



Red Cross/Red Crescent Climate Centre

IPCC SREX

Early Warning/Early Action

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FoodFirst, Floriade Venlo, 29 May 2012

More *certainty* about climate change



More *uncertainty* about its manifestations



IPCC: Academic Climate Change Experts



Local climate change experts



Impacts from weather and climate events depend on:



nature and severity of event

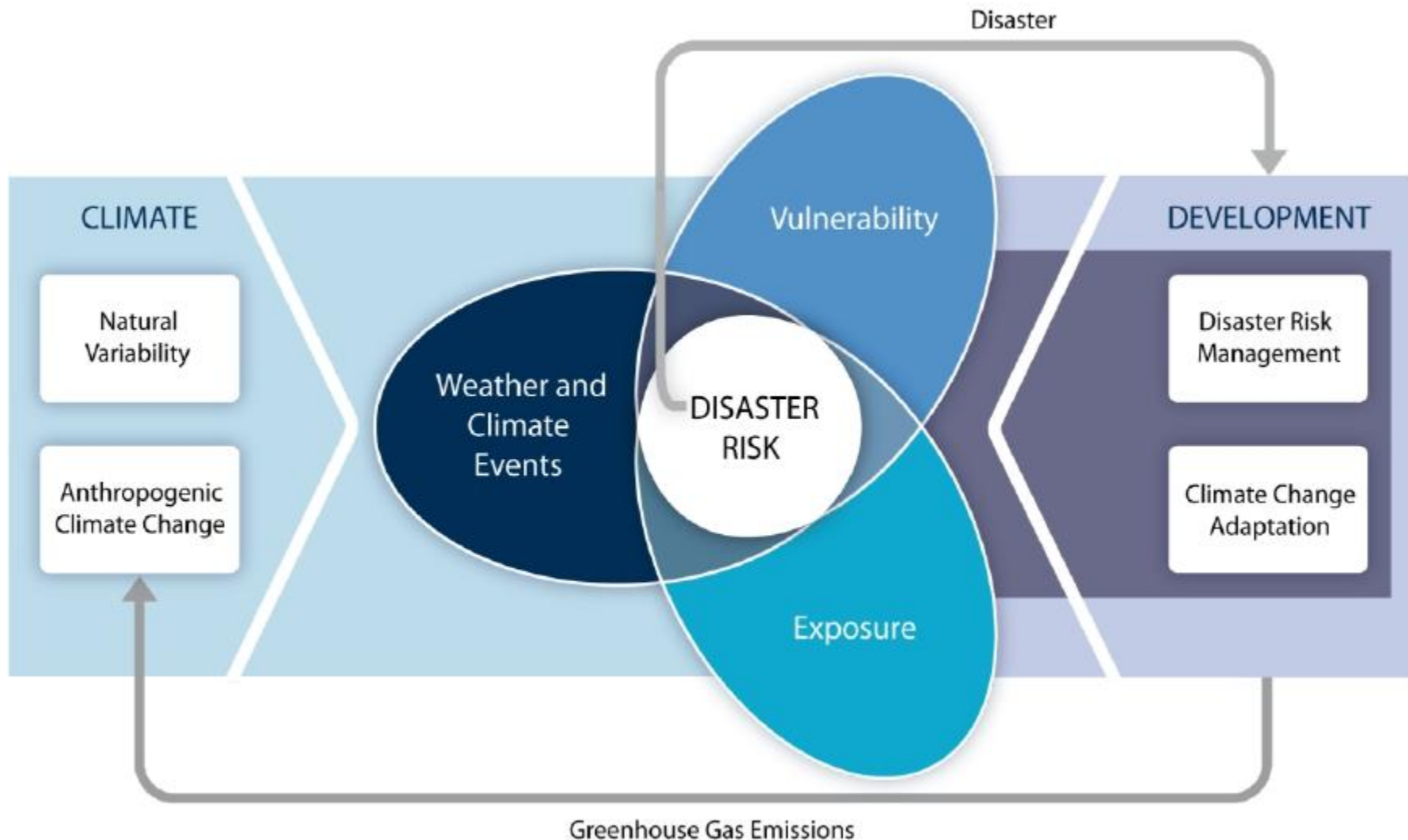


vulnerability



exposure

Increasing vulnerability, exposure, or severity and frequency of climate events increases **disaster risk**



*Disaster risk management and climate change adaptation can influence the degree to which **extreme events translate into impacts and disasters***

Managing the risks: **drought** in the context of **food security** in West Africa

Risk Factors

- more variable rain
- population growth
- ecosystem degradation
- poor health and education systems



Risk Management/Adaptation

- improved water management
- sustainable farming practice
- drought-resistant crops
- drought forecasting

Projected: *low confidence* in drought projections for West Africa

Red Cross/Red Crescent perspective

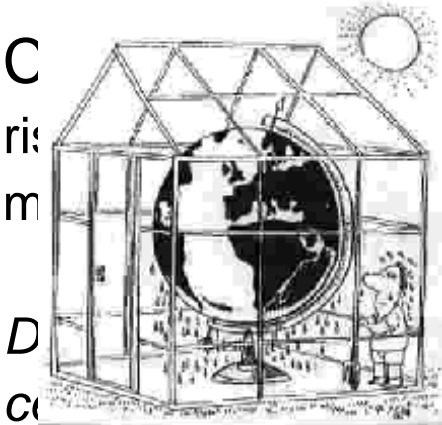
- **Response:** prepare for *more* but also *smarter* response operations



