MODERN COOKING FOR HEALTHY FORESTS IN MALAWI

TIPHIKE MWA MAKONO POTETEZA NKHALANGO POLITICAL ECONOMY ANAYSIS: INITIAL ANALYSIS

January 2022

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Cover Photo: Charcoal market in Lilongwe. Photo credit: Lilongwe Wildlife Trust.

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ACRONYMS AND ABBREVIATIONS

ACB	Anti-Corruption Bureau
CFS	Community Forest Scout
CITES	Convention on International Trade in Endangered Species and Wild Fauna and Flora
CONGOMA	Council for Non-Governmental Organizations in Malawi
COSMA-DFR	Project for Conservation and Sustainable Management of Dzalanyama Forest Reserve
CSO	Civil Society Organization
DF	Director of Forestry
DFO	District Forestry Officer
DLP	Developmental Leadership Program
DoF	Department of Forestry
ESCOM	Electricity Supply Corporation of Malawi Ltd.
FGD	Focus Group Discussion
FCDO	Foreign, Commonwealth and Development Office
FR	Forest Reserve
GoM	Government of Malawi
IFMIS	Financial Management Information System
JICA	Japanese International Cooperation Agency
KII	Key Informant Interview
LPG	Liquid Petroleum Gas
MCCCI	Malawi Confederation of Chambers of Commerce and Industry
MCHF	Modern Cooking for Healthy Forests in Malawi
MFRN	Ministry of Forestry and Natural Resources
MK	Malawian Kwacha
MP	Member of Parliament
MPS	Malawi Police Service

MRA	Malawi Revenue Authority
NCS	National Charcoal Strategy
NEAP	National Environmental Action Plan
NEEF	National Economic Empowerment Fund
NEP	National Energy Policy
NFLRS	National Forest Landscape Restoration Strategy
NGO	Non-Governmental Organization
PEA	Political Economy Analysis
PERFORM	Protecting Ecosystems and Restoring Forests in Malawi
USAID	United States Agency for International Development
WAG	Wildlife Action Group
WCIU	Wildlife Crime Investigations Unit
ZFC	Zone Forestry Office

EXECUTIVE SUMMARY

BACKGROUND

Modern Cooking for Healthy Forests (MCHF) is a five-year project co-funded by the United States Agency for International Development (USAID) and the UK Foreign, Commonwealth, and Development Office (FCDO). It is designed to support the Government of Malawi (GoM) to promote sustainable forest management of selected landscapes, promote sustainable energy options in selected urban areas in order to maintain forest cover, and reduce land-based emissions. MCHF applies a landscape approach to address deforestation and forest degradation through a focused mix of demand-side, supply-side and regulation and enforcement interventions across multiple land uses, to address wood fuel supply and demand dynamics holistically.

This report presents the final output of a Political Economy Analysis (PEA) of the charcoal sector in Malawi. It takes a systematic look at the underlying drivers of forest cover loss and charcoal supply and demand in Malawi. A PEA approach incorporates a detailed examination of the actors and networks operating within the value chain to understand their interests and influence, and to identify any possible leverage points that might help overcome market constraints and facilitate market-based solutions that utilize local systems and resources.

The PEA process commenced in February 2020. The team scheduled in-country fieldwork for March 2020 and analysis completion by July 2020. However, the COVID-19 pandemic ultimately precluded any international team members from performing in-country fieldwork. As a partial corrective, international team members undertook a more expansive literature review and provided a series of PEA training and fieldwork planning workshops to local team members. International team members conducted key informant interviews using online meeting platforms between September 2020 and April 2021, and local team members conducted the landscape-level research.

POLITICAL ECONOMY CONTEXT

The successful implementation and outcomes of the MCHF activity require numerous changes in social and economic behavior by consumers and producers in response to market forces, such as cost, availability of alternative fuel sources, consumer preferences, and so on. Among the five "Building Blocks" articulated in the MCHF Work Plan, only one, "Improve the enabling environment" (BB 3), explicitly envisions a role for the government. Yet the effectiveness of MCHF equally depends on Malawi's politics and governance, and such considerations cut across all five Building Blocks.

Given the country's political performance over the last three decades, which was marked by triumphs as well as glaring governance failures, Malawi can be characterized as a mixed or hybrid regime. Institutions of horizontal and vertical accountability are inconsistent, and political power tends to be centralized in the executive. Malawi does boast a relatively strong and autonomous judiciary, a relatively robust civil society, often led by the church, and a history of competitive multiparty elections and peaceful transitions of power. At the same time, however, since the return of multipartyism in 1994, the stability of Malawi's nascent democracy has been challenged repeatedly by mis-governance and corruption; episodes of autocratic and elite behavior; and persistently fragile institutions.

