CLIMATE ACTION

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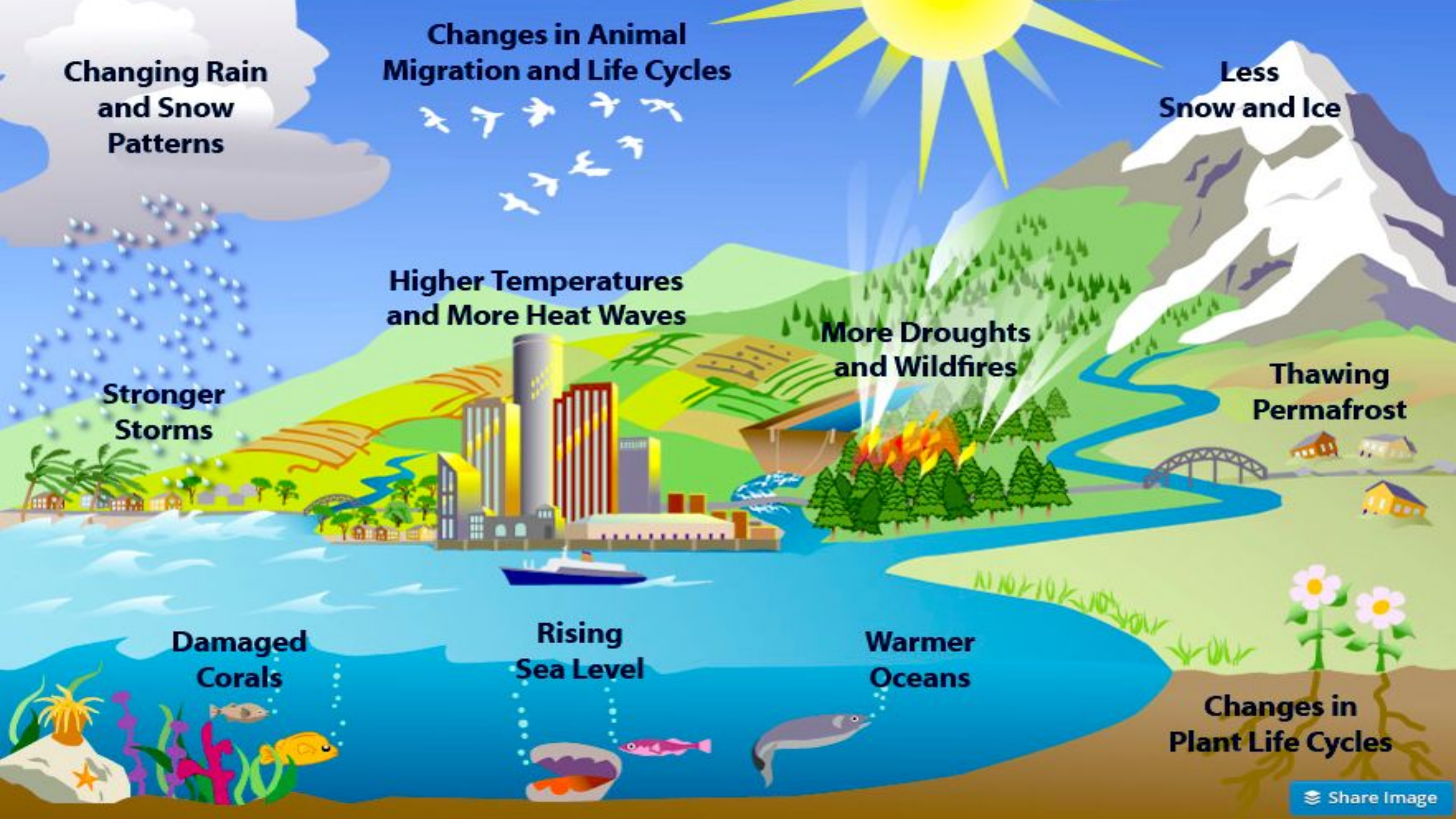
INTRODUCTION TO CLIMATE ACTION

- **Global Climate Change Overview**: Climate change refers to long-term changes in temperatures and weather patterns, primarily due to human activities like deforestation, burning fossil fuels, and industrial processes.
- These activities release greenhouse gases (GHGs) such as carbon dioxide (CO2), trapping heat and causing global warming. The impacts include more extreme weather events, sea-level rise, and disruptions to ecosystems.


