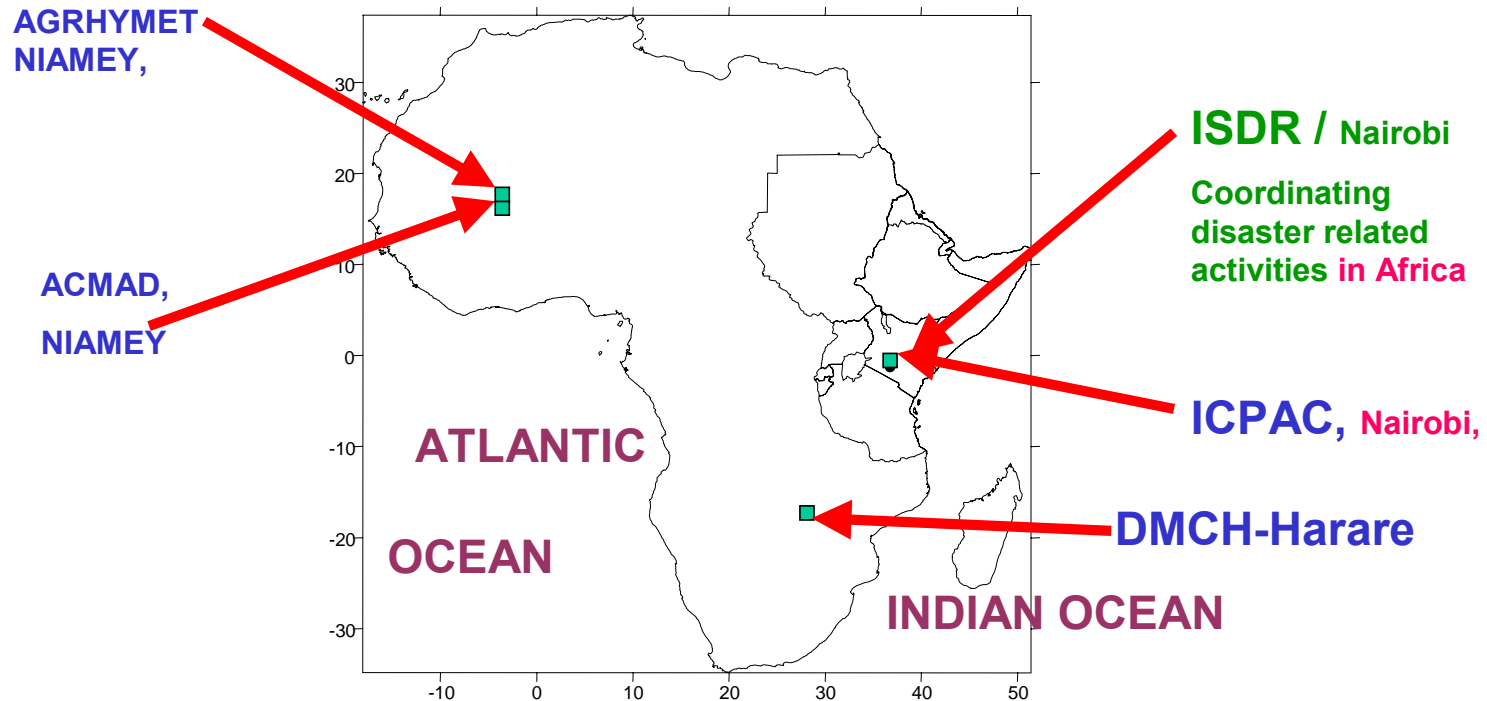


ICPAC INTEGRATED CLIMATE EARLY WARNING ACTIVITIES IN THE GREATER HORN OF AFRICA:

Enhancing hydroclimate monitoring, early warning and applications for the reduction of climate related risks

L. A. OGALLO



IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (IPAC)

MAJOR AFRICAN DISASTERS

- **DROUGHT:** Too little water resulting from deficient precipitation;
- **FLOODS:** Too much water from excessive precipitation
- **HIGH/LOW Temperatures;**
- **Land slides, Desertification; Forest Fires; Dust Storms; Heat Waves;**
- **Hazards Over Lakes and Ocean/Coastal Zone;**
- **Disappearing Mt Glaciers;**
- **Locust, Army Worm, Malaria; Vector borne Pests and Diseases;**
- **Tsunami; Bird Flue;**
- **Disasters of Geological Nature;**

ICPAC EARLY WARNING EXPERIENCES FOR DISASTER RISK REDUCTION

◆ DATABASE:

