

EIGHTH
EDITION

WHY NOT YOU? WHY NOT NOW?

SPARK

CHANGEMAKER NETWORK MAGAZINE

06 What is
Climate Change?

10 What can
we do now?

CHANGE
MAKER
NETWORK



masifunde's Changemaker Network

With the Changemaker Network, masifunde aims to capacitate learners with knowledge on relevant social topics such as leadership, prevention of gender-based violence, community safety, bullying or holistic health. Through the network, the participating learners are empowered to spark change in their schools and communities.

Firstly, masifunde runs activation workshops in all Grade 9 classes. In these workshops, the learners nominate and select suitable changemakers within their class. The selected learners then join a one-week training. In this training they learn tools and methods on how to run campaigns and share knowledge with their peers.

Afterwards, on a quarterly basis, the now trained changemakers share the knowledge they have learnt through advocacy school campaigns.

This edition's **Contents**

- Foreword **03**
- MCN info and status **04**
- What is Climate Change? **06**
- What causes Climate Change? **07**
- Reality check! Effects of Climate Change **08**
- Impact of Climate Change **09**
- What Can We Do Now? **10**
- What is an Eco-changemaker **11**
- Activity 1 - Mitigation & Adaptation **12**
- Activity 2 - Sustainable Living: 5 R's **13**
- Activity 3 - Sustainable practices **14**
- Q&A with Climate Change Activist **15**

With funding from

 Austrian
Development
Cooperation



More on Masifunde
www.masifunde.org

More on the Changemaker Network
www.Changemaker-Network.org



FOR WORD



In this edition of Spark the changemaker focus is on the challenge of climate change. Climate change is about a bunch of things, all interacting, that act to "turn up the volume" on things like rainfall, wind, heat, and currents in the air and the sea. Our planet is a complex mix, a "system" of interacting parts that allow us to live our day-to-day lives through providing us with things like oxygen and food. But this is changing, and changing faster. Two things especially are happening that we need to urgently pay attention to and act upon. The first is that we're changing the conditions on the planet. The second is that we're reducing the planet's ability to cope with the change, we're reducing its resilience. And the science is clear, the "we" in the story is us, you and me, the species we call humans.

But life on the planet is tough, we've evolved and adapted to seasons, we've sailed our boats through storms before, and survived thousands of years. Except in this case we're punching holes into the same boat we're sailing.



Dr Gary Koekemoer
Climate Change Expert

Participating Schools & progress made

Status:
MAY 2024

47 participating schools in Nelson Mandela Bay
207 learners trained as Changemakers



MCN NATIONAL REPPLICATION

In 2023, The Masifunde Changemaker Network has been replicated in:

- ▶ **9** provinces in South Africa.
- ▶ **40** Civil Society Organisations have been capacitated and trained to replicate MCN in their communities.
- ▶ **200** schools have been reached.

- ▶ **207** NMB Changemakers trained on GBV and Climate Change during the March School Holidays for their campaign.





What is Climate Change?

Climate change refers to the overall changes in the Earth's land and sea temperatures, winds, rainfall, ice coverage, and sea currents over a long period of time. The planet's climate has naturally changed a number of times in the past thousands of years, due to volcanic eruptions, meteor strikes, and changes in the sun's activity. But in the last 200 years, human activity, such as the burning of fossil fuels and how we use the land and sea, has started changing the climate on an accelerating basis – the changes are getting bigger, and faster.

Understanding climate change is crucial for all, especially the younger generation who will inherit the Earth and have to deal with bigger changes than we have now.

To understand Climate Change, let us first define what is "weather" and what is "climate"

- Weather** - Is the state of the atmosphere at a particular place at a particular time or for a limited period of time (for example a Day or a Month). "It's raining today" – that's weather
- Climate** - Is the average state of the weather at a particular place over a long period of time (several decades). "the Earth's land temperature has been increasing on average every year for the last two hundred years" – that's climate change.

Other terms we will need to know as we delve into this magazine

Global Warming

A gradual increase in the overall temperature of the Earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide, CFCs, and other pollutants.

Pollution

The introduction of harmful materials into the environment. These harmful materials are called pollutants. Pollutants can be natural, they can also be created by human activity, such as trash or runoff produced by factories. Pollutants damage the quality of air, water, and land

Greenhouse gases

These are gases that contributes to the greenhouse effect by absorbing infrared radiation. Carbon dioxide and chlorofluorocarbons (CFC) are examples of greenhouse gases

WHAT CAUSES Climate Change?

