

2013



SWAC/CRC INTER-REGIONAL WORKSHOP FOR DESERT LOCUST INFORMATION OFFICERS

22-25 April 2013

Cairo, Egypt

Commission for Controlling the Desert Locust in South-West Asia (SWAC)
Commission for Controlling the Desert Locust in the Central Region (CRC)
Desert Locust Information Service (DLIS)



SWAC/CRC Inter-regional Workshop for Desert Locust Information Officers

22-25 April 2013 (FAO/RNE, Cairo)

Introduction

The FAO Senior Locust Forecasting Officer conducted an inter-regional workshop for Desert Locust Information Officers in frontline countries of the Central Region and South-West Asia. The FAO Commissions for Controlling the Desert Locust in South-West Asia (SWAC) and the Central Region (CRC) sponsored the workshop. It was the sixth annual workshop since 2008. Nationally designated Locust information officers (LIO) from nine countries and DLCO-EA attended the workshop as well as resource persons from the Western and Central regions and FAO: five participants from SWAC, 15 participants from CRC and five resource persons¹. The relatively high number of resource persons was required in order to provide sufficient training on RAMSESv4.

Programme

Similar to previous workshops, there was no detailed agenda developed in advance and the workshop was not preplanned; instead, participants indicated what problems they face in their daily work and what they would like to learn at this year's workshop. This methodology is known as Open Spaces². As a result, the workshop covered three broad topics: reporting, eLocust3 and RAMSESv4. The workshop hours were from 8:30 to 4:00 PM.

1. Reporting

The Senior Locust Forecasting Officer provided feedback on the quality, timeliness and frequency (regularity) of reporting (Annex 1). During the past 12 months, quality declined slightly in Saudi Arabia, India and Eritrea while timeliness declined slightly in India, northern Somalia, Pakistan and Eritrea. Compared to 2011, substantial improvements in both quality and timeliness occurred in northern Somalia. A slight decline in quality in 2012 compared to 2011 occurred in Egypt, Sudan, India and Saudi Arabia while timeliness improved in 2012 in northern Somalia, Ethiopia, Eritrea, Sudan and Pakistan.

¹ SWAC: India (Pramod Gour, Chandra Sharma), Iran (Mehdi Ghaemian, Mahmoud Chalaki), Pakistan (Shahbaz, Muhammad Javed Khan)

CRC: DLCO-EA (Felege Elias), Egypt (Mohamed Reyad Tony, Osama Rabie Mahmoud Moustafa, Yara Ahmed Kamel Hassan, Khaled Ebrahim El-Khilany), Ethiopia (Hiwot Lemma, Zebdewos Salato), Oman (Nassor Al-Harthy, Khalid Al-Harrasi), Saudi Arabia (Abdellatif AbdulSalam, Saeed Turkistani, Marwan Hassan Balkhour), Sudan (Hussien Osman, Eshatti Ali Mohammed Enajeeb) Yemen (Saeed Al-Mamaary, Ahmed Al Eryani)

FAO: Keith Cressman (DLIS), Hichem Dridi (CLCPRO), Mamoon Al-Alawi (CRC), Essam Mahmoud Khalifah (CRC)

² see http://intouch.fao.org/renewal/teamwork/tools_and_methods/running_teams/, <http://www.kstoolkit.org/Open+Space>, <http://www.openspaceworld.org/>.

The causes of the decline in reporting quality were:

- Not reporting every three days during outbreaks (Egypt, Eritrea, Saudi Arabia)
- Control totals differ between RAMSES data and reports (Egypt, Sudan)
- RAMSES data was not received by DLIS (Eritrea, Pakistan)
- RAMSES data and maps showed locust populations that were not mentioned in the report (Egypt)
- A summary of the RAMSES data was not provided (India, Saudi Arabia)
- Insufficient summary and analysis of the situation in the fortnightly bulletin (India)
- The PDF of the bulletin is a scanned image (India)
- The map is a MS Word document instead of a PDF file (India)

Some countries did not report at least once per month:

- Eritrea (September 2012 – the LIO was busy with a *Quelea* campaign, March 2013 – the LIO was in the field)
- Iran (May and September 2012 – problems with the PPO email account, March 2013 – due to the Joint Survey)
- Somalia (May and July 2012)

Countries requested that DLIS provide feedback on reporting every three months in order to improve the quality and timeliness.

(a) Training plans

Four of the participating countries indicated that they have annual training plans.

Egypt. One to two field workshops are organized per year to provide training to field staff in eLocust2, GPS, map reading, survey and control.

