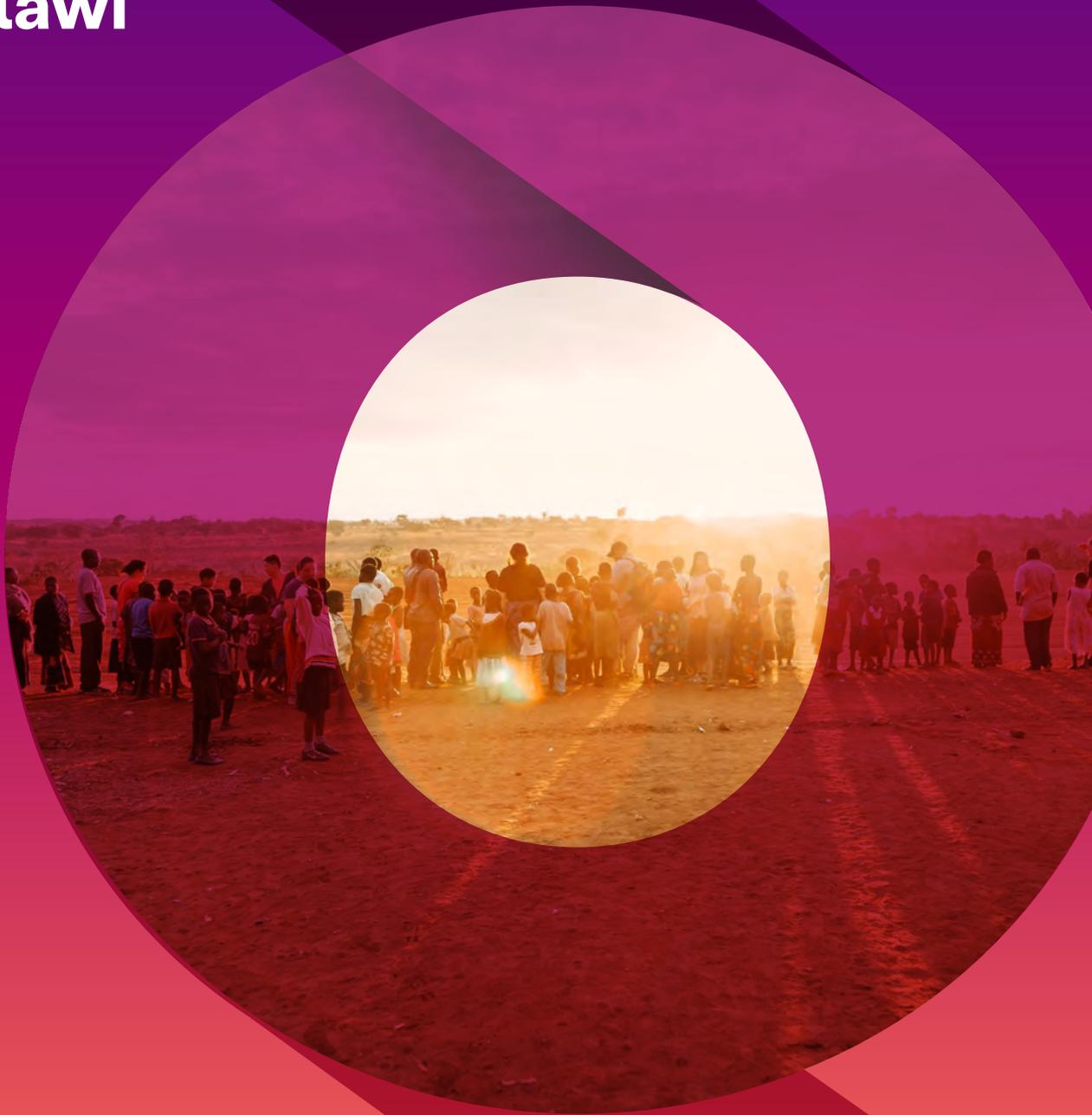


# State of Climate Action and the Scope for a Just Transition in Malawi



## Colophon

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## Acronyms

<b>AR</b>	Assessment Report
<b>CEPA</b>	Centre for Environmental Policy and Advocacy
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>COP</b>	Conference of Parties
<b>CSI</b>	Coal Supply Industry
<b>CPSD</b>	Country Private Sector Diagnostic (CPSD)
<b>GDP</b>	Gross Domestic Product
<b>GHG</b>	Greenhouse Gas
<b>FOLU</b>	Forestry and other Land Use
<b>IPCC</b>	Inter-governmental Panel on Climate Change
<b>LPG</b>	Liquefied Petroleum Gas
<b>NAPA</b>	National Adaptation Programme of Action
<b>NDC</b>	Nationally Determined Contribution
<b>REDD+</b>	Reduced Emissions from Deforestation and Forest Degradation