PAST STATISTICS: RISK ZONING AND MAPPING;
VULNERABILITY / IMPACTS ASSESSMENT; DEVELOPMENT OF
SCENARIOS

CURRENT STATE - MONITORING INCLUDING USE OF REMOTE
SENSING PRODUCTS

◆ **EARLY WARNING** - 10 DAY, MONTHLY AND SEASONAL
PRODUCTS

◆ **CAPACITY BUILDING** OF SCIENTISTS AND USERS

◆ **DISSEMINATION, OUTREACH AND POLICY ISSUES** INCLUDING
ROLE MEDIA

Key Current Problems

◆ **Non Use of Available Information**

◆ **Lack of Capacity to Effectively Maximize Climate
Information Use**

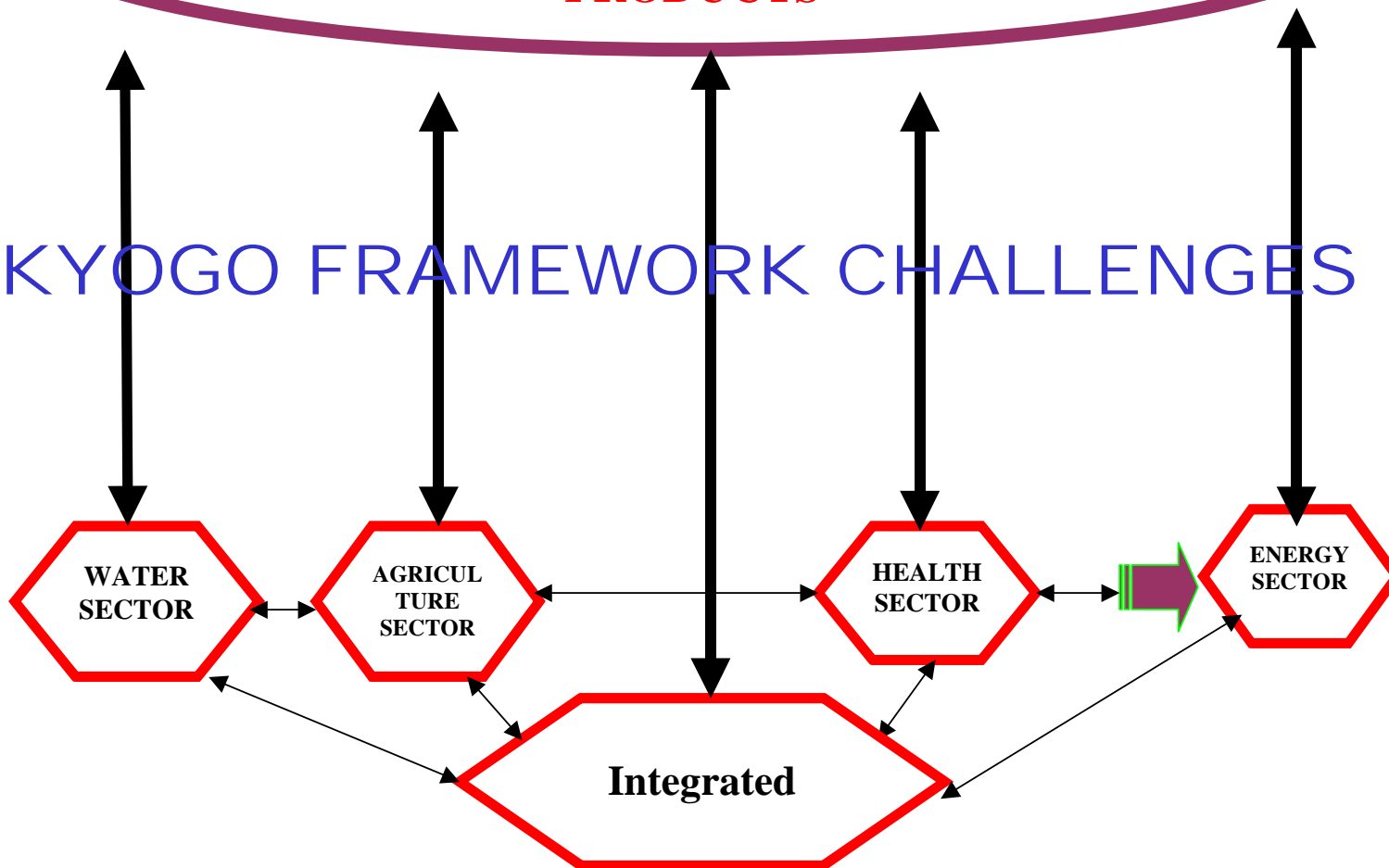
Project activities: Enhancing hydroclimate monitoring, early warning and applications for the reduction of climate related risks

Hyogo Framework for Action, and the Millennium Development Goals: addressing Challenges Posed by the Natural Disasters of the Specific Regions

