



Solidarity practices during climate crises: Collaboratively exploring opportunities with women agroecologists.
A Case Study of the Natal Midlands

mahlathini
development foundation

Coventry
University

Research Centre
Agroecology, Water
and Resilience


Zingela Ulwazi

MAIZE TRUST

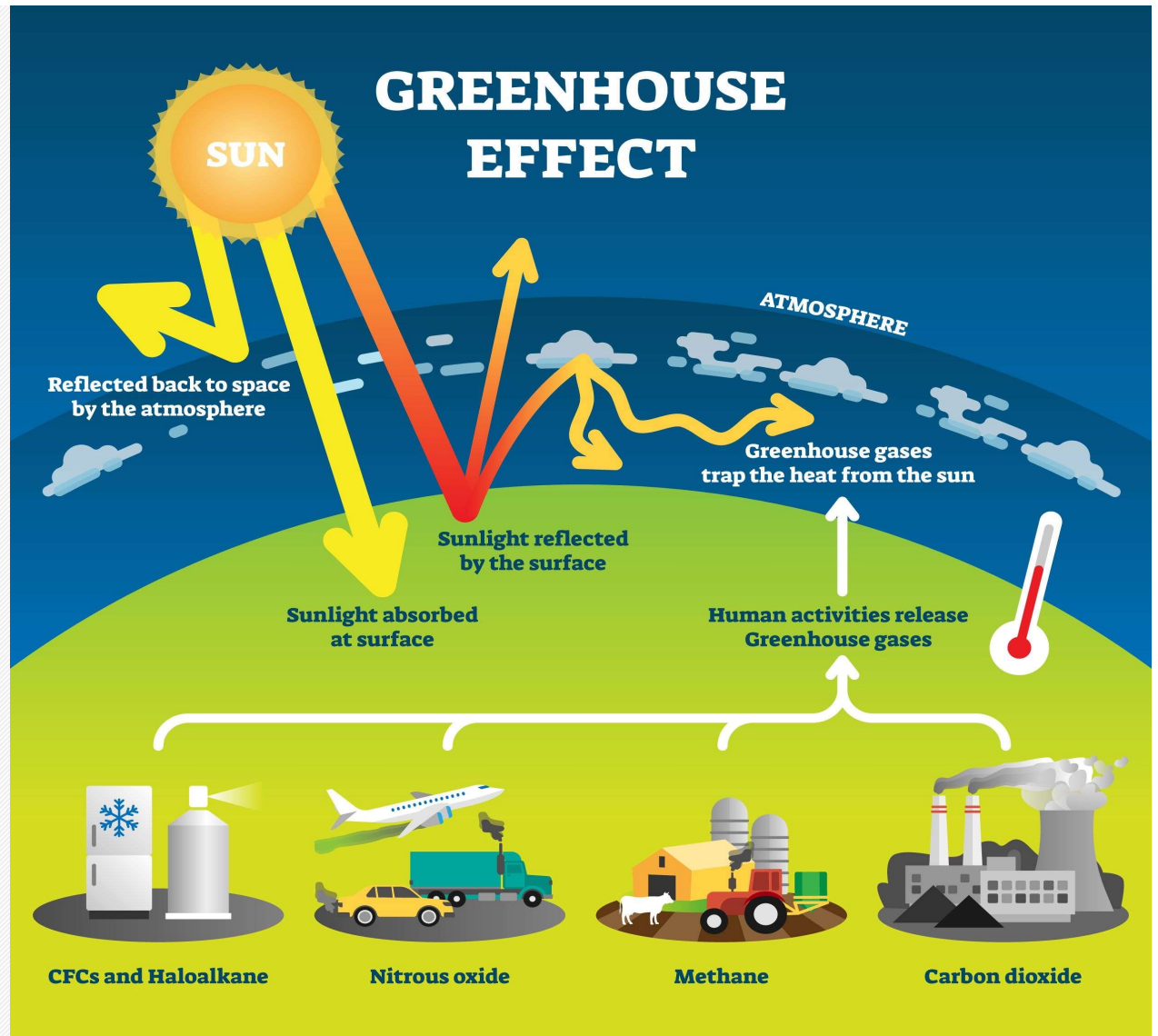


By Temakholo Mathebula



CLIMATE CHANGE

WHAT IS CLIMATE CHANGE?