## Key Messages

1. Efforts by Malawi to reduce greenhouse gas emissions and strengthen resilience to climate impacts imply significant socio-economic transitions in various sectors of the economy, including energy, transport, agriculture, and forestry. If not carefully managed, these transitions could have unintended negative impacts on some people whose livelihoods are entwined with today's practices in these sectors.
2. The concept of a "just transition" to a low carbon and climate resilient society is increasingly gaining prominence around the world. It provides a framework to ensure that national responses to climate change do not create or worsen social inequality or heighten people's vulnerability. For example, through job losses, restrictions on natural resource use, or higher energy costs.
3. Malawi's climate policies and broader development strategies do not explicitly refer to the concept of just transition. However, in the agriculture sector, various aspects of the National Agricultural Policy 2016, the Malawi Vision 2063 and the country's NDC promote changes that are well aligned with the concept of just transition. For example, the greater inclusion of smallholder farmers in planning processes and improved participation by youth in climate smart agriculture practices.
4. The NDC's emphasis on improving community participation in seed selection, storage, and management, as well as the establishment of community and multiplication seed banks, is consistent with a just transition. These changes could help to address existing economic and social inequalities regarding seed access (which has increasingly become too costly for most smallholder farmers).
5. On the other hand, some of the changes suggested in Malawi's NDC could pose risks for some stakeholders. For instance, the NDC promotes greater mechanisation in the agricultural sector. This will require smallholder farmers, especially women and other marginalised peoples, to have secure land tenure to avoid being exploited or otherwise losing out as a result of these changes. The country will require stronger legislation, such as the enforcement of a minimum wage for labourers, to address the possible displacement of primary agriculture labour in favour higher agriculture value chains. The Malawi 2063 target to increase agricultural areas to 40% in 2030 and 80% in 2063 will strain land resources, with consequent risks for smallholders or those without secure tenure.
6. Another key sector for Malawi's just transition is the forestry sector. This sector is important because Malawi is losing forest cover at an alarming rate, and household reliance on charcoal is increasing. A just transition in this sector implies that forest interventions should prioritise the poor and marginalised.
7. Malawi's intention to strengthen laws relating to illegal wood harvesting for charcoal production may be necessary from a climate and environmental perspective, but could create livelihood risks for those involved in illegal timber harvesting and charcoal sales. These laws could also reduce energy access for poor household who do not have access to other affordable energy solutions. It is therefore imperative that the National Charcoal Strategy creates alternative livelihoods and energy access for such people.
8. The just transition lens can help Malawi to ensure that, as agriculture is increasingly commercialised and efforts are made to tackle deforestation, new practices address both the climate crisis and, simultaneously, social and economic inequalities.
9. Malawi needs support for, and investment in, interventions that drive equitable economic growth while supporting mitigation and adaptation in forestry and other sectors.

## 1. Introduction

**Climate change has been described as one of the biggest crises of our time, requiring global action and response. Over the years, science has highlighted the impacts of climate change and the critical importance of decreasing Greenhouse Gas (GHG) emissions. In the Fifth Assessment Report (AR5), the IPCC highlighted that the continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems.<sup>1</sup> This has made it necessary to comprehensively examine the causes and contributors to continued anthropogenic GHG emissions, which are driven by population size, economic activity, lifestyle, energy use, land use patterns, technology and climate policy.<sup>2</sup>**

During the negotiations for the Paris Agreement, world leaders committed to limiting the increase in global average temperature to ‘well below 2°C above pre-industrial levels,’ and pursuing efforts to limit the temperature increase to 1.5°C.<sup>3</sup> This commitment has clear implications for activities resulting in high GHG emissions, and existing ways of doing business. Globally, economic activity and population growth have continued to be important drivers of increases in Carbon Dioxide (CO<sub>2</sub>) emissions from fossil fuel combustion.<sup>4</sup> Achieving the Paris Agreement requires national commitments towards defined goals to significantly reduce emissions from fossil fuels, which were largely driven by industrialization and economic development.

Many of the world’s workers, communities, and countries are dependent on extractive industries and agriculture for their livelihoods, wellbeing and economic development.<sup>5</sup> The Paris Agreement introduced a key principle to ensure that the transition to green and clean economies does not further exacerbate the existing global inequalities. This principle is the **just transition**, which is referenced in the preamble to the Paris Agreement, where parties agree to take into account “... *the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.*”<sup>6</sup> In this preamble, the Paris Agreement recognises the anticipated impacts of the transition to a low carbon economy, and the resulting need for global and national response to ensure that people are provided with decent work and quality jobs within

this framework. This was subsequently reinforced at the 2018 Conference of Parties (COP24) in Poland, through the ‘Solidarity and Just Transition Silesia Declaration,’ based on which Parties were called upon to commit to a just transition.

This paper considers what a just transition means for a developing country like Malawi, and how it may be incorporated into the national development framework and priorities.

### 1.1 Understanding the “Just Transition”

Although decreasing GHG emissions is essential to reduce the impacts of climate change, the decline of extractive and high emissions industries has social and economic impacts. In their study on the historical trends of industrial transitions, Atteridge et al. (2021) found that industrial decline has significant economic and demographic consequences, as well as social and cultural impacts.<sup>7</sup>

For example, a key economic consequence of mine and industry closures in the 20th and 21st centuries has been direct and indirect job losses.<sup>8</sup> As the world accelerates towards greener economies and low carbon societies, it is expected that the decline of carbon intensive industries (such as extraction) and changes to industries (such as agriculture) will have a direct impact on the people dependent on these sectors for their livelihoods and wellbeing.<sup>9</sup>

### 1.2 Conceptual Framework

The concept of a just transition is rooted in labour unions and environmental justice initiatives. While

1. Intergovernmental Panel on Climate Change (IPCC), 2014: *IPCC's Fifth Assessment Report (AR5)*, Summary for Policy Makers.
2. Ibid
3. (Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, 2015)
4. (IPCC)
5. (Anderson & Kwizera, 2020, Principles for a Just Transition in Extractives and Agriculture)
6. United Nations Framework Convention on Climate Change (UNFCCC), 2015: “Paris Agreement to the UNFCCC.”
7. (Atteridge, Blanco, & Strambo, 2020)
8. Ibid.
9. (Anderson & Kwizera, 2020: *Principles for a Just Transition in Extractives and Agriculture*)

## 1. Introduction

the focus was initially on reducing the impact of job losses in transitioning sectors, the just transition is increasingly recognised as a deliberate effort to leverage the transition to a more environmentally sustainable economy, while creating more socially sustainable and equitable jobs, sectors and economies.<sup>10</sup> Unions highlight that in addition to solving the climate crisis, a just transition away from coal must enable a social dialogue that includes workers in the process of shaping desirable outcomes, such as new opportunities through decent jobs, improved labour rights, strengthened social protections and organised labour, all of which should benefit the wider community.<sup>11</sup>