Since its independence, the illicit use of public resources for personal or political gain is a near constant theme in Malawi. Elite corruption plagues Malawi, and numerous instances have erupted into public scandals, particularly since political liberalization, that affected both the breadth and

visibility of corruption. Malawi also has multiple institutions and initiatives—including the Corrupt Practices Act, the Anti-Corruption Bureau (ACB), the Financial Management Information System (IFMIS)—which, on paper, are intended to combat the scourge of corruption. These anticorruption bodies, and Malawi's weak enforcement capacity writ large, are ineffective at reducing the illegal charcoal trade.

Malawi's civil society, however, emerged as one of the important bulwarks against democratic backsliding. Although the strength of Malawi's civil society varies, the country has witnessed periods of civil society activism and expressions of civic power, including pressing for the annulment of the 2019 presidential election. The level of civil society activism holds clear relevance for MCHF, but it cuts both ways. Several civil society organizations (CSOs) are active in the conservation movement, and advocate against deforestation. On the other hand, civil society also has the capacity to *resist* any imposition of regulations on charcoal: absent biting sanctions or credible alternative fuels at low costs, CSOs may regard reforms as an infringement on the lifestyles and livelihoods of the poor, especially.

The Government of Malawi has numerous policies and laws that deal with conservation of natural resources and the environment. The National Environmental Action Plan (NEAP, 1994) identified deforestation as one of the key environmental issues nearly three decades ago, and the main driver of deforestation and forest degradation remains charcoal and firewood production. The Malawi Constitution also recognizes the importance of environmental responsibility and conserving the biological diversity of Malawi. The country's failure to quash deforestation and the destruction of forestry resources through woodfuel production thus can be seen as a breach of Malawi's constitutional obligations to its people. Perhaps ironically, Malawi does have numerous laws governing environmental issues. It is the implementation and enforcement of these laws that continues to prove confounding.

Key insights from the PEA

- Charcoal producers are the most numerous actors involved in the value chain. These are primarily informal, casual laborers, who have access to forest resources and acquire them at no cost (although illegally). There is evidence, however that large-scale charcoal production is increasingly "organized" and in many instances is linked with other illegal activities (including illegal settlement, agricultural production, marijuana cultivation, mining, etc.). In many cases, charcoal production is a survival strategy and a means of securing necessary cash for everyday needs. Charcoal provides quick and guaranteed income, without the need for investment or inputs apart from labor. Producers are both men and women, however, the robust female representation among producers is not a cause for celebration. Instead, it suggests deepened financial hardship in rural communities as well as the limits of alternative livelihoods.
- Typically, once charcoal is produced in makeshift and highly inefficient traditional (e.g., unimproved earthen) kilns, it is distributed through various networks, often carried to areas where the charcoal is aggregated into larger volumes for transport to the marketplace. In some areas, at least, the historically informal exchange between producers and transporters is increasingly mediated by another set of actors: charcoal agents or brokers. Such brokers introduce another layer of illicit exchanges in the form of bribes, and may arrange both production and delivery of charcoal, as intermediaries between producers and transporters. Brokers acting as individual agents, rather than as representatives of criminal cartels, are far easier to curtail through legal enforcement measures. This could be considered an opportunity area for MCHF as an easier (and more politically palatable) entry point to controlling production and distribution of illegal charcoal.

