position Reports to:	Private Sector Component Lead & MAPs and Honey Expert				
Assignment Period:	Start Date: June 2018		End Date: September 2018		
Total LOE for Position:	Total LOE: 15 days	Onsite: 12	Offsite: 3	Travel: 0	

USAID/Sweden FARMA II - Description of Project

USAID and the Government of Sweden have awarded Cardno Emerging Markets USA a five-year contract for implementation of the Fostering Agricultural Markets Activity II (FARMA II) project in Bosnia & Herzegovina (BiH). The purpose of the FARMA II Project is to create agricultural and agribusiness economic opportunities for BiH farmers and entrepreneurs. FARMA II will achieve this by assisting agricultural producer organizations to adopt European Union (EU) and international agricultural and food standards and new production techniques, produce new high value products and expand their access to foreign and domestic markets.

Background

Beekeeping in B&H is largely dependant on the weather conditions. For the last several seasons conditions were particularly harsh for bees which resulted in a reduced number of hives and significantly lower honey production. According to the BiH Agency for Statistics the number of hives dropped from 410,000 in 2016 to 405,000 in 2017, while honey production keeps dropping down at a much higher rate. The total production in 2015 was 4,926 tons; in 2016 the production reached 3,138 tons, while in 2017 it dropped down to only 2,635 tons of honey. As a consequence, beekeepers have experienced losses and had to invest much more than they earned in order to at least keep their bees alive. Consequently, imports of honey also increased. In 2016 the import of honey was 1,249,288 KM (182,151kg), while in 2017 the value of import increased to 2,020,410 KM (269,717kg). More than 70 tons of honey was imported at an average price of 5 KM. There is no information on production volumes, market values, imports of other beekeeping primary products. No royal jelly, bees wax, pollen or propolis has been exported.

China is recognized as the world's largest producer and exporter of royal jelly, with an estimated annual production of between 400-500 tons. Almost all of the exports are to Japan, Europe and the USA. Korea, Taiwan and Japan are also important producers and exporters.¹

In order to reduce losses and increase income, beekeepers must diversify their production from reliance on the production and sale of honey as the only product. Importantly, whilst honey production is largely dependent on weather conditions, the production of other primary beekeeping products does not necessarily depend on the weather, which can be a distinct advantage for producers when the season is extremely bad and influenced by adverse weather conditions. Another advantage is that the production of, for example, royal jelly or bee venom does not need to be at the expense of honey production and vice versa, provided that appropriate technologies are being applied.

Traditionally, honey is considered the major beekeeping product, although beekeeping is much more than that. Bees' primary function is pollination of different crops, while the best known primary products

¹ <http://www.beeculture.com/royal-jelly-worker-bee-produced-protein-rich-mothers-milk/>

other than honey are royal jelly, pollen, propolis, venom, wax, queens, bees which are also marketable product. Market information on propolis, royal jelly and bee pollen is scarce. Retail price of 1 g of royal jelly is around 2 Euro (BiH market price; source FARMA II). In order to extract one kilogram of royal jelly, at least 2000 queen cups have to be emptied. Usually, BiH beekeepers are collecting royal jelly only occasionally from the cells of natural swarms so they collect not more than one gram or two per hive. Without trained beekeepers and/or beekeeping advisors who are able and willing to devote considerably more time than is commonly required for the production of primary bee products (other than honey) this will remain an unused income generation opportunity. A well-managed hive during a season of 5–6 months can produce approximately 500 g of royal jelly. Since the product is perishable, producers must have immediate access to proper cold storage (e.g., a household refrigerator or freezer) in which the royal jelly is stored until it is sold or used as an ingredient in other honey based value added products.

Many of the primary beekeeping products do not have a market until they are added to more commonly used, value added products. Even the value of the primary products may increase if good use is made by mixing them with other honey based products, thereby increasing the profitability of beekeeping and improving its attractiveness to younger population. All products containing one or several of the primary bee products are value added products. Royal jelly is, together with bee venom and bee bread (perga) the most valued beekeeping product. Certain numbers of beekeepers in BiH do produce royal jelly, but due to technology they use, they do not get the most out of it. Royal jelly is used in cosmetics, as a dietary food supplement and in traditional medicine. Its production is a painstaking process that requires close attention and precise timing.

