

# Food System Resilience: Elusive Concept or Actionable Framework?

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December 14, 2023  
9:30am ET



# TODAY'S **Agenda**

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Opening Remarks



Speaker Introductions



Technical Presentations



Audience Q&A



Closing Remarks



# Carol Jenkins

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**Resilience and Agriculture Advisor**  
USAID, Center for Resilience



**USAID defines resilience as the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.**





# Herman Brouwer

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**Sr. Advisor Food Systems and  
Multistakeholder Collaboration**

Wageningen University  
& Research

# Meet Today's Speakers

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**Bart de Steenhuijsen Piters**

Sr. Food System Scientist |  
Wageningen University &  
Research



**Ones Karuho**

Head, Resilience & Food  
Systems Unit | World Food  
Programme



**Namukolo Covic**

Director General's  
Representative to Ethiopia | ILRI



# Bart de Steenhuijsen Piters

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**Sr. Food System Scientist**  
Wageningen University & Research

# Food System Resilience

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*Let's put it to work for  
people and communities*





# Resilience: From Obscurity into the Spotlight

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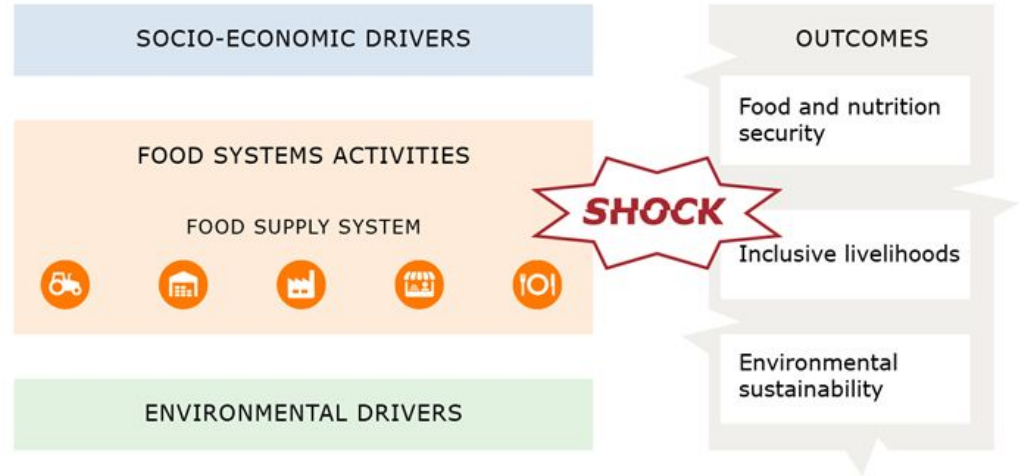
- ✓ Resilience is known in science for > 100 years
- ✓ Main driver for recent attention was COVID-19
- ✓ Little agreement in science on its definition
- ✓ Even more confusion when applied to food systems
- ✓ Scientists aspire to ‘walk the last mile’
- ✓ But how to make resilience concepts work for people and communities?



# Why is Food System Resilience Important?

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Building food system resilience is necessary to withstand shocks and stressors and maintain progress towards desired outcomes, such as food and nutrition security and equitable livelihoods for all in a healthy ecosystem.



# Defining Food System Resilience: Keep it Simple

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- ✓ We understand food system resilience as the **capacity of food systems to deliver desired outcomes in the face of shocks and stressors.**
- ✓ The delivery of desired outcomes depends on that capacity of food systems to **anticipate, prevent, absorb,** and **adapt** to the impacts of shocks and stressors.
- ✓ From the vast literature on resilience, we identify four capabilities that are strongly correlated to resilient systems:



# The ABCD of food system resilience building



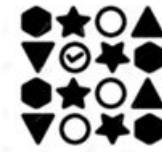
Agency



Buffering



Connectivity



Diversity

## Agency

the means and capacities of people to mitigate risks and to respond to shocks

## Buffering

resources to fall back on in the face of shocks and stressors

## Connectivity

the interconnection of and communication between actors and market segments

## Diversity

diversity at different scales and in different places, from production to consumption and from farm level to regional diversity

# Using the ABCD for Building Food System Resilience

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1.

Diagnosing the ABCD capabilities at the right level

2.

Focusing resilience building for whom, for what, for when, for where and why

3.

Designing interventions: which ABCD capabilities at need to be strengthened and how (5 W's)?

4.

Monitoring & evaluating: which easy-to-use indicators of ABCD reflect well progress and impact?