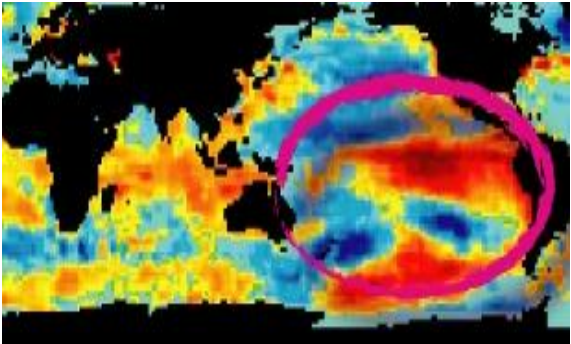
- **Risk reduction:** invest in community resilience *before disasters happen*

Using Information Across Time-scales...

Long
Lead
Time



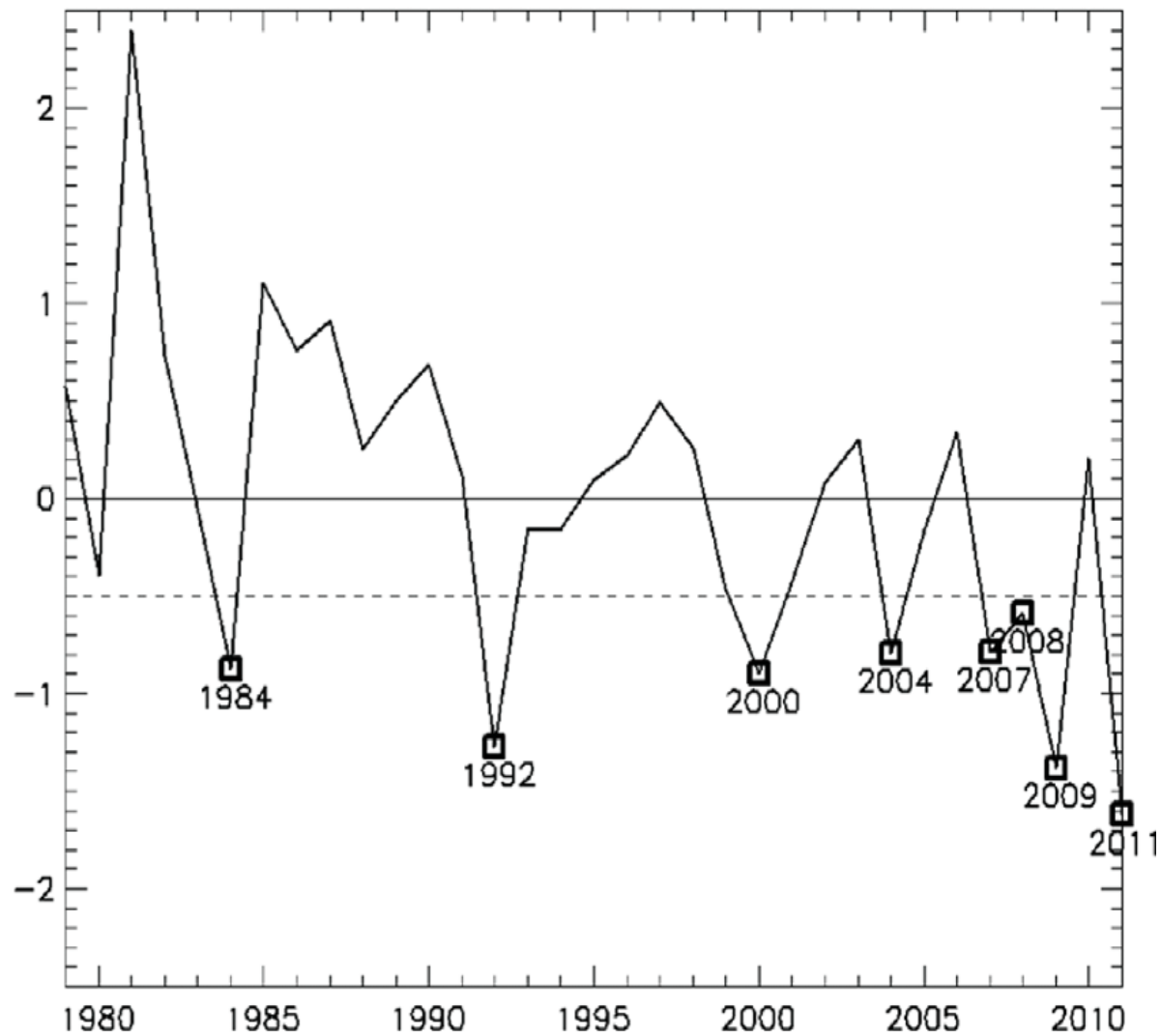