CLIMATE CHANGE

- Shifting of the overall weather patterns due to atmospheric changes brought on primarily by human activity globally.
- For KZN interior these changes include
- Increased rainfall variability (*later onset of seasonal summer rains, increased incidence of storms and hail, increased incidence of droughts and dry spells*)
- Increased temperature (*average 2 °C increase in minimum and maximum temperatures, increase in number of un-seasonally hot days, reduction in winter snows and rainfall*)



CLIMATE CHANGE EFFECTS

- Climate change is already impacting human health. Changes in weather and climate patterns can put lives at risk. Heat is one of the most deadly weather phenomena.
- As ocean temperatures rise, hurricanes are getting stronger and wetter, which can cause direct and indirect deaths.
- Dry conditions lead to more wildfires, which bring many health risks.
- Higher incidences of flooding can lead to the spread of waterborne diseases, injuries, and chemical hazards.
- As geographic ranges of mosquitoes and ticks expand, they can carry diseases to new locations.

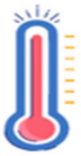
CLIMATE CHANGE EFFECTS



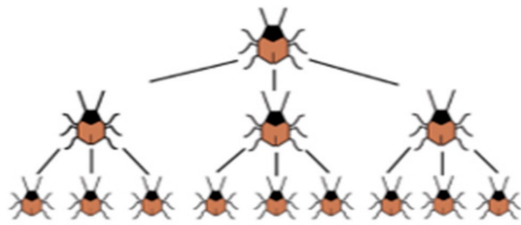
Pollution of water sources



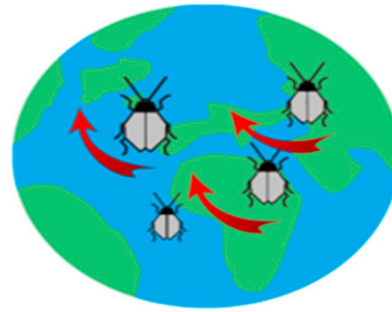
Landslides



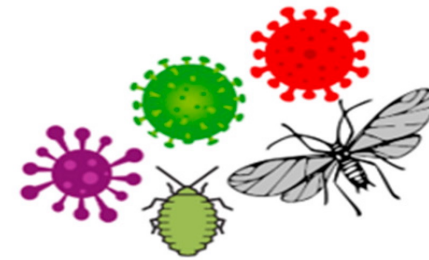
HOW DOES TEMPERATURE INCREASE AFFECTS INSECT PESTS?



Increased number of generations



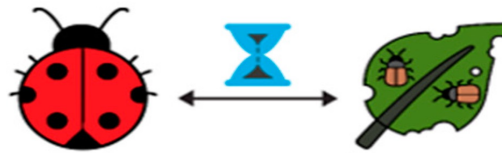
Expansion of geographic range



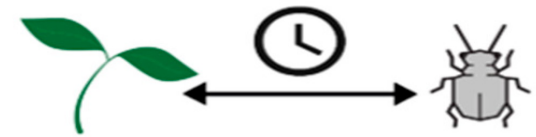
Outbreak of plant diseases transmitted by insects



Increased overwintering survival



Desynchronization of insects and their natural enemies



Loss of synchrony with the host plant

CLIMATE CHANGE EFFECTS: INCREASE IN PESTS AND DISEASES



CLIMATE CHANGE EFFECTS KZN



CLIMATE CHANGE EFFECTS IN SOUTH AFRICA

1. DAY ZERO

No water for Gauteng by 2030



2. HEATWAVES

More wildfires and more deaths



SOUTH AFRICA ON THE BRINK OF GLOBAL HEATING DISASTER

1.5°C
could lead to

Lower rainfall will decimate crops

4. FOOD SHORTAGES



200km/h winds will rip through SA

3. CYCLONES



F4CJ: PROBLEM STATEMENT

- The COVID-19 Pandemic has exposed how fragile food systems are (FAO, 2020). This crisis coupled with the growing climate emergency has highlighted how people rely on community networks in order to survive in uncertain times.
- **Eco-feminists argue that the disproportionate distribution of resources and the preferential treatment given to men and industrial agriculture are intersectional concerns that often leave women and regenerative forms of agriculture at disadvantage (Shiva, V, 2016).**

Research Question

How can solidarity networks undergird agro ecology to enhance resilience of women in the face of climate change?

