



### **R4: Rural Resilience & Food Security in Ethiopia**

NEC Conference Istanbul, Turkey Oct, 16-20/2017

Tilahun Gemeda,

### **R4: Rural Resilience and Food Security in Ethiopia**

- R4 is a strategic partnership initiative between the United Nations World Food Program (WFP) and Oxfam that builds the resilience of vulnerable, food-insecure population through an integration of four risk-management strategies: disaster risk reduction through natural resource management, risk transfer through micro insurance, prudent risk taking through microcredit, and risk reserves through savings.
- R4 is built on the initial success of Horn of Africa Risk Transfer for Adaptation (HARITA 2009 2011) pioneered by REST, Oxfam America and Swiss Re in Tigray.

### **Goal and Objectives**

### **Goal:**

Improve the resilience of smallholder farmers to weather shocks, improve their livelihoods and enhance their food security.

### **Specific Objectives:**

- Reduced climate related losses faced by food-insecure communities through implementation of DRR measures linked with adaptation.
- Protection for food insecure households from unavoidable drought risk through innovative weather index insurance products, which can be paid for with labor or cash.
- Improved food and livelihood security for participants, including increased agricultural productivity, through best practices and access to financial services such as credit and savings

### Components of R4: The 4Rs 1. Risk Reduction: DRR

The poor farmers (PSNP) can access insurance through insurance for work arrangements engage on different adaptation measures

#### 2. Risk Transfer: Insurance

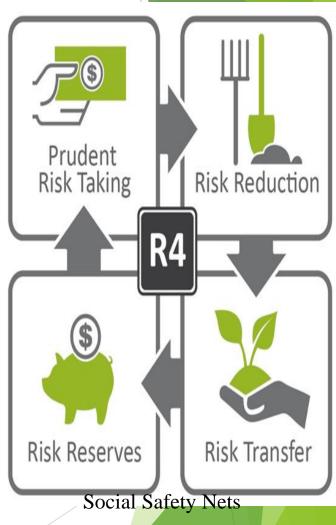
- **Transfer drought risk** and reduces its negative impact
- Develop confidence in agricultural decisions that enhance productivity

#### 3. Risk Taking: Provision of loans

- Accessing credit, and investing in productive assets and inputs for increasing agricultural productivity.
- Empower to take 'prudent risks' and **develop resilience** that are less exposed to increasing climate risks.

#### 4. Risk Reserve: Savings

The poor farmers establish small-scale savings, build 'risk reserves' and acts as a buffer against short-term needs and absorbed shocks.





#### Insurance for Work

### Social Safety Nets as a Channel for Insurance

### Satellite based Weather Index Insurance

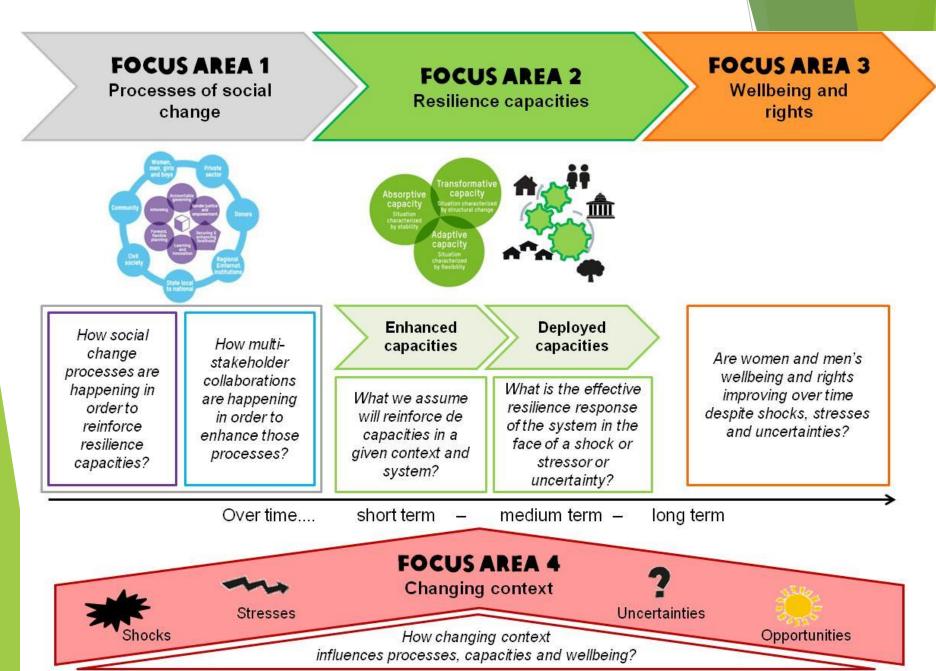
### **Oxfam's Role**

### Convening Role

#### Influencing and advocacy

#### Evidence based research and lessons

### **4 Focus Areas of MEAL**



### **Partnerships**

#### **Local Partners**

- REST,
- ORDA,
- Community,
- Regional government,
- Africa Insurance Company,
- Nyala Insurance Company,
- Ministry of Agriculture and Natural Resources,

