#### Weather-Indexed Early Warning and Livelihood <u>Protection</u>

an Example from Ethiopia



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## **Overview**

- Who we are
- Our Aim
- Risk Management Framework
- Structured Finance
- Building an Index
- Ethiopia Pilot





## FAO/WFP areas of work



- Technical Support to Agriculture/ Livestock/ Forestry/ Fishery
- Agricultural Statistics
- Agro-climatic Monitoring
- Agricultural Policy
- Early Warning for Agriculture & Food Security



- Vulnerability Monitoring Assessment and Mapping
- Early Warning & Needs Assessment
- Structuring of Finance, development economics & financial law
- Aid targeting & distribution

#### **Joint FAO-WFP**

- Crop and Food Supply Assessments
- Needs Assessments & Emergency Operations
- Pre-crisis Market Profiles and Market Analysis
- Risk Management & Livelihood Protection

# Other Weather Risk Management Projects

- Argentina I: Weather insured seed credit
- Argentina II: Dairy yield protection against low rainfall
- South Africa: Apple co-operative freeze cover
- India: 20,000 farmers bought weather insurance in 2004
- Mexico: Crop insurance portfolio reinsured through weather derivative
- Morocco: Weather indexed crop insurance
- Ukraine: Winter wheat protection against weather risks
- Malawi: Seed maize & groundnut yield protection against drought
- Peru: Weather insurance for 8 crops in 5 regions of the country
- Nicaragua: Groundnut weather insurance

#### **Protecting People's Potential**

#### by structuring financial solutions to meet disaster funding requirements

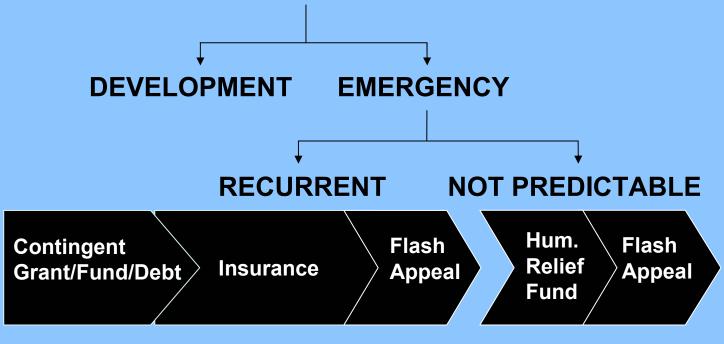
#### **Example:**

**Ethiopia Weather Risk Management Project** 





## **Structured Finance**



CONTINGENCY PLAN
BASED TIMELY
RESPONSE

ADHOC RESPONSE





#### **How Our Products Help**

- CONTINGENCY FUNDING eliminates delays in delivering funds after natural disasters
- FINANCED CONTINGENCY PLANS ensure correct assistance reaches correct beneficiaries at the right time
- Most efficient use of relief resources
- Protects assets beneficiaries need to recover after natural disasters