more specific information



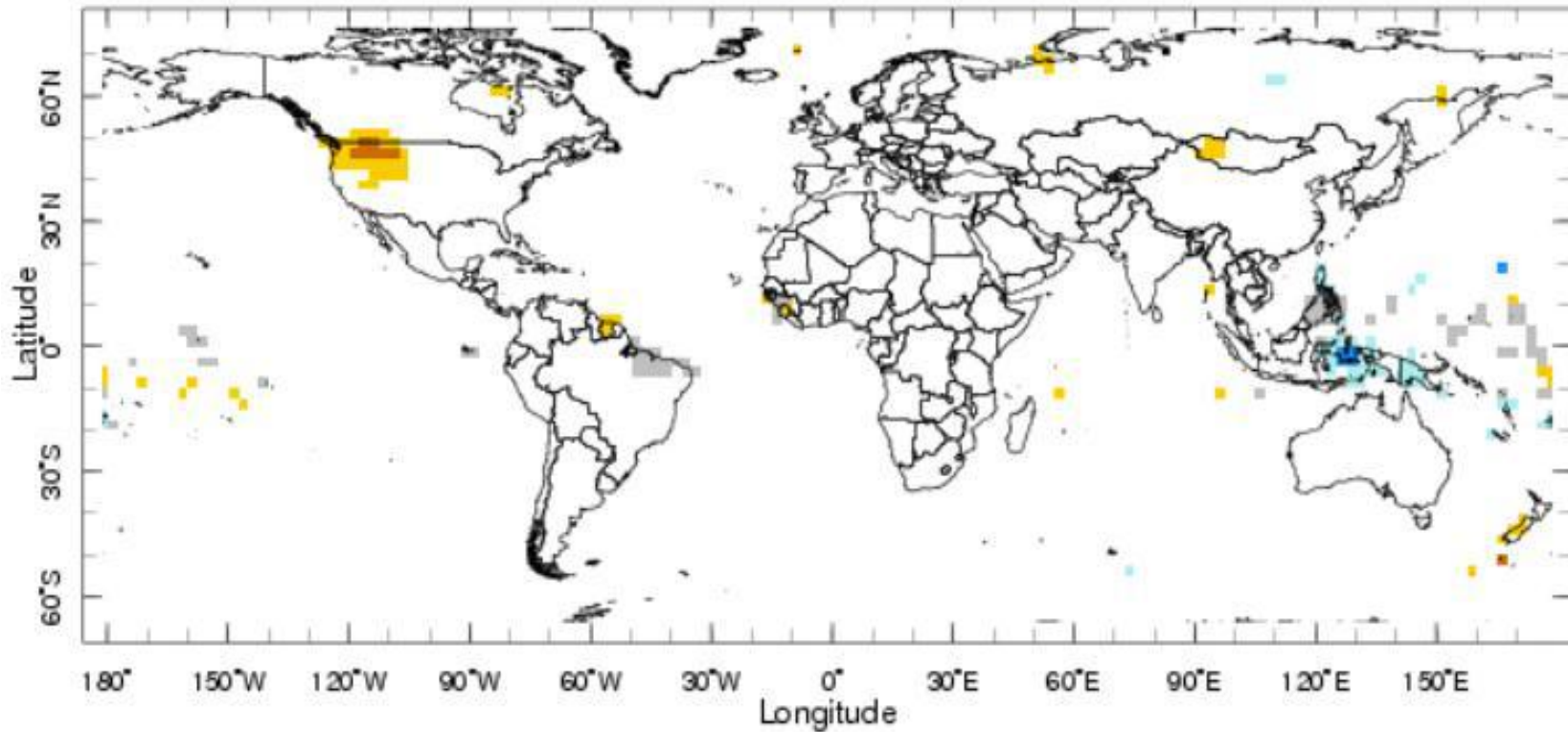
Short
Lead
Time

more time to reduce risk

March-May rainfall patterns 1979-2011 in southern Ethiopia, central-eastern Kenya and southern Somalia