- ◆ **Improvement of Regional Climate Modelling, Prediction and Early Warning;**
- ◆ **Increased availability of Sector Specific Tailored Climate Products;**
- ◆ **Improvement of Data Base;**
- ◆ **Outreach: Dissemination; Interactions: Climate Outlook Forums, Media;**
- ◆ **Gender;**
- ◆ **Indigenous Knowledge;**
- ◆ **Capacity Building of Scientists and Users;**
- ◆ **Policy Issues;**

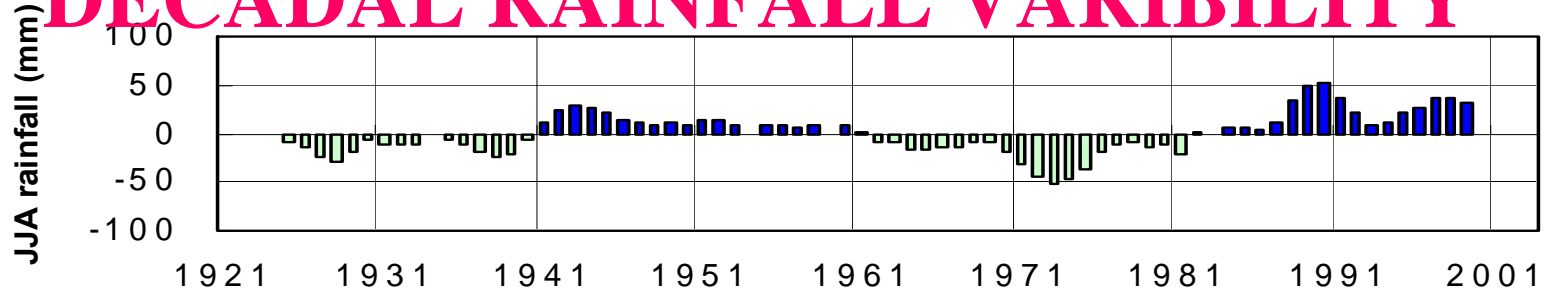
**WEATHER / CLIMATE INFORMATION,
PREDICTION AND EARLY WARNING
PRODUCTS**

KYOGO FRAMEWORK CHALLENGES

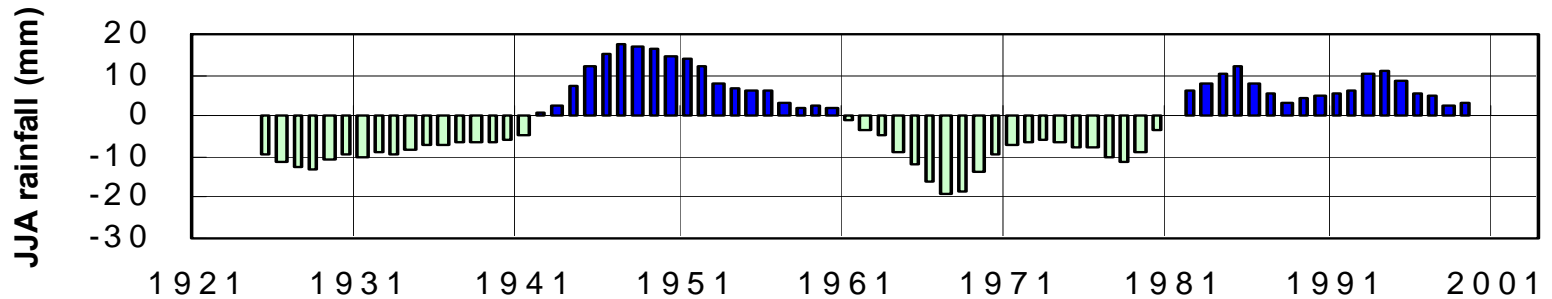


Zone 11 (Entebbe)

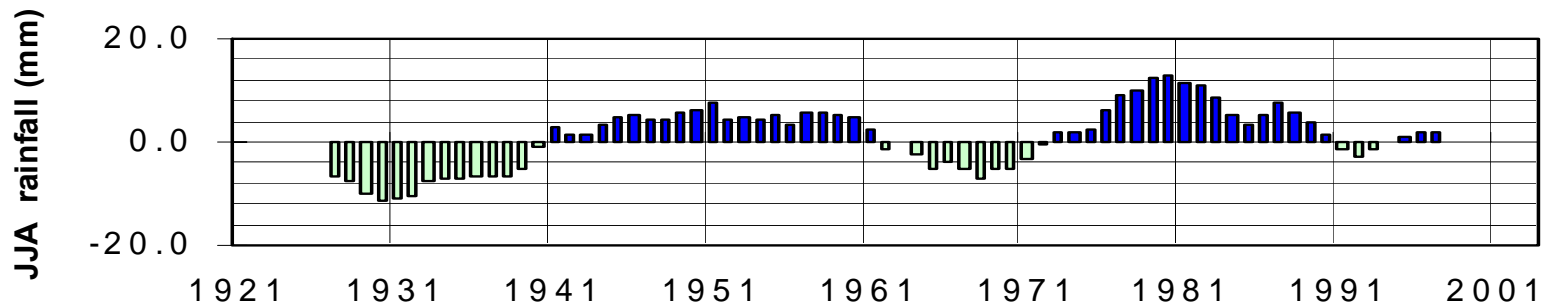
DECADAL RAINFALL VARIABILITY



Zone 3 (Masindi)