India. Master trainers conduct two workshops per year for Locust Warning Organization officers in eLocust2 and new technologies.

Iran. Four Master Trainers conduct an annual workshop in which regions nominate participants. The workshop concentrates on survey and control methodologies and the introduction and use of new tools such as eLocust2 and RAMSESV3.

Sudan. One to two national workshops are conducted per year on survey and control methods, data collection, and how to use data. In the absence of workshops, on-the-job training is provided.

As recommended at the 28th session of CRC, countries should establish national training plans and make use of Commission funds and technical assistance to carry out at least one training course per year. LIOs should discuss this with their Locust Director.

(b) Communications

It was noted that Internet connection is extremely poor, unreliable, and slow in Eritrea and nearly non-existent in Yemen. Furthermore, it is not possible to contact field teams due to a lack of mobile service and no HF radios.

(c) eLocust2

Participants were urged to improve the management of eLocust2 units by deactivating units that are not expected to be used in the field during the next 4-6 months. This will help to reduce monthly subscription fees (16 Euros/unit). Ideally, the monthly subscription costs

should be close to the monthly data transmission costs. In this way, the activated eLocust2 units are being utilized in the most effective and efficient manner possible.

Participants, as LIOs, were reminded that they are considered as the Master Trainers for eLocust2 and are responsible for providing training to users and ensure the units are maintained and updated.

Minor issues were discussed and resolved (see Annex 2).

(d) RAMSESv3

In general, participants have a very good knowledge of RAMSES and use it regularly to manage and analyze locust, weather and ecological data. Minor issues were discussed and resolved (see Annex 3).

2. RAMSESv4

Two and half days were devoted to RAMSESv4. The Senior Locust Forecasting Officer presented an overview of the development team, architecture, programming language and computer requirements for RAMSESv4. Participants were divided into pairs and practiced installing, uninstalling and reinstalling RAMSESv4 on their laptops using XP and Windows 7 (Annex 2). Minor errors were discovered during this process and immediately addressed in order to resolve them. Participants then practicing using RAMSESv4 with the help of instruction provided by the resource persons and by completing exercises in a Self Training Manual. Participants brought with them their portable external hard disk drive that was received by DLIS to use during the training and to be updated. Additional hard disk drives with updated files were distributed to the countries at the workshop (Annex 4). Several tips were discovered during installation, uninstall and usage to improve user experience (Annex 5). Participants had several suggestions for improvements to RAMSESv4 (Annex 6).

The RAMSESv4 Development Team relies on an online service, Bitbucket³, to manage the development of the custom application. Participants were shown how to provide feedback regarding bugs and improvements in RAMSESv4 through Bitbucket by creating a new issue. Users must first register for the free service. In this way, the entire RAMSESv4 Development Team will be informed and they can address and follow all issues in a systematic manner. This is more efficient than sending email messages to various team members.

3. eLocust3

The Senior Locust Forecasting Officer presented the demonstration version of eLocust3 in English and Arabic in a presentation as well as on one eLocust3 tablet. The participants discussed and reviewed each data field to ensure that all possible data collected in the field during survey and control operations could be entered into eLocust3. The Arabic version will be reviewed with Saudi Arabia and Libya, the two countries that primarily use Arabic. A few suggestions were made (Annex 7).

4. Social media and remote access

Participants were encouraged to develop a Facebook page for the national locust program in their country and to use Twitter. Both technologies are useful tools to keep people informed of the Desert Locust situation. Saudi Arabia is an example of one of the countries that makes effective use of these technologies.