#### Risk Management Framework

Ex-Ante Financing

of contingency plans

**Capacity Building** 

for effective plan implementation

Early Warning System

with reliable baseline and trigger points

Contingency Planning

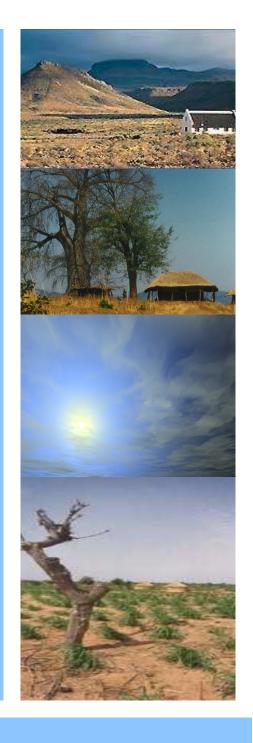
for appropriate and timely response





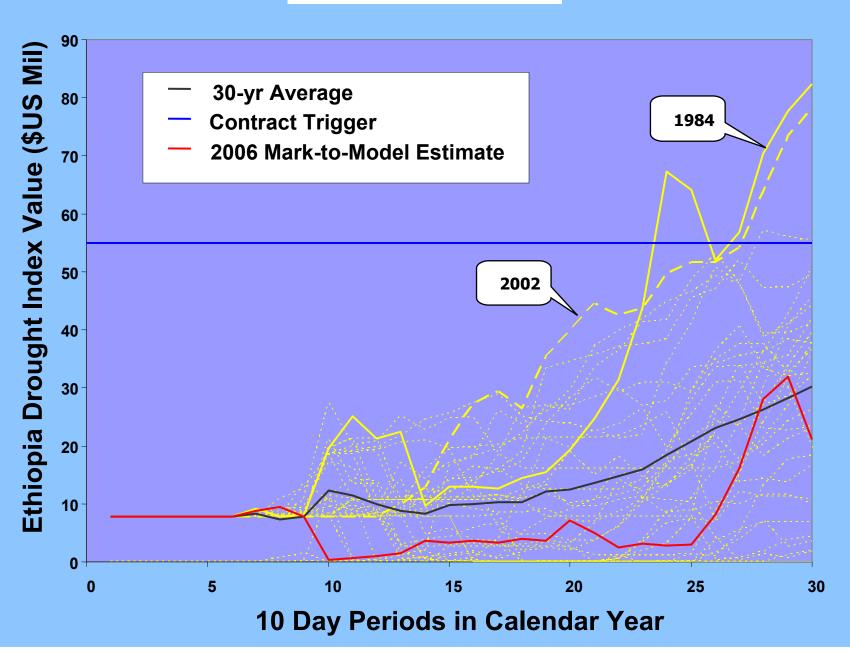
#### **Building a Weather Index**

- Identify exposure number of beneficiaries
- II. Quantify the impact
- III. Correlation between needs and weather data
- IV. Structuring financing: triggers and payout rates

