



14th November 2024

Economics Association of Malawi (ECAMA) Conference

TOPIC

CLIMATE CHANGE ADAPTATION AND LAVERAGING
CARBON TRADING FOR RESILIENCE.



A Presentation by

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Presentation Outline

1 Introduction

2 Climate Adaptation & Mitigation

3 Leveraging carbon trading for resilience

4 Role of ECAMA & Stakeholders

5 Conclusion & Call to action

Introduction

- **Despite efforts to curb global greenhouse gas emissions, the impacts of climate change are intensifying and causing mounting losses and damages.**
- **IPCC estimates that, 3.3 to 3.6 billion people globally are highly vulnerable to climate change (IPCC, 2023).**
- **Developing countries like Malawi, are more exposed to climate hazards and more vulnerable to their impacts (OECD, 2021).**
- **Climate change impacts are not evenly distributed.**
- **Apart from loss of life, these impacts have devastating economic impacts.**

Impacts of Climate change

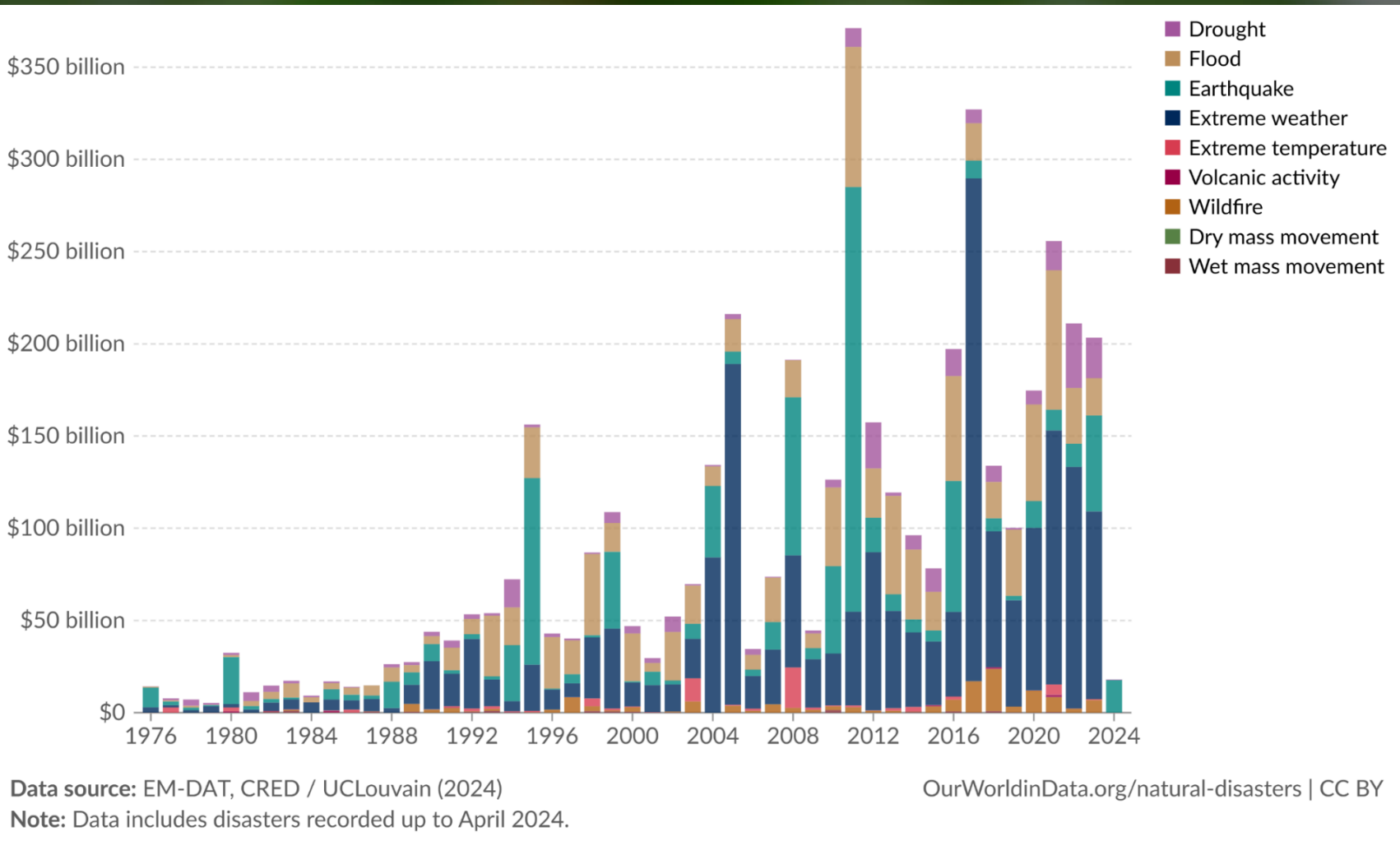
Economic

- Reduced output & production
- Loss of income & livelihoods
- Sectoral rationing
- Employment & tax revenue losses



Economic Damage by disaster type, 1976 to 2024

Global economic damage from disasters, differentiated by disaster category and measured in US\$ per year





Resilience

The ability of a system, community or society exposed to hazards to **resist**, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner.

The ability of an economy or a society to minimize welfare losses for a disaster of a given magnitude is its resilience.

Different indicators are used to quantify resilience. These then:

Track national progress

Compare resilience across countries

Target resources efficiently

Malawi Agenda 2063 for Malawi provides a clear pathway for resilience.

Vulnerability



Heavy reliance on biomass & hydroelectric power.

- Vulnerable to climate variability.



Agriculture is the largest source of greenhouse gas emissions, primarily from deforestation and unsustainable land use practices.



Deforestation contributes significantly to carbon emissions.



Critical infrastructure is vulnerable to extreme weather.

- Dependence on these climate-sensitive sectors constrain capacity to adapt.
- This inequality in the face of climate risk caused by highly variable exposure and vulnerability reinforces the link between climate action and resilience.

Climate change Adaptation and Mitigation

Response

- Actions taken to address the impacts of climate change.
 - mitigation (reducing greenhouse gas emissions) & adaptation (adjusting to the effects of climate change).
- Effective climate responses can help protect economies, ecosystems, and communities from the adverse impacts of climate-related hazards



