ANNUAL REPORT OF THE RESIDENT/HUMANITARIAN COORDINATOR ON THE USE OF CERF GRANTS

Country	**Mozambique**
Resident/Humanitarian Coordinator	**(FAO Regional Project)**
Reporting Period	**1 January 2009 – 31 December 2009**

I. Summary of Funding and Beneficiaries

Funding (US$)	Total amount required for the humanitarian response:		$547,003
	Total amount received for the humanitarian response:		$547,003
	Breakdown of total country funding received by source:	CERF CHF/HRF COUNTRY LEVEL FUNDS OTHER (Bilateral/Multilateral)	$547,003
	Total amount of CERF funding received from the Rapid Response window:		$547,003
	Total amount of CERF funding received from the Underfunded window:		
	Please provide the breakdown of CERF funds by type of partner:	a. Direct UN agencies/IOM implementation:	$547,003
		b. Funds forwarded to NGOs for implementation (in Annex, please provide a list of each NGO and amount of CERF funding forwarded):	
		c. Funds for Government implementation:	
		d. **TOTAL:**	**$547,003**
Beneficiaries	Total number of individuals affected by the crisis:		Potentially more than 15 million people of the larger region are at risk while those food insecure in the targeted countries are at direct risk
	Total number of individuals reached with CERF funding:		total individuals
			children under 5
			females
Geographical areas of implementation:			ecological sensitive areas in Tanzania, Malawi and Mozambique as required

II. Analysis

During the period January to May 2009, the International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA) undertook surveys in the Red Locust breeding areas of Tanzania, Malawi and Mozambique using financial support from the Food and Agriculture Organization (FAO) through TCP/RAF/3118(E) covering Tanzania and Malawi and TCP/MOZ/3203(E) covering Mozambique.

The surveys conducted in Tanzania revealed widespread infestation with hopper bands in Ikuu-Katavi, one of the biggest and richest wildlife areas in Tanzania, the Rukwa plains and the Malagarasi Basin, and it became imminent that a potentially serious locust upsurge was developing. With the onset of the dry season and the beginning of bush fires by May/June the Red Locust population would concentrate and form swarms. At this point these swarms would escape from the original breeding areas and invade adjacent farmland and neighbouring countries causing serious damage to crops and pasture and thus worsening the already precarious food situation in the sub-region. Simultaneous locust outbreaks also in Malawi and Mozambique significantly increased the risk of a plague potentially more serious than the one of 1996 with devastating consequences for the livelihoods of millions of people.

It was against this background that IRLCO-CSA together with Ministries of Agriculture of Tanzania, Mozambique and Malawi launched an appeal to FAO for assistance. The United Nation's Central Emergency Response Fund (CERF) and FAO responded to the request with a project titled 'Emergency response to control a Red Locust outbreak in Central and Southern Africa' (project code; OSRO/RAF/909/CHA). The total budget of the survey and control programme in the Region was of US$2 845 752, including the budget available under CERF of US$1 873 824, to facilitate aerial survey and control operations. The specific objective of the CERF project was provision of equipment to prevent humanitarian crisis emanating from food crops destruction caused by Red locust swarms. The funding, therefore, sought to mitigate the chances of swarms escaping from the outbreak areas by strengthening the response capacity of IRLCO-CSA and the national plant protection agencies in Tanzania, Malawi and Mozambique to effectively cope with developing Red Locust threats. The project placed emphasis on safeguarding food security by taking important aspects of human health and environmental protection into consideration in the process of its implementation.

Survey and control operations in Buzi-Gorongosa and Dimba plains of Mozambique were undertaken from the 4th to the 12th August 2009. A total area covering 202,000 ha was surveyed in the Buzi plains and spraying using Sumi-Combi Alpha 50 (cocktail of Fenitrothion and Esfenvalerate) was conducted on 3,100 ha infested with medium density locust swarms (5-15 locusts/m2). In Dimba plains, 48,000 ha were surveyed and 600 ha with densities ranging from 5 to 10 locusts/m^2 were sprayed with Fenitrothion 96%.

