Food and Agriculture Organization of the United Nations

DESERT LOCUST CRISIS

Appeal for rapid response and anticipatory action in the Greater Horn of Africa

January–July 2020

At a glance

The worst Desert Locust outbreak in decades is underway in the Greater Horn of Africa, where tens of thousands of hectares of cropland and pasture have been damaged in Ethiopia, Kenya and Somalia with potentially severe consequences for agriculture-based livelihoods in contexts where food security is already fragile.

Highly mobile and capable of stripping an area's vegetation, swarming locusts can cause large-scale agricultural and environmental damage. Even a very small locust swarm can eat the same amount of food in one day as about 35 000 people. This can be especially devastating in countries facing food security crises, where every gram of food produced counts towards alleviating hunger.

11.9 million people experiencing severe acute food insecurity in Ethiopia, Kenya and Somalia

485 000 ha of land targeted for rapid locust control in the three countries

80 000 households targeted for rapid livelihoods protection and recovery support in the three countries

USD 70 million required by FAO for rapid response and anticipatory action in the three countries from January to July 2020

Source: United Nations Global Map, 2019

In addition to the 11.9 million people already experiencing severe acute food insecurity in the three countries, the Desert Locust crisis poses a potential threat to the food security of another 20.1 million people (Integrated Food Security Phase Classification [IPC] Phase 2).

Intensive ground and aerial control operations are urgently needed (in addition to diligent surveillance) in order to detect and reduce locust populations, prevent more swarms from forming and avoid the spread to even more vulnerable areas, such as South Sudan. If locust swarms continue unhindered, this will have serious implications on crop production in the upcoming main season across the entire region.

Efforts must also be made to protect the livelihoods of farmers and livestock holders – ensuring they have the inputs they need to restart production and have access to much-needed cash to meet their immediate food needs.

It is also critical to ensure that if damage is done to crops and pastures, anticipatory actions can be undertaken to safeguard livelihoods and promote early recovery at the scale needed.

The Food and Agriculture Organization of the United Nations (FAO) urgently requires USD 70 million to support rapid control actions and take measures to prevent a deterioration in the food security situation and protect livelihoods.

Cover photo: ©FAO/Kenya

Crisis overview

Desert Locust activity in the Horn of Africa since July 2019

Favourable rainfall in the Horn of Africa from September to December 2019 for Desert Locust breeding

Current situation

Despite control efforts, a serious and widespread Desert Locust outbreak is threatening crops and pasture across Ethiopia, Somalia and Kenya. According to experts in the region, this is the worst outbreak in over 25 years in Ethiopia and Somalia and the worst observed in over 70 years in Kenya.

The situation has rapidly deteriorated in January as weather conditions have been unusually conducive to the spread of the pest. After Cyclone Pawan made landfall in early December 2019, flooding across the Horn of Africa created favourable breeding conditions for Desert Locust. These conditions will allow breeding until June 2020 and could lead to 500 times more locusts, with the formation of large numbers of swarms.

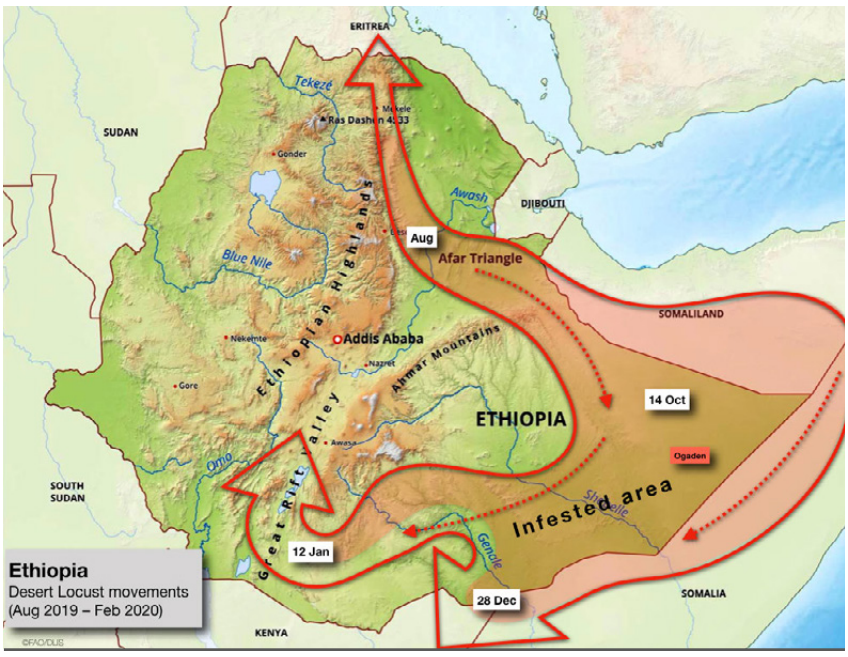
The Desert Locust is considered the most destructive migratory pest in the world as it is highly mobile and feeds on large quantities of any kind of green vegetation, including crops, pasture and fodder. A typical swarm can be made up of 150 million locusts per square kilometer and is carried on the wind, up to 150 km in one day.