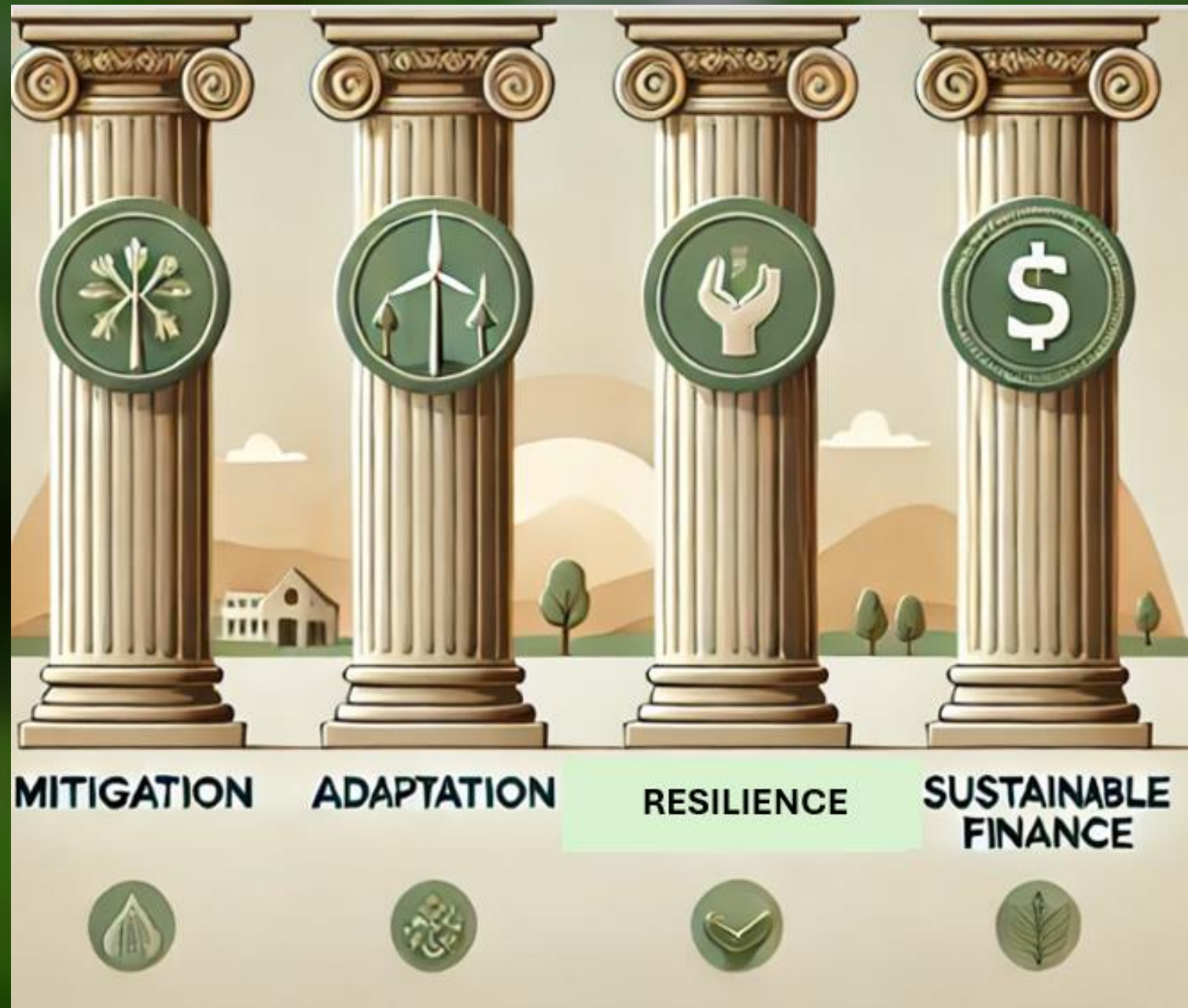
Pathways to a resilient Malawi

Mitigation:
Emission reduction efforts and renewable energy.

Adaptation:
Building climate-resilient infrastructure.

Resilience:
Reduce vulnerability and risk to strengthen resilience.

Sustainable Finance:
Carbon credits & green investments



Pathways to a resilient Malawi

- Increased investment in adaptation will be critical for building resilience to the impacts of CC.

Consistent with the Paris Agreement, Sendai, Malawi agenda 2063, there is a need to align finance flows with climate-resilient development and mobilize additional

- resources for necessary adaptation measures.
- There is a large unmet need for finance to implement investments in adaptation.

Both public and private sector should play a key role in financing adaptation.



Investments to reduce risk, prevent disasters, and for other adaptations to climate change
e.g. Resilient infrastructure, EWS etc.

