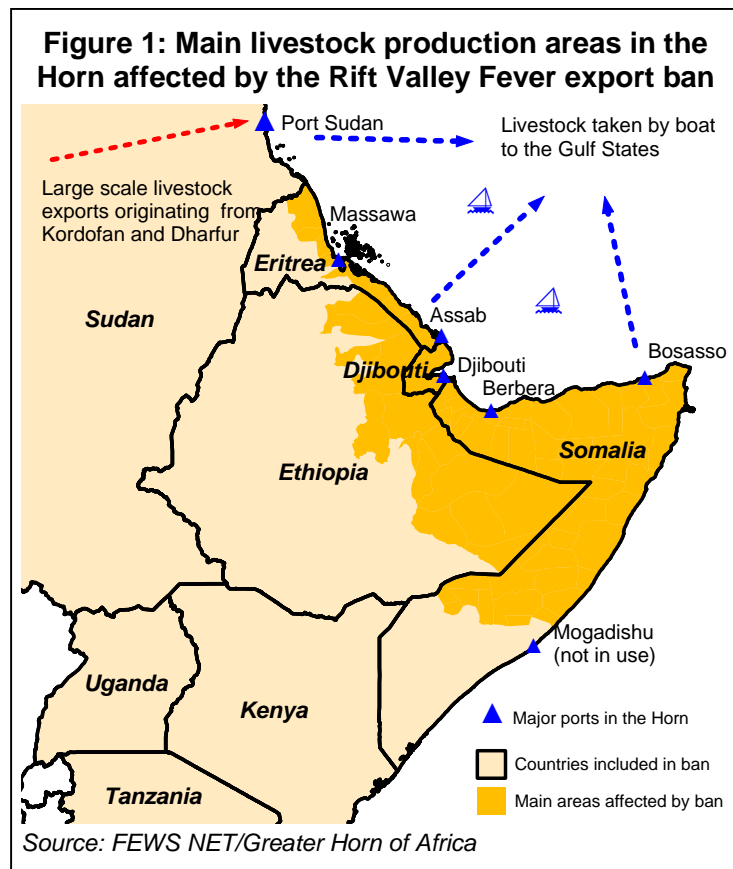


Rift Valley Fever Threatens Livelihoods in the Horn

For the second time in less than three years livestock producers and traders in the Greater Horn are facing the devastating consequences of Rift Valley Fever (RVF). An outbreak of RVF in



southern Saudi Arabia and Yemen (the first reported outside of Africa) has left dozens of people dead and hundreds infected in the last month. As a consequence, six Persian Gulf States – Saudi Arabia, Bahrain, Oman, Qatar, Yemen and the United Arab Emirates – have now banned livestock imports from nine African countries, principally in the Horn. RVF is endemic in the affected countries (Figure 1), but none has reported a recent RVF epidemic. Although these African countries are therefore not experiencing the direct impacts of the disease, the livestock trade embargo will undermine a precarious regional food security situation.

RVF is an acute, fever causing viral disease that affects domestic animals (such as cattle, sheep, goats and camels) and humans. It is generally found in regions of southern and eastern Africa where sheep and cattle are raised, but the virus also exists in most countries of sub-Saharan Africa.

RVF is most commonly associated with mosquito borne epidemics during years of heavy rainfall and localized flooding. Humans can get RVF from mosquito bites, handling infected meat at slaughter or preparing infected food. Approximately 1% of humans infected die from the disease. There are no established courses of treatment or human vaccines. Prevention and control focus on mosquito control and limiting contact with infected animals.

The economic impacts of this ban are likely to be massive. Saudi Arabia banned livestock exports from the Horn between February 1998 and May 1999, due to a RVF outbreak in Kenya and Somalia. The scale of the economic losses at that time provides a useful indication of what the present impact might be. Pastoralists in Somaliland, Somalia, Zone V of Ethiopia and Eritrea, the source of most of the Gulf imports, saw the volume and value of their livestock exports tumble. Exports from the major livestock dealing port of Berbera in Somaliland dropped from nearly three million head in 1997 to just over one million in 1998, equating to around \$100 million of lost exports. It is estimated that half of these livestock originated in Somalia and half in

Zone V of Ethiopia. Prices of livestock fell by around 30% in Eritrea, Ethiopia and Somalia as a result of the ban. Other Horn Countries included in the ban were only marginally affected, as the Gulf is not a significant importer from these countries.

If anything, the current ban may cause even greater economic losses. Previously, Horn countries were able to redirect exports to alternate Gulf markets, an option unavailable this time as more Gulf States have joined the import embargo. Sudan, which normally exports hundreds of thousand of livestock to the Gulf, has also been included on this occasion. Livestock seeking alternative markets may depress prices in neighboring countries. Many of the areas affected also coincide with extremely vulnerable and food insecure areas currently receiving emergency assistance.