Through the CERF project, the IRLCO-CSA Cessna spray aircraft was fitted with new spray gear and a track guidance system for more targeted and precise pesticide application during spraying. The IRLCO-CSA helicopter underwent complete technical overhauling using CERF funds, which facilitated covering over 1.1 million hectares during the survey operations. The project also supported renovations of IRLCO-CSA's main pesticide store at its HQ in Ndola, Zambia, to meet the required standards of safe pesticide storage. Expendable and non-expendable equipments were supplied by the project and this strengthened the capacity of IRLCO-CSA to implement the project and to effectively deal with future locust emergencies.

The timely intervention facilitated through the CERF support played a key role in safeguarding food security and livelihood of farmers in Eastern and Southern Africa. Of significance was the demonstration that the bio-pesticide used during the operations can successfully be used also on adult Red Locust populations. This result should lead to a reduction of chemical pesticides in locust control and hence reducing the risks of chemical pesticides on people and wildlife living in and close to the ecologically vulnerable locust outbreak areas.

The aim of the UN–CERF project was to preserve food security and livelihoods of rural populations and mitigate further damage to already fragile agricultural production in Central and Southern Africa region.

Moderate levels of food insecurity persist in the southern parts of Mozambique (severely hit by drought) and in some parts of the central region, hit by floods. The number of acutely food insecure persons has increased from 302,664 in May 2008 to 450,000 in October 2008. Poor to very poor households having limited or no coping strategies need continuous humanitarian assistance through March 2009 when early harvests begin. A total cereal deficit of 604,000 MT was estimated for the 2008/09 marketing year. The Red Locust outbreak in the Buzi-Gorongosa plains could have exacerbated food insecurity condition severely.

It should be noted that more 15 million people of the larger region were potentially at risk, in case the Red Locust outbreaks had not been contained on time to avoid a full plague.

Consequently, the immediate objective of the assistance was to mitigate the chances of Red Locust swarms leaving the outbreak areas and causing extensive damage to crops which would result in a major humanitarian food crisis. To achieve this objective, the project aimed at strengthening the response capacity of IRLCO-CSA and the national plant protection agencies in Tanzania, Mozambique, Malawi and Zambia to effectively deal with the locust outbreaks. The project also paid special attention to human health issues and protection of the environment. In this regard, control of Red Locust in the Ikuu wetlands which is part of Katavi National Park, one of the most valuable wildlife areas of Tanzania, was carried out using a fungal based biopesticide, which has no side effects on non-targets.

The project achieved its principle objective to prevent the risk of the Red Locusts on agricultural production and livelihoods of the rural communities. An independent evaluation of the operations conducted in September 2009 revealed that the early intervention and timely response prevented a major humanitarian crisis due to the Red Locust in Central and Southern Africa. An estimated 598,000 ha of food crops were protected in Tanzania alone. Through the emergency assistance it was possible to quickly scale up the locust survey and control capacities in the Region, and achieved ecologically sound management of the locust infestation by applying principles of Integrated Pest Management (IPM).

To this end, the project accomplished the following:

- timely delivery inputs in support of survey and control operations, such as camping kits, communication equipment (VHF and HF radios) and sprayers and provision of funds for the operations;
- rapid transfer and airlifting of certified conventional pesticides from existing stocks in Mali to the region in need;
- timely procurement of a sizable amount of biopesticides for control operations in ecologically sensitive areas;
- detachment of two national consultant to monitor the safe use of chemical pesticides;
- strengthening the intervention capacity of IRLCO-CSA through the delivery of a track-guidance system and modern spray equipment for up-grading the fixed-wing spray aircraft of the Organization;
- support to survey and control operations through timely fielding of an international locust expert to reinforce the management of the operations, and by providing Letters of Agreement between FAO and IRLCO-CSA.