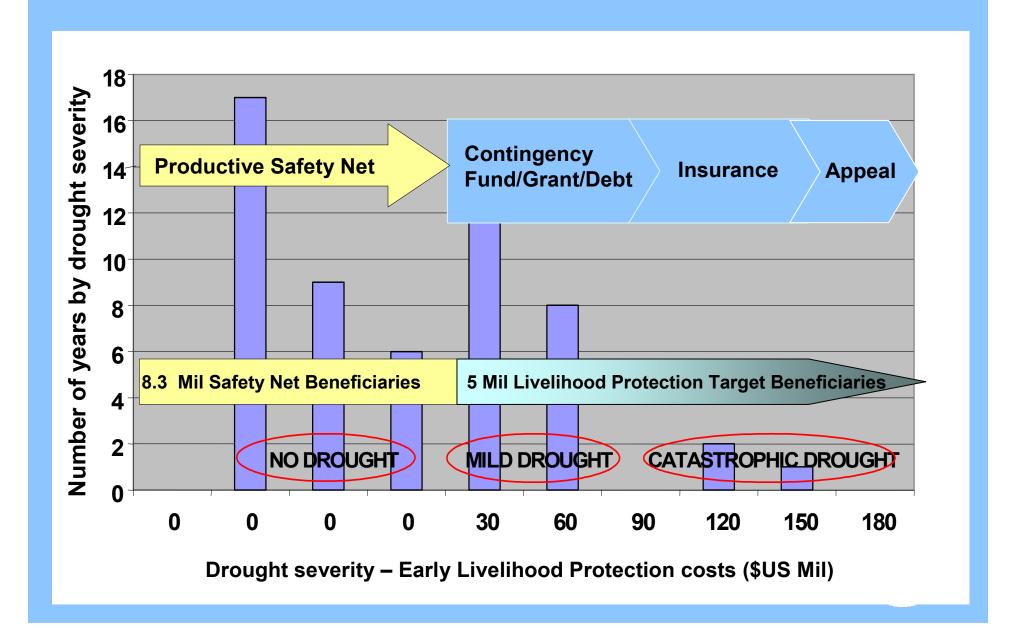




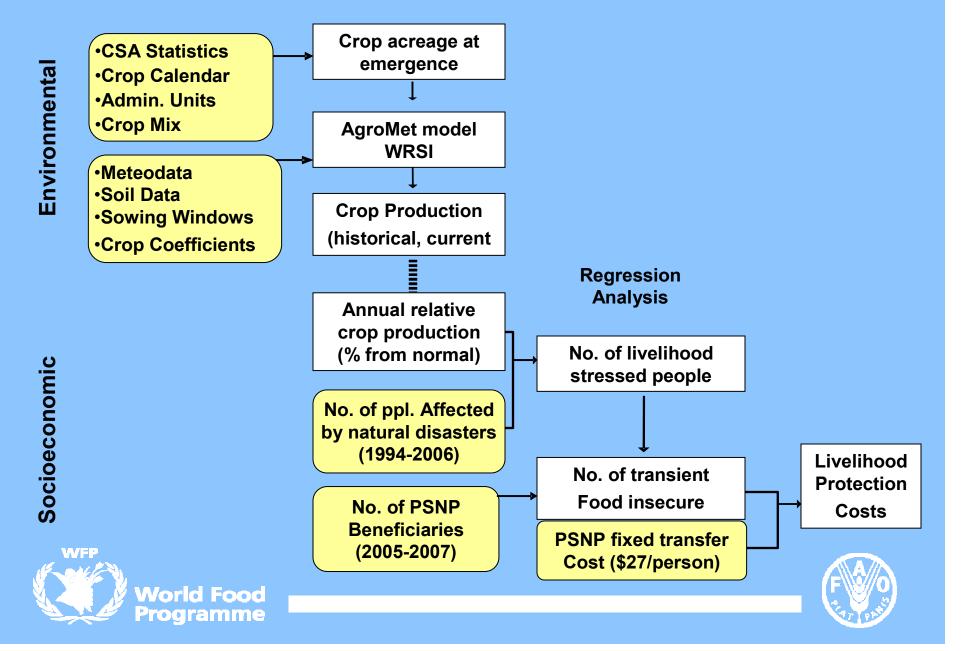
# **2006 Pilot**



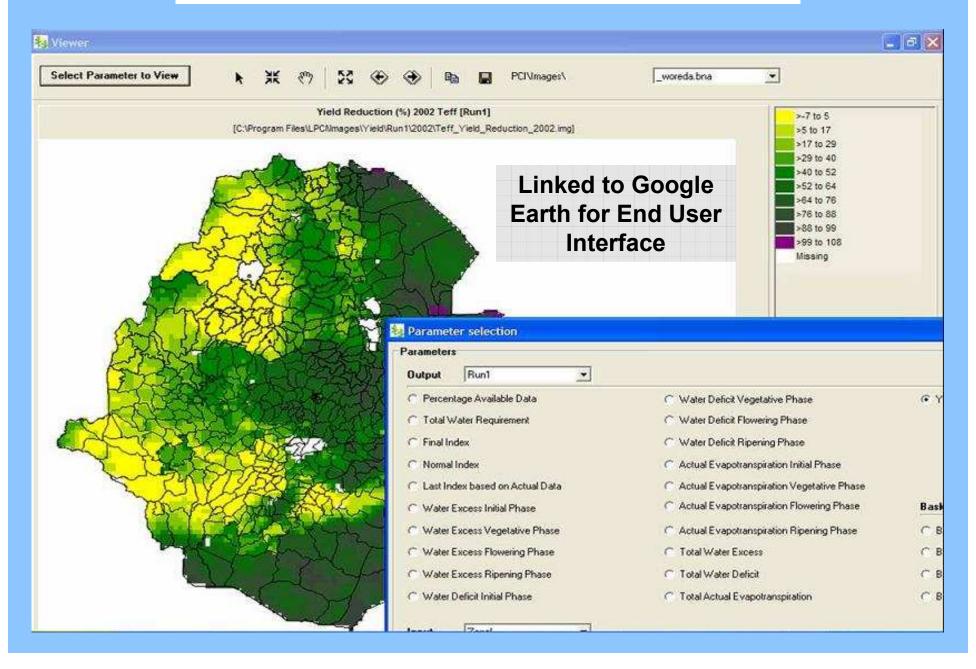
#### Ethiopia Risk Finance 2008-2010



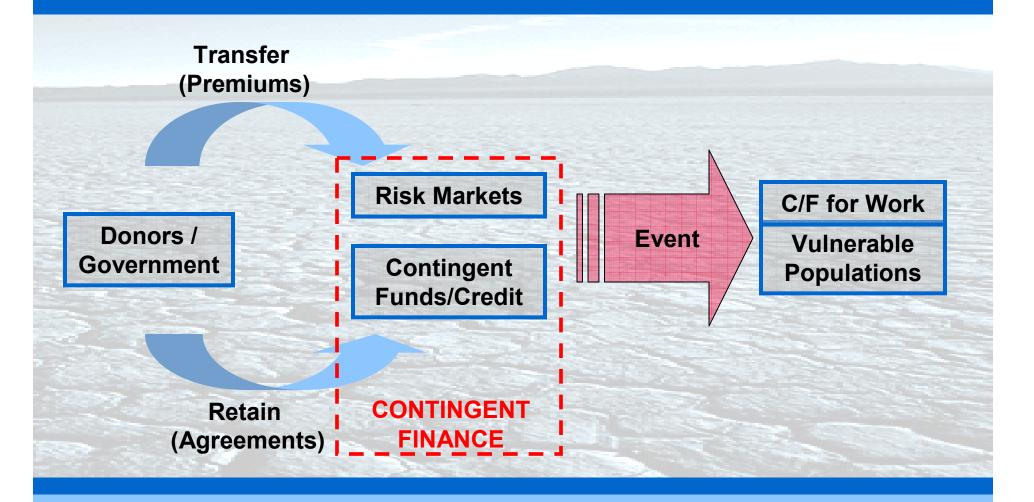
# Agricultural LPCI Design



#### **Software Tool: LPCI Calculator**



# Flow of Funds







## Conclusion

Innovative Risk
Transfer Mechanisms
for Populations
Affected by Natural
Disasters In LowIncome Countries

Risk



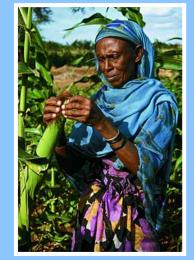
**Beneficiary Governments** 



Financial Risk Markets



Donor Governments/ Agencies











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