- Regular RVF updates are available from ProMED mail www.promedmail.org
- A fact sheet on RVF is available from the center for Disease Control and Prevention (CDC), <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/rvf.html>
- Thanks to Dr. Chip Stem of Tufts University (cstem@africaonline.co.ke), working with OAU/IBAR in Nairobi, for information on RVF.
- A detailed report on the last ban, "The Livestock Embargo by Saudi Arabia: A Report on the Economic, Financial and Social Impact on Somalia and Somaliland" by P. Steffen et al, July 31, 1998, is available from FEWS NET.
- Useful background information, "Livelihoods and Food Security in Ethiopia's Somali Region," FEWS Special Report 98-1, is available at <http://www.fews.org/fewspub.html#SpecialReport>

A quick lifting of the ban is unlikely – the last ban lasted 15 months in the absence of a disease outbreak in Saudi Arabia. The current ban could run the full three years recommended by the *Office International des Epizooties* (OIE), even though the epidemic will naturally subside with the coming dry season in the Gulf. The potential to redirect livestock exports is limited for a variety of reasons, including poor economic competitiveness, quality standards and the regional preference for meat of the local breeds. In these circumstances what can be done to minimize the disruptions to pastoral livelihoods?

- **Trace the origins of the outbreak.** It is import to establish whether this is a new introduction of the virus or whether in fact the pathogen has been present for some time in Yemen and Saudi Arabia and only now has come to the attention of public health authorities. If it is proved that the current Gulf outbreak did not originate from recent Horn imports this should influence the duration of the ban.
- **Establish testing and quarantine procedures for exports.** Countries of the Horn will have to establish testing systems to prove the absence of RVF in their animals for export. Although these systems were recommended after the last ban, no action was taken. There is an excellent ELISA (Enzyme Linked Serum Assay) test for RVF. ELISA tests can be routinely run by local laboratories (including private Somali laboratories), are generally easy, reliable and affordable.
- **Establish national surveillance systems.** Given the relationship of RVF epidemics to climatic conditions it is possible to use remote sensing products to accurately forecast future RVF epidemics. This provides a lead-time of over one month during which preventative measures may be taken.
- **Link livestock off-take and emergency feeding programs.** A collapse in the demand for livestock is likely to result in both a rapid growth of small stock numbers (possibly resulting in environmental degradation) and a possible increase in emergency relief with the unexpected sharp drop in the major source of income for pastoralists. A practical and proven intervention is the purchase, slaughter and local distribution of the meat as a protein supplement. If a small fraction of the funds allocated to current feeding programs

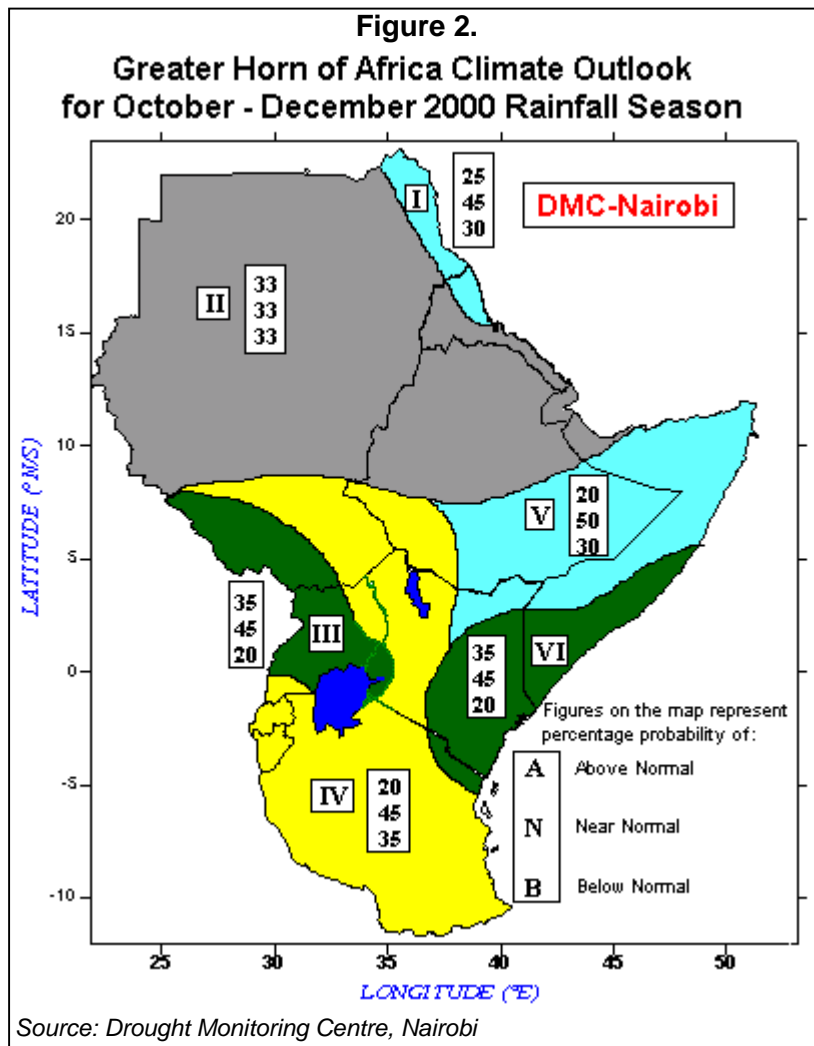
could be utilized for this purpose it would provide significant assistance to needy pastoralists.