# In Conclusion

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1. If you can't define it, you can't measure it
2. Food system resilience is a capacity, not a system outcome
3. The ABCD explain +/- 70% = good enough: make it work in practice now
4. It's important to understand the rationale of intervention (5 W's) before designing



# In Conclusion

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5. The ABCD need to be diagnosed to reveal strengths and weaknesses
6. Interventions must be designed to strengthen ABCD capabilities
7. Easy-to-use indicators help MEL even in informal sectors of the food system
8. Building resilience must go with other system objectives, such as 'efficiency'





# Ones Karuho

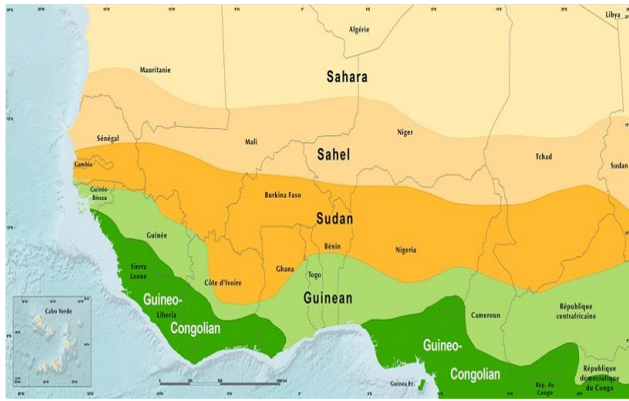
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**Head, Resilience & Food Systems Unit**  
World Food Programme

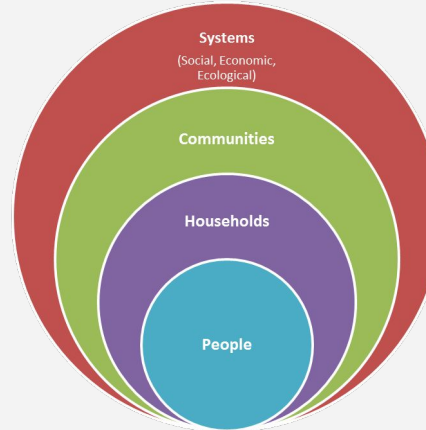


# Reducing the Need for Humanitarian Food Assistance by Investing in Resilience

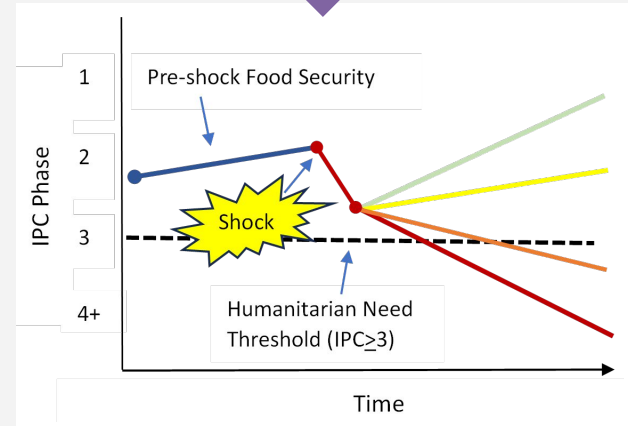
**Shocks and Stressors**  
(covariate and idiosyncratic)



**Resilience Capacities**  
(resources, assets, & strategies)



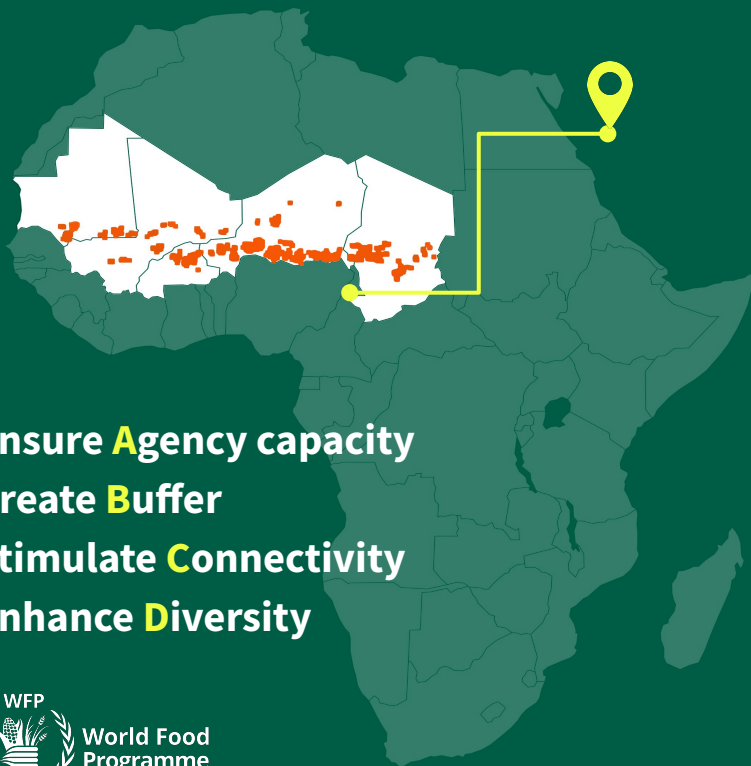
**Humanitarian Food Assistance Needs**



In addition to the **global shocks**, Western Africa is facing local shocks that affect its food systems