³ https://bitbucket.org/faodlis/fao_openjump/wiki/Home

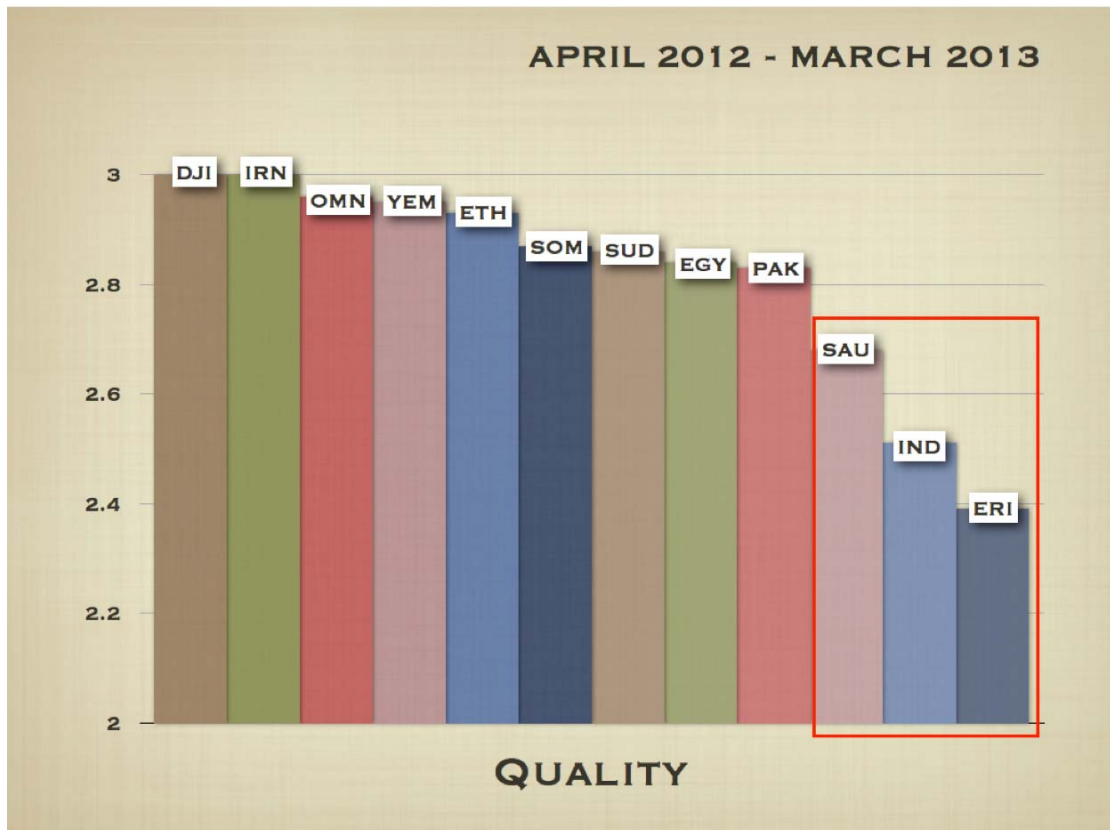
In order to provide support to new technologies, participants were shown how to download and install TeamViewer, which allows remote access to the user's computer (if the user allows it).

Conclusion

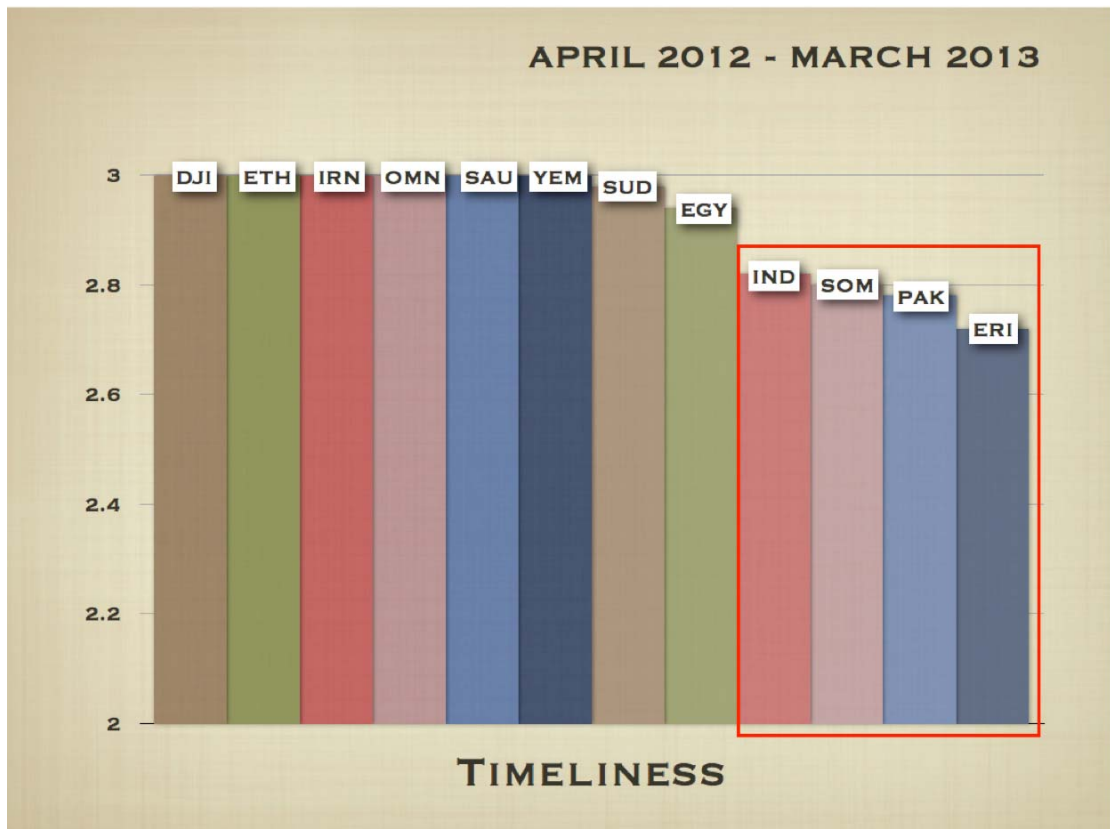
Participants confirmed the importance of and need to continue to organize the CRC/SWAC inter-regional workshop for Desert Locust Information Officers on an annual basis in order to strengthen Desert Locust data management and analysis, maintain a high level of reporting on timely and regular basis, and to sustain an effective early warning system. This system is the basis for the preventive control strategy as a means to reduce the frequency, duration and intensity of Desert Locust plagues.