Changing Rain and Snow Patterns
Changes in Animal Migration and Life Cycles
Less Snow and Ice
Higher Temperatures and More Heat Waves
More Droughts and Wildfires
Thawing Permafrost
Stronger Storms
Damaged Corals
Rising Sea Level
Warmer Oceans
Changes in Plant Life Cycles
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Relevance to Southern Africa :

- Southern Africa is highly vulnerable to climate change due to its geographical location and socio-economic context.
- The region has experienced increased temperatures, prolonged droughts, and unpredictable rainfall, all of which threaten agriculture, water security, and health. This makes climate action crucial to the region's sustainable development and survival.

•What is climate action ?

•Climate Action refers to efforts taken to combat climate change and its impacts.

WHY CLIMATE ACTION MATTERS TO UNIVERSITIES

- **Centers for Knowledge & Innovation:** They are the birthplace of ideas, research, and solutions. Universities can lead in finding and applying new technologies and methods that help mitigate and adapt to climate change.
- **Role in Shaping Policy:** Universities generate research that can inform government policies on climate change.
- **Empowering Future Leaders:** Students in today's universities will be the professionals and leaders in various fields tomorrow.

KEY AREAS FOR CLIMATE ACTION IN UNIVERSITIES

- **Sustainable Campus Infrastructure:** Universities can take steps to make their own operations more sustainable. This includes energy-efficient buildings, reducing waste, and using renewable energy sources like solar and wind power.
- **Research and Innovation:** Universities should encourage research on climate-related topics, such as renewable energy, climate-resilient crops, or new technologies that reduce carbon emissions.

- **Curriculum and Education**: It's important to integrate climate science and sustainability across various disciplines, not just environmental studies.
- **Community Engagement**: Universities are often in close contact with surrounding communities. They can engage these communities by sharing knowledge on sustainable practices, providing training on climate resilience, and participating in local climate projects

CHALLENGES ASSOCIATED WITH IMPLEMENTING CLIMATE ACTION

- Financial Constraints
- Policy Gaps
- Lack of awareness
- Technological Limitations
- Resistance to Change
- Infrastructure Limitations

STRATEGIES FOR OVERCOMING CHALLENGES ASSOCIATED WITH IMPLEMENTING CLIMATE ACTION

- **Partnerships:** Universities can collaborate with governments, the private sector, and international organizations to pool resources and expertise for climate projects.
- **Capacity Building:** Offering workshops and training sessions can help increase awareness and build skills among university staff and students on sustainable practices.
- **Innovation Hubs:** Establishing climate and sustainability innovation hubs within universities can drive targeted research and foster collaboration across different academic disciplines, ensuring that climate solutions come

HARARE INSTITUTE OF TECHNOLOGY INITIATIVES

- Have Environmental Management, Renewable Energy and Climate Change (EMRECC center
- EMRECC is responsible for leading proffering of technological solutions to climate change, energy and environmental management.
- Schools/ Faculties are intrinsically linked to EMRECC initiatives
- Each subject or course has sustainability and Environmental protection content

Climate Actions for a healthy planet

1. Save energy at home. Much of our electricity and heat are powered by coal, oil and gas
2. Change your home's source of energy
3. Walk, bike or take public transport.
4. Switch to an electric vehicle
5. Consider your travel (transport system)
6. Reduce, reuse, repair and recycle.
7. Eat more vegetables and Throw away less food.

CONCLUSION

In conclusion, Southern African universities are uniquely positioned to be leaders in the fight against climate change. As centers of knowledge, research, and innovation, they have the power to shape future leaders, influence policies, and create sustainable solutions that address both local and global climate challenges. However, to unlock this potential, universities must overcome significant challenges, including financial limitations, policy gaps, and technological constraints.