- 1. Climate shocks and land degradation** => reducing production capacity due to desertification, droughts, and floods
- 2. Economic shocks** => making nutritious diet unaffordable
- 3. Armed conflicts** => disrupting food supply systems
- 4. Migration and other people's movements** => illegal and dangerous migration to Europe + traditional pastoralism

# WFP's approach to building resilience in the Sahel



Ensure **A**gency capacity  
 Create **B**uffer  
 Stimulate **C**onnectivity  
 Enhance **D**iversity



- Over **3.2 million people** reached from 2018 to 2023
- Nearly **1,000 intervention sites** in **3,000 villages**

## ACHIEVEMENTS 2018 – 2023



### Reduction of humanitarian needs

- **500,000 people didn't require food assistance in 2022 and 2023** despite massive drought
- Savings of **USD 45 million**



### Hunger-free future

- **1 in 4 people** are no longer hungry
- **14% more veggies** (Mali)
- **90% more iron rich foods** (Sahel)
- Strategies to alleviate hunger reduced



### Greener tomorrow

- **Over 280,240 hectares** of land rehabilitated
- **3400 ponds and wells**
- **3000 hectares** of gardens
- **50% vegetation** increase



### Building human capital

- **660,000 children in school** across the 5 countries
- **7% dropout rate lower** in WFP supported schools
- **95%** of children will finish primary school in Mali **against 55%** in non-WFP supported schools



### Protection against climate change

- **77%** of people feel protected against climate hazards
- **80%** report better access to natural resources
- Carbon sequestration: **1 hectare = 6 tons of CO2 a year** (Niger)
- Reduction of daily hardships: **3 out of 4** of participants



### Pathway to peace

- Improved social inclusion in Burkina Faso and Niger:
  - **93%** feel having equal access to economic opportunities
  - **90%** see more respect for diversity
- Stronger women empowerment, reduced distress outmigration

**Reducing  
humanitarian  
needs in the  
Sahel**



**Drive  
transformative  
change, enhancing  
natural capital,  
human capital,  
socio-economic  
inclusion and  
social cohesion**



**Livelihoods, value  
chains and ecosystems  
are being restored to  
mitigate the impacts  
of climate change**





# Namukolo Covic

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**Director General's  
Representative to Ethiopia, ILRI;  
Regional Director East & Southern  
Africa CGIAR**

## Borena Ethiopia drought



<https://twitter.com/RobertC78726751/status/1726070424646435083>

# Multiple Resilience Challenges

Poverty, climate change, internal conflicts, external conflicts, resource limitations, etc.

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**“Food system resilience: difficult and complex but actionable framework with adequate & iterative resourcing.”**

Ethiopia case study used to illustrate what is possible

<https://twitter.com/UN/status/1220935074289315842/photo/1>



**Ethiopia and Kenya, Nov 2023**

# Ethiopia Productive Safety Net Program (integrated)

- ✓ Rural: Large-scale social protection: Improve food security by stabilizing asset levels to enhance resilience.
- ✓ Urban: Savings, skills, self employment
- ✓ Disaster risk management
- ✓ Mix of public works employment and unconditional transfers.
- ✓ No demonstrated effect on nutrition outcomes
- ✓ Evaluations have led to enhancing nutrition sensitivity, but resources are limiting coverage and potential impacts.
- ✓ Impacts on infrastructure development is visible.



# Seqota Declaration Innovation Phase: Impressive Progress

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- ✓ Ruel et al., 2018: difficult to reduce stunting using nutrition sensitive agriculture
- ✓ Joint impact study with John Hopkins for Seqota Declaration Innovation Phase (2015- 2020; 40 woredas)
- ✓ **< 2yr Stunting reduction: 3% / year**
- ✓ The approach included at game changer for the Ethiopia Food Systems Transformation Roadmap. Roadmap includes an Index Based Livestock Insurance to reduce climate related risk in pastoralist settings.



# Ethiopia Food Systems Transformation Pathway and Roadmap

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## The Vision!

*“A holistic transformation of Ethiopia’s food systems from production to consumption that promotes enhanced food safety, nutrition and diets, improved livelihoods, greater land preservation and restoration and greater resilience to shocks and stress.”*

*“We seek to transform our food systems using sustainable and healthy diet-centred lens that minimizes trade-offs through calling for strong collaboration across all food systems actors, uniting around a common goal of healthy and sustainable diets for all.”*

**A visionary framework and supporting governance structure has emerged out of the UNFSS2021 within which to address resilience**





# Taking a Humanitarian, Development and Peace Nexus Approach is Important!

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- ✓ Humanitarian: Save lives now!
- ✓ Food Systems & Development: How can we strengthen resilience long-term from a development perspective?
- ✓ Peace: Insecurity begets humanitarian crises that begets development crises.

**Challenges in any of three pillars will negatively impact resilience, but integration needs attention!**





# Thank You

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Please use the Q&A feature to  
submit questions for our speakers