Participants acknowledged and gave a heartfelt *Thanks of Appreciation* to the efforts of the RAMSESv4 Development Team for their hard work in developing the new programme and to DLIS and the Senior Locust Forecasting Officer for the tireless efforts in maintaining the Desert Locust global early warning system.

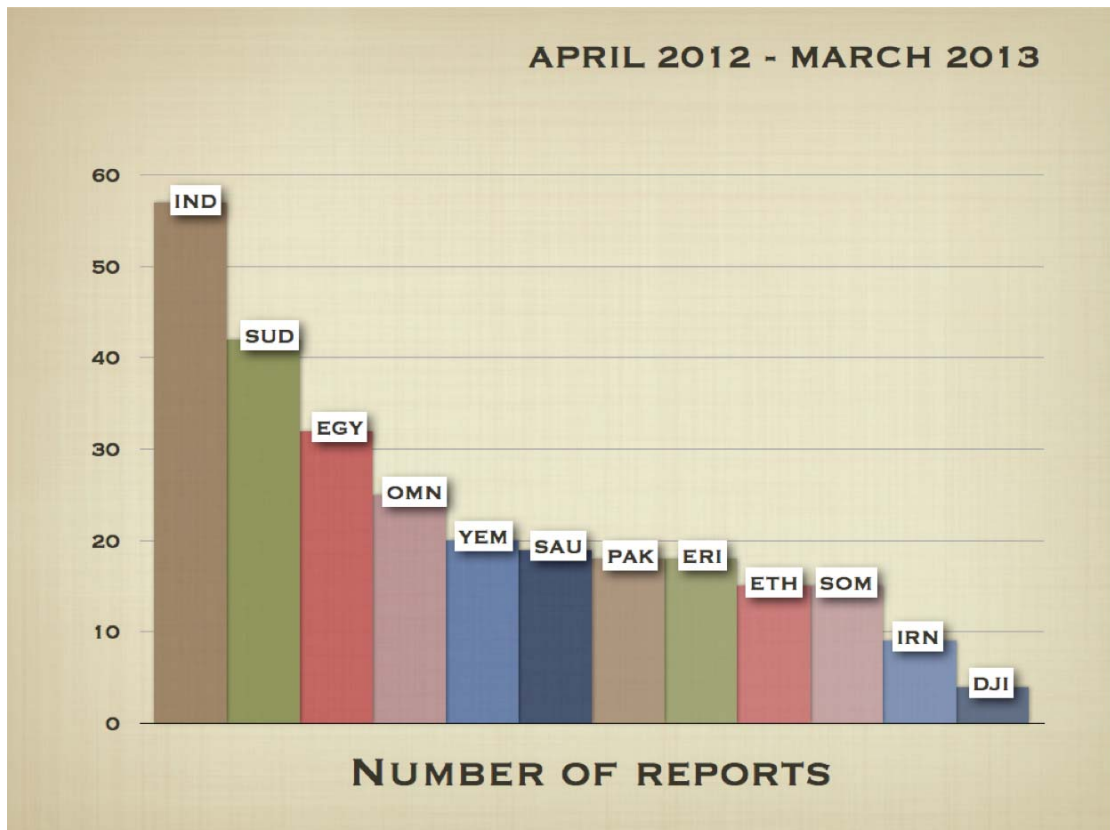
Annex 1. Reporting



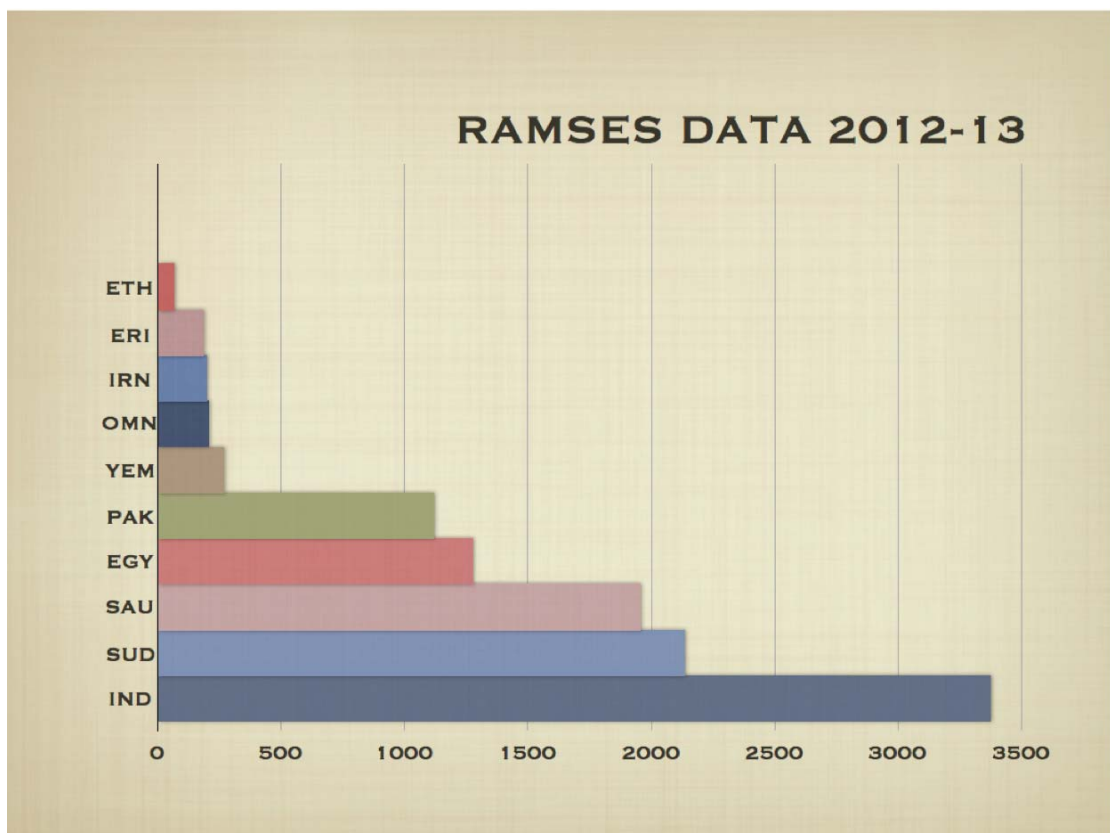
Quality declined slightly in Saudi Arabia, India and Eritrea.



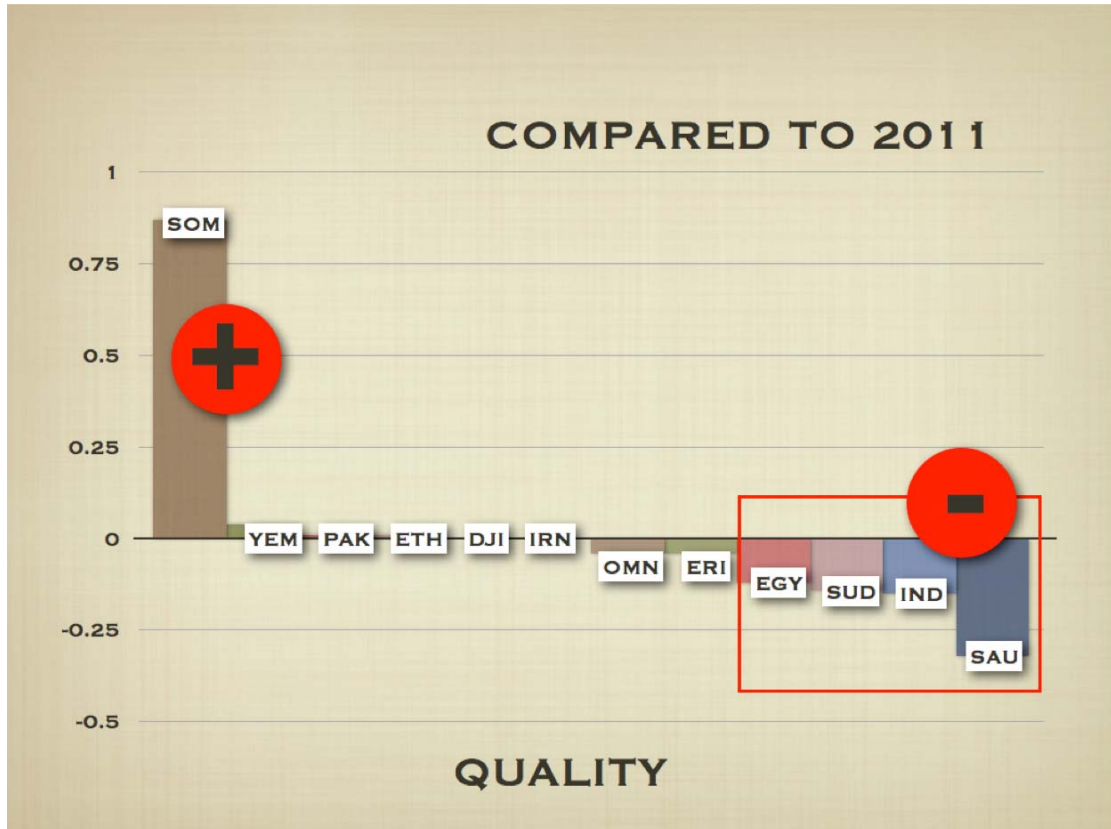
Timeliness declined slightly in India, Somalia, Pakistan and Eritrea.