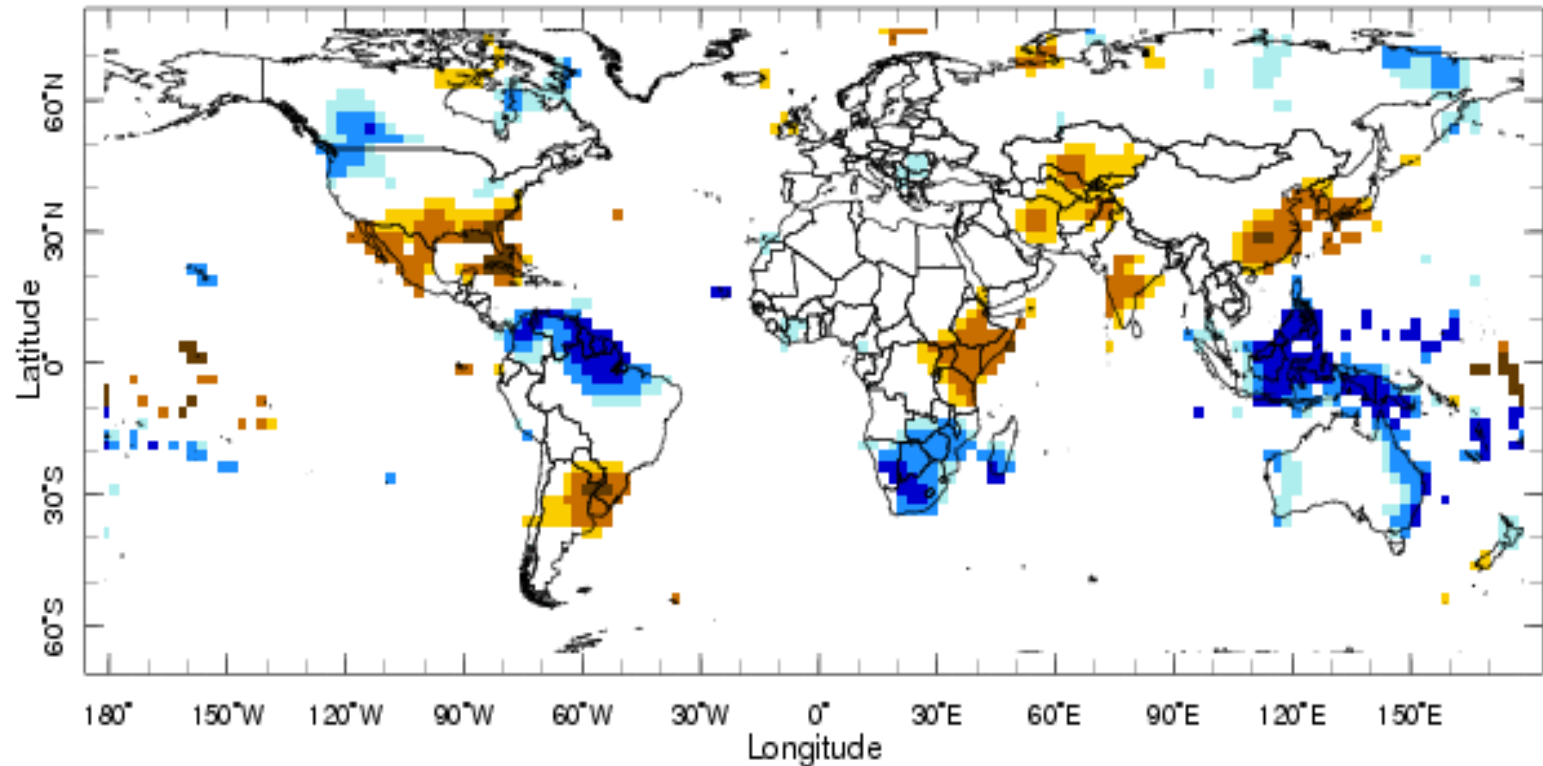


Seasonal forecast are helpful for a 'heads-up'



Forecast for May-July, issued 7 May 2012

Seasonal Rainfall **forecast** Issued **October** 2010 for upcoming **November-January**



Forecast for Nov 2010 - Jan 2011, Forecast Issued Oct 2010

How confident can we be that the next 3 months will be unusually wet?



Low Confidence
(35% to 40% Chance)



Medium Confidence
(45% to 50% Chance)



High Confidence
(55% Chance or Greater)

How confident can we be that the next 3 months will be unusually dry?



Low Confidence
(35% to 40% Chance)



Medium Confidence
(45% to 50% Chance)



High Confidence
(55% Chance or Greater)