Zone 26 (Kisumu)

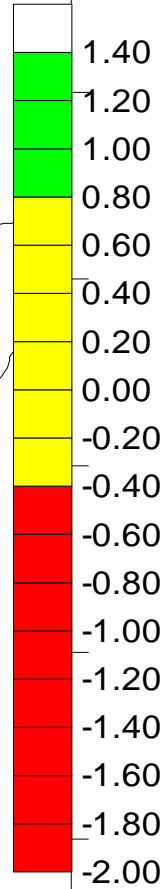


LATITUDE (°N/S)

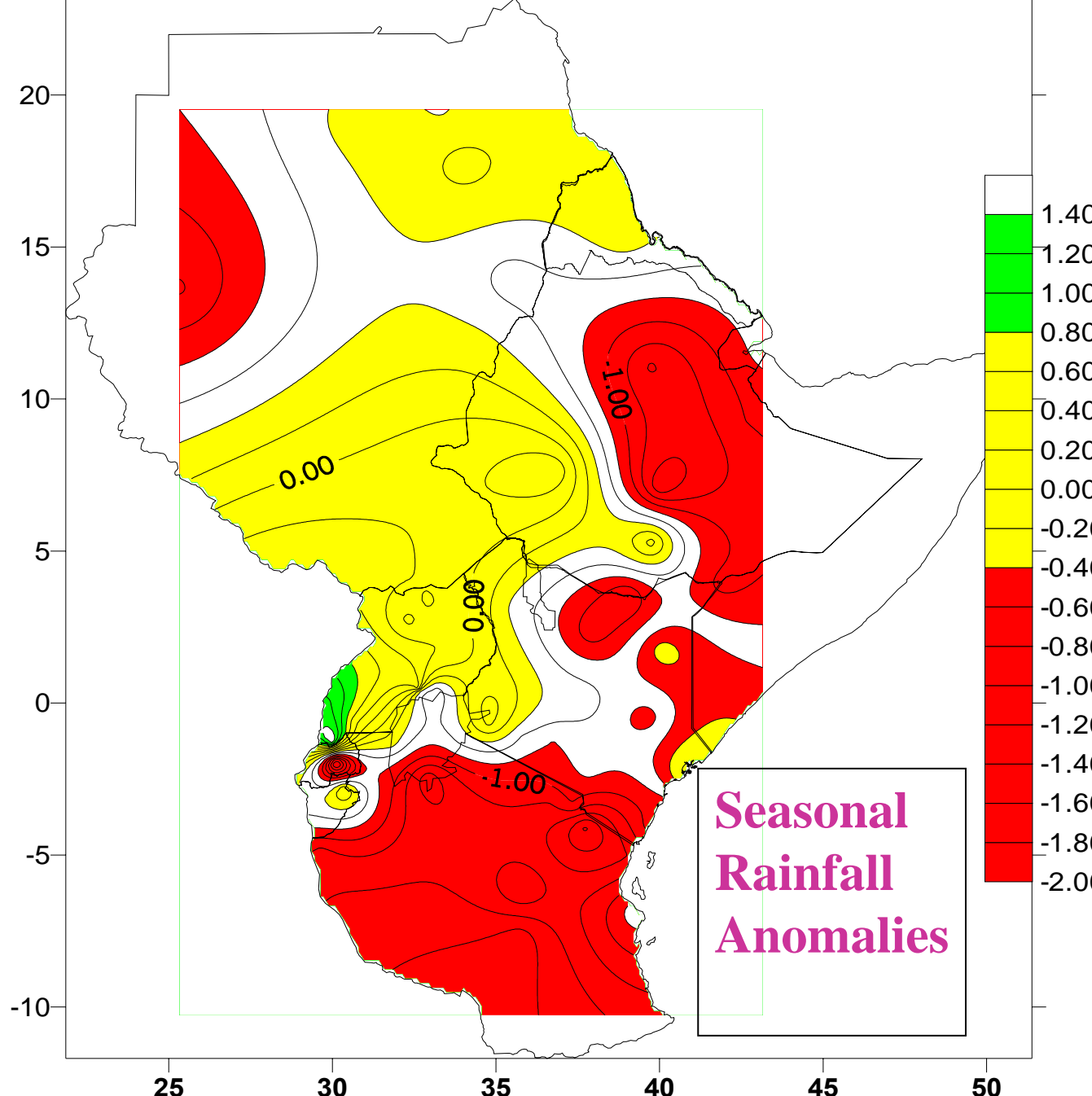