Even a very small, 1 km^2 locust swarm can eat the same amount of food in one day as about 35 000 people. A single large swarm in Kenya was recorded with an area of 60 km by 40 km; a swarm of that size can consume the equivalent amount of kilocalories in one day as millions of people. This can be especially devastating in areas where food security is poor and, where every gram of food produced counts towards minimizing gaps in a family's food consumption.

The Desert Locust represents an unprecedented threat to food security and livelihoods in the region and has the potential to become a regional plague that could lead to further suffering, displacement and potential conflict. Unless sustained measures are taken to control the invasions in Ethiopia, Kenya and Somalia, the pest will spread to other East African countries, in particular South Sudan and Uganda.

Ethiopia

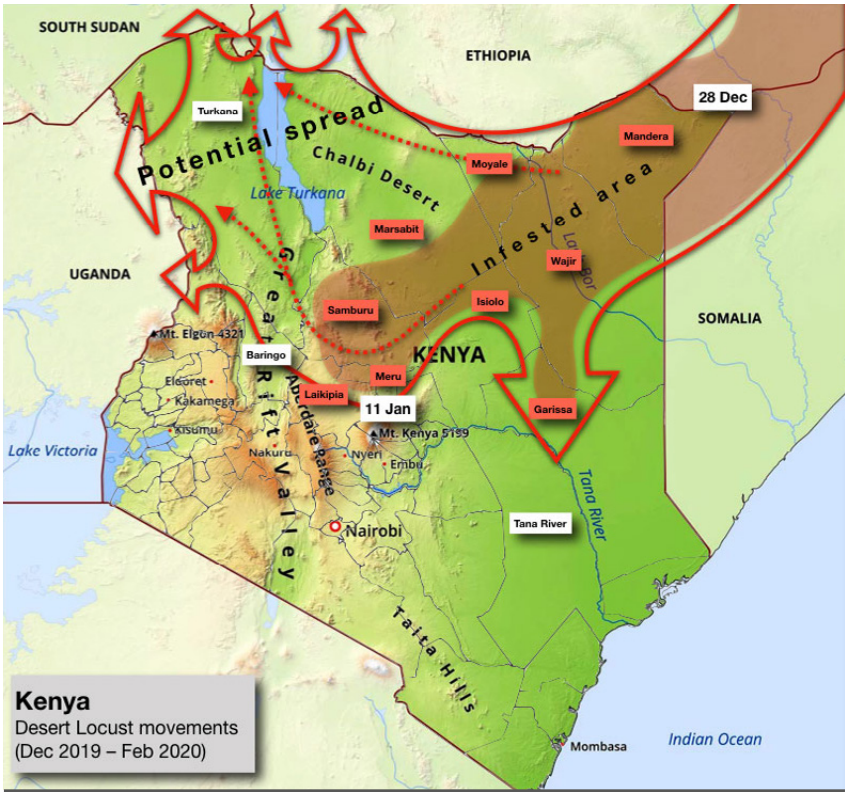
Over 2 350 km^2 of land has been affected so far in Ethiopia. Some cropping areas in Amhara and Tigray have already reported substantial crop losses, which is likely to have a direct impact on food security in the affected areas. As the locusts move, livelihoods and food security are at risk in the southern and southeastern areas of the country. While aerial control operations are taking place, additional support from FAO is required not only to control the Desert Locust outbreak, but also to support the livelihoods of the most vulnerable people in the affected areas.