EAST AFRICA Food Security Outlook Update

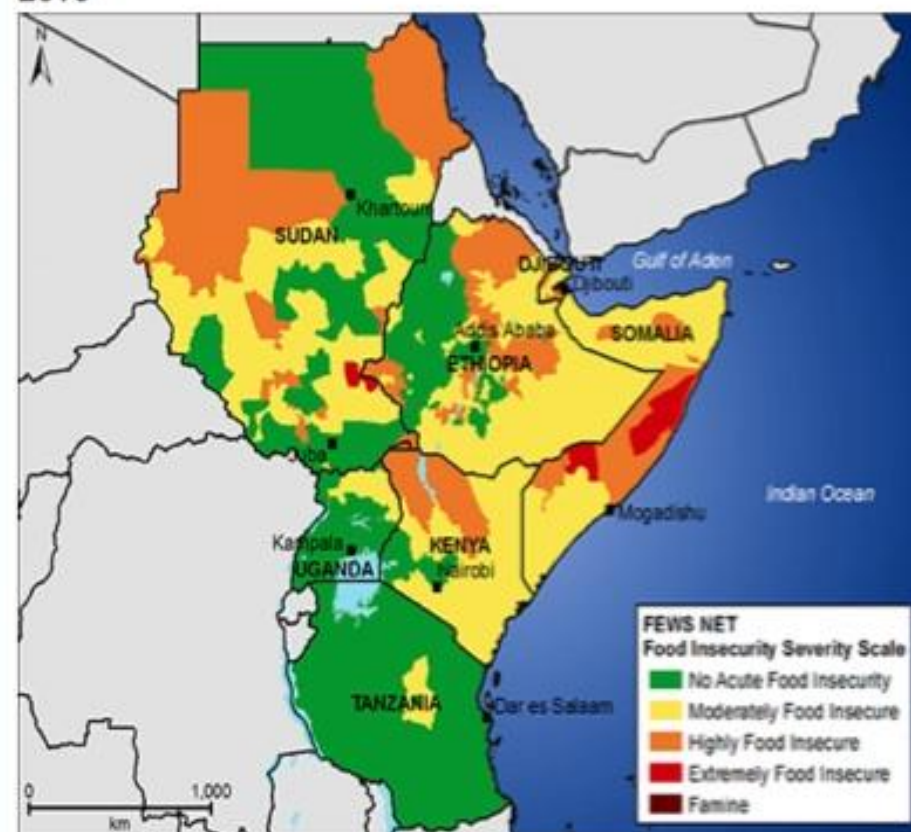
September 2010

Food security conditions likely to deteriorate due to La Niña event

Key Messages

- Food security conditions in the region have continued to improve due to the above-normal long rains, as well as the good performance of the June-August *meher* season in Ethiopia and Sudan. Food security is likely to continue to improve in the northern and western parts of the region from October to December as main season harvests take place and prices of staple foods decline.
- However, early forecasts for the October to December rains indicate the probability of below-normal rains in the eastern sector of the region due to a moderate La Niña episode. Below-normal rains would begin to impact food security toward the end of the year for pastoralists in the eastern sector, and in early 2011 for households in marginal agricultural areas.
- Prices of staple foods have declined slightly in most markets in the region, due to increased supplies from local harvests, macro-economic policies favoring imports, and food aid interventions in Djibouti and Southern Sudan. However, prices have increased in south and central Somalia due to increased insecurity.

Figure 1. Estimated food security outcomes, September 2010



Source: FEWS NET

Figure 2. Estimated food security outcomes, October-December 2010



USAID
FROM THE AMERICAN PEOPLE



WFSNAU



FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

EAST AFRICA Food Security Alert

February 23, 2011

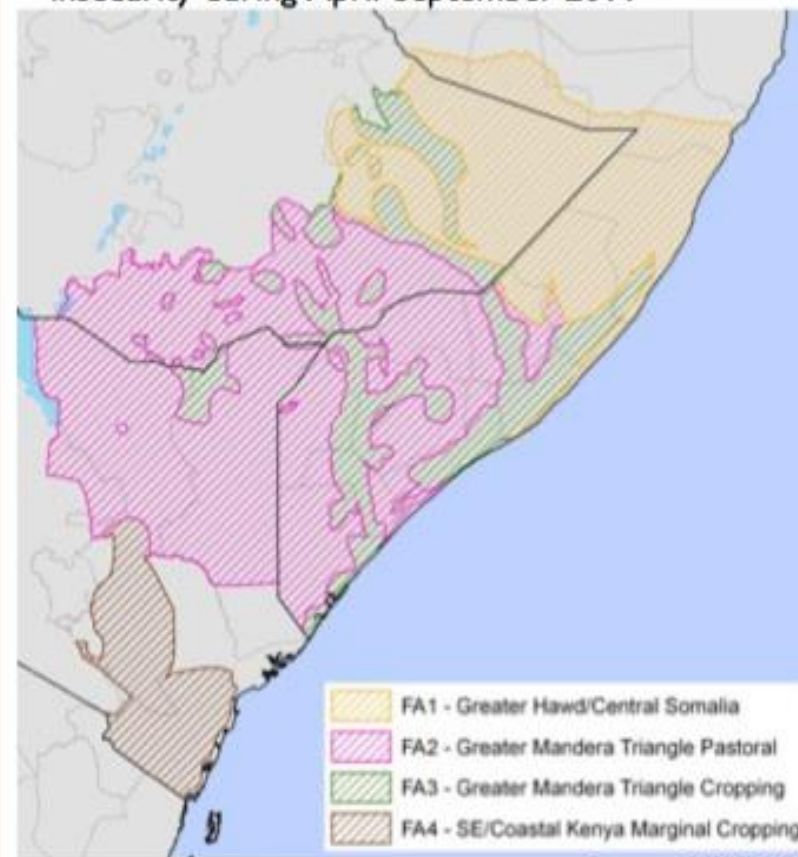
Ongoing drought and uncertain forecast raise food security concerns

In the Horn of Africa, households in pastoral and marginal cropping areas (Figure 1) currently face high levels of food insecurity due to an ongoing drought, deteriorating purchasing power, and, in some areas, limits on the delivery of humanitarian assistance. Poor performance of March-May rainfall would result in further deterioration in food security. Large-scale emergency assistance to address current food insecurity is needed; contingency planning, given the possibility of a major crisis, should also be implemented.

Following two seasons of average to above-average rainfall, the 2010 *Deyr*/Short rains (Oct-Dec) were extremely poor across the region's eastern sector, with rainfall totals less than 30 percent of average in many areas of southern Ethiopia, central/southern Somalia, and eastern/northern Kenya. January/February harvests completely failed in most cropping areas. In pastoral areas, poor rainfall limited both sheep/goat conceptions and pasture growth in key grazing areas. Serious water shortages are ongoing.