- NDRMC,
- NMA,
- MFI,
- Cooperatives,
- Mekele University,

#### **Global Partners :**

Research, evaluation, and program funding



**Rockefeller Foundation** 

Innovation for the Next 100 Years







A MARGARET A. CARGILL PHILANTHROPY



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

#### Swiss Agency for Development and Cooperation SDC

# Swiss Re

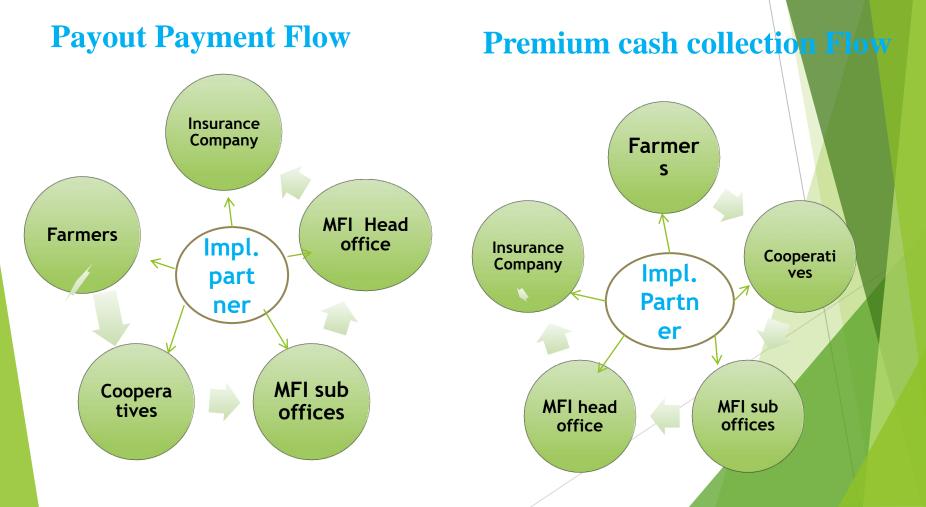
14

Index Insurance Innovation Initiative at the University of California, Davis

### **R4 Program Results/Achievements**

**1.** Risk Transfer

### **Insurance Distribution Channels**

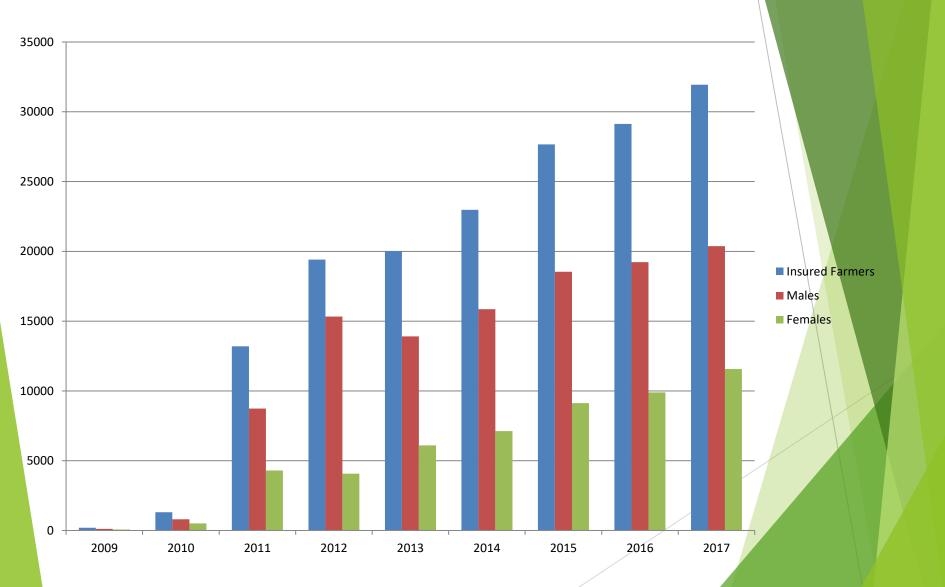


### Weather Index Insurance Summary (2009-2017)

Production year	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Districts covered	1	3	9	11	12	12	12	12	2 12
# of villages covered	1	5	43	76	80	84	86	86	5 86
Insured crops	Teff	Teff , Barley and wheat	Teff , Barley, Sorghum, Maize, bean, and wheat	Teff , Barley, Sorghum, Maize, bean, and wheat	Teff , Barley, Sorghum, Maize, bean, and wheat	Barley, Sorghum, Maize and wheat	Sorghum, Maize, wheat, teff and Bean	Sorghum, Maize, wheat and teff	Sorghum, Maize, wheat and teff
Local Insurers	NIC	NIC	NIC & AIC	NIC & AIC	NIC & AIC	NIC & AIC	NIC & AIC	NIC & AIC	NIC & AIC
# of insured farmers	200	1,308	13,195	19,407	20,015	22981	27,668	29,127	31,942
Male	125	802	8,740	15,334	13,906	15,857	18,538	19,224	20,372
Female	75	506	4,304	4,073	6,109	7,124	9,130	9,903	3 1 <mark>1,570</mark>
Total sum insured	115,000	974,400	15,883,726	24,481,550	23,064,380	24,694,550	32,137,100	61,343,894	63,257,025
Premium	27,600	357,014	3,633,637	4,840,237	5,273,298	4,843,958	5,834,935	14045457	10,205,050
Payout	No	No	295, 653.70	5,809,890	452,493	678,405	7,953,301	78,413.02	
Farmers received payout			1,804	12,702	3,321	7,848	26,672	748	3