Source: Food and Agriculture Organization of the United Nations Locust Watch, retrieved on 23 January 2020

Kenya

In Kenya, dozens of Desert Locust swarms have arrived from Ethiopia and Somalia on a nearly daily basis since the end of December 2019. To-date, about 70 000 ha of land has already been infested. As they move into the centre of the country, the pest outbreak poses a risk to agricultural livelihoods. Agropastoral communities in the north are particularly vulnerable as they are only just recovering from a prolonged drought. Aerial control operations began early, though the capacity of the country to respond to the rapid multiplication and formation of dense swarms requires FAO support for both control operations and livelihoods interventions.



Source: Food and Agriculture Organization of the United Nations Locust Watch, retrieved on 23 January 2020

Somalia

Desert Locust swarms bred in the north and have moved mainly to insecure areas in the central and southern parts of the country, invading livestock pasture and threatening the staple food crops in Somalia's breadbasket, where severe food insecurity is recurrent. Up to 180 000 ha require control interventions, including remote, insecure areas where control capacity is limited. FAO support is therefore urgently needed to back government efforts to survey, control and monitor the pest, and deliver time-sensitive livelihood and food security assistance to the most vulnerable.

Regional livelihoods and food insecurity implications

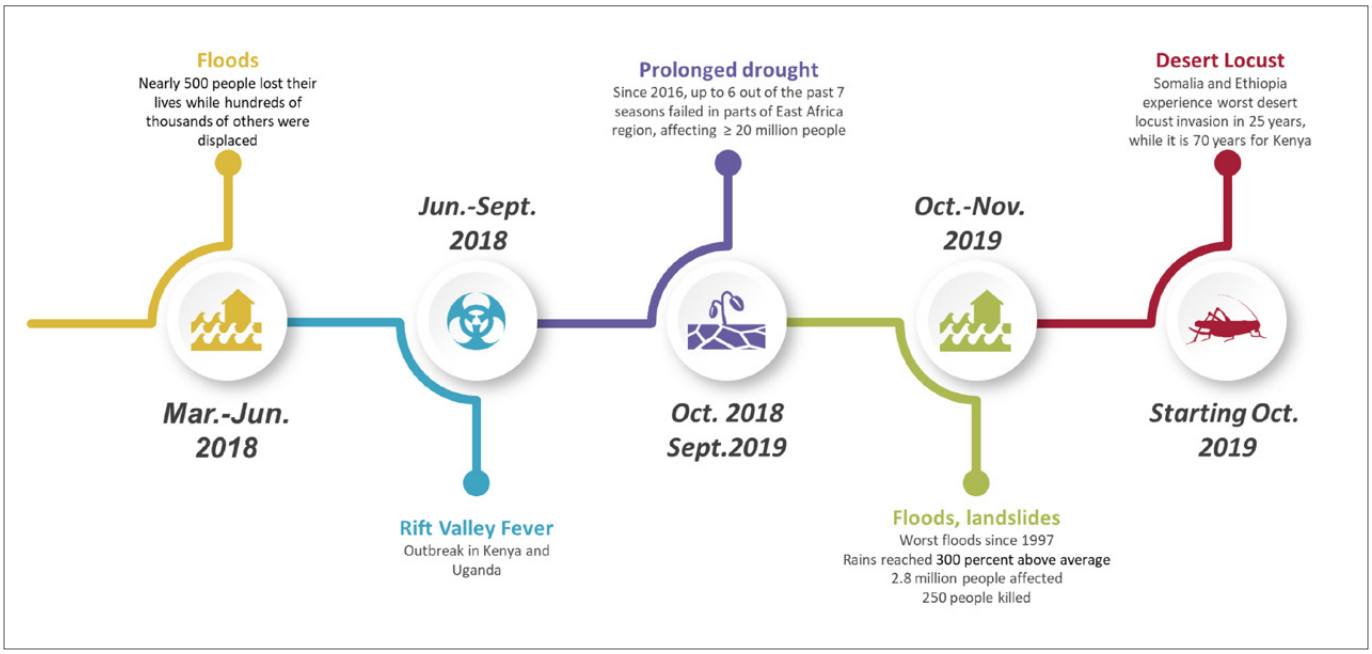
In the Horn of Africa, climatic events have been increasing in severity and frequency, and aggravated by climate change, desertification and land degradation. With consecutive years of poor rains, dry spells and drought, some households have had limited recovery between shocks – particularly those dependent on agriculture for their food and income.