- Sub-question 1: What existing networks already support agroecology practices of women? What inhibits and enables these solidarity networks?
- Sub-question 2: How does an understanding of solidarity networks contribute to the concept of social innovation and the practice of agroecology?

Methodology

- ❑ A PAR Approach was used in this research
- ❑ Limitation of research: research acknowledges that timeframe shorter than what is required for PAR, since PAR is already part of MDF then research will be seen in broader reflection of MDF's work
- ❑ Research was conducted in a series of interviews; individual interviews, focus group discussions, cross learning workshops
- ❑ Outputs (animations/videos/handbook)



Context of Study-KZN

- ❑ Area: Swayimane and Ozwathini areas are situated between 50 and 90 km from Pietermaritzburg, KwaZulu-Natal.
- ❑ High rainfall areas, with a lot of mist in Ozwathini in summer. Deep well drained soils that are mostly reddish brown in colour.
- ❑ This study focused on smallholder farmers, majority of whom are women from Ozwathini, Gobizembe and Mayizekanye between the ages of 40 and 80 years old.
- ❑ Between 5-10% of participants are men between the ages of 40 and 75 years old.



Understanding Solidarity Networks and their Link to Farming

- Solidarity networks can be described as groups (both formal and informal) of mutual interests and cooperation that are formed, often in response to harsh realities such as climate change and COVID 19.
- According to Smith (2009), solidarity networks focus on and explore alternatives to the challenges of marginalization, underdevelopment, and poverty in communities.
- Another source describes them as a form of **mutual insurance**, especially amongst agrarian communities (Fafchamps, 1992).

Findings: Solidarity Networks in Midlands

A focus group was held in Swaymane on the 17th of February where farmers were asked to identify existing solidarity networks. Below were the main findings with regard to solidarity networks:

- ❑ Mahlathini Learning Groups (Conservation Agriculture)
- ❑ Stokvels (meat, blanket, money, funeral)
- ❑ Savings and Loan Associations
- ❑ Groups that assist orphans
- ❑ DARD Farmers' Association
- ❑ Livestock groups (broilers, layers, goats, calves, rabbits)
- ❑ Mushroom Production Groups
- ❑ Church Groups



Solidarity networks tend to play a pivotal role in how farmers make decisions around farming

Benefits and Challenges of Solidarity Networks

BENEFITS OF SOLIDARITY NETWORKS

- Knowledge access and sharing
- Conservation of soil and water
- Saving money for various needs
- Preservation of culture (the principles of *Ubuntu* (humanity) and *ubumbano* (solidarity))
- Mitigating the effects of climate change

CHALLENGES

- Jealousy amongst group members
- Poor attendance of meetings
- Lack of cooperation amongst group members
- Gossiping
- Cliques
- Lack of confidentiality
- Poor record keeping

WHAT ENABLES AND INHIBITS NETWORKS?

What enables networks to function well?

Working together with a common goal
Gaining of new knowledge and skills on good agricultural practice
Love for farming
Able to grow food for our families
Physical exercise
Helping the needy
Eat food from our own garden/field
Assist each other with market
Bulk buying

What are the opportunities for growth?

Build stronger relationships
Plant new types of crops and due to CC
To grow more food due to increase in demand for local produce
Buying produce from one another

What inhibits networks from performing well?

Lack of sufficient training on usage of chemicals
Poor coordination
Differing views
Not attending meetings/demos and expecting to piggy back on others
Gossiping
Lack of trust
Poor record keeping

What could threaten the future of local networks?