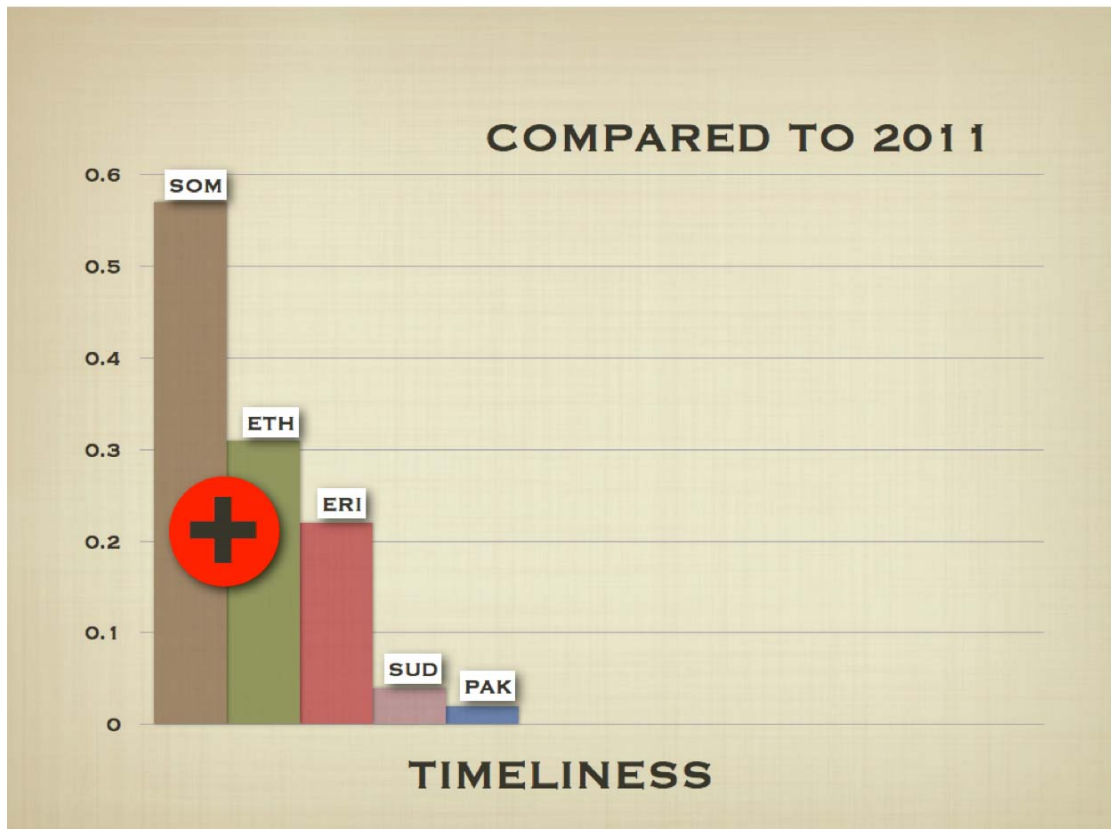
Numerous reports were received from India (due to regular monitoring) and Sudan (outbreak).



