



DLCO-EA QUARTERLY NEWSLETTER

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DIRECTOR'S VISIT TO MEMBER COUNTRIES

The new Director of the DLCO-EA, **Dr. Stephen Wangai Njoka** assumed office in January, 2015. The visit to Member Countries **Sudan, Eritrea, Djibouti, Tanzania Kenya** and **Uganda** was essentially intended for the new Director to **acquaint himself** with the staff at Bases, **brief** the Executive and Council Delegates on progress made in preparations for the 60th DLCO-EA Regular Session, get the DLCO-EA **Revised Convention** signed, and also follow-up on

Government's commitment and financial **contributions** to the Organization.

In each country the Director, made general staff meetings, field visits meetings with Executive Committee Members and Council Members in respective countries particularly the Executive Committee Chairman in Asmara.



**Signing DLCO-EA Revised Convention:
(Mr. Magara, Dr. Njoka,
Hon. Bucyanayandi, Mr. Komayombi).**

In Uganda Hon. Minister Mr. Trees Bucyanayand, Ministry of Agriculture, Animal Industry and Fisheries signed DLCO-EA Revised Convention.

In Sudan Hon. Dr. Gaffar Abdalla also signed the DLCO-EA Revised Convention. The Director also visited the winter breeding areas around Port Sudan on the Red sea.

In Eritrea the Director met and briefed the Minister for Ministry of Agriculture Hon. Arefaine Berhe. Additionally the Director also held discussions with Ministers for Foreign Affairs and Finance Hons. Osman Saleh and Berhane Habtemariam respectively.

In Djibouti the Director met and briefed Hon. Awalleh the Minister for Agriculture who promised to clear Djibouti's arrears and also attend the 60th Council Session.

In Tanzania The Director met and briefed the Deputy Permanent Secretary for Agriculture Dr. Yamungu Kayandabila and the Director of Agriculture.

In Kenya the Director met and briefed the Principal Secretary for Agriculture Mrs. Sicily Kariuki on behalf of the Council Chairman. The Principal Secretary appreciated the efforts being made by the Organization to hold the 60th Council Session in Uganda as scheduled (September 14th - 18th 2015).

REGIONAL TRAINING ON MIGRATORY PEST MANAGEMENT

The Desert Locust Control Organization for Eastern Africa (DLCO-EA) organized a Regional Training Course on Migratory pest

Management in Nakuru, Kenya from 20th – 24th April, 2015.

The participants were the National Coordinators and experts for the control of African Armyworm, *Quelea* birds and Desert Locusts from Eritrea, Ethiopia, Kenya, Sudan, South Sudan, Tanzania and Uganda. DLCO-EA staff, care taker from Northern Somalia, and the new Research Officer from Nairobi

Operation Coordination office attended the training course. A total of 16 participants attended the training course and these were as follows:

Djibouti although invited to the training did not respond to the invitation to attend the training course by nominating an appropriate expert.

The trainers were Senior Staff Members of DLCO-EA from the Research and Information and Forecasting Divisions and the Operation Coordinator.

The main objective of the training course was to upgrade the capacity of the National Coordinators and Experts in the management of Desert Locust in the Member Countries and thereby prevent tremendous crop losses that are likely to be caused by the Desert Locust and contributes to the efforts in ensuring Food Security in the region.

The training course was funded by DLCO-EA and FAO/USAID.



Group Photo of Participants, Nakuru, Kenya

OPENING ADDRESS:

The Director of DLCO-EA, Dr Stephen W. Njoka, highlighted that the training course would provide the much needed input to enhance the combating Desert Locust and make a positive contribution to ensure food security in the DLCO-EA Member States.

Dr. Njoka stressed that the Management of Desert Locust require regional effort and approach as they cause serious damage to a wide range of agricultural crops, pastures and the environment in general and outbreaks transcend political boundaries. The main aim of such regional training is to consolidate these efforts to contain major outbreaks that are a threat to Food Security in our region resulting in reduced crop harvests, denuded pastures and badly defoliated vegetation.

He also emphasized that DLCO-EA as a Regional Organization not only enhances the capacity of Plant

Protection Departments in the Member States through providing such training but also supplements their efforts by providing aerial survey and control of Desert Locust. In addition DLCO-EA carries out operational research, concentrating on migrant pests control, pesticide use and safety in the region and also issue forecasts on the status of these migratory pests in the region.