Most of the areas in the region worst affected by Desert Locusts are currently facing Crisis (IPC Phase 3) or Stressed (IPC Phase 2) outcomes, with conditions likely to continue through May 2020. An estimated crisis poses a potential threat to the food security of at least 32 million people (IPC Phase 2 and above) in the three affected countries.

Multiple years of poor rains, and recent flooding in late 2019, have resulted in widespread food insecurity, with severe acute food insecurity (IPC Phase 3 and above) currently affecting 6.7 million people in Ethiopia, 3.1 million in Kenya and 2.1 people in Somalia.

While the current Desert Locust outbreak is rapidly developing, its effects on food availability and food security are not yet being felt on a large scale – meaning that there are limited food security impacts for the ongoing lean season across most of the Horn of Africa. Ongoing Desert Locust impact assessments across the affected countries will provide additional information in the coming weeks on impacts caused to crop production, pasture and livelihoods so far.

Figure 1. Natural hazards timeline in the Horn of Africa (2018–2019)



Forecasted scenario

> Significant crop losses in key production areas and deepening food insecurity levels in already vulnerable communities are expected. Swarms of the crop-destroying insect have reached unprecedented size. Their numbers could swell exponentially and spill over into more countries due to climatic conditions favourable to breeding.

The current Desert Locust outbreak has the potential to cause a deterioration in the food security situation across the East Africa region. Looking at historical locust outbreaks, such as the 2003-2005 Desert Locust outbreak in West Africa and the 2013 locust plague in Madagascar, production losses caused by locusts can be a driver of food insecurity, particularly in contexts of multiple shocks and already high vulnerability.

The March-April start of the long rains season will enable a new wave of breeding and further the spread of the pest to areas with optimal climatic conditions (including winds, soil moisture and vegetation). Given the life cycle of Desert Locusts, coinciding with the regeneration of rangeland and the start of planting activities, the infestation could affect the main staple crop production season. This could have disastrous impacts on food access and availability – especially if the locusts spread further to the Rift Valley (the region's breadbasket), as well as to Uganda and South Sudan, where there is no existing response capacity in either country and neither have seen swarms since 1961. For South Sudan, an incursion of Desert Locust would be the latest of several compounding shocks to the population, 47 percent of which is currently projected to be facing severe acute food insecurity.

Regional cereal supply levels are already stressed to their limits due to the residual impacts of the below-average 2019 crop production levels seen in many areas. This, along with macroeconomic crises in parts of the region, has already caused above-average food prices. Should grain supplies contract further due to poor 2020 harvests, this could drive up prices even further and result in limited food access and more widespread food insecurity. In this scenario, food insecurity in crop producing areas could increase in September or October and peak during the first half of 2021. Recognizing that locusts can cause losses of up to 100 percent for both crops and fodder, food insecurity is most likely to increase in affected areas due to severe, localized crop damage – and particularly in zones with existing high levels of food insecurity (e.g. South Sudan, Somalia), as well as in any area that experiences a complete crop failure. With its significant potential to become a regional plague, Desert Locust could lead to further suffering, population movements and rising tensions in already complex environments.

In considering the outcome of a worst-case scenario, Desert Locusts could reach key production areas and cause significant crop losses in 2020. This would have the potential to result in below-average national harvests, exacerbating the already serious food security situation. In pastoral areas, the current availability of rangeland resources is above average due to heavy rainfall during the 2019 October–December period, and impacts of the Desert Locusts on livestock production seem to be very limited. However, under a worst case scenario where Desert Locusts cause localized severe pasture losses, atypical livestock movements may occur. Given the very heavy dependency on market purchases to access food, any major price increases on local markets could also drive worsening food insecurity. For pastoral areas, food insecurity would likely peak between September and October in bimodal areas and between October and January in northern pastoral areas of Ethiopia.

Strategic approach

Applying the right range of control options at the right time

FAO will apply control methods that are technically sound and adapted to the life cycle of Desert Locusts, drawing from the expertise of its staff at headquarters, regional and subregional level. The control of large swarms will be a coordinated effort to avert a major food security and livelihoods crisis as well as to mitigate further spread of the pest to other countries of the region. This will mean providing urgent large-scale aerial and ground pest control operations as well as surveillance, trajectory forecasting and data collection efforts. During the hopper stages, ground operations are cost-effective and will be prioritized. Once locusts reach adult stage, air control operations will be utilized.