Revised Forecast Indicates Enhanced Probabilities of Near-Normal Rainfall

On the basis of evolving global indicators, a revised seasonal forecast for October to December 2000 has been issued by the regional Drought Monitoring Centre (DMC) based in Nairobi. This forecast indicates enhanced probabilities of near-normal rainfall in most areas of the Greater Horn and provides hope for relief from the severe drought that has been gripping the region for more than one year.

The DMC issued an *updated* forecast for the October to December period in late September. The original forecast (produced in August 2000) had broadly predicted enhanced probabilities of below-normal rainfall in southern and eastern areas and enhanced probabilities of normal to above-normal rainfall in western and northern areas (see FEWS NET September Regional Update for details). This forecast was especially significant, given the convergence of the areas currently experiencing severe drought, including northern and eastern Kenya and southern Ethiopia, and the areas forecast to have enhanced chances of below-normal rainfall.

The revised forecast for October-December is significantly different (Figure 2) and the dominant feature is now for enhanced probabilities of near-normal rainfall across the Greater Horn. This is



an important rainfall season for central and southern areas of the Greater Horn, but not in northern Sudan, northern Ethiopia, most of Eritrea and Djibouti where it is normally seasonally dry.

The forecast has been revised on the basis of the observed evolution of Sea Surface Temperatures (SSTs) in the Pacific, Indian and Atlantic Oceans. The original forecast assumed that the La Niña episode (below-normal SSTs in the Pacific Ocean) would persist and consequently depress rainfall in much of the Horn. However, the SSTs have warmed and moved towards normal, hence modifying and improving the forecast.

This forecast should still be applied cautiously -- the usual caveats associated with these seasonal forecasts still apply. It is a *probabilistic* forecast not a deterministic forecast. Total rainfall is forecast for the three-month period and does not

imply a good distribution within the season. Importantly, forecasters concede that forecasting skills are higher in years of SST anomalies, El Niño and La Niña episodes, and that forecasting is more difficult in years of near normal SSTs. Furthermore, SSTs are still evolving and a further update may still be issued in mid October.

Despite these limitations, as the skill of seasonal forecasting improves, these products are increasingly applied by a variety of users. Food security professionals can, and do, use these forecasts to influence planning of mitigation activities. The revision to the seasonal forecast for the Greater Horn is significant and should be used to update contingency and response plans appropriately.

Vulnerable groups in the Horn have endured several successive seasons and consequently, their assets have been seriously depleted. It is clear that one year of 'normal' rainfall will not reverse the damage to their livelihoods. Even in a best-case scenario, significant relief needs will persist into 2001. However, a good rainfall season would assist a start to the recovery process and prevent an escalation of emergency needs.

Further information may be found on the following web pages:

- *The DMC web site <http://www.meteo.go.ke/dmc/index.html> includes the full regional forecast and links to National Meteorology Services, who in turn produce more detailed local forecasts.*
- *Other institutions which produce complimentary regional scale forecasts are the International Research Institute for Climate Prediction (IRI) http://iri.ldeo.columbia.edu/climate/forecasts/net_asmt/ and the European Centre for Medium-Range Weather Forecasts (ECMWF) <http://www.ecmwf.int/services/seasonal/forecast/index.jhtml>*
- *Other useful related information can be found at the web sites of FEWS NET partner agencies: the Africa desk of the Climate Prediction Center, which focuses on short term climate prediction and monitoring for Africa http://www.cpc.ncep.noaa.gov/products/african_desk/index.html and at the EROS Data Center of USGS where extensive archives of remotely sensed data are available <http://edc.usgs.gov/>.*