20
15
10
5
0
-5
-10

25 30 35 40 45 50

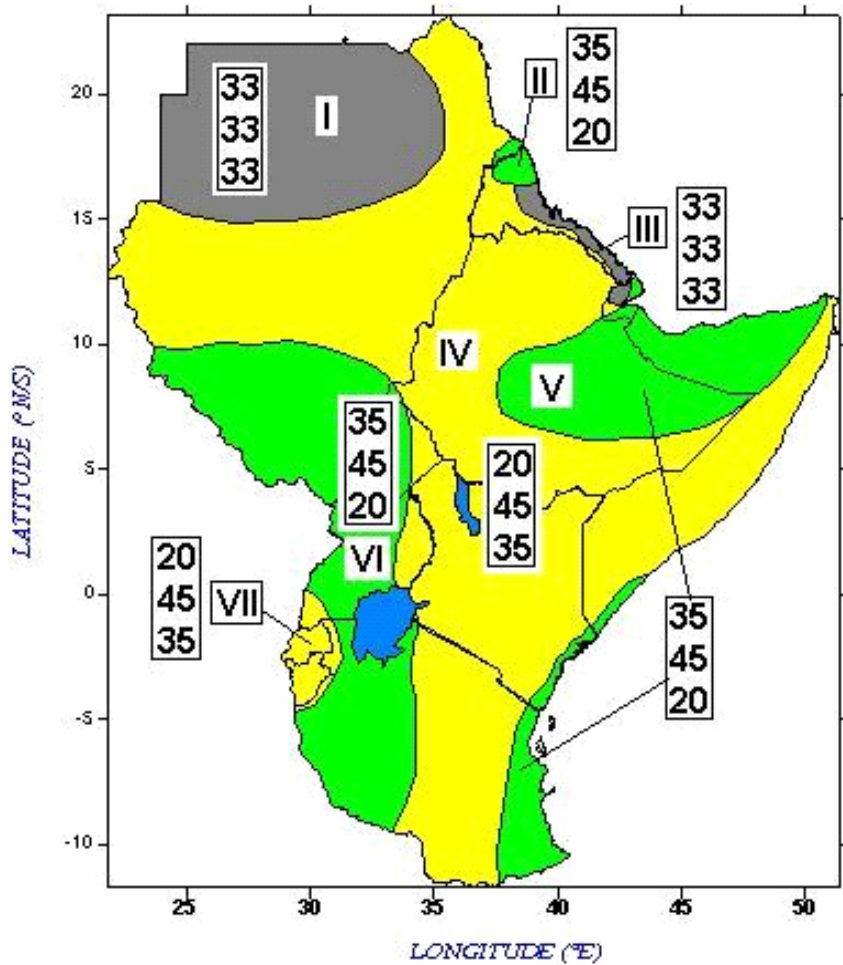
LONGITUDE (°E)