- As noted, the smallest but most numerous transporters convey small loads of charcoal by bicycle, while the bigger players use 5-ton or larger vehicles that can transport 40 – 200 (or more) bags of illicit charcoal at a time. The balance between the larger scale urban-based transporters and the smaller-scale rural transporters appears to vary depending on the local characteristics of the area. In areas where production sites are close to points of sale, small-scale bicycle transporters dominate the market. In areas where distances between production sites and consumption are greater, larger and more urban-based transporters enjoy market dominance. Somewhat paradoxically, historically the big players in the trade routinely escaped fines, forfeiture, or punishment, due to their capacity to pay bribes throughout the sector and, it appears, connections to political actors.
- There are increasing reports of charcoal cases being prosecuted and of the state winning conviction, providing some basis for optimism about the government's stance toward criminality and corruption in the sector. Recent data collection by MCHF indicates significant shifts in convictions and charges for forest crimes: the number of people charged with forestry crimes increased by 472 percent from the baseline (Oct. 2016 – September 2019) to FY 2021; the number of people convicted of forest crimes increased by 428 percent; the number of people acquitted decreased from an annual average of four people per year to zero in FY2021; the percent of people fined increased by 12.44 percent; the percent of people receiving custodial sentences increased by 4.39 percent; and the number of people receiving community service and suspended sentences decreased by 2.21 percent and 9.46 percent respectively.
- The direction and magnitude of change are similar regarding penalties, and include: a 92.3 percent increase in the average duration of custodial sentences; and a 353 percent increase in the average fine (ranging from MK5,000 to MK3,000,000 [mean of MK283,575]). The analysis found no records of suspects apprehended without being formally charged, although this could be an interesting area for MCHF to monitor in the future, if such data is indeed obtainable.
- More than 80 percent of Malawians rely on woodfuel, predominantly charcoal, for cooking. Although a higher proportion of rural households rely on woodfuel for their energy needs than in urban areas, recent data shows that urban households also rely heavily on woodfuels for their cooking needs, a trend that increased with population growth and continued urban in-migration. Given cultural preference, the scarcity of affordable electricity, and the current cost of liquid petroleum gas (LPG) relative to charcoal, charcoal remains the fuel of choice.
- Alternative energy sources such as LPG and electricity remain peripheral, taking up a small proportion of the energy mix. One reason that electricity plays such a small part in the energy mix is that it is not competitively priced in Malawi. A further disincentive for electricity as a source of energy for cooking stems from improperly structured tax policy. The price of charcoal reached MK10,000 ($12.27) for a "50 kg bag" (which contains approx.. 15 kg of useable charcoal) in June 2021. If the price increased to MK14,000-MW15,000 ($17.18–$18.40), it would be competitively priced with electricity and LPG. This illustrates the potential effectiveness of minor interventions into the alternative energy market, to push the prices closer to a point at which they will be competitive with those of illegal and unsustainably produced charcoal. The key is to provide consumers access to other sources of cooking fuel at prices that do not cause undue financial hardship.
- A familiar refrain from those who favor supply-side solutions is to stop charcoal production at the source. This is both morally suspect and politically untenable. It is hard to justify supply side interventions alone, rather than targeting consumption and demand, given that Malawi is 80 percent rural, very poor, and dominated by the informal sector. On the other hand, should demand for charcoal decrease, rural producers would eventually need to find other livelihoods and, as noted above, a post-charcoal world would be dominated by other illegal activities, absent legal alternatives.

- Reportedly, many political and bureaucratic elites are directly or indirectly involved in the charcoal trade. Most of them retain some measure of plausible deniability, however, occasionally they are exposed. Given the limitations of this study, it has not been possible to precisely ascertain the level of specific politicians' involvement in the charcoal trade, beyond rumor and supposition.
- Interviewees identified numerous individuals in the forestry sector as potential champions, including the new administration's Minister of Forestry and Natural Resources, Nancy Tembo; Secretary Yanira Ntupanyama; and Director of Forestry Clement Chilima. There also appears to be at least some support for reforms within the political class, the locus of which is the Malawi Parliamentary Conservation Caucus, in which MP Werani Chilenga plays a prominent role. Martha Chizuma, who took over as Director General of the ACB in May 2021, is also reputed to have an interest in changing the culture of corruption in the country, including the illegal charcoal trade. While the number of actors/proto-champions mobilizing in support of charcoal sector reforms in Malawi continues to grow, they do not yet occupy sufficiently powerful positions, or represent a formidable community of change. What is needed, therefore, is some kind of "league of champions" of like-minded bureaucratic leaders across ministries and agencies, that can cooperate to promote reform.
- There is little disagreement about the need for greater enforcement of forestry laws and regulations. In many areas, there is a significant shortage of personnel engaged in enforcement. Existing forestry guards are severely underequipped and face wide variations in their equipment, weaponry, and morale. However, a rigid enforcement regime will produce negative, even destabilizing, consequences if not accompanied by remedies that address community needs and incentives.
- It appears that significant barriers or challenges to entering the legal licensed charcoal market remain, not least of which is its competitive disadvantage: the main competitor to legal licensed charcoal is the illegal trade, which is much cheaper than the legal product. It is not a level playing field with healthy, legitimate competition, since legal licensed charcoal producers have significant overheads (labor, machinery, costs of compliance, etc.). The process of entering the market also remains rather cumbersome and has only been possible in Malawi through significant external help (notably PERFORM) and subsidies. However, there are some signs of hope in this area, in large part due to the concerted efforts of MCHF. Over the last 12 months, the number of legal licensed charcoal producers increased from three to seven, and the Department of Forestry is reviewing two additional applications. While most of these producers can be classified as "small," some of the recently licensed producers have the potential to become bigger producers.

