

<b>Technical Workshop on Locusts in Caucasus and Central Asia (CCA)</b>
Bishkek, Kyrgyzstan, 12-16 November 2012
<b>Strengthening national capacities: Training</b> -Report-

*- Item 8 of the Provisional Agenda -*

The following training sessions were delivered in 2012 in the framework of the “Five-year Programme to improve national and regional locust management in Caucasus and Central Asia (CCA)”, against FAO and USAID funding:

- Kyrgyzstan, April 2012
- Azerbaijan, April 2012
- Afghanistan & Tajikistan, June 2012.

Presentation on this activity will be made by the concerned countries during the workshop (See *ad hoc* template). The below text reflects the points of view of the trainers (FAO International Consultants).

- **Kyrgyzstan, April 2012 (locust monitoring)**

Short description: the five-day training took place on 16-20 April 2012 in Jalal-Abad, South Kyrgyzstan. It was funded against FAO Technical Cooperation Programme (national project TCP/KYR/3305). The 16 trainees were specialists of the Department of Chemicalization and Plant Protection (DCPP) at central, province and district levels. The training program was delivered in Russian. It included the following topics:

- Survey of participants' expectations;
- Initial and final assessments of participants' knowledge (tests);
- Theoretical classes;
- Practical classes in the lab and in the field;
- Assessment of training by the participants.

Special attention was given to the use of the CCA standard forms, particularly the Standard Survey Form, which are rarely used in the field. The importance of standardized information was emphasized. During the field class, participants learned how to fill out the Standard Survey Form, how to use the Global Positioning System (GPS) units and how to identify locust species and developmental stages. Upon completion, each participant received a flash-drive with all training materials and a certificate. A boxed collection of main locust species in Central Asia was put together by the International Consultant and donated to DCPP.

Expectations: participants expected to gain knowledge on biology, ecology and monitoring of the main locust species present in Kyrgyzstan, i.e. *Dociostaurus maroccanus* (Thunberg 1815), the Moroccan Locust (DMA) and *Calliptamus italicus* (Linnaeus 1758), the Italian Locust (CIT), to learn using CCA standard forms and GPS units and to acquire practical skills in locust survey and information processing.

Assessment of participants: participants varied in age from under 30 to over 60 years old. All were Plant Protection Officers with varying degree of experience in locust issues.

The pre- and post-training tests were administered to evaluate participants' progress. They showed that while before the training the percent of correct answers to test's questions varied from 21 to 79% (avg. 54%), after the training it increased to 75-100% (avg. 96%). According to self-assessment by the participants, their knowledge increased from 5.2 before to 8.2 after the training on a 10-point scale.

Participants' feedback: all trainees were very enthusiastic about the training. On a 10-point scale, they assessed it from 9.13 to 9.33. They appreciated the highly interactive manner of teaching by the International Consultant and his very clear and comprehensible language. Some evaluated the training as "the best in their entire life." In terms of improvement, it was suggested to increase the field part of the future trainings, in order to receive more hands-on experience in survey, especially in the use of GPS. During the current training, only three GPS units were available; therefore, it was necessary to divide the trainees in groups of five to six people for GPS exercises. It was also suggested to conduct training on pesticides and spraying; it was explained that such topic went beyond the current training session but that a separate training on these questions is envisaged next year, under TCP/KYR/3305.

Main conclusions: overall, the training was very successful. All agenda items were comprehensively covered. The participants have noticeably increased their knowledge which results in the enhanced capacity of the Kyrgyz DCP. Furthermore, they made important personal contacts with each other, which will be beneficial for the entire service. The training was highly praised by the Director of the DCP who sent a letter of appreciation to the FAO Office in Kyrgyzstan.

Recommendations:

- Increase the time for the practical part of the training in the field;
- Equip each trainee with a GPS unit to provide hands-on, individual experience in the use of this technology;
- Conduct training when the locusts are available in the field, preferably during oviposition;
- Include more field specialists (at district level) in the trainees roster.