Anticipating impacts

The window of time between now and the onset of the long rains is a critical opportunity to implement actions to contain the spread of Desert Locust and to protect the food production capacities of the most vulnerable. While conducting forecasting, surveillance, monitoring and control operations, FAO will also deliver activities to safeguard livelihoods, including cash-for-work activities, cash transfers, livestock feed provision and livelihoods packages for farmers whose crops have already been affected in preparation of the next planting season.

Establishing the crisis as a corporate priority

In view of the demonstrated scale, complexity, urgency, capacities to respond and reputational risk, FAO has declared a corporate Thematic Scale-Up for Desert Locust, activating fast-track procedures so that

operations can be planned and launched with greater flexibility, including rapid deployment of staff and scaled up programmes. In addition, FAO has already mobilized USD 2 million from its own resources to step up control operations and ensure early action to safeguard livelihoods and avert a potentially devastating impact on the food security of already extremely vulnerable populations.

Responding to Desert Locust outbreaks requires timely control operations and anticipatory action in order to protect livelihoods by saving assets and preventing negative coping mechanisms.

FAO's response to food chain emergencies, such as animal diseases and plant pests and diseases, are managed within the context of the Food Chain Crisis Management Framework. In particular, the Organization's current Desert Locust response will be handled by the Emergency Centre for Transboundary Plant Pests which integrates technical and operational capacities under the overall management of the FAO's Plant Production and Protection Division and with the Food Chain Crisis – Emergency Management Unit of the Emergency and Resilience Division operationally managing the response.

Partnering with country governments and key stakeholders

To support country capacities that risk being overwhelmed in view of the scale of the crisis, as well as respond to requests for urgent support, FAO is providing technical and operational support to control efforts as well as to support the livelihoods of the most vulnerable. Furthermore, the Desert Locust Control Organization for Eastern Africa (DLCO-EA) is a key partner that maintains its own fleet of fixed wing aircraft to spray crops. DLCO EA also routinely exchanges pest and weather information and data while aircraft movement is monitored and contact maintained during field operations or transit flights.

Advocating for flexible funding under the SFERA

To ensure maximum impact in a rapidly evolving situation, FAO is advocating that resource partners contribute to the Locust Window of the Special Fund for Emergency and Rehabilitation Activities (SFERA). This mechanism provides FAO with the financial means to react quickly to crises, reducing the time between funding decisions and actions on the ground. SFERA's pooled funding approach provides the flexibility to adjust activities and support the geographical and thematic areas of greatest needs. Likewise, the programme approach enables operations to adapt as the situation changes, streamlining activities to ensure the most appropriate assistance reaches affected populations sooner.

Engaging with the Global Network Against Food Crises

The Global Network Against Food Crises, a partnership created to identify and jointly implement lasting solutions to food crises, will be engaged to support coordination, consensus building as well a platform to discuss the most effective programmatic approaches. The Global Network has a key role to play in supporting the uptake and mainstreaming of early warning early action, as well as ensuring lessons learned are utilized, documented and disseminated within the framework of knowledge management.

Rapid response and anticipatory action*

(January–July 2020)

> The coming few weeks are crucial to contain the Desert Locust invasion, anticipate and reduce its effects on people's food insecurity, and to protect livelihoods.

► 1. Curb the spread of Desert Locust

Budget required **USD 36.05 million**

Funding needed by **February 2020**

- **Informing response.** Continue to assess the situation through the FAO Desert Locust Information Service and provide early warning, forecasts and advice to affected countries and international partners.
- **Control operations.** Provide aerial and ground control operations support and enhance national preparedness capacity:
  - Ground control operations (hopper-stage locusts): procurement of chemical and bio-pesticides and equipment, storage, trainings, human and environmental safety, and disposal of chemical drums and containers.
  - Air control operations (adult-stage locusts): contracting planes, pesticides procurement, human and environmental safety, trainings, and disposal of chemical drums and containers.
- **Ground surveillance and impact assessments.** Facilitate ground surveillance, monitoring and continuous assessment in partnership with country governments and DLCO-EA with the objective of reinforcing region-wide early warning and response.

