



Building Smallholder Farmers' Resilience under Climate Change through Value Chain Management

Policy Dimension

WFP AND CLIMATE DISASTERS

- 80% of food insecure people (~652 million) live in disaster-prone areas
- In the last decade, around 50% of WFP operations were responding to climate disasters (169 million people affected)
- WFP has invested US\$ 23 billion in emergency and recovery operations responding to climate disasters

CLIMATE CHANGE IS A RISK MULTIPLIER FOR FOOD INSECURITY

CLIMATE CHANGE AFFECTS **ALL** DIMENSIONS OF FOOD SECURITY

- **Food availability:** Lower productivity of staple crops through higher temperatures, more erratic rainfall, pest infestations and diseases, extreme events
- **Food access:** Price increases of major crops; interruption of market access
- **Food utilization:** Calorie intake affected by water- or vector-borne diseases; less dietary diversity; heat stress in humans and livestock; possible vicious cycle of disease and hunger.
- **Food stability:** More frequent and intense weather events can upset the stability of individuals' and government food security strategies

CONFLICT AND CLIMATE-RELATED SHOCKS ASSOCIATED WITH FOOD CRISIS SITUATIONS IN 2016

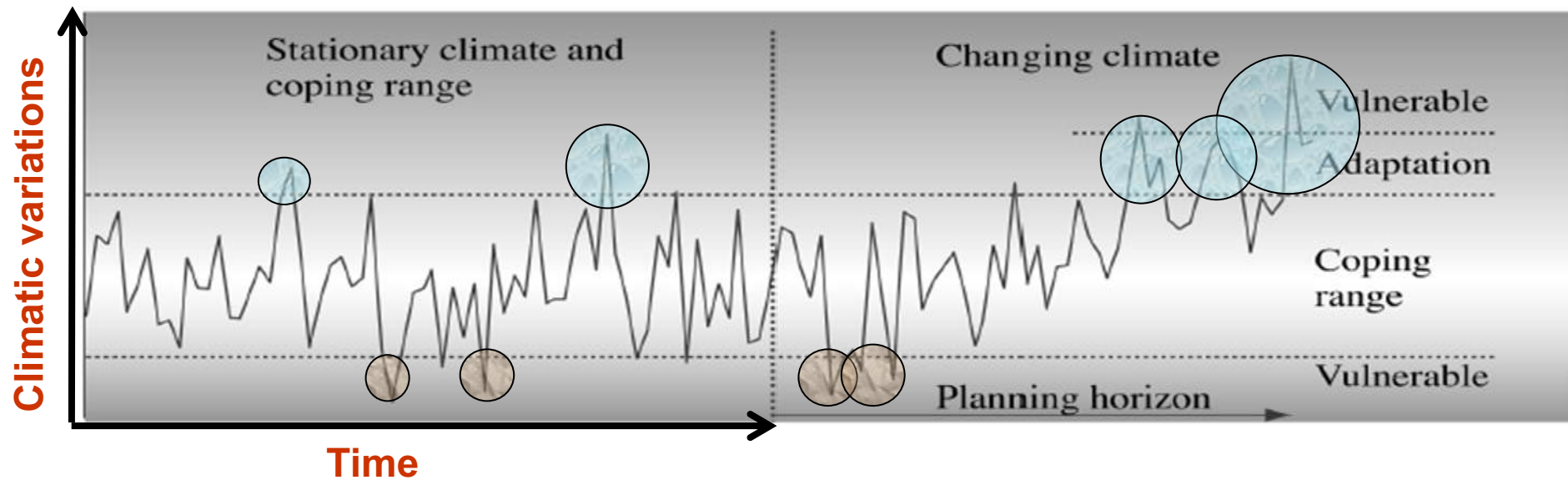
Country	Main climate/weather adverse effect on food security	Number of food-insecure people (IPC/CH phase 3+) in millions
Afghanistan	Floods, landslides in winter; drought in Ghor province	8.5
Burundi	El Niño phenomenon	2.3
Central African Republic	Localized floods	2.0
Democratic Republic of the Congo	El Niño phenomenon	5.9
Iraq*	Drought	1.5
Somalia	El Niño-related drought	2.9
South Sudan	Drought and floods	4.9
Sudan	El Niño phenomenon	4.4
Syrian Arab Republic*	Drought in Aleppo, Idlib and Homs	7.0
Yemen	Flooding, heavy rains and tropical cyclones	14.1
Total		53.5

NOTE: Figures for food-insecure populations for countries indicated with an asterisk are reported by the government, Food Security Cluster (HNO or HRP) or WFP-CARI; figures for South Sudan and Somalia refer to IPC analyses conducted in January and February 2017, using data from 2016.

SOURCE: Food Security Information Network (FSIN). 2017. *Global Report on Food Crises 2017*. Rome.