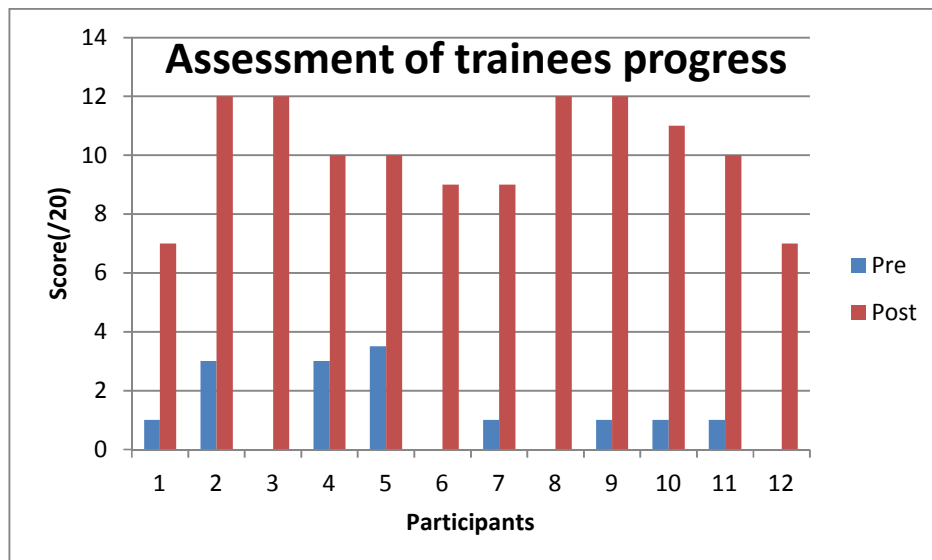
- **Azerbaijan, April 2012 (locust spraying)**

Short description: training workshop on ground Ultra low volume (ULV) spraying techniques was organized in Ganja, Azerbaijan, from 19 to 23 April 2012. It was funded against USAID contribution to the Five-year Programme (regional project GCP/INT/134/USA). Twelve participants attended the workshop composed of: seven directors of regional Plant Protection Centers, two officers of national Plant Protection and tree tractor-drivers involved in locust control campaigns. This training covered theoretical and practical aspects of ULV spraying principles, the main spraying parameters, calibration and maintenance of the equipment, full coverage spraying and barriers treatments, weather influence and controlling the quality and effectiveness of treatments. Two days were devoted to theoretical background using a participatory approach and two full days were spent for practice of flow rate calibration and collecting droplets using different sprayers.

Expectations: the participants expected to learn the ULV spraying techniques, particularly how to calibrate the sprayers dedicated to spray oil formulations.

Assessment of the participants: the participants' age was in general high. Approximately 60 percent were over 50 years old; and 33% were more than sixty years old. Most participants are officials. No young technicians involved in locust control operations attended the training workshop.

Pre- and post- training workshop assessments were made to measure trainees' progress. The results were very satisfactory with 233% of rate progress. All trainees increased considerably their knowledge.



Participant's feedbacks: at the end of the workshop, an overall evaluation was conducted to allow participants to express their appreciation anonymously regarding

their initial expectations and objectives, the workshop topics and the quality of the organization. The results showed that almost all the trainees were very satisfied and described the workshop successful as their expectations were fully met.

Main conclusions: the desired objectives were achieved. The evaluation showed that all topics were well developed and well understood by the participants. The new knowledge acquired during the workshop and specific documentation distributed should allow participants using ULV pesticide formulations in the best and efficient ways.

Recommendations:

- Pay more attention to pesticide spray quality as many accidental factors or pollutants can hamper insidiously control operations and therefore adversely affect the effectiveness of treatments and the environment;
- Provide ULV sprayers and oil formulations pesticides to regional Plant Protection centers involved in locust control campaign;
- Select the most qualified persons, taking into consideration the age and the required skills to participate to the future workshops. Priority must be given to the young persons in order to assure sustainability.