In defining a *just transition*, Heffron and Mccauley suggest it is a composite concept with three forms of justice:

1. Climate justice, which concerns sharing the benefits and burdens of climate change from a human rights perspective;
2. Energy justice, which refers to the application of human rights across the energy life-cycle (from cradle to grave);
3. Environmental justice, which aims to treat all citizens equally and to involve them in the development, implementation and enforcement of environmental laws, regulations and policies.<sup>12</sup>

Building on this understanding, a comprehensive policy review by Atteridge and Strambo reiterates the complexity of the concept and its evolution to encompass more than just labour related concerns.<sup>13</sup> The authors develop a comprehensive list of seven principles “...not only dealing with compensation and employment measures for affected workers, but also looking for ways to ensure environmental protection and restoration, diversify industry and other economic activities, and tackle socio-economic inequity and gender inequality.”

The following principles are identified as essential to achieving a just transition, as long as they are implemented “*in parallel and not selectively*”:

- (1) Actively encourage decarbonisation;
- (2) Avoid the creation of carbon lock-in and more “losers” in these sectors;
- (3) Support affected regions;
- (4) Support workers, their families and the wider community affected by closures or downscaling;
- (5) Clean up environmental damage, and ensure that related costs are not transferred from the private to the public sector;
- (6) Address existing economic and social inequalities; and
- (7) Ensure an inclusive and transparent planning process.

While just transition frameworks have typically been applied to carbon intense economies, the concept is gaining importance in developing countries, as it provides a framework for ensuring that national responses to climate change do not create inequalities or exacerbate vulnerabilities to the impacts of climate change. The concept, therefore, addresses the dual crises of climate change and inequality.<sup>14</sup>

With this understanding, this paper identifies key sectors in Malawi’s economy, which are crucial to the global low-carbon transition. This paper also reviews the potential implications of these transitions. The paper explores the existing policy framework within these sectors; the extent to which the principles of a just transition are addressed by current policies or programmes; and the existing gaps that may need to be addressed in order to promote a just transition for Malawi.

10. (Smith, S. 2017. Just Transition: A report for the OECD. Brussels: Just Transition Centre Available at: <https://www.oecd.org>)

11. (Anderson & Kwizera, 2020: *Principles for a Just Transition in Extractives and Agriculture*)

12. (Heffron & McCauley, 2018)

13. (Atteridge & Strambo, 2020: Seven principles to realize a just transition to a low-carbon economy)

14. Climate Strategies, 2021: Incorporating transition strategies into developing countries NDCs and Covid-19 responses, Comparing insights from Ghana, Colombia and Indonesia.

## 2. Country Context

### 2.1 Socio-economic and Climate Profile



**Malawi has been ranked 3<sup>rd</sup> among the 10 countries most affected by climate change in the world**

Malawi is a small landlocked country in Africa that is highly dependent on rain-fed agriculture. It remains classified as a Least Developed Country and has a low human development index. Malawi's poor economy has been further disadvantaged by its vulnerability to adverse climate hazards, such as dry spells, seasonal droughts, intense rainfall, ravine floods and flash floods. The country has been ranked (3<sup>rd</sup>) among the 10 countries most affected by climate change in the world, and is impacted by various regional climate disasters such as Cyclone Idai, which led to damages estimated at US\$ 220 million.

Over the past five decades, Malawi has experienced more than 19 major floods and seven droughts, with these events increasing in frequency, magnitude and scope over the years. In 2015 and 2016, Malawi experienced serious and unprecedented floods and droughts due to climate change, with effects on key socio-economic sectors and, consequently, on the economy. In early March 2019, heavy rains hit Malawi, causing severe flooding in the southern, and to a lesser extent, central, regions.

These disasters had a significant impact on people's lives, livelihoods and socioeconomic infrastructure in affected areas. They pushed a large number of people into poverty and food insecurity. Globally, climate change has been recognised as one of the biggest challenges that humanity is facing, and tackling it requires concerted effort by all nations.

The observed climate variability and change in Malawi has been consistent with the global trends and in sub-Saharan Africa. Malawi's climate is greatly influenced by topography and the presence of Lake Malawi, a huge water body (29,600 km<sup>2</sup>) that covers

nearly two-thirds of the country's length.<sup>15</sup> The mean annual minimum and maximum temperatures range from under 12 to over 32 °C.<sup>16</sup> The 1980s recorded some of the highest surface air temperatures in recent years, closely followed by the 2000s, raising fears that climate is already changing faster than at any other time in the past. These changing climatic conditions have normally been associated with the effects of the El Niño.<sup>17</sup> According to the World Bank climate profile for Malawi, the average annual temperature in Malawi is projected to increase by 1.1°C to 3.0°C by the 2060s.

### 2.2 Key Sectoral Contributors of Climate Change in Malawi

Climate change is caused by GHG Emissions, which are largely attributed to carbon intensive energy sectors and characterised by fossil fuel use. Historically, developing countries like Malawi have not made a significant contribution to the emissions currently causing the climate crisis, and Malawi has one of the lowest per capita emission rates worldwide.<sup>18</sup> Over the years, emissions in Malawi have steadily grown, increasing 35% over between 2010-2017.<sup>19</sup> However, the National Renewable Energy Strategy highlights that despite these difficulties, Malawi is commencing its transition from a position where almost all energy in the country, namely biomass and hydro, could potentially be sustainable and renewable if managed properly.<sup>20</sup> This is especially true considering that much of the energy supply is currently generated from hydropower.