Unpredictable weather patterns
Old age
Rise in input costs
Competition with commercial farmers
High mortality due to COVID and other diseases

Findings on the Role of each Network

- Matrix ranking for the three areas revealed that Regenerative Agriculture ranked the highest in all 5 of the benefits listed by farmers which were used as criteria to do the matrix ranking.
- From these findings it became clear that RA contributes not only to knowledge creation and soil and water conservation but also has a positive impact on strengthening community relations.
- Stokvels, burial schemes, savings groups and church groups played a more significant role in saving money, preservation of cultural values and solidarity.
- There was an indirect link between local savings groups/stokvels and farming activities.

	CA learning group	DARD Farmers Association	Sewing Group	Money Stokvel	Grocery Stokvel	Harvesting Group
GOBIZEMBE						
Access to Knowledge	2	2	2	1	2	2
Soil and water conservation	2	2	0	0	0	1
Saving money	2	2	2	2	2	1
Increased resilience to climate change	2	0	0	0	0	1
Preservation of culture	2	2	2	1	2	2
Solidarity	2	1	2	2	0	2
TOTAL	12	9	8	6	6	9
	CA learning group	DARD Farmers Association	Savings Group	Burial scheme	Stokvel	Harvesting Group
MAYIZEKANYE						
Access to Knowledge	2	2	2	2	2	2
Soil and water conservation	2	2	0	0	1	1
Saving money	2	2	2	2	2	1
Increased resilience to climate change	2	2	2	0	0	1
Preservation of culture	2	2	2	1	2	2
Solidarity	2	2	2	2	2	2
Mayizekanye	12	12	10	7	9	9
	CA learning group	DARD Farmers Association	Calf Group	Savings Group	Burial Scheme	Harvesting Group
OZWATHINI						
Access to Knowledge	2	2	2	2	2	2
Soil and water conservation	2	1	2	0	0	0
Saving money	2	2	2	2	2	1
Increased resilience to climate change	2	1	2	0	0	0
Preservation of culture	2	2	2	0	2	2
Solidarity	2	2	2	2	2	2
TOTAL	12	10	12	6	8	7

Context of Study-Mpumalanga

- Women, in the area that ZU focuses on, live below the recognised UN poverty line of \$1.90 a day.
- A core concern of ZU was to address this and assist women out of poverty. There was an urgency to ensure that women had some form of food security while looking for ways of increasing their ability to make money.
- ZU turned to permaculture as a philosophical and practical action to address food insecurity.



ZU: Background

- In 2019, Permaculture Explorers, a programme of ZU launched the “Above the Lines” project in Acornhoek, for 20 women headed households.
- In 2021 a second and third class graduated from the RDP village and Rooiboklaagte B Village. A total of 53 women have received education in Permaculture and small enterprise development.
- As ZU reflected on the initiative, they also introduced education around mentality control, making wise choices and creating action plans (Zingela Ulwazi, 2022).

Findings from Research: ZU Solidarity Networks

The following networks were dominant across all three groups.

- Society groups (community burial associations)
- Stokvels
- Old age care centres
- Farming cooperation
- Social clubs (help with groceries, food)
- Soap making project
- Day care centres
- Poultry and eggs projects
- Sewing projects
- Anti - GBV groups (Sekwanele self-defense group)

Findings from Research: ZU Solidarity Networks

Links between farming and networks:

- It helps to access market
- To access funds
- Learning from each other

How can networks strengthen agro-ecology?

- by explaining the benefits of organic farming
- explaining the difference between agro - ecology and agriculture and the health benefits thereof.
- Advocating for organic food to help with chronic illness.



Amagapu

	Abakwini	Amabul'inyisi	Amankomo	Ukongu	Amagapu	Amabul'inyisi
2	2	2	2	2	2	2
2	1	2	0	0	0	0
2	2	2	2	2	2	1
2	1	2	0	0	0	0
2	2	2	0	2	2	2
2	2	2	2	2	2	2
12	10	12	6	8	7	

2 = good 1 = okay 0 = bad



Thank You!