Household purchasing power has declined across these same drought-affected areas. Poor harvests in January/February, government price policy in Kenya, and increasing international food prices have driven up local staple food prices. January retail prices for sorghum in Baidoa, Somalia and maize in Mandera, Kenya are 34 percent and 39 percent above January 2010 prices, respectively, and higher than 2008 food-price crisis levels. This trend in prices is expected to continue through at least July/August 2011. Reductions in cattle prices and wages have exacerbated the impact of increased food prices. Lean

Figure 1. Areas at highest risk of extreme food insecurity during April-September 2011



Source: FEWS NET

Emergency appeal



International Federation
of Red Cross and Red Crescent Societies

Kenya: Drought & Food Insecurity

Emergency appeal n° MDRKE016

GLIDE n° DR-2011-000029-KEN

22 July 2011

This Revised Emergency Appeal now seeks CHF 14,692,020 in cash, kind, or services to support the Kenya Red Cross Society (KRCS) to assist about 1,000,000 beneficiaries for 12 months and will be completed by the end of July 2012. A Final Report will be made available by 31 October 2012 (three months after the end of the operation).

The budget has been increased based on growing needs and gaps in support to vulnerable drought affected communities. The revised Appeal now targets a caseload of 1,000,000 beneficiaries in Drought stricken districts of the Northern Kenya which includes north Rift, Upper Eastern, North Eastern, Eastern and parts of Coast provinces. The operation will provide assistance in relief, hygiene, water and sanitation as well as support to livelihoods. The operation will also aim to strengthen the capacity of the National Society and wider civil society in order to respond to emergencies and humanitarian needs.

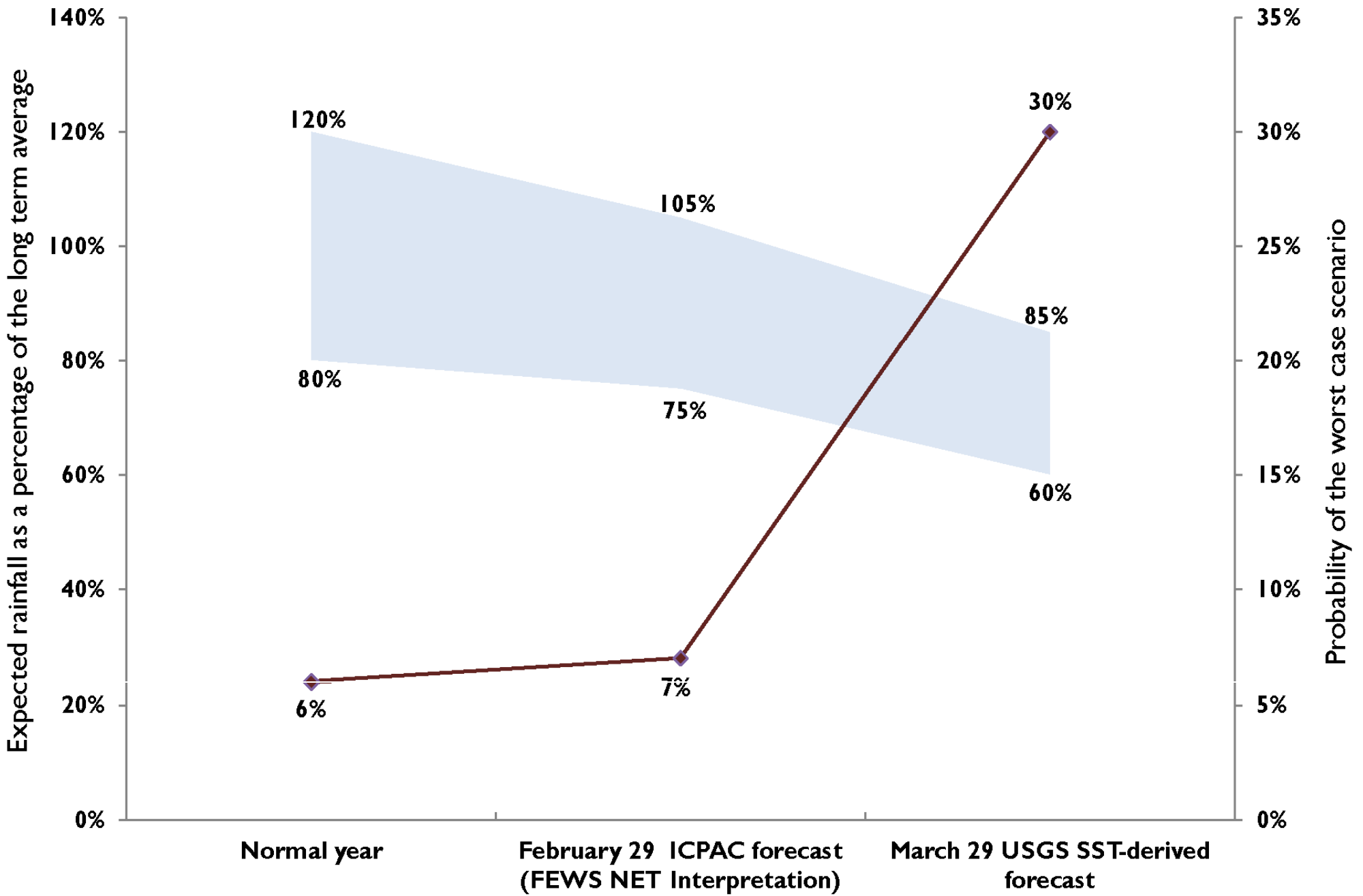


KRCS Secretary General, Abbas Gullet, distributes seeds to farmers of Ndalani community. Photo by / KRCS.