Dr. Njoka emphasized that the success of any task whether by DLCO-EA or Member States requires a good working relationship and concerted efforts of all parties, building of friendship which he summarized as a good TEAM work these:-

- T – together
- E – everybody
- A - achieves
- M - more



Opening address by The Director of DLCO-EA, Dr Stephen W. Njoka,

He also stated that this training course would cover all aspects

needed to manage Desert Locust and Pesticide Safety.

He hoped that the course will be interactive and will provide a participatory forum for exchanging ideas between the trainers and trainees.

He also encouraged the participants to ask questions, make comments and express their views based on their expertise and experience.

He thanked the organizers of this training course for making it possible for the DLCO-EA Management to fulfill part of its mandate and He also thanked FAO for funding this training.

Finally, Dr Njoka wished all the participants a good stay, successful training and declared the training officially open.

Before the training started, the pest situation in each country presented and discussed.

The topics covered in the training:

- ✚ Armyworm Biology & Recognition
- ✚ Migration & Seasonal Movements of Armyworm
- ✚ Armyworm Monitoring & Forecasting
- ✚ Armyworm Reporting & Control Methods
- ✚ Desert Locust Biology & Behaviour
- ✚ Red Locust Biology
- ✚ Desert Locust Information Collection & Reporting
- ✚ Organizing Aerial Survey & Control
- ✚ Armyworm & Locust Films
- ✚ Target Block Demarcation

- ✚ Integrated Biological Control of Locust & Grasshoppers
- ✚ Ground Support to Aerial Operations
- ✚ *Quelea* Biology & Ecology
- ✚ *Quelea* Survey Methods
- ✚ *Quelea* Film
- ✚ *Quelea* Control Methods
- ✚ Calibration of Spray Equipment for
- ✚ Migrant Pest Control
- ✚ Pesticides Use & Safety

CLOSING REMARKS:

The Director General of Plant Protection Services in the Ministry of Agriculture, Livestock and Fisheries, Kenya, Mr. Joseph Ngetich gave the closing remarks and handed over certificates for the participants at the end of the training on the 23rd of April, 2015.

In his closing remarks, Mr. Ngetich stated that, participants of the training are experienced experts on the area of Migratory Pest Management in their respective countries and this training must have created an opportunity for further experience sharing and grasp regional approaches in managing these pests. He stressed that the management of migratory pests inherently requires efficiency and effectiveness.

These migratory pests capable of building huge population unnoticed and destroy crops that are the livelihood of communities and that of commercial farms causing tremendous economic loss in a very short time. He also mentioned that under outbreak situation, failure to act efficiently and effectively unlike

other crop pests may result in total loss of the crop, aggravating food insecurity.

Imparting knowledge on exchanging information and forecasts on the movement and occurrence of these migratory pests is also one of the areas of the focus of such training to manage these trans boundary pests effectively and efficiently.

Mr. Ngetich emphasized that as these migratory pests are a threat to food security in the whole region, experts in the member states must have a regional approach and also coordinate their efforts in an efficient and effective manner to control them before they cause any significant damage to crops and pasture. As long as experts and countries put in place the desired effort in monitoring and controlling migratory pests, we shall prevail and save our crops and pasture from destruction.

After handing over the certificates to the participants, he declared the training is officially closed.



Closing remark by the Director General of Plant Protection Services in the Ministry of Agriculture, Livestock and Fisheries, Kenya, Mr. Joseph Ngetich

NATIONAL TRAINING ON QUELEA MANAGMENT

DLCO-EA carried out a National *Quelea* Training workshop in Iganga, Uganda from 24th – 28th May 2015 in collaboration with the Department of Agriculture, Animal Industry and Fisheries (MAAIF) of the Republic of Uganda. Eighteen participants from twelve Districts attended the four-day training workshop. The training course covered topics ranging from *Quelea* biology to environmental assessment of *Quelea* control techniques.

The workshop was officially opened by the Commissioner of Crop Protection Department of MAAIF, Mr. Komayombi Bulegeya.



Mr. Ndege explains to participants on how to perform damage assessment on a rice field at Tilda



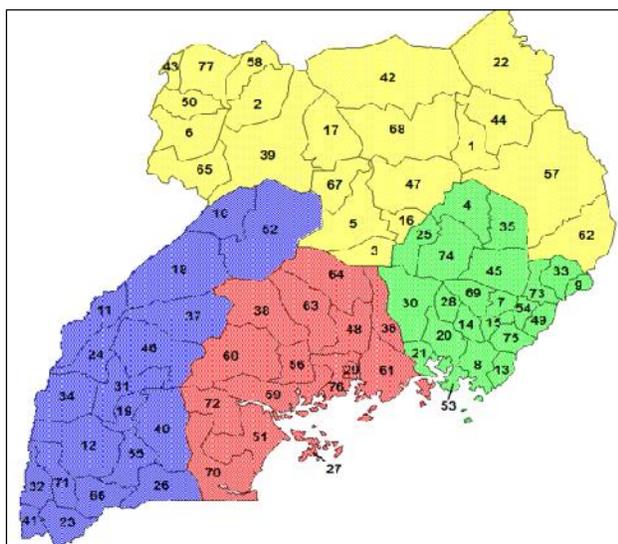
Participants are collecting trapped *quelea* specimens from mist net