Purpose of the assignment

The primary purpose of this assignment is to support targeted POs from the beekeeping sector to differentiate their production and tap into other value added products, based on honey. The consultant will work directly with registered larger beekeepers (members of associations or cooperatives) who are interested to expand their knowledge of beekeeping practices and new technologies (especially the production of royal jelly, but the field activities will be used to assess the situation / interest in the production of bee venom, bee bread (perga), pollen, propolis and other related products).

An effort will also be made to train the interested advisors in the beekeeping sector in order to increase the outreach of project interventions. With this assignment, beekeeping producer organizations will be able to diversify their production to mitigate the risk of adverse weather conditions and to increase their income. The secondary purpose of this assignment is to develop farmer-friendly training materials (including videos – to be filmed by FARMA II staff) that can be used to help encourage diversification and prevent growing vulnerability of the sector by increase in import of cheap and low quality honey and other beekeeping products.

Anticipated Activities

- To prepare and deliver 10 theoretical and practical trainings to 18 grantees from the beekeeping sector and/or their registered suppliers, and at least 20 new beneficiaries that are legally registered POs including beekeepers' association and cooperatives (the trainings will also be open for individual beekeepers that are not registered – but may decide to do so); Each training will include participation of at least 5 young beekeepers and whenever possible the representatives of relevant public institution and/or a private sector advisor, who will be able to transfer knowledge to broader beekeepers' community;
- Trainings will include both theoretical and practical classes; all training materials and/or presentations and videos from the apiaries will be further used by FARMA II project for training purposes;
- At the end of the assignment, the consultant will be expected to document a rapid assessment of the current situation in production of royal jelly i.e. how many beekeepers' PO's are producing royal jelly for commercial purposes and estimated annual production;
- For the identified / existing royal jelly producers, the consultant will be expected to inspect production quality and methods and suggest relevant improvements.

Deliverables

The Consultant will perform 10 combined classroom and practical trainings, during 12 days. Remaining 3 days can be used off site and will be allocated solely for assessments, training preparation and direct and/or online mentoring, based on the needs of individual advisors. The Consultant will also prepare and submit the following:

- Brief assessment of production of royal jelly in BiH (estimated number of producers, produced quantities, assessment of product quality, available product range / use of royal jelly in other products, key recommendations for improvement of royal etc.);
- In partnership with USAID/Sweden FARMA II, to determine locations and apiaries willing to host practical trainings;
- Detailed program for classroom and practical trainings to be submitted upon the identification of apiaries; In addition to the activities related to production technology, the trainings should include advice on product preservation, packaging, market demand and experiences with various value added products with royal jelly.
- Conduct classroom and practical trainings to 18 grantees from honey sector and/or their registered suppliers, and to at least 20 new beneficiaries that are legally registered POs including beekeepers' association and cooperatives; Each training will include participation of at least 5 young beekeepers and interested advisors where available;
- For the directly visited apiaries, the consultant will document a summary of recommendations.
- Concise final report should summarize all activities and document all deliverables, including photos from the events and attendance sheets.

Timing and Level of Effort

Total LOE is estimated at up to 15 days, including assessment, training preparation and travel and is expected to take place between June and September 2018. The consultant is expected to undertake two trips to BiH during this period. Some on-line support may also be required during the period.

Qualifications and skills

- University degree in agriculture or closely related field to apiculture or a relevant practical experience (with field credibility);
- At least 15 years of relevant professional experience in the beekeeping sector and minimum 5 years of practical experience in the production of royal jelly and trainings;
- Excellent analytical, presentation and facilitation skills;
- Excellent written and oral communication skills in BiH languages will be considered an advantage.

We encourage qualifying candidates to send a Cover Letter including three References and CV.

The closing date for the receipt of applications is **June 17, 2018**.

Cardno Emerging Markets USA, Ltd is an equal opportunity employer. All information received will be treated with confidentiality. Incomplete applications will not be considered. Only shortlisted candidates will be contacted.