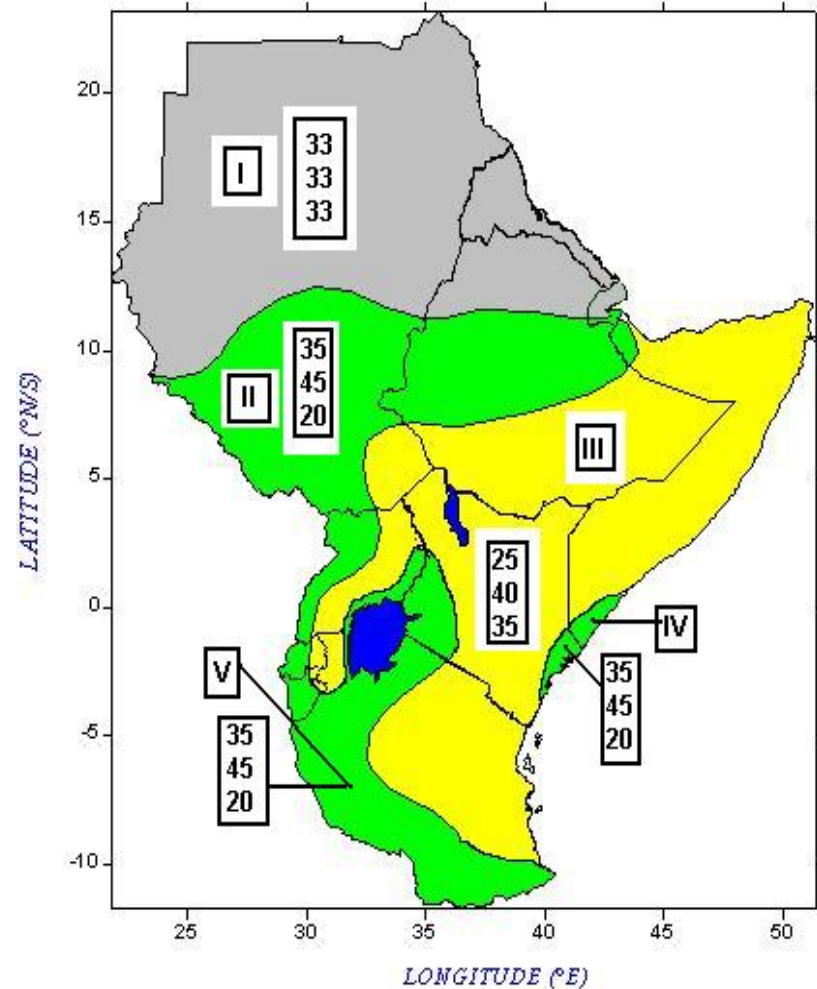
**Seasonal
Rainfall
Anomalies**



CLIMATE OUTLOOK PRODUCTS

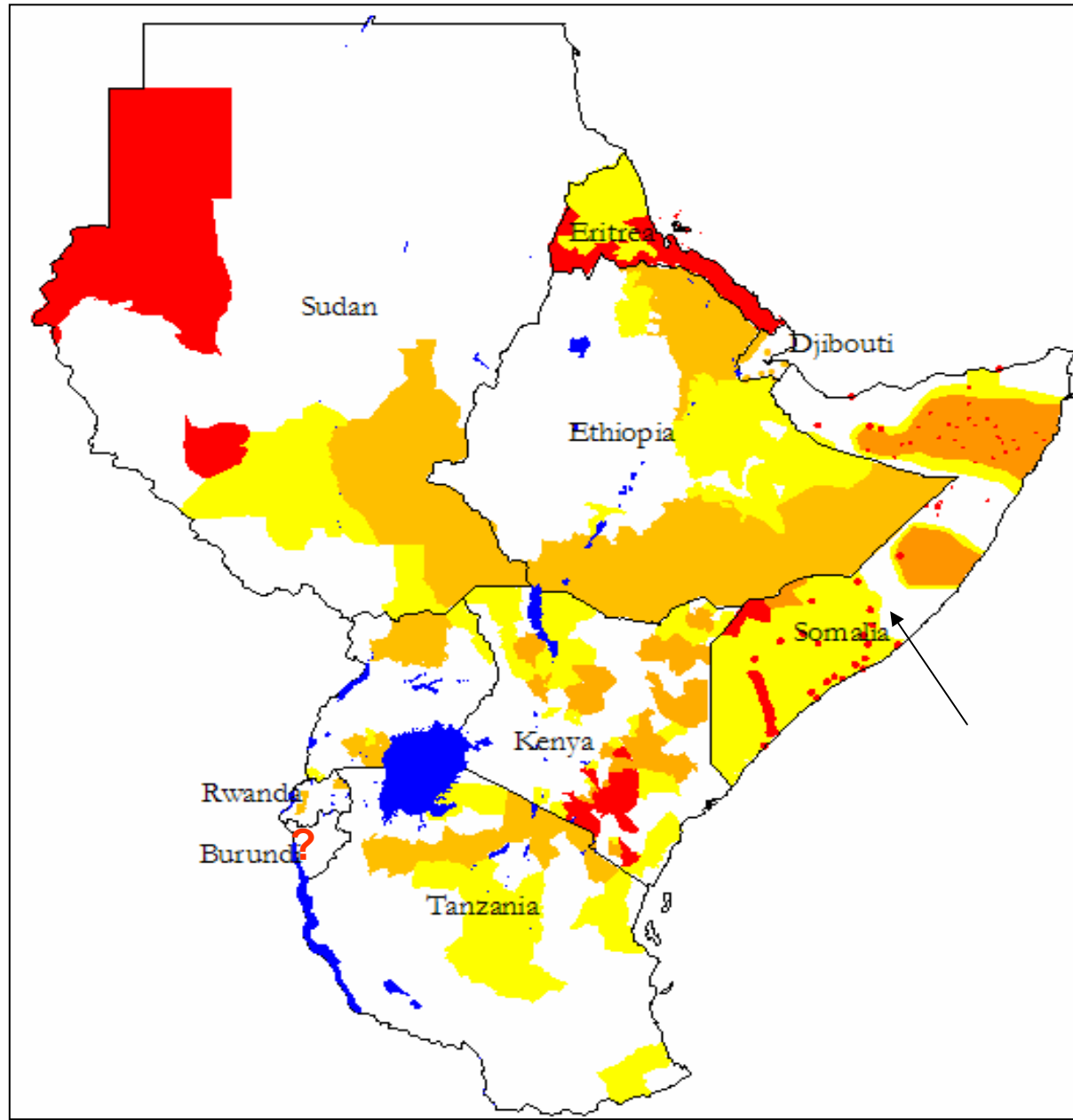


**Consensus Climate Outlook for
September to December 2005**

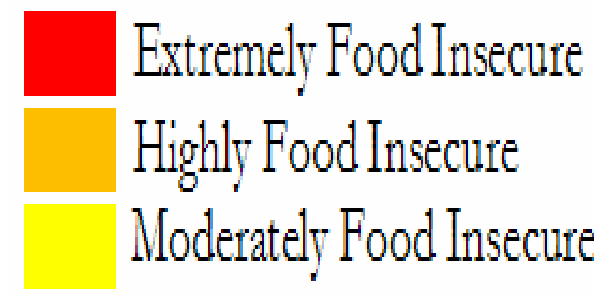