According to Malawi's Nationally Determined Contributions,<sup>21</sup> the latest national inventory data estimated total greenhouse (GHG) emissions, excluding forestry and other land use (FOLU), at 9.33 million tons of carbon dioxide equivalent (tCO<sub>2</sub>e) for 2017. Agriculture accounted for the largest share of the total (54%), followed by Energy (25%), and waste (18%). The inventory reports align with the second national communication, which identified the country's highest contributing sectors as forestry, land-use change, and energy.<sup>22</sup>

15. Wood, L. and Morinière, L., 2013. Malawi Climate Change Vulnerability Assessment. USAID.

16. Government of Malawi. March 2006: Malawi's National Adaptation Programme of Action (NAPA) Under the United Nations Framework Convention on Climate Change (UNFCCC). First Edition. Ministry of Mines, Natural Resources and Environment, Environmental Affairs Office.

17. Wood, L. and Morinière, L., 2013. Malawi Climate Change Vulnerability Assessment. USAID

18. (Government of Malawi, 2021a, Malawi's Updated Nationally Determined Contributions)

19. (GoM, 2017a: National Greenhouse Gas Emissions Report: Inventory Summary 2017)

20. (GoM, 2017b: Malawi Renewable Energy Strategy 2017-2022, 2016)

21. Ibid

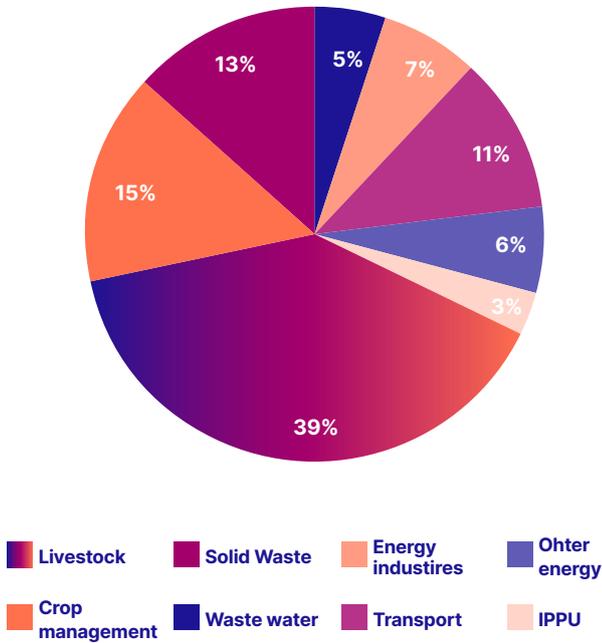
22. Ibid

23. (Malawi 2063, 2020)

## 2. Country Context

**Figure 1: GHG Emissions by Source Excl FOLU in 2017, million tCO<sub>2</sub>e**

Source: Malawi's Nationally Determined Contributions (2021)



The energy sector, however, is set to contribute 19.8 million tons by 2040 in a Business As Usual scenario. This is because Malawi's national development framework, Malawi 2063, provides for increasing investments into the energy sector to drive the industrialisation ambitions outlined in the plan.<sup>23</sup> Specifically, Malawi plans to invest in coal power production as part of the energy mix for industrialisation. The National Energy Policy (2018) considers the Coal Supply Industry (CSI) as an underutilised opportunity for power generation. According to the policy, Malawi seeks to promote the utilisation of its 1 billion metric tons of probable coal reserves through fiscal incentives and establishment of a rigorous regulation framework.

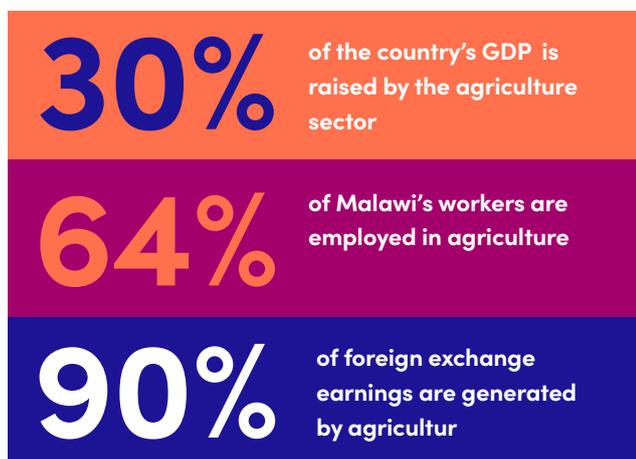
The CSI pathway is a direct contrast to a transition to a low carbon economy and climate resilient development. Not only does it sit awkwardly with the just transition principle of 'actively encouraging decarbonisation,' it negates the need to shift away from investments that lead to more emissions in keeping with the global commitment to address climate change.



### 3. Exploring Transitions in Key Sectors

The concept of just transition is applicable to all sectors of Malawi's economy. This paper, however, focuses on agriculture and forestry.

#### 3.1 The Agriculture Sector: Status and Trends



Agriculture in Malawi has, since Malawi achieved independence in 1964, remained the mainstay of the nation's economy.<sup>24</sup> The sector contributes 30% to the country's GDP and employs 64% of the total workforce. The sector generates over 90% of foreign exchange earnings.<sup>25</sup>

Agriculture is one of the key pillars of Malawi 2063, a long-term national development agenda with a focus on productivity and commercialisation. The intention is to embark on a progressive and extensive agricultural commercialisation programme to boost incomes and spur economic growth. The Malawi Government, under the Agriculture Input Program, provides subsidised fertiliser and seeds to small scale farmers to support their agricultural productivity. The programme is supportive to small scale farmers who are heavily affected by the impacts of climate change. However, the programme has increased reliance on inorganic fertilisers, particularly for those working with degraded soils. The programme has also monopolised the agriculture budget, which could have been used to support enhanced production technologies and high value, organic agriculture for smallholders.<sup>26</sup> The increased reliance on fertiliser, and the failure to promote higher-value, more ecological crops, has slowed the agricultural sector's

transition to a food system that works for people, nature and the climate.

