National Training Course on Migrant Pest Management, Moshi, Tanzania

The Tanzanian Ministry of Agriculture, Food Security and Cooperatives, and Desert Locust Control Organization for Eastern Africa (DLCO-EA) jointly organized a National Training Course on Migrant Pests Management which was held in Moshi, Tanzania from 12th - 15th August, 2013.

The main objective of the training course was to upgrade the capacity of the national staff in the management of African Armyworm, Quelea birds and Locusts so as to prevent tremendous crop losses that would be caused by these pests in the country. The trainees were the newly recruited staff of the Ministry with no or little experience in the migrant pests management.

A total of 22 trainees and 6 trainers attended the training course.

The trainers were Senior Staff Members from DLCO-EA.

Mr. Mkondo welcomed the participants to Moshi and the Republic of Tanzania and wished them a pleasant stay.

Mr. Mkondo further stated the role of DLCO-EA in combating the migrant pests in the region and the achievements made in ensuring food security in the Member States. He also stated that Tanzania is a Member of DLCO-EA since its inception in 1962. Since then the Government of Tanzania has continued to give the necessary support to the Organization considering its role in controlling the migrant pests, which can cause tremendous destruction to the agricultural crops.
Mr. Mkondo stated that participants to the current training course were only some of the Plant Health Services staff and therefore more courses are needed in future to accommodate the remaining staff of the Plant Health Service in the whole country.

Mr. Mkondo indicated that most of the participants are newly recruited staff, and therefore they would benefit a lot from the training course. He concluded his opening address by outlining the challenges in the infrastructure development for control operations and indicated that more airstrips will be constructed and repaired to facilitate aerial control operations in the country.

*Opening remarks by the Director of Administration and Human Resource Management*

Mr. Elias Shayo, the Director of Administration and Human Resource Management in the Ministry of Agriculture, Food Security and Cooperatives, Tanzania welcomed the participants and facilitators to the training course. He said the training course was important for effective and efficient management of migratory pests in Tanzania. He also stated that Tanzania was vulnerable to the three major migrant pests, namely Red Locust, African Armyworms and the Red-billed Quelea birds, which calls for vigilant attention every year to protect crops from their heavy damage.

Mr. Shayo added that efficient and effective control of the migrant pests requires a well trained staff in early warning system and monitoring of the pests. He noted that as newly recruited staff of the Ministry, the training course would be very significant to increase their expertise to safeguard food security and livelihood of the people of Tanzania and also to contribute to peace and tranquility in the country.

The Director wished all the participants a successful training, active participation and good stay in Moshi.

*Use of SMS Mobile Application for Reporting Armyworm Outbreak Alerts:*

DLCO-EA has developed a novel SMS Mobile Application for reporting armyworm outbreak alerts issued by the community forecasters. This novel technology was developed through Community Based Armyworm Monitoring, Forecasting and Early Warning project funded by USAID/OFDA.
The SMS Mobile Application was field tested in five villages in Fedis district in eastern Ethiopia. The items that need to be simplified or modified for use by the community forecasters were identified and communicated to the System Developer. Based on the feedback, the form had been simplified and user interface was added with the local language, Oromia.

Altogether 20 Community Forecasters and 10 development agents from 10 villages were trained on the use of SMS Mobile Application in Fedis district on 6th September, 2013.

The Community Forecasters had been issued with Nokia 110 GSM mobile apparatus with data collection form installed on them for reporting armyworm outbreak alerts, which are issued by the Community Forecasters during armyworm outbreak season.

The messages sent by the Community Forecasters through SMS will be displayed in the computer dedicated for this purpose in the National Armyworm Coordinator's office. This information enables the National Armyworm Coordinators to monitor the status of armyworm outbreaks in the country and to make informed decision for deployment of resources required for control operations.

This new SMS Mobile Application is planned to be introduced to Tanzania and Kenya for reporting armyworm outbreak alerts issued by the Community Forecasters. The technology will also be scaled up in Ethiopia to more villages that are participating in the implementation of Community Based Armyworm Forecasting Project.

The introduction of SMS Mobile Application is believed to improve greatly the management of African Armyworm in eastern Africa by enabling the deployment of resources required for control operations and initiating control operation on time.

**Presentation to Nature Uganda by DLCO-EA at Uganda Museum**

Following the total destruction of over 1,000 acres of sorghum by “unknown” birds in Kapchorwa region, and the subsequent successful aerial control of Quelea birds in Kibimba rice schemes, Bugiri District, Uganda, many players in agriculture and environment got interested in the activities of both the Uganda Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and the Desert Locust Control Organization for Eastern Africa (DLCO-EA). Nature Uganda (NU) was among the environmentalists that got interested to learn and appreciate the professionalism involved in aerial control operations of migratory pests. Along this line, NU invited DLCO-EA to make presentation to its Members and general public on “EFFORTS IN MANAGING MIGRATORY PESTS AND VECTORS IN EASTERN AFRICA REGION”. The DLCO-EA Director approved NUs request and Senior Scientists of the Organization contributed to the information that was presented to NU audience on 5th September 2013 by the Kampala Base Manager, Mr. Evarist Magara.
The presentation attracted 40 high calibre people including University Lecturers and Students, environmentalists, nature lovers, tour company operators, and some journalists.