Impact of CERF project

The primary objective of preventing Red Locust escaping from outbreak areas in Tanzania, Mozambique, Malawi and Zambia was achieved. It was also demonstrated that Green Muscle can be used for large scale control of Red locust in ecologically sensitive areas. For Mozambique, the following was achieved:

Buzi-Gorongosa plains: Surveys on a total of 165,000 ha located Red Locust concentrations and swarmlets of 5-15 locusts/ m^2 covering approximately 3,200 ha south of Pungue River. These infestations were controlled with the hired Turbo Thrush spray aircraft using 3,000 litres of Sumi-combi Alpha.

Dimba Plains: 48,000 ha of the Dimba plains were surveyed and only isolated to scattered Red Locust infestations in unburnt areas of 10,600 ha detected. The highest densities were found on scattered grass islands on a total of 600 ha with densities ranging from 5-10 locusts/m^2, which were marked for control. A total of 360 litres of Fenitrothion 96% was used.

Disaster prevention: Timely intervention using the FAO/UN-CERF project averted Red Locust outbreaks of the magnitude which would have caused extensive damage and food deficits in Tanzania, and Mozambique and in neighbouring countries. Threat of Red Locust swarms escapes from outbreak areas was prevented resulting in an estimated 589 000 ha of cereal crops in western Tanzania. In Mozambique 450 000 people faced severe food deficit due to floods and devastation of crops by locusts would have compounded the already desperate situation.

Environmental protection: Successful control using Metarhizium confirmed that the biopesticide can be used to control Red Locust on a large scale. Given that the biopesticide selectively kills members of the Acrididae family, thus non-target organisms were not affected hence preserving the biodiversity.

Capacity building: The capability of IRLCO-CSA to undertake emergency locust control in future was greatly enhanced through upgrading of equipment e.g spray aircraft and operational equipments.
The interaction between consultants and IRLCO-CSA/MASFC provided a forum for exchange of knowledge in the use of the biopesticide.

Public awareness: The use of Green Muscle to protect food security in the region received publicity locally and internationally.

III. Results:

Sector/ Cluster	CERF project number and title (If applicable, please provide CAP/Flash Project Code)	Amount disbursed from CERF (US$)	Total Project Budget (US$)	Number of Beneficiaries targeted with CERF funding	Expected Results/ Outcomes	Results and improvements for the target beneficiaries	CERF's added value to the project	Monitoring and Evaluation Mechanisms	Gender Equity
Agriculture	**Emergency response to control Red Locust Outbreak in Centeral and Southern Africa (Regional Submission) (09-FAO-016A)**	547,003	547,003	Potentially more than 15 million people of the larger region at risk while those food insecure in the targeted countries are at direct risk.	At least 800 kg of spores of bio-pesticide purchased and delivered and applied in ecological sensitive areas in Tanzania, Malawi and Mozambique as required.	Buzi-Gorongosa plains: Surveys on a total of 165,000 ha located Red Locust concentrations and swarmlets of 5-15 locusts/ m^2 covering approximately 3,200 ha south of Pungue River. These infestations were controlled with the hired Turbo Thrush spray aircraft using 3,000 litres of Sumi-combi Alpha. Dimba Plains: 48,000 ha of the Dimba plains were surveyed and only isolated to scattered Red Locust infestations in unburnt areas of 10,600 ha detected. The highest densities were found on scattered grass islands on a total of 600 ha with densities ranging from 5-10 locusts/m^2, which were marked for control. A total of 360 litres of Fenitrothion 96% was used.	Timely intervention using the FAO/UN-CERF project averted Red Locust outbreaks of the magnitude which would have caused extensive damage and food deficits in Tanzania, and Mozambique and in neighbouring countries.	Internal FAO mechanisms. Coordination of project activities will be ensured by IRLCO-CSA with support from FAO's HQs, FAO Representations in the three countries as well as the FAO's team leader.	This project benefited all people equally.