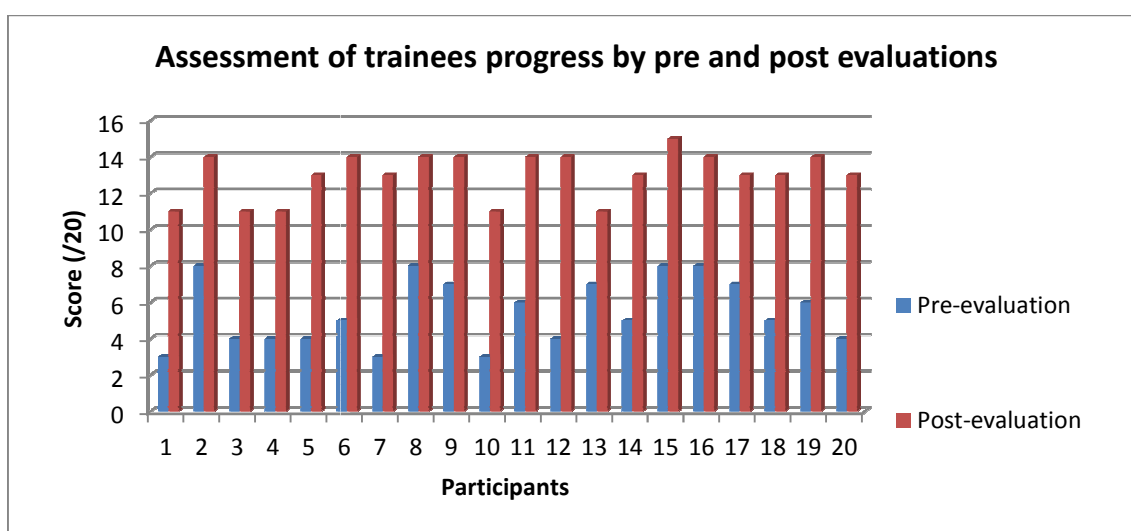
• **Afghanistan & Tajikistan, June 2012 (locust monitoring)**

Short description: the workshop was funded against USAID contribution to the Five-year Programme (regional project GCP/INT/134/USA). It took place in Kurgantyebe, Tajikistan, from 5 to 9 June 2012, to the benefit of both Afghan and Tajik experts. Initially, the workshop was supposed to be delivered in Afghanistan (to Afghan experts only). However, because of insecurity in the country, the workshop had to be postponed and relocated in Tajikistan. Twelve participants from Afghanistan and 3 from Tajikistan were designed to attend the workshop at first. However, given the importance of the workshop topics, the host country expressed the wish to have 9 additional participants. In total, 24 persons (12 from each country) participated in the workshop. The programme covered survey basics, tools and field techniques using a participatory approach. Survey basics concerned different methods used to estimate locust infestations in the field, why surveys are carried out, planning and implementing surveys. Survey tools included maps reading, compass, anemometer, hygrometer, GPS and CCA Standard Survey Form; trainees practiced using each tool. Furthermore, the importance of information and reporting was explained. Explanation was also provided on how to prepare the national monthly bulletin using the standard template.

Expectation: the participants expected to improve their knowledge on how to carry out locust survey and gather the required information in the best effective and efficient way.

Assessment of the participants: the range age of the participants was from 24 to 63 years old, with 46 percent were over 50 years old. The oldest participants were from Tajikistan. Three of them were over 60 years old. All participants had at least one-year experience in locust control. About 33% had been involved in locust control campaign for more than 10 years.

Pre- and post- training workshop assessments were made to measure trainees' progress on locust monitoring and information management. The results indicated that all trainees improved their knowledge during the training workshop with an average improvement of about 37.5%. They gained experience and abilities in conducting locust survey, gathering the required information and preparing good reports.



Participant's feedbacks: the participants deemed the training workshop successful and instructive. They were extremely enthusiastic and actively participated in each session. They believed that they gained sufficient background information on locust monitoring and information management. However, due to lack of time and insufficient number of GPS (only one was available for 24 persons), the participants expressed their wish to receive a training specially dedicated to the practical use of GPS to complete the knowledge gained.

Main conclusions: the agenda items of the regional workshop were addressed comprehensively and successfully despite the excessive number of the participants. The sharing of skills and experiences from Afghanistan and Tajikistan was one of the most valuable and rewarding aspects of the workshop. Some of the contacts made between participants are likely to continue and will lead to productive linkages between individuals and institutions in the two countries.

Recommendations:

- In order to ensure greater benefit and sustainability of future workshop achievements, FAO should request countries to provide a list of persons from which the best qualified ones will be selected based on age and profile required for the workshop;
- Future training workshops should allocate more time to practical use of GPS and the number of participants should not exceed 12;
- Organize joint workshop with neighbouring countries, especially for countries where it is not possible to carry out training sessions due to field insecurity.