MIGRATORY PESTS SITUATION March – June, 2015

DESERT LOCUST:

April:

Low numbers of solitary adults remained in a few places along the coast in Sudan and Saudi Arabia and no further control operations were required. A similar situation is likely on the northern and central Red Sea coast of Eritrea. Scattered adults were seen along the Atbara River in the interior of northern Sudan that probably arrived from the Red Sea coastal winter breeding areas. No locusts were reported elsewhere in the region. During the forecast period, small-scale breeding may occur in northern Sudan and in the interior of Saudi Arabia. the situation improved in the winter breeding areas along both sides of the Red Sea due to control operations and drying conditions in March. In Sudan, ground and aerial control operations declined, treating mainly locally bred adult groups and swarms on the southern coast. A few adult groups and swarms moved into this area from Eritrea where control was in progress against similar infestations. Locust numbers declined on the Red Sea coast in Saudi Arabia where limited control operations were conducted in the north. Low numbers of adults persisted on the Red Sea and Gulf of Aden coasts in Yemen.



Map of Uganda: The area in green is the Eastern region of the Country and being affected by the *Quelea* menace and was the focus for *Quelea* workshop training. The workshop was held in Iganga Town, within Iganga District (marked no. **20** in map above).

May:

Low numbers of solitarious adults remained in a few places along the coast in Sudan and Saudi Arabia and no further control operations were required. A similar situation is likely on the northern and central Red Sea coast of Eritrea. Scattered adults were seen along the Atbara River in the interior of northern Sudan that probably arrived from the Red Sea coastal winter breeding areas. No locusts were reported elsewhere in the region.

Locust numbers declined on the Red Sea coast in Saudi Arabia where limited control operations were conducted in the north. Low numbers of adults persisted on the Red Sea and Gulf of Aden coasts in Yemen.

June:

Scattered adults are present in and near cropping areas along the Nile and the Atbara Rivers in River Nile and Northern States in Sudan and in the western lowlands of Eritrea where small-scale breeding will occur as seasonal rains commence.

Source; *FAO Bulletins*

GRAIN EATING BIRDS (*Quelea quelea*)

During March – June, 2015 the situation in Member Countries remained calm except for some roosts reported in different locations in Kenya and Tanzania

Kenya:

Quelea birds outbreak was reported in Kisumu County where they were attacking irrigated Rice.

Tanzania:

Quelea birds outbreaks were reported in the country and a DLCO-EA aircraft has been deployed to control the infestations. control operation was conducted in the Singida, Morogoro, Shinyanga and coast regions. About 11million birds were controlled on 1095 ha using 670 liters of Bathaion and 370 litres of Fenthion.

Ethiopia:

Quelea outbreak is reported from Southern Region of Ethiopia in June.

Uganda:

There were press reports that *Quelea* birds were damaging Rice fields in Kibimba Rice Schemes.

Consequently, staff from the Ministry of Agriculture and DLCO-EA have visited the sites but found that the population was low and no control operation was needed.

ARMYWORM (*Spodoptera exempta*):

Armyworm Outbreaks:

During April to June, 2015 the Armyworm out break reported in four regions of Ethiopia (Ormia, Amhara, Harari and Dire Dawa) on A total of 37,861 ha crop and 65,476 ha of pasture. Control operation was conducted and completed.

ACTIVITIES ON COMMUNITY BASED ARMYWORM MONITORING, FORECASTING AND EARLY WARNING PROJECT

Activities of the third year of the Community Based Armyworm Monitoring Forecasting and Early Warning project started In October. Milestones for this year includes, Training of trainers, District and village meetings, Community forecasters training, Baseline survey, Technical assistance and Monitoring at village, district, and zone, Introduction of Cell phone technology Organizing field days, National workshop in Ethiopia Kenya and Tanzania and one Regional workshop .