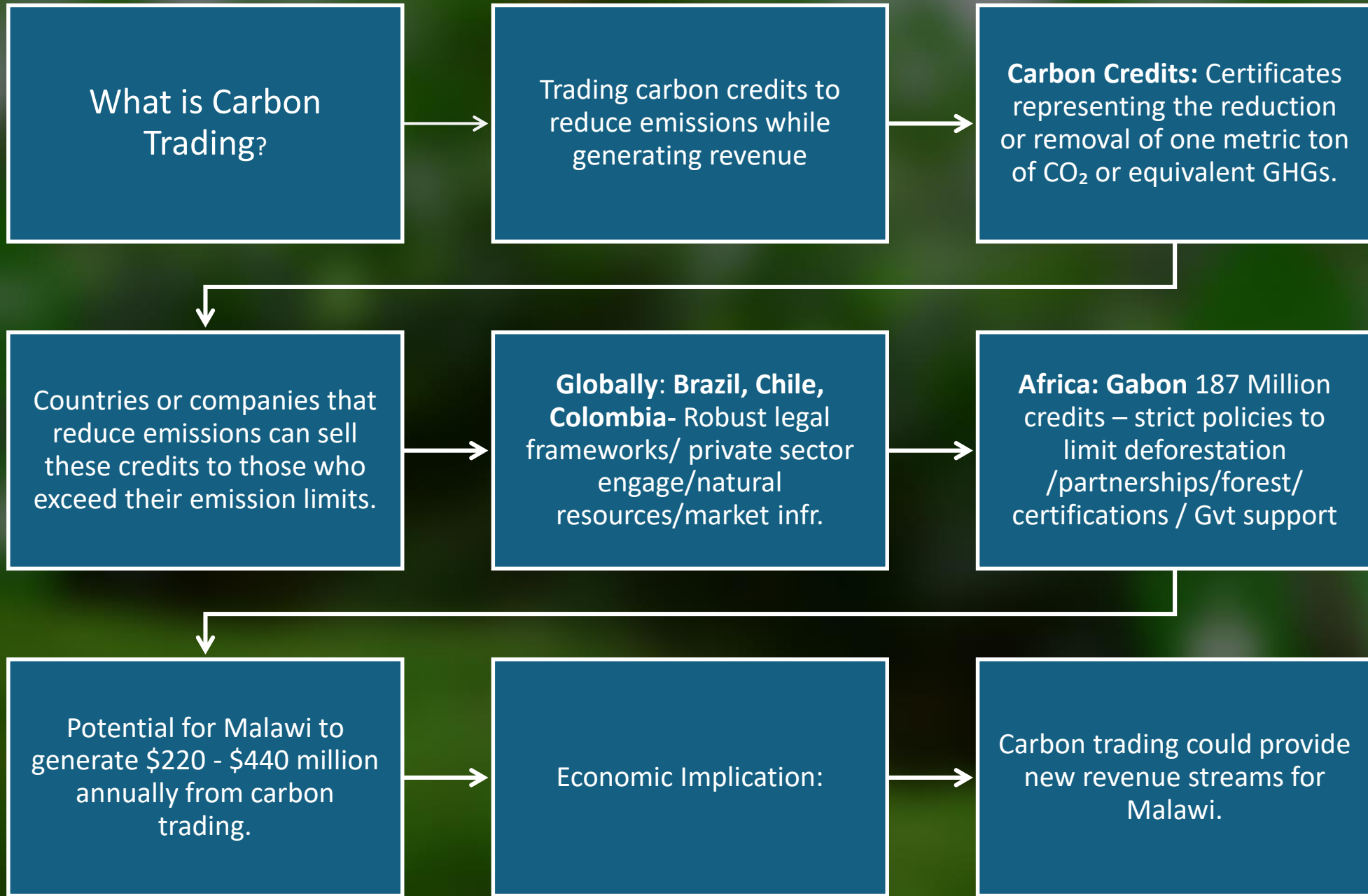


Resources to people and communities to cope with shocks
e.g. social safety nets

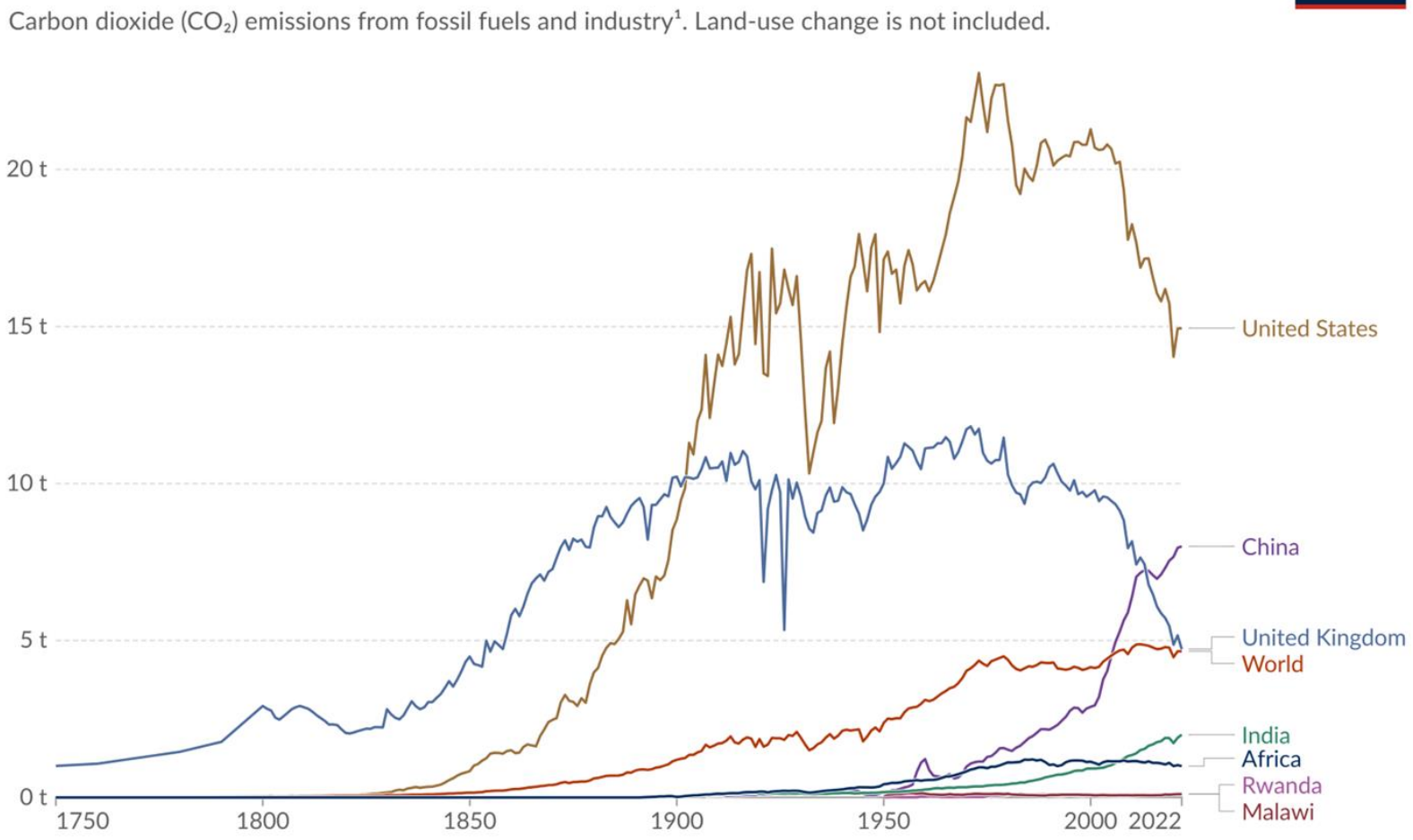
Financing to meet costs of disasters
e.g., Restoring services, reconstruction



CARBON TRADING



Per capita CO₂ emissions



Data source: Global Carbon Budget (2023); Population based on various sources (2023)
OurWorldinData.org/co2-and-greenhouse-gas-emissions | CC BY