• 36.2% of the households purchased insurance in 2017 are female-headed-households

### **R4 Weather Index Insurance Beneficiaries**



### 2. Risk Reduction (DRR)

### **Catchment Treatments**

( physical and biological soil and water conservation measures):

- protect excessive downstream runoff hazards,
- reduce erosion of farm lands fertile soil,
- improve soil moisture and
- prevent further expansion of gullies;



#### Micro-garden development

- DRR activities promote microgardening to improve the use of small backyard plots
- Women HHs typically own smaller farming plots and have less labor than their male-headed HHs

- Benefits:
- consumption,
- nutrition improvement and cash income generation



### **Soil Fertility Management Practices**

#### **Compost:**

- Critical for rebuilding soil nutrients and improve soil fertility
- improving soil moisture retention.
- Increase productivity of the soil

## Oxen driven mould board as compared to the local:

- Make wider and deeper furrow
- Enhance moisture conservation and infiltration capacity
- Promotes removal and decomposition of weeds
- Saves plowing time
  - Enhances productivity



### **Flood Diversion/Spate Irrigation**

Spate irrigation is a simple flood harvesting and management system, involving the diversion of flood using deflecting technologies

Flood harvesting and management systems reduce the effects of drought by supplementing the rain fed crops with water trapped and by diverting flood coming from the upper to lower areas.



### **Construction of Water Harvesting Check Dam Pond**

Harvesting of water by controlling the dry season spring water base-flow in storage structures for irrigation purpose.

>improves downstream ground water recharge and spring development,

>increases the productivity of degraded land



### **Roof Water Harvesting Technologies(RWH)**

- RWH enables HHs to:
  - improve drinking water supply and hygiene,
  - reduce workload of women and children,
  - Irrigate micro-gardens to produce vegetables and fruits.



# 3. Prudent Risk Taking (Credit) and Risk Reserve (Savings)

- The micro credit empower farmers to take 'prudent risks', diversify their incomes to develop resilience against climate risks.
- Credit provided as a revolving fund through RUSACCOs to invest on income generating activities to diversify their incomes
- Encouraging farmers to engage in high risk but high return activities
- ETB 9,698,421 evolving fund has been provided to 3,849 farmers



#### **Global Level Results**

- i. Influencing the rise of climate risk insurance
- ii. Informing global climate action
- iii. Promoting private sector innovation in resilience building
- iv. Promoting linkages between disaster risk reduction and social protection

### **Country Level Results**

- i. Promoting integrated approaches to risk management through safety nets
- ii. Influencing the design and implementation of pro-poor financial services
- iii. Establishing a national Index Insurance Working Group
- iv. Influencing the Disaster Risk Management Strategic Program and Investment Framework

### **Local Levels Results/Impacts**

#### **Result on Knowledge**

- Access to financial services to the poor
- Farmers aware how they can change their lives
- knowledge improved about new agricultural inputs and cultivation practices
- learnt the culture of saving, benefits of credit, and mechanisms for increasing yield

#### **Result on Resilience**

- Risk transfer increased farmers confidence to take out loans and to make productive investments
- The payout enabled farmers to avoid selling productive assets and recover faster
- Reducingweather-relatedshocksthroughimprovingresourcesmanagement.

#### **Result on Female HHs:**

- ✓ food insecurity declined from 2013 2016 in R4 villages was 26% smaller for female-headed HHs than it was in non-R4 villages.
- ✓ increasing their planting areas,
- ✓ spending more time on hired labor
- decreased sharecropping and land renting to male farmers
- ✓ increased asset building.

 $\checkmark$ 

DRR provide largest benefits(enhancing productivity and production)

#### **Result on productivity**

- Increased investments in agricultural production and adoption of new cultivation techniques
- Many farmers note that "insurance is like saving money in a bank, and insurance taught us to save money."

#### **R4 Key Implementation Challenges**

- Basis Risk and uncertainties
- Expensive premium rates/products
- Payout expectation of the client farmers in slight drought years
- Fund limitation to meet high demand from community and government and for scale out

#### **Lessons Learnt**

- Public-Private-People partnerships are essential to ensuring program effectiveness, scale-up and sustainability
- Evidence-based practice matters
- Building broad sector capacity helps spread influence and impact
- Increasing program quality by being responsive and adaptive
- Make the program influencing-focused from the planning stage
- Index design refinement/modification: to build farmers' trust and confidence in the insurance products
- Affordable product –negotiate local insurers and international reinsurers
- On time product designing and pricing
- Empower and capacitate local insurance companies
- High demand by farmers for loan access on the revolving basis to invest on various IGAs and linking R4 with MFIs through provision of guarantee fund to raising matching fund