Appeal history:

- Kenya Red Cross Society launched a [National Drought Appeal](#) on 14 January 2011 for CHF 20,043,150 for 6 months.
- An [Emergency appeal](#) for CHF 4,931,743 was launched by the IFRC EA Regional Representation on 23 March 2011 for 6 months to assist 850,000 beneficiaries. The appeal supplemented KRCS' response to the drought.

Evolution of March-May 2012 rainfall forecasts in the eastern Horn of Africa



Range of likely rainfall totals compared to the 1979-2011 average [left axis]

Probability of the worst case scenario (rainfall totals <60% of average) [right axis]

Acute Food Insecurity Phase

1: None or Minimal

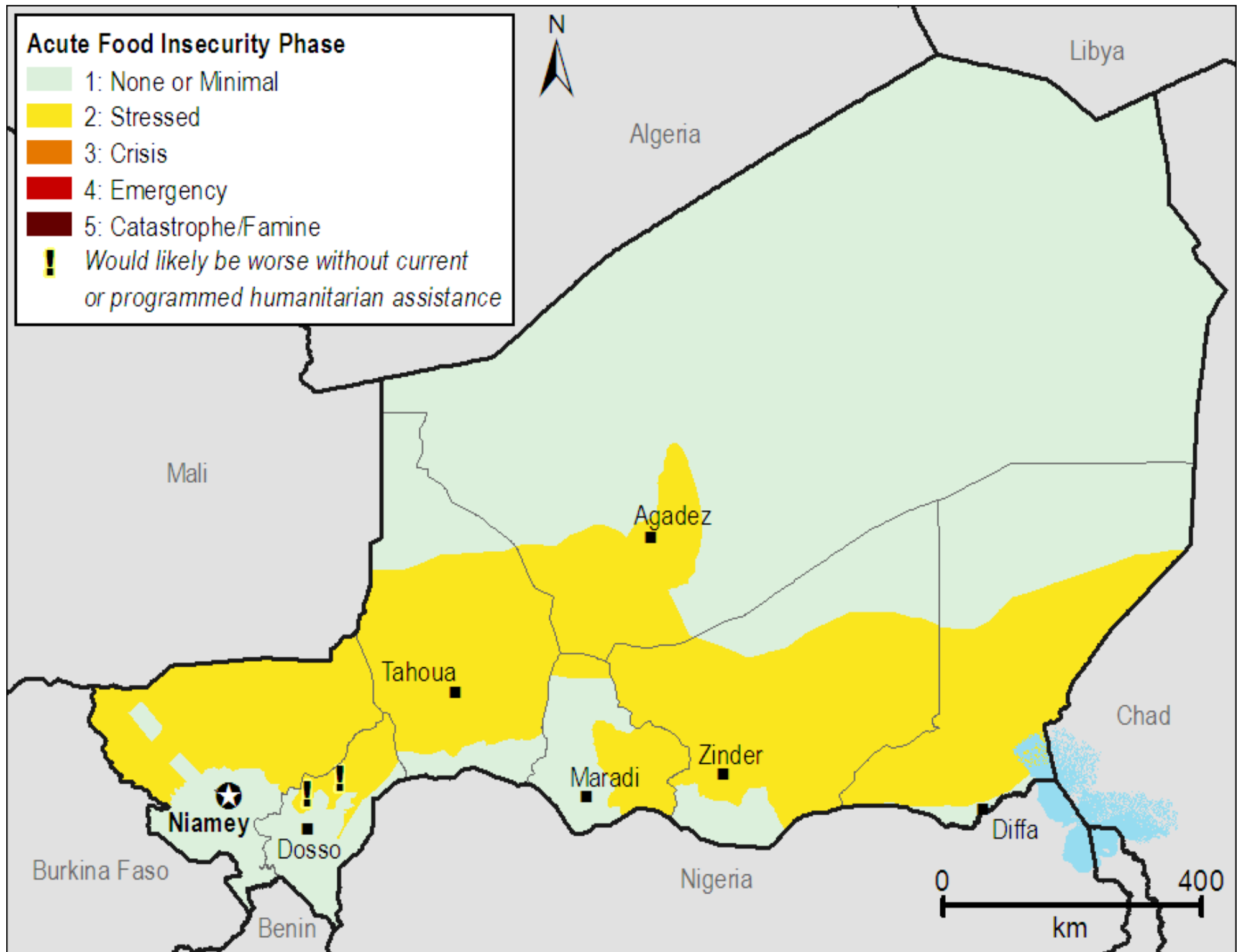
2: Stressed

3: Crisis

4: Emergency

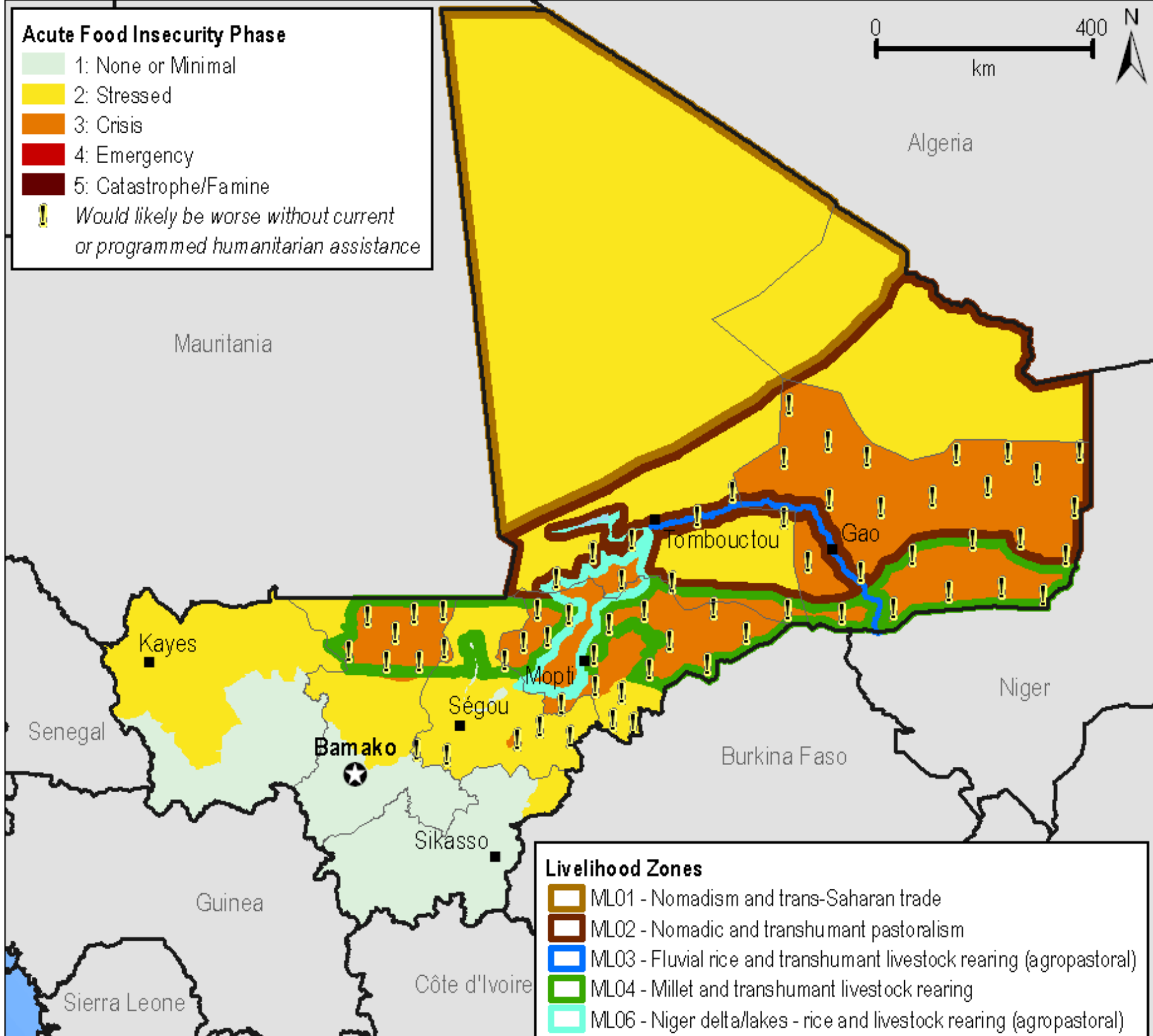
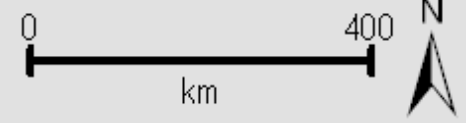
5: Catastrophe/Famine

! *Would likely be worse without current or programmed humanitarian assistance*



Acute Food Insecurity Phase

- 1: None or Minimal
- 2: Stressed
- 3: Crisis
- 4: Emergency
- 5: Catastrophe/Famine
- ! *Would likely be worse without current or programmed humanitarian assistance*



Livelihood Zones

- ML01 - Nomadism and trans-Saharan trade
- ML02 - Nomadic and transhumant pastoralism
- ML03 - Fluvial rice and transhumant livestock rearing (agropastoral)
- ML04 - Millet and transhumant livestock rearing
- ML06 - Niger delta/lakes - rice and livestock rearing (agropastoral)

**GREAT
GREEN
WALL**





www.climatecentre.org
www.climatecentre.org/srex
www.ipcc-wg2.gov/SREX
www.cdkn.org/srex (regional summaries)