The most field data comes from India (due to regular surveys) followed by Sudan, Saudi Arabia and Egypt (all due to increased locust activity)



Quality improved significantly in Somalia compared to 2011 but declined slightly in Egypt, Sudan, India and Saudi Arabia in 2012.



Timeliness improved significantly in Somalia and to a lesser extent in Ethiopia, Eritrea, Sudan and Pakistan.

	EGY	ERI	ETH	IND	IRN	PAK	SAU	SOM	SUD
did not report every 3 days during outbreaks	X	X					X		
control totals differ between bulletin and data	X								X
RAMSES data not sent		X				X			
monthly bulletin late			X					X	
duplicate reporting								X	
RAMSES data + map show swarms but not in summary or bulletin text	X								
no summary of RAMSES data (SAU: during outbreak)				X			X		
insufficient summary and analysis (fortnightly bulletin)				X					
PDF is a scan only				X					
map is word DOC not a PDF				X					
no reports received		Sep Mar			May Sep Mar	May Jan- Mar		May Jul	

Note: If a country is not listed above, then no reporting deficiencies occurred.

Annex 2. Problems and solutions

In order to troubleshooting and solve problems, it is necessary to take a Step-By-Step approach to identify exactly where the problem lies. Once this is known, then it will be easier to solve.

eLocust2

Missing data

- Do not turn off too soon;
- Better to keep the Wescor always plugged in and on;
- Make sure field teams also record data on the *Desert Locust Survey and Control Form* as a backup.

Slow transmission

- Check the cable and replace with a new one;
- If the problem persists, check the antenna (LED should be green) and contact DLIS if antenna is problematic

Duplicate data and missing data

- This may be caused by errors that occur during transmission

eLocust2 history differs from RAMSES: seconds in coordinates

- This is due to the format of seconds in eLocust2 and RAMSES (decimal degrees and degrees/minutes/seconds)

eLocust2 history differs from RAMSES: time in minutes

- Remember that time in eLocust2 is GMT while time in RAMSES is the local time;
- Check step-by-step to identify exactly where the time is changing by starting with History in eLocust2 unit, followed by Novacom platform, Novacom CSV file, eLocust2Mapper, eLocust2Mapper export file, RAMSES import, RAMSES database, RAMSES export file

No data is sent by eLocust2 despite confirmation

- Use only activated units
- Check to see if the LED on the antenna is green during data transmission
- Check the cable and replace if necessary

Terminology

Area surveyed

- This is a rough estimate of green vegetation at the survey stop area infested in which your survey sample is valid – usually in homogenous vegetation and habitat;
- It should usually only be a few hundred hectares – if it is more than this, then another sample (survey) should be undertaken;
- The Area Surveyed must always be greater than or equal to the Area Infested – it cannot be less

Area infested

- This is the area in which locust are estimated to present based on the survey results, regardless if control is required or not
- If control is required, then Control=Yes should be selected in eLocust2

Area treated

- This is the area sprayed against Desert Locust
- It can be more or less than the Area Infested
- It is rare that it is exactly the same as the Area Infested

Remote Sensing

Cannot download the greenness maps (Ethiopia)

- DLCO-EA (Felege) will try to resolve this upon return to Addis Ababa

RAMSESv3

Cannot include greenness maps in the bulletin (Saudi Arabia)

- Instead of using the Print Command, try to export the Layout as a JPG

Appearance button not functioning (Saudi Arabia)

- It is suggested to query the database using the Behaviour button as this is more relevant
- Download the latest RAMSES.APR file, backup the old one and install the new one

Cannot display greenness maps (Yemen)

- Make sure the Tiff 6.0 image extension (File Menu) is ticked

Some control data is missing in the RAMSES export file (Egypt)

- Remember to delete control data, then survey data for each record

Multiple symbols were displayed for a single location (Sudan)

- This was resolved by reinstalling RAMSES and following the correct order of each update

Annex 3. Laptop configurations used for RAMSESV4 training

Participant	Country	OS	Language	RAM	Partner	Country
Felege	DLCO-EA	W7	E	4	Orion	ERI
Osama	Egypt	W7	E	4	Yara	EGY
Hiwot	Ethiopia	XP	E	2	Tedros	ERI
Zebdewos	Ethiopia	XP	E	3.5	Hussein	SUD
<i>Pramod *</i>	<i>India</i>	<i>XP</i>	<i>E</i>	2		
Chalaki	Iran	W7	E	6	Eshatti	SUD
Khalid	Oman	XP	E	3	Pramod	IND
Shabaz	Pakistan	W7	E	6	Khan/Charma	PAK/IND
Abdellatif	Saudi Arabia	W7	E	4	Saeed/Marwan	SAU
<i>Hussien *</i>	<i>Sudan</i>	<i>W7</i>	<i>E</i>	2		
Eryani	Yemen	XP	AE	3	Saeed	YEM
Essam	CRC	XP	E	3.5	Khaled/Mohamed	EGY