**Consensus Climate Outlook for
March –May 2006**

FOOD SECURITY OUTLOOK PRODUCTS



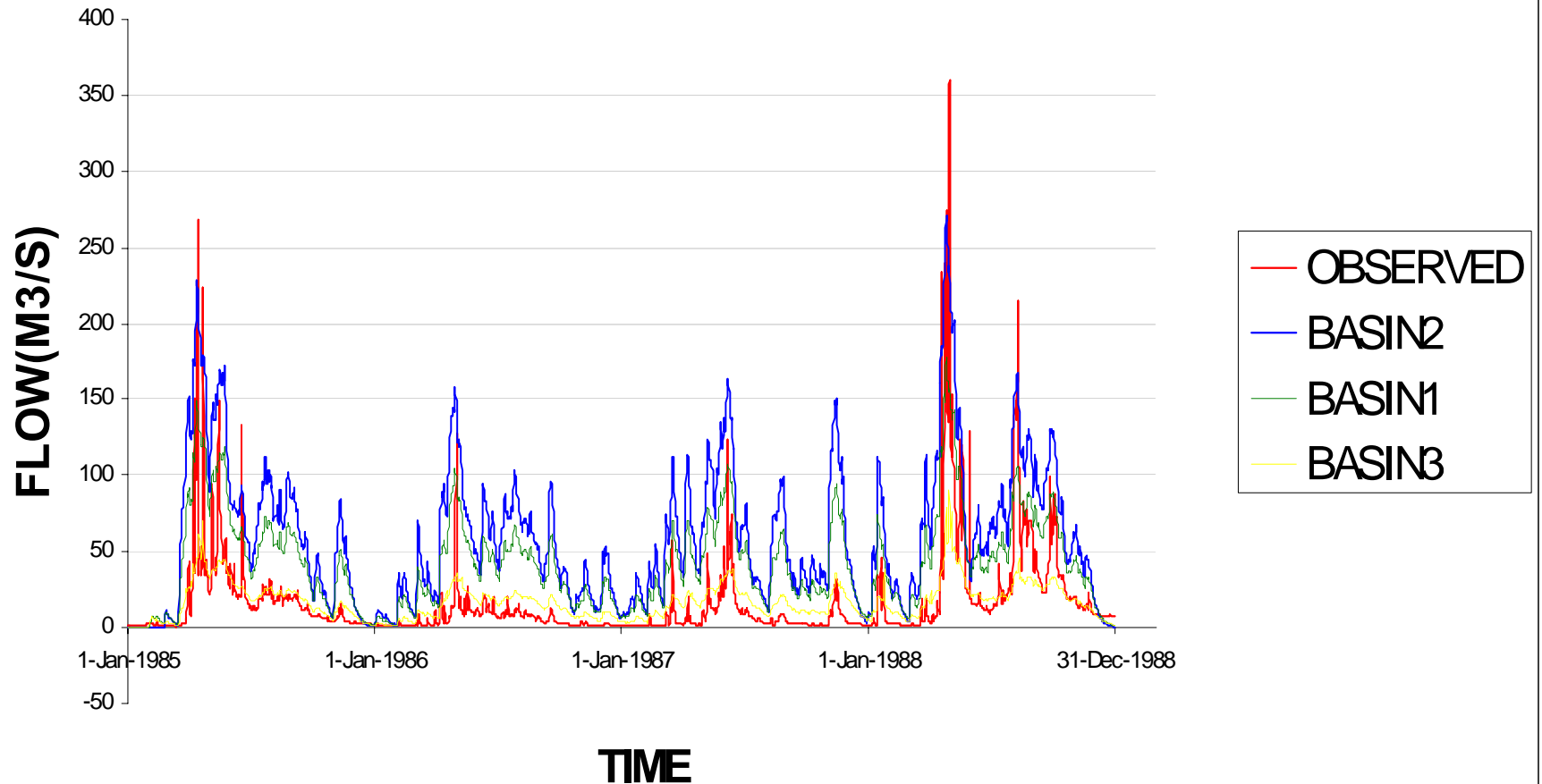
WITH
FEWS/NET



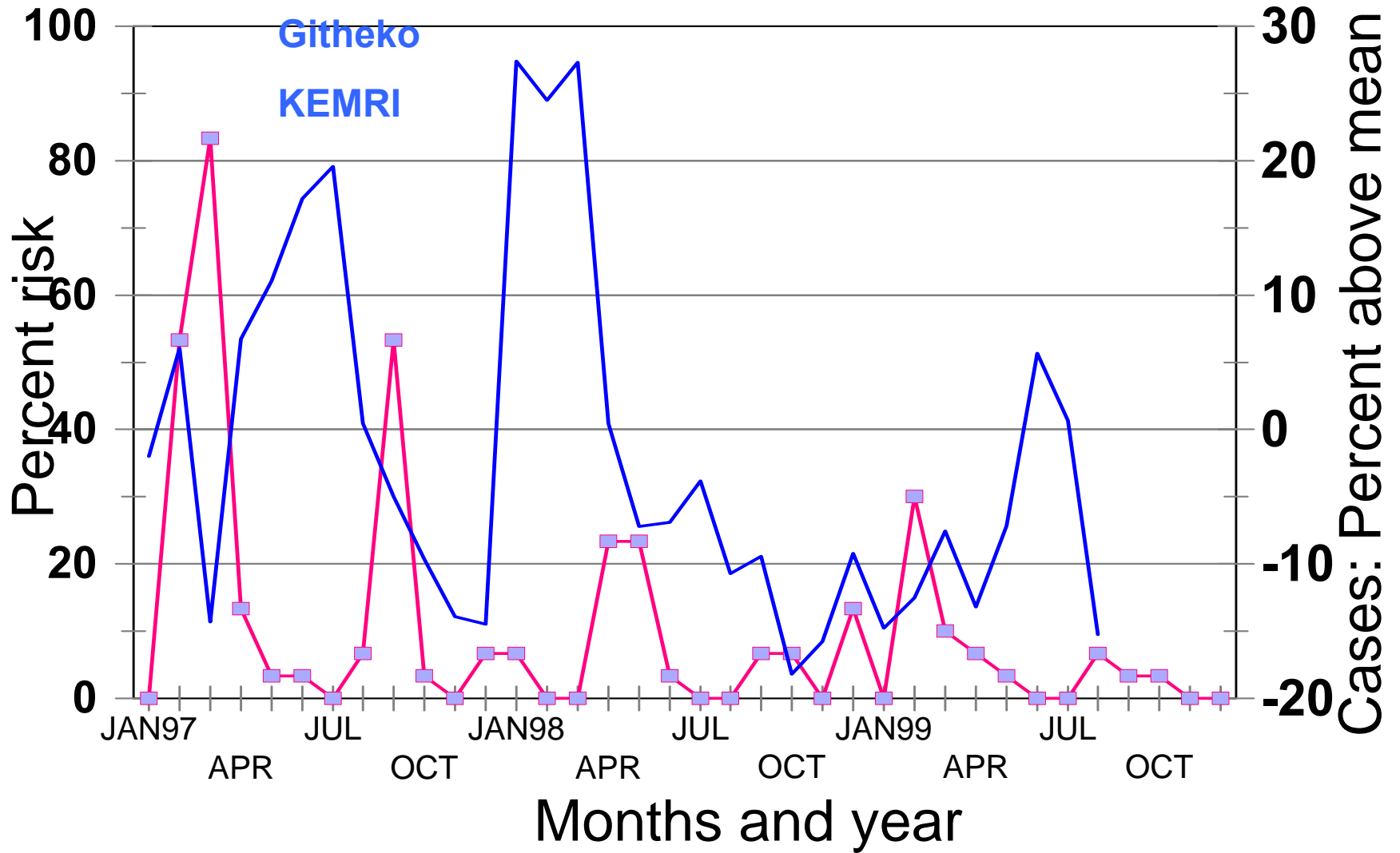
FLOOD FORECASTING

With WMO, USGS, NOAA

SFM NYANDO 1985_88



Malaria epidemic prediction model



—■— Epidemic Risk % Case anomaly

KEY CHALLENGES

- Resources
- Lack of Capacity to Effectively Maximize Climate Information Use
- Policy Issues

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