The Greenhouse Effect

When we use coal to generate electricity, when we use petrol to drive our cars, when we burn forests to clear land for farming, we release a gas called carbon dioxide into the air. And that gas drifts up into the atmosphere and traps more of the sun's energy, which heats up the "greenhouse" we all live in, and that extra heat begins to change the weather patterns of the planet we're used to. The air gets hotter, icebergs begin to melt, the seas rise and heat up, the wind changes, storms get stronger, it rains less and then it rains a lot (it "bombs" down). And when we change the conditions, other things start to change too, fish move, rivers dry up, wildfires increase, tides get bigger and wash away the shoreline, and floods happen more frequently. Like a spiderweb, touch one part and the whole web feels it.



The re-radiation of heat warms the planet's surface, creating a stable climate necessary for life. But human activity has increased the amount of greenhouse gases, which means the "blanket" keeps more heat in. Basically, we've turned up the heat.

These activities have cause the Earth to warm by approximately 1.1°C already since the 1800's. And we're heading for 1.5°C by 2030. While this might not sound like much, it has significant implications for people and wildlife around the globe, as the temperatures rise at an unusual rate.

Those human activities include things such as:

- Burning fossil fuels
- Industrial factory processes
- Polluting the air, land and sea

REALITY CHECK!

Effects of Climate Change

Around the world, there has always been heat & cold waves, storms, floods, droughts and other disasters due to the weather. However, climate change has "turned up the volume" on these natural disasters, making them bigger, and more regular.

In a South African context, changing conditions vary from region to region, leading to a great diversity of weather patterns. Here are some of the prevalent conditions:

Increasing/Decreasing Temperatures

South Africa has warmer summers and winters are becoming more common, leading to prolonged heatwaves and higher temperatures. However, colder than normal conditions have also been observed in parts of the country.



Hotter, drier and windier conditions increase the risk of wildfires. Like the recent wildfires in Schoenmakerskop and Sardinia Bay and the many parts of the Eastern and Western Cape. Wildfires affect wildlife, the ecosystem and human settlements.

Changing Rainfall Patterns

There is a change in rainfall, either too little or too much rain falls, resulting in events such as droughts, water scarcity and heavy rainfalls, leading to floods.



Settlements were badly hit by the flooding in Durban in 2019 and then again in 2022. More recently, there were devastating floods in Kariega in 2024.



In 2022, Nelson Mandela Bay faced a shortage of drinking water as our dams dried up and leading to a situation similar to the "Day Zero" experienced in the City of Cape Town a few years ago

Rising Sea Levels

Rise in sea levels is a concern around a number of coastal cities in South Africa, putting shorelines at risk of storm surges and coastal erosion, an example would be the flooding that happened in September 2023 in the Swartkops (Kwazungu) Estuary and impacted the communities of Swartkops and Amsterdamhoek..

HOW CAN CLIMATE CHANGE IMPACT me and my community?

By turning up the volume on the weather, our daily lives are impacted in many ways, for instance:

Heat Waves

Rising temperatures, dryness, and wind exacerbate conditions, particularly affecting vulnerable groups like the elderly and children. Heatwaves increase health risks like heat exhaustion and may contribute to mental health issues among children.



Flooding

Intense rainfall leads to increased runoff, potentially overwhelming drainage systems and causing flooding that damages infrastructure like homes, roads, and bridges.



Damaging Infrastructure

Extreme weather events disrupt schooling, causing children to miss classes in affected areas and damaging school infrastructure.



Water Scarcity

Diminishing water resources necessitate conservation measures like shorter showers, using recycled water for non-drinking purposes, and rainwater harvesting to mitigate scarcity-related issues



Ecosystem Services

Climate change and pollution threaten ecosystems, leading to the extinction of vital species like bees, which impacts food production through decreased pollination.



Food Scarcity

Erratic weather patterns diminish crop yields, leading to food shortages and increased prices due to decreased agricultural productivity.



WHAT CAN WE DO NOW?

Mitigation, adaptation and building resilience are three key approaches to addressing climate change

MITIGATION

Mitigation refers to actions taken to reduce or prevent the drivers of climate change, such as the further emission of greenhouse gases, which are responsible for global warming

ADAPTATION

Adaptation, on the other hand, focuses on adjusting and preparing for the impacts of climate change that are already occurring or are expected to happen in the future. Adaptation strategies aim to minimize the negative consequences of climate change.

BUILDING RESILIENCE

Building resilience, because climate change combines with other factors such as pollution, the overall health of our ecosystems declines, and their resilience to change is reduced.