The agriculture sector currently faces multiple challenges, including increasing population pressure. Of Malawi's total land area of 9.4 million hectares (ha), only around 31% is suitable for rain-fed agriculture at traditional management levels, due to variations in topography, slope, rainfall, temperature, soil type and soil depth.<sup>27</sup> These geographical realities have exacerbated production pressures.

At the same time, the agriculture sector faces high levels of land and soil degradation, and declining soil fertility.<sup>28</sup> Malawi loses an average of 29 tons of soil per year, leading to decreasing soil fertility in the farmlands. The net effect is a loss of agricultural productivity, increased expenditure on fertilisers, and a general decline in the profitability of crop production.<sup>29</sup> Land and soil degradation is exacerbated by deforestation, overgrazing, continuous cultivation, poor soil and water management practices, and unsustainable management of natural resources. This situation that has led to severe soil erosion and declining soil fertility, hence low crop and land productivity.<sup>30</sup>

#### 3.1.1 Vulnerability to Climate Change

Malawi's reliance on rain-fed agriculture renders the country dependent on seasonal livelihoods and one rainy season. Moreover, the country's dependence on maize further limits options. Even under normal circumstances, rural smallholder farmers face seasonal shocks and may remain in poverty, or have their circumstances improve, only to slide back into poverty depending on the agricultural year. This situation has worsened due to the impacts of climate change. Climatic shocks are primarily driven by variability in precipitation (causing droughts, dry spells, and floods) and exacerbated by poor soil and land management practices.

24. (National Agriculture Policy, 2016)

25. National Agriculture Policy, 2016.

26. Government of Malawi, 2021b: *Malawi, 2063*, National Planning Commission, Lilongwe.

27. GoM, 2020. The Third National Communication of the Republic of Malawi to the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change.

28. Phiri, MAR, Chilonda, P. and Manyamba, C. 2012: *Challenges and Opportunities for Raising Agricultural Productivity in Malawi*, International Journal of Agriculture and Forestry 2012, 2(5): 210-224.

29. Vargas, R. and Omuto, C. (2016), *Soil Loss Assessment in Malawi*, FAO.

30. Phiri, MAR, Chilonda, P. and Manyamba, C. 2012: *Challenges and Opportunities for Raising Agricultural Productivity in Malawi*, International.

## 3. Exploring Transitions in Key Sectors

Even though Malawi's contribution to GHG emissions is low on a global scale, it is scientifically accepted that human induced activities, such as deforestation and land use change, play a major role in exacerbating its impacts. Malawi's unique and fragile ecosystems are particularly vulnerable to the impacts of climate change, thereby negatively affecting livelihoods. This vulnerability is further exacerbated by the country's poor socio-economic and demographic factors, such as a narrow economic base, dependence on rain-fed agriculture, high reliance on biomass energy, and low adaptive capacity at the community and national levels.

The agriculture sector has suffered the greatest losses as a result of climate change impacts (GoM, 2016a). Most smallholder farmers in Malawi are resource poor with very limited capacity to adapt to shocks arising from climate change.<sup>31</sup> It is therefore imperative that climate solutions address the needs of resource poor smallholder farmers.

### 3.1.2 Status of Climate Action

Agriculture is included in the National Adaptation Programme of Action,<sup>32</sup> and in the National Climate Change Management Policy,<sup>33</sup> which incorporate strategies for adaptation and mitigation. The sector is also included in the National Resilience Strategy<sup>34</sup> and is identified as a key sector for breaking the cycle of food insecurity in Malawi. Furthermore, agricultural productivity and commercialisation are pillars of Malawi 2063.

In 2021, Malawi submitted its updated Nationally Determined Contribution (NDC) to the UNFCCC, which illustrates the efforts the country is taking to integrate climate change measures into national policies, strategies, and planning in order to achieve the goals of the Paris Agreement. The updated NDC outlines Malawi's climate change priorities for the period from 2020–2040, and has provided concrete strategies for addressing the causes of climate change through mitigation and adaptation. Agriculture is among those sectors targeted by the NDC.

In terms of GHG reductions, Malawi's NDC identifies mitigation potential in soil conservation measures,

which includes promoting conservation, zero tillage, crop residue and rotation practices. For adaptation, the NDC promotes mechanisation of agricultural production, with targeted support for smallholder farmers for the introduction, expansion, and scale-up of Climate Smart Agriculture practices. For example, crop and diet diversification through the cultivation of roots and tubers (cassava, sweet potatoes) and other drought tolerant crop cultivars; winter cropping systems using small-scale irrigation technologies; and improving community participation in seed selection, storage and management, and the establishment of community and multiplication seed banks.

## 3.2 The Forestry Sector

### 3.2.1 Importance of Forests

Forests play an important role in the socio-economic growth and development of Malawi. They provide a source of energy for cooking and heating to 97% of households. They also provide timber, poles for construction and industrial use. Moreover, they supply non-timber forest products for food security and income, support wildlife and biodiversity, and provide recreational and environmental services, including carbon sequestration.<sup>35</sup> Forests also prevent land degradation and control soil erosion and water loss, which are essential for agricultural productivity.

Malawi's major forests are found in Forest Reserves, National Parks, Wildlife Reserves and Nature Sanctuaries. The country has 87 forest reserves, five national parks, four wildlife reserves and three nature sanctuaries. These were established to protect important wildlife populations, major water catchment areas, and landscapes of high aesthetic value and to preserve them for scientific and recreational uses.<sup>36</sup> These forests are often surrounded by rural communities who have a high dependency on the forests for their livelihoods.