Leveraging carbon trading for economic resilience



Opportunities

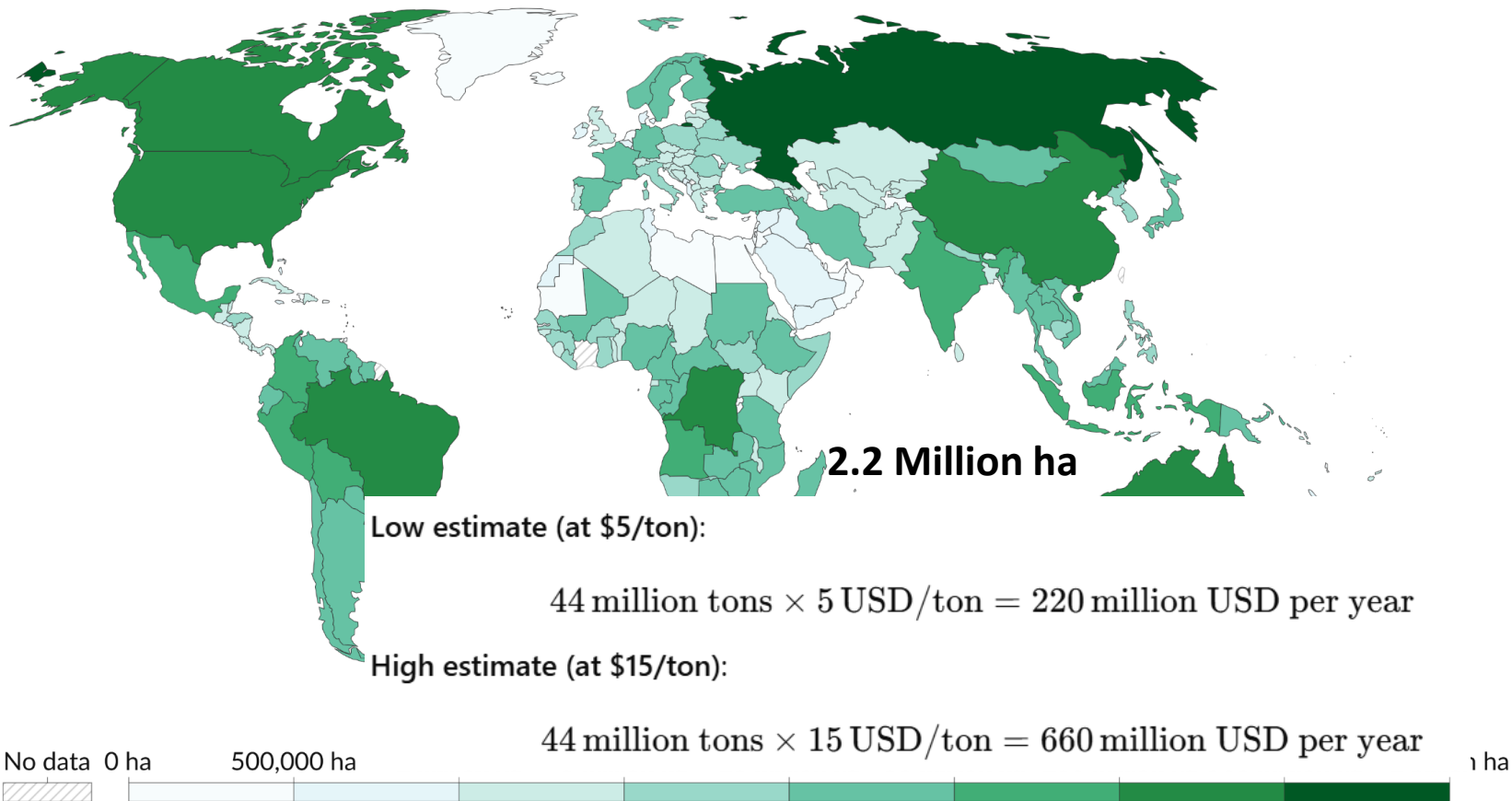
Malawi's vast forestry resources and agriculture-based economy & energy offer a significant opportunity to enter the carbon markets through reforestation, afforestation, and agricultural emissions reduction projects.