Next Steps

Given the limitations faced in undertaking this study, there remain some unanswered questions and analytical gaps that warrant further investigation once the situation in Malawi allows. These gaps include:

- Although this report outlines broadly the stakeholders within the charcoal value chain and their interests, a more granular level of detail regarding the connections and relationships between certain stakeholders and institutions would provide a more comprehensive understanding of the political landscape.
- There appears to be some indication of the emergence of "brokers" in the value chain. Further investigation into where these brokers are, the reasons for their emergence, and what this might mean for the charcoal sector is critical. A greater understanding of this could reveal new opportunities for MCHF intervention or support.

- The landscape-level research did not find clear triangulated evidence on the dynamic between forestry personnel and police staff at the local level; that is, whether there are entrenched, intentional collaborations across the institutions, or individualized, ad hoc instances of corruption. It is worth investigating further the dynamic between Malawi Police Service (MPS) and Forestry staff at the roadblocks—the jurisdictional boundaries and power relations—but also evidence of corrupt collaboration supporting the illicit charcoal trade.
- To ensure that program delivery continues to take account of the political realities on the ground, and that any potential opportunities are seized when they arise, it is important that the MCHF team keep their fingers on the social, political, and economic pulse in Malawi. Thus, on a routine basis and at key points in the program cycle—for example when drawing up a new annual work plan—it is important to take stock of the political landscape and update any previous analysis based on any changes to these factors.
- Using the information now available about stakeholders and their interests, including information on potential champions, existing and emerging change-makers who can influence MCHF outcomes can be identified on an ongoing basis.

1.0 PROJECT BACKGROUND

Modern Cooking for Healthy Forests (MCHF) is a five-year project co-funded by the United States Agency for International Development (USAID) and the United Kingdom Foreign, Commonwealth, and Development Office (FCDO). It is designed to support the Government of Malawi (GoM) to promote sustainable forest management of selected landscapes, promote sustainable energy options in selected urban areas in order to maintain forest cover, and reduce land-based emissions. The project builds on the work and findings of its predecessor project, the USAID-funded Protecting Ecosystems and Restoring Forests in Malawi (PERFORM). PERFORM helped to demonstrate that, contrary to the belief that agriculture was largely to blame for ongoing deforestation and forest degradation, urban demand for charcoal was the primary driver of forest loss. MCHF applies a landscape approach to address deforestation and forest degradation through a focused mix of demand-side, supply-side and regulation interventions across multiple land uses to address wood fuel supply and demand dynamics holistically. In particular, MCHF aims to reduce unsustainable wood fuel demand by:

- Developing inclusive and sustainable market systems across alternative energy, legal licensed charcoal, and forestry value chains by engaging a wide range of actors within each value chain, identifying leverage points that overcome market constraints, and by facilitating market-based solutions that utilize local systems and resources;
- Engaging the private sector to mobilize financing, investment, and additional resources for alternative fuels, fuel-efficient technology, improved forest governance, and forest land restoration;
- Building on and advancing key GoM policies and strategies, particularly the Malawi Growth and Development Strategy III, Malawi 2020 Vision Document, National Charcoal Strategy (NCS), National Energy Policy (NEP), National Forestry Policy, Forestry Act, National Cookstoves Programme Roadmap, National Forest Landscape Restoration Strategy (NFLRS), and Malawi Renewable Energy Strategy; and
- Strengthening local capacity for self-reliance and sustainability by prioritizing local partners, working with and through GoM institutions, implementing facilitative market system approaches, and supporting human and institutional capacity development.

MCHF is organized around five objectives:

- Alternative energy sources and efficient cooking technologies to reduce unsustainable wood fuel demand adopted;
- Local delivery of forestry services and sustainable use of forest resources in targeted areas improved;
- Regulatory and enforcement framework to support sustainable wood fuel production and use strengthened;
- Government of Malawi's implementation capacity of low emissions development in REDD+ and/or other land use increased; and
- USAID, development partners, GoM, and other resources leveraged.

Key indicators and results include:

- 30 percent of households in urban areas that have adopted alternative cooking energies or fuel-efficient cooking technologies;
- 75 percent of people in and around targeted forest reserves that have adopted FE cooking technologies;

- $1.5M increase in annual sales of firms doing business in alternative energy options and efficient cooking technologies;
- 3,000 tons of legal licensed charcoal produced;
- 315,000 ha of hectares of forested land in targeted areas showing reduced deforestation based on the GoM deforestation estimation;
- 50 percent increase in prosecution cases and custodial sentences related to illegal charcoal production and illegal trade in forest products; and
- $10M of investment mobilized for sustainable landscapes.