1.0 Training of Community Forecaster:

The training was conducted in Tanzania, Kenya and Ethiopia in final year three two districts that implement the project from 2nd to 3rd March 2015 in Mbeya rural district and from 16th to 17th March, 2015 in Ikungi district In Tanzania. In Kenya the training was conducted 14th - 15th May, 2015 in Taveta district at the venue Lutheran Guest house - Taveta and on 18th -19th May, 2015 Kibwezi district at the venue Joy Lagos-Kambu. In Ethiopia

The training target total number of 80 trainees in which 40 expected to be community forecasters, 20 Village chairperson and 20 Agricultural extension officers. All trainees attended in Three countries.

Topics covered included:

- ✚ Identification of armyworm moths,
- ✚ Site selection for pheromone traps and rain gauges
- ✚ Setting up and handling of pheromone traps and rain gauges
- ✚ Filling of daily record sheets,
- ✚ Monitoring and forecasting rules.
- ✚ Dissemination of forecasts to the communities and other stake holders.
- ✚ Control of armyworms and safety when handling pesticides.



Group photo of participants in Kenya



Participants in Mbeya rural district, Tanzania attending the class presentation



Trainer showing trainees how to read the rain gauge

2.0 Training of Trainers (TOT)

Community Based Armyworm Monitoring, Forecasting and Early Warning Project (CBAMFEW) year III milestones scaled up to two districts Raya Alamit and Raya Azebo, in Tigray region Northern Ethiopia and one of the milestones Training of Trainers (TOT) was held from 17th -19th May 2015 for three days at **Wukuro Alem Sharaten Hotel**.

The Ministry of Agriculture Plant Health Regulatory Directorate coordinated the three days training of trainers (TOT) and facilitation role was played by DLCO-EA.

The training was attended by 17 participants

Purpose of the Training:

- ✚ To introduce various aspects of the armyworm including its biology and life cycle.
- ✚ To create awareness and understanding about the feeding habits of the armyworm and the damage it causes on crops and pasture grasses.
- ✚ To introduce its migration pattern, seasons and factors favoring migration
- ✚ To introduce armyworm monitoring and levels of forecasting systems their advantages and limitations
- ✚ To show importance of CBAF and how it complements the national forecasting service
- ✚ To discuss the benefit of CBAF
- ✚ To introduce the different forecasting equipment and their operation system
- ✚ To discuss on methods of data collection and communication channels.



Group photo of participants Wukro, Ethiopia

3.0 Technical assistance and Monitoring of villages selected

A key milestone in the implementation of Community Based Armyworm Monitoring, Forecasting and Early Warning is a technical back-up of the project implementers including community armyworm forecasters, frontline extension officers and local administrators. The technical assistance and back up was conducted in Tanzania in all ten districts from 2nd to 24th June 2015. In Kenya 23rd May to 9th June. During this particular exercise **Dr. Yene representing USAID** (donor) joined the team in visiting some trap sites in both countries.

Objectives of the Technical Back up and Monitoring:

- ✚ To assess forecasters knowledge of the forecasting process and their performance.
- ✚ To assess farmers' understanding, perception and support for the CBAMFEW project.
- ✚ To examine farmers response to positive forecasts and actions taken following outbreaks if any.
- ✚ To assess the relationship, collaboration and support amongst stakeholders.
- ✚ To establish whether corrections and modifications of procedures are needed.

- ✚ To provide technical backstopping and address problems and concerns.
- ✚ Service the pheromone traps and rain gauges.



The Team interviews Armyworm Forecasters in a trap sites in Muranga South District Kenya



**Technical Back up and Monitoring in Naivasha District , Kenya
Community Forecaster explaining how to use the rain gauge**

4.0 Collecting Geographical data for Project Villages:

The Latitude, Longitude and Elevation of the selected Districts and trap sites were collected in each country (Ethiopia, Kenya and Tanzania) and trap sit map was produced by GIS Unit USAID, Washington.

ACTIVITIES ON COMMUNITY BASED DESERT LOCUST MOITORING AND REPORTING PROJECT

One of the activities that DLCO-EA providing is to define and develop community-based locust monitoring and reporting network with traditional local chiefs and other authorities.

Based on this activity two days training on Desert Locust information reporting to locals village Elders/Chiefs and Desert locust scouts were conducted in Dire Dawa and Kombolcha Eastern Ethiopia from 01 – 03 April, 2014 to discuss the current locust situation and identify chiefs and elders that will involved in the information networking.

OBJECTIVE:

To establish the Community-based Desert Locust monitoring and reporting system in Ethiopia to facilitate early detection of gregarious desert Locust population.