### 3.2.2 Loss of Forest Cover

Despite the important role that forests play in Malawi, they are under threat of depletion. Forest cover has decreased from 57% of the total land area in 1975, to 28% in 2000, and 23% in 2019.<sup>37</sup> The main threats to forests in Malawi are deforestation (removal of all trees in a forested area) and forest degradation (deterioration in forest condition). As the population

31. GoM, 2016a. National Climate Change Management Policy. Ministry of Natural Resources, Energy and Mining Environmental Affairs Department, June 2016.

32. GoM, 2015: National Adaptation Programme of Action.

33. GoM 2016: National Climate Change Management Policy.

34. GoM, 2018b: National Resilience Strategy, 2018-2030.

35. GoM, 2020: Third National Communication of Malawi on Climate Change, Environmental Affairs Department.

36. Ibid.

37. Ibid.

### 3. Exploring Transitions in Key Sectors

increases, there is a growing demand for energy for cooking. This has led to increased pressure on forest resources, with utilisation exceeding the rate of replacement. Between 2011 and 2018, the number of households using charcoal as their primary source of cooking and heating energy doubled from 9% to 18%. Over this same period, the percentage of urban households relying on charcoal increased from 45% to more than 75%.<sup>38</sup> The overdependence on traditional biomass (wood and charcoal) to meet the country's growing energy needs are therefore threatening Malawi's forest resources and depleting carbon sinks.



**Forest cover has decreased from 57% in 1975, to 28% in 2000, to 23% in 2019**



**Forests provide an energy source for 97% of households**

#### 3.2.3 Emissions from the Forestry Sector

The Forestry and Other Land Use (FOLU) sector is associated with a large proportion of Malawi's greenhouse gas emissions – around 60% of total GHG emissions in 2015 – largely due to deforestation and forest degradation (Figure 1).

#### 3.2.4 Vulnerability to Climate Change

While the forestry sector contributes significantly to Malawi's greenhouse gas emissions, the sector is simultaneously vulnerable to changing climatic conditions. Climate projections for Malawi indicate increasingly dry conditions, with forests progressively changing to drier forest types.<sup>39</sup> The implication of this is that there will be species change in favour of tree species that are better adapted to drier environments. This could impact forest dependent communities, as income from forest goods and services has gained importance, as it diversifies livelihoods for rural communities. For example, a 2014 study found that income derived from natural forests contributed 22% of total household income in developing countries.<sup>40</sup> Changes in forest biodiversity will therefore have an impact on the availability and accessibility of a range of goods and services for rural communities dependent on forest resources.

#### 3.2.5 Forestry in the National Development and Climate Response Agenda

The Malawi 2063 national development plan has an ambitious target for reversing forest cover loss. The plan aims to rejuvenate and maintain forest resources, with a target of more than 50% forest cover by 2063, up from 23% in 2019. At the same time, the vision sets a target for reduction in the deforestation rate from 1.6% in 2018 to below 0.22% per year by 2063.<sup>41</sup>

As a result of the vulnerability of the sector, forestry is identified as one of the most affected sectors by climate change in the National Adaptation

**Figure 2: Baseline Scenario Projections by Sector in Giga grams for 2015-2020**

Source: Malawi Nationally Appropriate Mitigation Actions, 2015

Sector	2015	2022	2025	2030
Energy	795.38	4,780.20	4,961.10	5,140.00
IPPU	72,04	78,17	84,30	90,43
AFOLU: Agric	8,990,58	9,418,44	9,846,30	10,274,16
FOLU	16,935,80	17,741,40	18,547,00	19,352,60
Waste	472,43	531,63	590,83	650,03
<b>Total</b>	<b>27,266,23</b>	<b>32,551,84</b>	<b>34,029,53</b>	<b>56,507,22</b>

38. GoM, 2018a: Malawi Population and Housing Census, 2018.

39. GoM, 2020: Third National Communication of Malawi on Climate Change, Environmental Affairs Department.

40. Angelsen, A.; Jagger, P.; Babigumira, R.; Belcher, B.; Hogarth, N.J.; Bauch, S.; Börner, J.; Smith-Hall, C.; Wunder, S. Environmental Income and Rural Livelihoods: A Global-Comparative Analysis. *World Dev.* 2014, 64, S12–S28.

41. GoM, 2021b: Malawi 2063, National Planning Commission, Lilongwe.

### 3. Exploring Transitions in Key Sectors

Programme of Action (NAPA).<sup>42</sup> Accordingly, the NAPA provides for addressing the impacts of climate change on forestry through watershed management, reforestation, and natural woodland regeneration.

Furthermore, the National Climate Change Management Policy includes forestry related initiatives, namely mitigation programmes to be implemented with funds from the Clean Development Mechanism, and the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism.<sup>43</sup> The programmes emphasised by this policy include Climate Change mitigation and adaptation, capacity building, education, training, research, technology development and transfer, and systematic observation.

#### 3.2.6 Forestry in the Nationally Determined Contribution

The updated NDC suggests Malawi can reduce its total GHG emissions by around 123 million tons of CO<sub>2</sub>-eq by 2050. This can be achieved through forest abatement interventions, initiatives to tackle deforestation and forest degradation, and promoting afforestation and reforestation efforts. The NDC suggests that avoiding forest degradation could achieve net removals of around 86 million tons of CO<sub>2</sub>-eq, while avoiding deforestation could achieve around 29 million tons of CO<sub>2</sub>-eq. The NDC also indicates that afforestation and reforestation programmes could mitigate 8 million tons of CO<sub>2</sub>-eq. These efforts are likely to sequester 88.7 tons of CO<sub>2</sub>-eq per hectare. On an annual basis, they are likely to account for a 2.5 tons per hectare. The level of uncertainty for the estimates ranged between 30.3 and 33.3%.<sup>44</sup>

There are four key areas of intervention are flagged by the NDC, namely,

1. Afforestation (protective forests, woodlots and urban forests);
2. Agroforestry (wood, fruit and fodder);
3. Sustainable forest management; and
4. Riparian restoration.