* insufficient RAM memory did not allow RAMSESV4 to work so participants were reassigned to other groups

It was noted that Hiwot's laptop with XP and 2GB RAM worked fine with RAMSESV4 while Pramod's laptop with the same configuration did not. It is suspected that the former laptop was a clean machine with few applications installed; hence, less RAM memory and resources were being utilized by the operating system, allowing sufficient memory for RAMSESV4.

It became clear that RAMSESV4 worked better with less problems on Windows 7 with at least 4 GB RAM, preferably 6GB, while on XP operating systems, more than 2.00GB RAM is generally required, preferably 3GB, and other applications and background resources, such as Skype, should be closed or stopped in order to have sufficient RAM memory for RAMSESV4.

Annex 4. External portable hard disk drives (HDD)

The original 2TB HDDs that contain the RAMSESV4 installation and data files were updated and additional updated HDDs were distributed to participating countries at the workshop.

Each HDD contains:

- data – static and dynamic raster data
- docs – installation, uninstallation and training guides for XP and Windows 7
- installation_sequence – installation files including country specific files
- updates – eLocust2Importer
- WD SES Device Driver – driver for the HDD

CRC and SWAC countries have now received a total of 28 HDDs as follows:

Country	HDDs
DLCO-EA	DLC, DLC/KEN
Egypt	EGY, EGY2, EGY3
Eritrea *	ERI2
Ethiopia	ETH, ETH2
India	IND, IND2, IND3, IND4
Iran	IRN, IRN2, IRN3
Oman	OMN, OMN2
Pakistan	PAK, PAK2
Saudi Arabia	SAU, SAU2, SAU3
Sudan	SUD, SUD2, SUD3
Yemen	YEM, YEM2, YEM3

* FAO Senior Locust Forecasting Officer to bring additional HDD to Eritrea during technical visit in May

Annex 5. RAMSESV4 tips

A. Install / Uninstall

1. temporarily disable anti-virus programs
2. close all windows and apps
3. XP with 2+ GB RAM
4. W7 as Admin (right-click - Run as... and set in Properties)
5. copy **installation_sequence** folder to desktop and uninstall from there

B. Usage

1. zoom in first, then add hi-resolution backgrounds (Landsat, TPC)
2. don't update Java6
3. Greenness maps - to make gray background transparent:
 - a. right-click on layer
 - b. Change Raster Image Properties
 - c. tick - Do you want a color to be set to be transparent
 - d. RGB tab
 - e. resize window
 - f. RGB=100/110/110
4. if get error during query, restart RAMSESV4
5. Greenness map (and some other dynamic images) selection – only FROM date
6. monthly rainfall anomaly (difference from norm) vs. aggregate (month total)
7. use eLocust3Importer plug-in to enter, update and correct data manually

Annex 6. RAMSESV4 amendments

A. Current features and functionality that require amending

Some existing features and functionality require correction or improvements. These are listed below.

1. The northern extent of the national boundary of Sudan is 22N
2. The southern extent of the national boundary of Egypt is 22N
3. Oman should include Musandam Peninsula and Medha
4. Country default zoom is global rather than national – this should always be national extent and not global
5. Locust data for Iran is missing (Iran will provide MS Access database)
6. Documentation on how to use eLocust3Importer plug-in (once it has been updated)
7. Add new data to RAMSESV4 database using the eLocust3Importer plug-in interface
8. Labeling of features new coasts in Gaul sub-national boundary

B. Additional features and functionality that are requested

Workshop participants requested several additional features and functionality that are currently not available in the first release of RAMSESV4. These are listed below.

1. South Sudan boundary is missing
2. Ability to export detailed information of a survey stop to a spreadsheet (via Info icon)
3. Add populated places layer (settlements layer in RAMSESV3)
4. Ability to import RAMSESV4 export file from another country (required for DLCO-EA)

Annex 7. eLocust3 amendments

During a presentation and demonstration of eLocust3, participants made several suggestions for eLocust3 as follows:

1. ability to select up to two habitat types
2. ability to select up to two control methods
3. indicate which fields are mandatory (by font colour or asterisk)

The suggestions were communicated to Novacom, the software developer.