THE WORKSHOP IN BRIEF:

The Ministry of Agriculture Directorate of plant protection in consultation with regional

agricultural Bureaus selected 43 participants (Locust scouts, village Elders and chiefs) whom they think they work with them in Desert Locust monitoring and reporting system to attend the workshop (Annex A). The workshop was held in Dire Dawa on May 3. 4, 2015 and May 8 - 9, 2015 in Kombolcah. The program was prepared by the facilitators ahead.

Some of the scouts and villagers were partly illiterate so the workshop was conducted through visual aids, and flipcharts and mainly concentrate on discussion in order to enhance information exchange, providing simple identification tools such as posters. The workshop was in **local language**.

The workshop started by well-coming of the participants by Senior information and forecasting officer, DLCO-EA. This was followed by the introduction of participants. Report from the scouts who have been working in different areas, challenges and success in scouting and information delivery system of the Desert Locust situation was reviewed and presentation on what information to be collected, how and to whom to send information was presented. One participant presented a poster which states about the Desert Locust alert and Identification. Each participant was given a copy of the posters.

THE MAIN TOPICS COVERED:

- ✚ Desert Locusts scouts activity report
- ✚ Strength and weakness of Desert Locust survey

- ✚ What information to be collected, how and to whom to send information
- ✚ Identification of Desert Locust
- ✚ Environmental impact of pesticide

Group photo of participants



RESEARCH ACTIVITIES

Evaluate Effectiveness of Safer Alternative for Control of Armyworm:

An experiment was carried out involving environmentally safe alternatives bio-pesticides against armyworm as control options that were obtained from Agri-Life company in India (bio-pesticide Lipel, *Bacillus thuriengiensis* var *kurstaki*) and Valent Bio-Sciences Corp. USA (XenTari, *Bacillus thuringiensis* var

aizawai). This field experiment on the effectiveness of these biological products by comparing them with the insecticide malathion 50% EC was conducted in Somali regional state in eastern Ethiopia in May, 2015.

The result of the analysis of the experimental data showed that the performance of the treatments vary significantly. Among the treatments, malathion 50% EC caused significantly higher mortality compared to Lipel, XenTari and the control. These two Bt products caused more than 50% cumulative mortality on average in the early instars (1st -3rd) of armyworm up to four days of observation after treatment. However, the effect of the malathion 50% EC vanished after the fourth day of treatment application while XenTari and Lipel continued to cause mortality among the larvae in the field up to six days after treatment. After six days of treatment applications all the treatments did not cause any mortality.

There was no any meaningful mortality of armyworm larvae in the control plot at any dates of observation. The lower level of mortality in the control plots were highly significant compared to all other treatments. The highest mortality was recorded two days after treatment for malathion (>90%), XenTari (>51%) and Lipel (>33%) and it was significantly higher than the rest while there was no significant difference between levels of mortality at six and eight days of observation after treatment.

DLCO-EA AIRCRAFT SITREP AS AT 30TH JUNE, 2015

A/C REG.	5Y-BCJ Beaver	5Y-BCK Beaver	5Y-BCL Beaver	5Y-KRD Beaver	5Y-DLA Caravan	5Y-DLO Baron	5Y-BBB Islander	5Y-DLD Turbo Beaver
C OF A DUE DATE	23/04/2016	07/09/2015	IN PROGRESS	IN PROGRESS	19/02/20 16	IN PROGRESS	DUE	IN PROGRESS
CHECK III	05/04/2017	07/09/2015	01/07/2018	IN PROGRESS	N/A	IN PROGRESS	DUE	02/03/2017
PROP. 5 YR OVERHAUL	28/07/2016	29/07/2016	10/02/2018	IN PROGRESS	28/05/20 18	IN PROGRESS	DUE	21/07/2017
A/F HOURS	199:50	590:00	00:00	00:00	3477:05	00:00	00:00	65:50
ENGINE (S) HRS	355:00	193:30	883:00	00:00	22:45	PORT: 00:00 STBD: 00:00	PORT: 1556:10 STBD: 1556:10	401:25
PROP. HRS	199:40	310:45	300:55	00:00	1194:50	PORT: 1346:25 STBD: 1278:05	PORT:216:00 STBD:216:00	284:15
LOCATION	QUELEA TANZANIA	LOCUST SUDAN	MAINTENANCE NAIROBI	UNDER ACCIDENT REPAIR	MWANZA UNHCR	MAINTENANCE NAIROBI	MAINTENANCE NAIROBI	MAINTENAN CE NAIROBI

NB:

 **IMMEDIATE ATTENTION**

 **TO BE NOTED**

Checked by: - Ag. Chief Engineer

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