#### 3.2.7 Forestry Transitions Highlighted in other Policies

In addition to the above, there are various other policies, plans and strategies introduced by the Government of Malawi that aim to bring about some degree of change in forestry-related activities.

*Under the National Forest Landscape Restoration Strategy*, Malawi has committed to conserving a total of 3.5 million hectares as part of the African Landscape Restoration Initiative (AFR100), a pan-African, country-led effort to restore 100 million hectares of degraded and deforested landscapes by 2030. In this regard, Malawi has identified and mapped degraded sites in every district, which are to be targeted for restoration through: the establishment and management of community forests and woodlots, forest management in forest reserves and plantations, and the rehabilitation of stream and riverbanks.<sup>45</sup>

At the same time, Malawi established a national programme under the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism, which will inform future actions on the categorisation of greenhouse gases that emanate from forestry and land uses. This forms part of the national GHG accounting and reporting systems, and meets part of the country's obligations to UNFCCC, the Convention of Biological Diversity, and the United Nations Convention to Combat Desertification.

Furthermore, The Government of Malawi developed a National Charcoal Strategy (2017-2027),<sup>46</sup> recognising that more than 97% of households presently rely on illegally and unsustainably sourced biomass (charcoal and firewood) for domestic cooking and heating energy.

The Strategy provides for the following pillars and actions:

- i. Promoting alternative household cooking fuels** (affordable, reliable, and readily available alternative energy sources such as (i) electricity, (ii) Liquefied petroleum gas (LPG), (iii) briquettes and pellets and (iv) Biogas).
- ii. Promoting adoption of fuel-efficient cook-stove technologies**, (improved charcoal and firewood cook-stoves for household cooking and heating

42. GoM, 2015: National Adaptation Programme of Action.

43. GoM, 2016a: National Climate Change Management Policy, Ministry of Natural Resources, Energy and Mining Environmental Affairs Department.

44. GoM, 2021: Malawi's Updated Nationally Determined Contribution, Environmental Affairs Department, Lilongwe.

45. GoM, 2017c: National Forest Landscape Restoration Strategy.

46. GoM, 2017d: National Charcoal Strategy.

### 3. Exploring Transitions in Key Sectors

with the aim to use comparatively less energy thereby mitigating emissions).

- iii. **Promoting sustainable wood production** (large-scale/commercial cultivation of fast-growing tree species and/or alternative feedstock suitable for charcoal and commercial firewood production, through concessions or other appropriate means).
- iv. **Regulating sustainable charcoal production** (a regulated charcoal value chain that promotes sustainable and efficient production of charcoal in Malawi based on a business model).
- v. **Enhancing livelihoods** (secure livelihoods for legal producers and find alternative livelihoods for others).

- vi. **Strengthening law enforcement** (to reduce illegal wood harvesting and charcoal production and to create a market for sustainable wood and charcoal production).

An annual *National Forestry Season Campaign* runs between 15th December of one year and 15th April of the following year. The countrywide campaign promotes public participation in tree planting (afforestation and reforestation) taking advantage of the rain season.

The *Tree Survival Campaign Programme* focuses on encouraging the nation to plant and to manage planted trees so that they attain the utility age to increase survival rate.



## 4. Pursuing a Just Transition in Malawi's Agriculture and Forestry Sectors

### 4.1 Just Transition in Agriculture

A just transition in the agriculture sector needs to reduce inequalities, foster inclusiveness and participation of smallholder farmers in policy processes, including transforming the food system to work for people, nature and the climate. Recognising the need for this inclusive development, the *National Agriculture Policy (NAP), 2016*<sup>47</sup> promotes empowerment of the youth, women and other vulnerable groups involved in agriculture. The *Malawi Vision 2063 prioritises climate smart agriculture technologies and practices, and will introduce affordable consumer-oriented agriculture insurance for smallholder farmers to counter the variability and adverse conditions affecting rain fed agriculture system*. The vision specifies that commercialisation of the agricultural sector shall particularly target the youth. The national land governance framework has also been reviewed to promote sustainable land management by facilitating security of tenure for smallholder farmers through the registration of customary land. By providing for inclusive climate solutions, these policy aspirations are consistent with a just transition to a low carbon economy and climate-resilient development.

The NDC's promotion of mechanisation and the Malawi 2063 vision for a wealthy and self-reliant, industrialised, middle-income country, means the agriculture sector will continue to become increasingly mechanised. This will require smallholder farmers, especially women and other marginalised farmers, to have secure land tenure to avoid being exploited by the mechanisation drive. The country will also require stronger legislation to enforce minimum wages for the labour force. This could help to address the possible displacement of primary agriculture labour for higher agriculture value chains.