From the discussion, it emerged that most people were not well informed about how aerial pest control operations are executed, and professionalism involved. It was resolved that future pest control operations should involve more relevant stakeholders that operate in fields of nature and environment. A bigger part of the audience appreciated the work, procedures and protocol followed by MAAIF/DLCO-EA during pest control operations and called for sustained professionalism in all operations. The DLCO-EA Base Manager called upon any Scientist that might have any appropriate and effective alternative pest control approaches to come forward and partner with MAAIF/DLCO-EA in evaluating and testing such innovative measures.

Very useful and enriching questions were raised by the audience and the DLCO-EA Base Manager attempted to give appropriate answers to all raised questions. Some issues were charted as way forward for future pest management approaches. Overall, the issue of sentiments in pest or environmental management was over ruled by the audience. The presentation and interaction was an excellent public relations (PR) avenue and opportunity for MAAIF/DLCO-EA.

**MIGRATORY PESTS SITUATION**  
**July – September, 2013**

**DESERT LOCUST:**

The Desert Locust situation was calm in the region during July except in Yemen where one swarm reached Wadi Hadhramaut area in the interior. Breeding during June and July caused locust numbers to increase in Yemen, where solitarious and transient hoppers and adults were present. Control operations were not possible due to insecurity. Locust infestations declined in the spring breeding areas of Saudi Arabia where only a few adult groups were reported. Scattered adults persisted in the Nile Valley in northern Sudan and low numbers of solitarious adults appeared in parts of the summer breeding area but vegetation was slow to become green due to intermittent rains. In northern Somalia there was an unconfirmed report of hoppers. No locusts were reported elsewhere in the region.
The Desert locust situation remained generally calm in the region during August. Only low numbers of solitarious adults were reported in the northern and eastern parts of the summer breeding areas in Sudan. Unusually good rains that fell during August allowed small-scale breeding to occur in September. Consequently, locust numbers increased and vegetation started to dry out, causing locusts to concentrate and form small groups in October. In Yemen, hopper and adult groups and at least one small swarm were reported in the interior as a result of local breeding. The situation is worrisome because breeding continued and small hopper bands and swarms formed.

GRAIN EATING BIRDS (*Quelea quelea*):

Ethiopia:

*Quelea* outbreaks were reported in the southwest in Borena zone, Teltele Woreda (district) in Oromiya and Konso Liyu Woreda in the Southern Peoples Nation and Nationalities Regions of the country. DLCO-EA Spray Aircraft was deployed and conducted control operation from 26th July to 6th August, 2013. About 11 million *Quelea* birds roosting on Acacia trees and Typha grass were killed using 750 litres of Avicides. The birds were feeding on Sorghum crops.

Tanzania:

Small flocks of *Quelea* birds were reported in Kilimanjaro region but no control operation was undertaken as birds were not damaging crops.

Kenya:

A DLCO-EA Aircraft was deployed during the month to control *Quelea* birds, which were reported attacking wheat in Rongai area in Nakuru County and Rice in Kisumu County.
Uganda:

In recent years, Uganda reported an upsurge in the populations of quelea birds necessitating urgent lethal control. During a study done in Uganda by Ndege et al, in June, 2013, it was established that Tilda rice scheme alone, was recording 30-50% crop losses due to quelea. It was estimated that the quelea bird population was about 2 million causing over 1.5 tons of Rice crop loss per day. In late June, 2013, it was further reported in Uganda press that strange birds had wiped out over 1,000 acres of sorghum in Kapchorwa region. The Desert Locust Control Organization for Eastern Africa (DLCO-EA) in collaboration with the Crop Protection Department of the Ministry of Agriculture in Uganda visited Kapchorwa and confirmed that the birds were quelea. But there was no control done since the birds had already done total damage to the sorghum crop and left the area!

On 22nd July, 2013, an aerial control operation against Quelea birds was effectively and efficiently executed at Kibimba rice schemes, in Bugiri District, Uganda. A quelea roosting site covering about 40 hectares was sprayed with 160 litres of Queletox (Fenthion 640g/l ULV). About 1.9 million birds were killed leading to a saving of over 40 million UGX per day; that was being lost in terms of labour expenses and crop losses. It is recommended that routine control and management of quelea birds be done regularly to avoid the population growing back to such magnitudes, resulting into massive crop damages and losses

Planned activities during October – December, 2013

- **58th DLCO-EA Regular Sessions is planned to be held in Asmara, Eritrea. From 7th – 11th October, 2013.**

- **National and Regional Training Courses on Quelea Management are planned to be organized in Eritrea and Sudan.**

Massive flocks of quelea birds at Kibimba before aerial control
**DLCO-EA AIRCRAFT SITREP AS AT 30th SEPTEMBER, 2013**

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<th>5Y-KRD Beaver</th>
<th>5Y-DLA Caravan</th>
<th>5Y-DLO Baron</th>
<th>5Y-BBB Islander</th>
<th>5Y-DLD Turbo Beaver</th>
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<td>07/04/2014</td>
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<td>KISUMU</td>
<td>KENYA</td>
<td>STANDBY</td>
<td>NAIROBI</td>
<td>UNDER ACCIDENT REPAIR</td>
</tr>
</tbody>
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**NB**

- **IMMEDIATE ATTENTION**
- **TO BE NOTED**

Checked by: - Chief Engineer

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