ALTERNATIVE ENERGY SOURCES

- Wind
- Solar
- Hydro power

ECOSYSTEM

- Restore derogated wetlands
- Restore floodplain systems

INFRASTRUCTURE

- Urban forests and green spaces
- Rainwater harvesting
- Strategic planting of mangroves
- Bioswales

BUILDING RESILIENCE

BUILDING CLIMATE CHANGE RESILIENT COMMUNITIES

AGRICULTURE

- Hydroponic farming
- Use of Agri AI tools

EDUCATION

- School infrastructure should be able to withstand natural disaster.
- The schools should have a disaster management plan

HEALTHCARE

- Ensure health care facilities have plans in place, for virus outbreaks.
- Educate communities about viruses and how best to treat them



What is an Eco-changemaker?

An Eco-changemaker is an individual or entity actively involved in driving positive environmental change. These individuals promoting sustainability, conservation, and eco-friendly practises in different ways. They may engage in advocacy, education, innovation, policy-making, or grassroots initiatives to address environmental challenges and promote a more sustainable future. Eco-changemakers can include environmental activists, conservationists, scientists, educators, entrepreneurs, policymakers, changemakers and everyday citizens who are dedicated to making a difference for the planet. They play a crucial role in raising awareness, inspiring action, and implementing solutions to protect the environment and preserve natural resources.



Eco-changemaker to do list

Educate those around you about climate change

Follow the 5R's

Save waste & keep waste out of water

Consume responsibly

Keep plants healthy

Upcycle and donate your clothes

Save electricity

Don't waste food

Lead by example, Be the Change

ACTIVITY

On the table below are examples of activities that address climate change, tick the box which the statement refers to.

Activities	Mitigation	Adaptation
a Using public transportation or carpooling instead of driving alone to reduce carbon emissions from vehicles.		
b Installing solar panels on rooftops to generate clean and renewable energy.		
c Implementing water conservation measures and efficient irrigation techniques in regions experiencing drought.		
d Modifying agricultural practices to cope with changing growing seasons and shifting weather patterns.		
e Planting trees and creating green spaces to absorb carbon dioxide from the atmosphere.		
f Promoting recycling and reducing waste to minimize the release of greenhouse gases from landfills.		
g Constructing flood barriers and improving drainage systems in areas prone to increased rainfall and flooding.		
h Encouraging the use of energy-efficient appliances and LED lighting to reduce energy consumption		
i Implementing water conservation measures and efficient irrigation techniques in regions experiencing drought		
j Tweaking your diet and eating more plant-based meals		
k Not wasting food		

ANSWERS: a-M • b-M • c-A • d-A • e-M • f-M • g-A • h-M • i-A • j-M

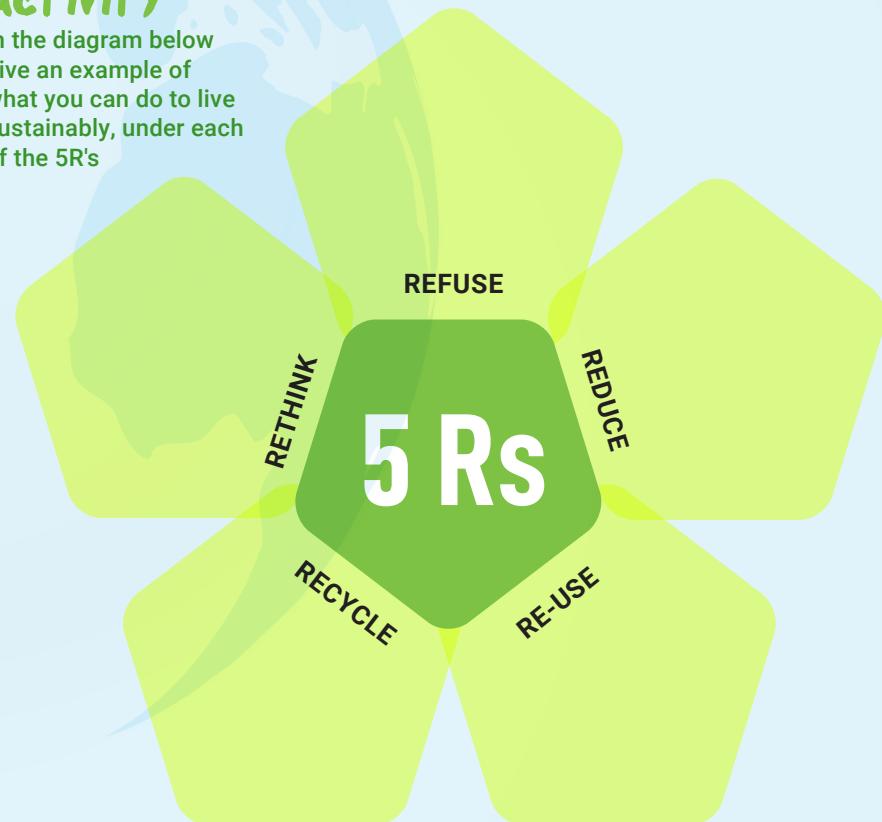
SUSTAINABLE LIVING

Climate change results from human activity and requires a change in our lifestyle to ensure a sustainable future. Remembering the 5Rs:

Refuse, Reduce, Reuse, Recycle, and Rethink—is key. Refuse single-use plastics, reduce waste, reuse items, recycle materials, and rethink consumption habits. This approach minimizes our environmental impact and fosters a partnership with nature, preserving our only home for future generations.

ACTIVITY

In the diagram below give an example of what you can do to live sustainably, under each of the 5R's





SUSTAINABLE practices

List individuals or organizations in your own community that are taking climate action. E.g. community gardens.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Q&A

with climate change activist:
Lusanda Msebi
Founder of CYDA



Q: Please give us background on your organization

A: Catwalk Youth Development Agency (CYDA) Is a youth development agency, with the intention to nurture, empower and transform local youth to be self-reliant, independent and the key players in bringing in their communities. Our mission is to mainstream youth issues such as youth unemployment into the society and facilitate youth development by activating communities to create healthy, caring and responsible individuals. We envision a world where all young people are inspired and equipped to create the future they want.

Q: What Inspired You to Get Involved with Climate Change Advocacy Work

A: Growing up in Motherwell, I witnessed rampant illegal dumping and waste. Joining the Hlumani Nande Environmental Ambassadors ignited my passion for environmental issues. Discovering the impact of waste on the Swartkops Estuary spurred me to take action. My journey began with local activism, which evolved into educating others on climate change and founding CYDA, dedicated to climate advocacy and promoting a circular economy.

Q: What programs has your organization implemented to combat climate change?

A: Our organization hosts knowledge-sharing workshops to educate communities on environmental impact. Our Eco-minded Creative Ambassadors program activates youth to be environmentally conscious. Community clean-ups reduce waste in the Swartkops Estuary and raise awareness about climate change. Our sustainable fashion project promotes thrifting and upcycling to reduce textile production and waste.

Q: What challenges have you encountered in the implantation of these program

A: Our main challenge is making environmental content relevant and interesting, especially for communities facing socio-economic issues. Terminology can be a barrier. We tackle this by using a passionate, sincere approach, empowering people to find innovative solutions and live sustainably with what they have, despite challenges like water access. Adaptation to the climate crisis demands lifestyle changes to ease environmental stress.

Q: How can the youth get involved in the Environmental Space?

A: Keep learning by reading and staying curious. Understanding terms, concepts, and policies gets easier with time. Find what interests you and use your skills to make a positive impact. Live environmentally consciously and inspire others. Collaborate with like-minded individuals and seize opportunities like the Presidential Climate Commission in Nelson Mandela Bay.

Q: Message for the Youth

A: As youth, we have energy, and we need to channel that energy into the climate change space. We can make a difference by coming up with innovative solutions to create change for the future. Find a space that interests you, immerse yourself in it, stand up firmly for what you believe in. We need to conserve our resources and preserve our planet for future generations by sharing the practices Indigenous African communities have been putting into practices to conserve our planet.





FOLLOW US ON: [f Changemaker Network](#) [@ Changemaker_Network](#)

www.Changemaker-Network.org

Resources

Green cycle – recycling collection services

Collecting recycled waste and send it to the relevant recyclers for processing
www.greencycle.co.za • 041 581 2174

The Re-Trade Project – community -based recycling

Community recycling, trading project and recycling education & environmental law
www.retradeproject.co.za • 041 367 1100

Motherwell Community and Enviro Hub

Community recycling and environment hub for various activities related to sustainability, waste management, and environmental education by means of workshops, waste sorting, craft-making, food gardens and composting.
www.environmentcen.co.za • 076 608 3587

H & M Recycling Programme

*Take a bag of your old clothes to H&M and receive a 15% discount off your next purchase
For more information visit any of their stores near you or get more information on their website.*

Green Cape

*A non-profit organisation that drives the widespread adoption of economically viable green economy solutions from South Africa, also supports School Eco-clubs.
info@greencape.co.za • 021 811 0250*

WEssa Eco-schools

*Eco-Schools is the largest global sustainable schools programme – it starts in the classroom and expands to the community by engaging the next generation in action-based learning
cindy.cloete@wessa.co.za • 064 752 0598*