► 2. Safeguard livelihoods

Budget required **USD 24.2 million**

Funding needed by **February 2020**

- **Cash interventions.** Deliver cash programming (including by extending on existing activities) to highly vulnerable populations severely affected by Desert Locust outbreaks. This will include cash-for-work to undertake locust ground control interventions or to rehabilitate productive infrastructure, as well as unconditional cash transfers in combination with livelihood inputs.
- **Supplementary livestock feed.** Protect pastoral and agropastoral livelihoods by providing subsidized livestock feed and supplementary feed in areas where Desert Locusts have severely affected pasture. The inputs can boost livestock nutrition and support livestock production (particularly milk yield), resulting in rapid improvements to household food supply and nutrition.
- **Farming input packages.** It is fundamental to ensure farmers in the region plant well (and replant if necessary) by providing quality inputs that will optimize their harvest. Packages will include a diverse set of seeds to ensure a variety of nutritious foods in order to improve both the food security and nutrition status of beneficiaries. The diversified seed package will also enable a staggered harvest time, which can reduce farmers' risk of losing all crops at once.

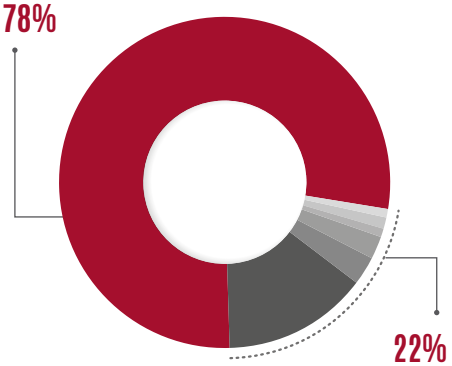
*This initial, conservative plan will be revised by March according to newly available data and the emerging situation.

Funding overview (28 January 2020)

FUNDING GAP

USD 54.6 million

78%



22%

FUNDING TO-DATE

USD 15.4 million

USD 10 million
The Central Emergency Response Fund (CERF)

USD 2.3 million
FAO

USD 500 000
The Government of Belgium

USD 800 000
The Government of Denmark

USD 1 million
Special Fund for Emergency and Rehabilitation Activities (SFERA)

USD 800 000
The United States Agency for International Development (USAID) / Office of U.S. Foreign Disaster Assistance (OFDA)

▶ 3. Support early livelihood recovery

Budget required **USD 7 million**

Funding needed by **March 2020**

- **Comprehensive livelihood recovery packages.** From a longer-term perspective, provide comprehensive livelihood recovery packages to support farming and livestock-holding communities severely affected by the locust outbreak, including six-month cash transfers.

▶ 4. Coordination

Budget required **USD 2.75 million**

Funding needed by **February 2020**

- **Deploy rapid surge support.** Provide technical and operational expertise to respond in affected countries, particularly where local capacities are limited.
- **Coordinate cross-border response.** Ensure regular communication with governments of affected and at risk countries and key stakeholders to facilitate information-sharing, harmonization of approaches, quality assurance, appropriateness of interventions, efficient response and identification of gaps.
- **Strengthen national capacity.** Promote learning across countries (including affected and at risk) to boost national forecasting, surveillance and control capacities through the transfer of skills and competencies.

Table 1. Estimated budget required for January–July 2020*

Activities	Somalia	Ethiopia	Kenya	Total
1. Curb the spread of Desert Locust	**11 050 000**	**12 500 000**	**12 500 000**	**36 050 000**
Ground and air control operations	8 550 000	11 500 000	11 500 000	
Ground surveillance and impact assessment	2 500 000	1 000 000	1 000 000	
2. Safeguard livelihoods	**7 500 000**	**8 350 000**	**8 350 000**	**24 200 000**
Cash interventions	3 600 000	3 600 000	3 600 000	
Livestock feed	1 500 000	2 750 000	2 750 000	
Farming input packages	2 400 000	2 000 000	2 000 000	
3. Support early livelihood recovery	**-**	**3 500 000**	**3 500 000**	**7 000 000**
Livelihood recovery package for farming communities	-	1 750 000	1 750 000	
Livelihood recovery package for livestock-holding communities	-	1 750 000	1 750 000	
4. Coordination				**2 750 000**
			Total initial funding required**	**70 000 000**
			Total funds mobilized***	**15 400 000**
			FUNDING GAP	**54 600 000**

* All amounts indicated are in USD. ** Flexible funding will be critical for FAO's effective response to this rapidly evolving crisis. This appeal will be revised according to emerging needs. *** Funds mobilized to-date have been contributed by: CERF, FAO, the Governments of Belgium and Denmark, the Swedish International Development Cooperation Agency (Sida) (pledged through SFERA) and USAID-OFDA.

Saving livelihoods saves lives

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