As part of the agriculture commercialisation drive provided for in Malawi 2063, the target is to increase area under commercial agriculture to 40% in 2030 and to 80% in 2063. This ambitious target presumes availability of sufficient land for potential investment in large scale commercial agriculture. This may not be the case going by the dwindling land holding sizes at 0.33ha per capita, which is fuelling pressure on land resources.<sup>48</sup>

The commercialisation drive could, if not well managed, end up being captured by large scale commercial agricultural producers while leaving behind smallholder farmers and falling short of a just transition. Considering the existing pressure on land resources, smallholder farmers may be denied access to productive land and water to pave way for 'investors,' if investment models are not designed to be inclusive and to benefit smallholder farmers. There are examples of commercial investments in agriculture that have not benefited smallholder farmers due to poor benefit sharing mechanisms.<sup>49</sup> For example, as observed in a study of the sugarcane expansion scheme:

*"The implementation of the sugar cane cultivation expansion project under Malawi's Green Belt Initiative<sup>50</sup> dramatically altered the patterns and relations of production in rural areas. In some cases, smallholder farmers are losing their land completely; in others, they are getting less land than they initially offered, losing control over how they use their own land. The net effect is the fostering of a process of disenfranchisement of the smallholder farmers, who must become wage labourers on larger plots, while guaranteeing some privileged elites access to sugar cane cultivation!"<sup>51</sup>*

**A just transition pathway will require inclusive planning and investments that empower smallholder farmers who are highly vulnerable to climate impacts in all agricultural investments.**

The just transition lens will help to ensure that, as agriculture is increasingly commercialised, new modes of production contribute to addressing both the climate crisis and social and economic inequalities.

Malawi's NDC recognises irrigation as an important adaptation measure to climate change. It is worth noting that the NDC provides for small-scale irrigation technologies, which are often community driven and inclusive. Similarly, the provision for improving community participation in seed selection, storage and management, and the establishment of community and multiplication seed banks in the NDC is consistent with a just transition as it would help to

47. GoM, 2016b: National Agriculture Policy.

48. Government of Malawi, 2012: The Third Integrated Household Survey (IHS), National Statistical Office.

49. Gcanga, A. 2014: *Benefit sharing in Company – smallholder sugarcane outgrower partnerships, A case study of Kasinthula smallholder sugarcane scheme, Chikwawa District, Malawi*, Master's Thesis, Wageningen University, Netherlands.

50. The Green Belt Initiative is a government programme aimed at irrigating a million hectares of land lying within 20 km radius of the country's three lakes and 13 perennial rivers as a means of protecting gains in food security, reduce vulnerability to drought, and diversify crop production.

51. Chinsinga, B. 2017: *Green Belt Initiative, Politics and Sugar Production in Malawi*, Journal of Southern African Studies, Vol. 43, No. 3, 501–515, <http://dx.doi.org/10.1080/03057070.2016.1211401>.

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address existing economic and social inequalities in access to seeds, which have increasingly become too costly for most smallholder farmers.

### 4.2 Just Transition in Forestry

As noted above, a just transition must actively encourage decarbonisation, support affected regions and address existing economic and social inequalities.<sup>52</sup> Based on this understanding, it is clear that Malawi's development agenda and priorities for the forestry sector are consistent with a just transition trajectory, in so far as interventions are aimed at reducing emissions from the sector. At present, the forestry sector has the highest chance of allowing Malawi to reduce emissions. Other sectors, such as energy and waste, require significant investments in technology in order to reduce emissions.

While Malawi's forestry policies may reduce emissions, existing forestry policies may not be consistent with a just transition to low carbon and climate resilient development. The equity objective of a just transition implies that forest interventions should benefit the poor and marginalised. Considering the limited alternative household energy sources available in Malawi, strengthening law enforcement to reduce illegal wood harvesting for charcoal production – a practice which is fuelling deforestation – could create energy poverty risks for many communities who do not have access to other affordable energy solutions. The scarcity of alternative cooking fuels is attributed to the increased upfront costs of cooking devices and the absence of distribution channels for alternative energy sources such as LPG gas in urban and peri-urban areas.<sup>53</sup> The limited penetration of grid electricity in rural areas also means that rural communities have no

realistic alternative options to fuel wood. This calls for deliberate programmes targeting energy access for both rural and urban communities, especially low-income households.

Furthermore, the illegal production of charcoal is an industry that provides livelihoods for many producers and sellers. While the *National Charcoal Strategy* highlights the need to create alternative livelihoods to such people, the absence of deliberate programmes in this regard means that these people are, at present, excluded from Malawi's journey to low carbon development, and at risk of having their livelihoods greatly impacted. Hence, the current policy settings may help tackle climate change, but additional effort is needed to address the equity imperatives to ensure this transition is just. Accelerated, practical implementation of the livelihoods pillar of the National Charcoal Strategy would be a good application of the just transition concept in the forestry sector.

Like other sectors, realising emissions reduction targets in the forestry sector is conditional to external support. The NDC estimates about 22% to be unconditional and 78% conditional.<sup>54</sup> In accordance with the principle of supporting affected regions with lower historical responsibility for global emissions, there is a need for support and investment in interventions that drive equitable economic growth while supporting mitigation and adaptation in the forestry sector. External support may therefore also be relied upon to fund programmes and investments that, at the same time, can address the social and economic impacts of these changes.

52. Atteridge, A. and Strambo, C., 2020: Seven principles to realize a just transition to low carbon economy, Stockholm Environment Institute.

53. While LPG gas offers good potential for transition from biomass energy, it is also inconsistent with a just transition to a low carbon economy because gas is a fossil fuel despite its relatively lower global warming potential.

54. GoM, 2021: *Malawi's Updated Nationally Determined Contribution*, Environmental Affairs Department.

## 5. Conclusion

The concept of 'just transition' is neither explicitly included in Malawi's NDC nor any other development policy framework for Malawi. However, there are aspects in Malawi's policies, plans and strategies for agriculture and forestry that resonate with the concept of just transition. At the same time, there remain clear gaps that need to be addressed to avoid climate action being responsible for rising poverty or inequality, especially in Malawi's rural areas. More engagement is needed at different levels to explore the application of the just transition in promoting national development that addresses the challenges of climate change and inequality, as increasing GDP will not automatically lead to a decrease in inequality, or prevent vulnerable groups from being affected by transition policies.



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