By conserving and expanding these forests, Malawi can generate carbon credits to sell in international markets.



Forest area, 2020

Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems.





Opportunities

Revenue Generation

By capitalizing on its large forested areas, Malawi could generate significant revenue potentially up to \$ 600 million annually—from carbon credits.

Environmental conservation and sustainable land management

The incentive to generate carbon credits encourages forest preservation, reforestation, and sustainable land use, helping protect biodiversity and reducing deforestation rates.

Rural Development and community empowerment

By involving local communities in carbon projects, such as forest management and reforestation, carbon trading can create job opportunities and generate income directly for these communities.



Opportunities

Climate Change Mitigation and Adaptation

Carbon trading contributes to global climate change mitigation by sequestering carbon and reducing greenhouse gas emissions. The funds generated can also support Malawi's adaptation measures, such as improved infrastructure, early warning systems, and resilient agricultural practices

Investment in resilience-building Initiatives

Revenue from carbon trading can be reinvested into crucial sectors like healthcare, education, and infrastructure, thereby strengthening Malawi's overall resilience. Such investments can bolster the country's ability to cope with climate-related hazards and economic disruptions.



The state of carbon trading in Malawi

Progress, but marred by several challenges

Regulatory and Institutional framework;

High transaction cost and limited local capacity;

Market access and price volatility;

Limited awareness and stakeholder buy-in

Challenges in measuring and verifying emissions reductions



Way forward



Carbon trading is vulnerable to various bottlenecks, including, supply-chain vulnerabilities, skills gaps, rising costs of capital, and obstacles to policy



Implementing ambitious climate policies alone is not enough



Government need to get the policy basics right, implementing nationally appropriate policy mixes that consider the full range of priorities, consider collaboration.



THE GOVERNMENT OF THE REPUBLIC OF MALAWI

Ministry of Natural Resources and Climate Change
Environmental Affairs Department

Building resilience

Sustainability

Promote
Public-
Private
Partnershi
ps

Engage local
communities &
explore regional
cooperations

Develop and
implement
high-quality
carbon offset
projects



Invest in
capacity
building/rese
arch /
innovation

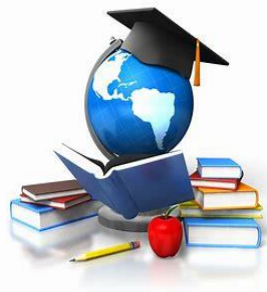
Strengthen
Policy and
Institutional
Frameworks

Knowledge gap

Strengthening
governance



NATIONAL
PLANNING
COMMISSION
SPEARHEADING WEALTH CREATION FOR ALL





Role of ECAMA & Stakeholders

ADVOCACY

Advocating for effective policies and frameworks that can maximize the benefits of carbon pricing.

RESEARCH

Research, analysis, and recommendations to help shape the country's carbon tax policies, ensuring they are both economically viable and environmentally sustainable

AWARENESS

Raise awareness among policymakers and the public about the potential of carbon tax to generate revenue for climate change mitigation and adaptation efforts.

PROMOTION

By promoting the development of a robust legal framework and equitable carbon pricing schemes, can ensure revenue generated from carbon tax is used effectively to benefit local communities and drive sustainable development.

Conclusions

- Malawi's economy is highly vulnerable to frequent disasters, which intensify its economic challenges.
- Carbon trading presents an opportunity to foster resilience, economic diversification, and environmental sustainability.
- By engaging in carbon markets, Malawi can drive climate mitigation and adaptation efforts, diversify its economy, and support sustainable livelihoods while protecting biodiversity.
- Carbon credits provide a pathway to generate revenue for development projects, attract investment, create jobs, and improve citizens' livelihoods.
- To fully harness this potential, Malawi must establish strong monitoring, reporting, and verification systems and strengthen the legal framework among others.





THANK YOU



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