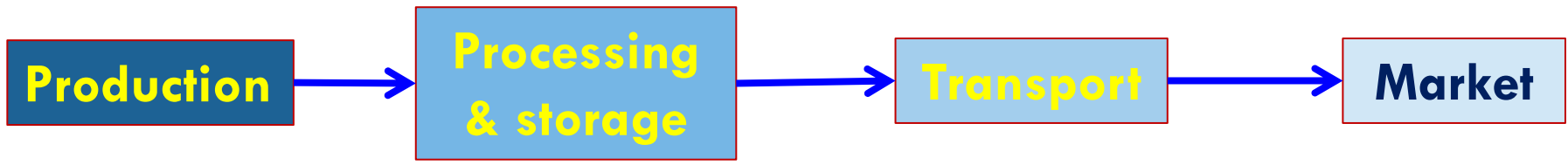
CLIMATE CHANGE AMPLIFIES RISKS FOR SMALLHOLDERS

- Historic experience/traditional knowledge no longer sufficient to cope with climate extremes
- Losses & damages in rural livelihoods become larger & more unpredictable



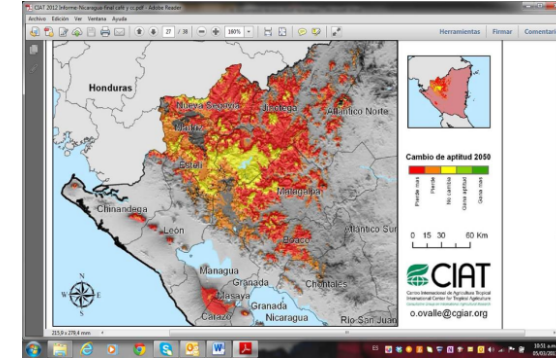
Difference between weather (short-term variability) and climate (long-term trend!)

CLIMATE RISKS IN VALUE CHAINS



MANAGING CLIMATE RISK: ENTRY POINTS

- 1) Through better **analysis**: Recognizing new and emerging risks for food systems
- 2) Through **innovation**: Integrating risk management and risk financing solutions into country programmes
- 3) Through **natural capital**: Enhancing the natural risk reduction functionality of landscapes



CLIMATE RISK MANAGEMENT INNOVATIONS



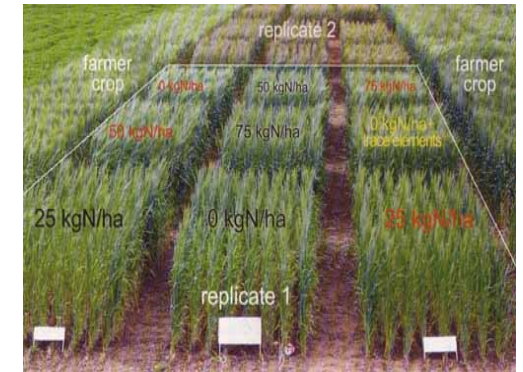
Early Warning systems



Weather-index-based insurance



Better access to weather information



Drought/salt/flood - tolerant crop options



Participatory GIS for Hazard mapping



More robust/flexible infrastructure



Better post-harvest protection



Green technologies for cooking, heating, cooling

CLIMATE RISK MANAGEMENT THROUGH LANDSCAPES



Agroforestry



Erosion control



**Watershed
management**



Land rehabilitation

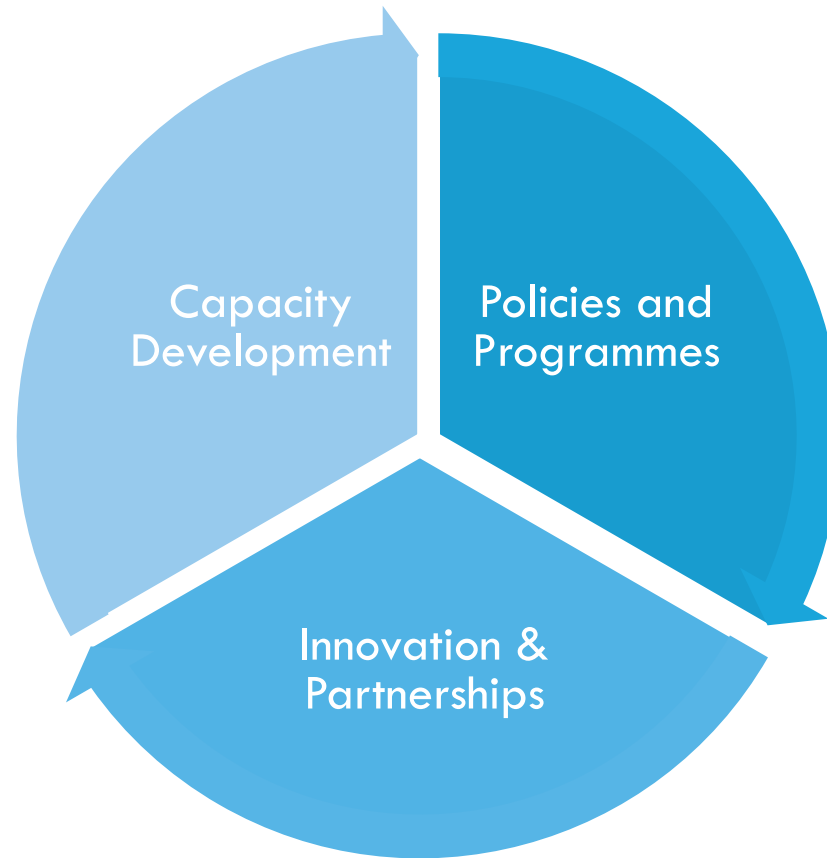


**Conservation
agriculture**

WFP CLIMATE CHANGE POLICY IMPLEMENTATION PLAN

A. Capacity Development:

Increasing WFP and partner capacities to design and implement high-quality climate risk management programmes that will serve the needs of vulnerable people and governments



B. Policies & Programmes:

Supporting governments, partners and staff in climate **policy engagement and programme development**, especially through NAPs, NDCs and climate finance processes, so that food security concerns get national prioritization

C. Innovation & partnerships: Supporting the development of **innovative adaptation analyses, interventions & partnerships** across a range of contexts to ensure the best options can be implemented for vulnerable people & governments

谢谢