After almost 30 years of GoM and development partner intervention in this area, during which Malawi experienced a steady decline in forest cover, it is time to take a systematic look at the underlying drivers of forest cover loss and charcoal supply and demand in Malawi. Why does the saturation of alternatives to wood fuels, and in particular charcoal, remain extremely low? And, why does charcoal continue to be primarily produced unsustainably from indigenous forests using inefficient earthen kilns?

Why PEA?

The Statement of Work proposed the use of a Political Economy Analysis (PEA) that examined the interaction of political and economic processes affecting forest and land use practices, charcoal production, transportation, and marketing in MCHF landscapes and urban centers. A PEA approach enables a detailed look at the actors and networks operating within the value chain to understand their interests and influence, and any possible leverage points that might help overcome market constraints and facilitate market-based solutions that utilize local systems and resources. By doing so, it may be possible to identify potential entry points (for MCHF and for GoM counterparts) to support a reform agenda.

This report reviews the analysis as it currently stands, along with an outline of known information gaps and areas for follow-up. The analysis is intended as an iterative process to be modified as information becomes available and a step toward building a more complete understanding of the sector.

2.0 METHODOLOGY AND TIMELINE

2.1 A BRIEF OUTLINE OF METHODOLOGY

PEA is a qualitative field-research methodology, which informs project design and implementation. PEAs follow a set methodology and research framework, focusing on power relations, formal and informal institutions, and on the structural, social, cultural, and ideological underpinnings of a society, which together help explain why change happens or not. PEAs help to understand the interests and motivations of key decision-makers who will drive reform and the context in which their projects are set.

There are various types of PEAs, but they all share some common methodological elements. The difference is largely one of scope. Since the mid-2000s most PEAs follow a similar format (though sometimes with different terminology) based on the well-thought-out Strategic Governance and Corruption Analysis (SGACA) design. The recent Applied PEA Field Guide developed by USAID uses a similar methodology. There is general agreement that a number of key factors drive decision-making and behavior, so PEAs tend to focus on the four variables identified in Box 1.

BOX 1: DEFINITION OF VARIABLES IN THE PEA FRAMEWORK

i) Foundational Factors (also called "structural" drivers or variables). These are deeply embedded and slow to change; they shape the character of the state and economic choices. They are usually beyond the control of stakeholders and major actors.

ii) Rules of the Game (formal and informal institutions). These are the rules and norms that influence actors' behavior, expectations, and values.

iii) Here and Now (current events). These impact individuals and groups and their responses, and provide opportunities for, or impediments to change.

iv) Dynamics (features in flux) that may offer an opening or closing of space for change.

Aid programming changed in the last few years with the advent of "adaptive programming," which has inbuilt learning through short PEAs done at regular intervals. The findings are fed back into the projects, and their components—theories of change, activities, budgets, even their outputs and outcomes at times—may change. There are other times when short, focused PEAs are done to answer specific questions (e.g., the Development Leadership Program (DLP) proposes a methodology for doing short studies to explore what people's interests are and what space and capacity they have to effect change). Answering the first of these questions takes the researcher into the realm of social norms, organizations, authority, beliefs, behavior, etc.

Traditional linear pre-planned projects with log frames laid out for three to five years assume that the theory of change, log frame, activities, budget, and the outputs designed in the inception phase will not change. But "iterative learning and adaptive" programming assumes that once a project starts there will be changes to it as the context changes or as the staff learn more about the actors and factors that are hampering or promoting reform. In such cases the theory of change may need to be modified, and the activities, budgets and outputs will be redesigned. New partners might be selected, and there are cases where outcomes were changed as the staff realized that their initial assessment about what could be done was erroneous.

There are several examples of approaches that use adaptive programming with problem focused PEAs as an integral part of the process, including: Collaborating, Learning and Adapting (CLA); Problem-Driven Iterative Adaptation (PDIA); Thinking and Working Politically (TWP); and Doing

Development Differently (DDD). More information about these approaches is provided in the methodology and workplan report for this study.

Some of the things that these approaches have in common are that all recognize that context is everything and that there is no one-size-fits-all blueprint. They also all advocate for real-time learning, where the PEA process is not a one-off piece of research conducted by external experts, but is embedded into program implementation and undertaken throughout its life. In order to do this, we need to:

1. Communicate PEA concepts in an accessible way, avoiding jargon.
2. Ensure program staff are a fundamental part of the process with the PEA team taking on a facilitation function.
3. Start small and grow. This PEA exercise may not be able to answer all questions or unpack all the issues related to the charcoal value chain, but we aim to lay the groundwork to enable the program team to continue with this work, adding pieces of the puzzle over time to enable team members to account for subsequent developments.

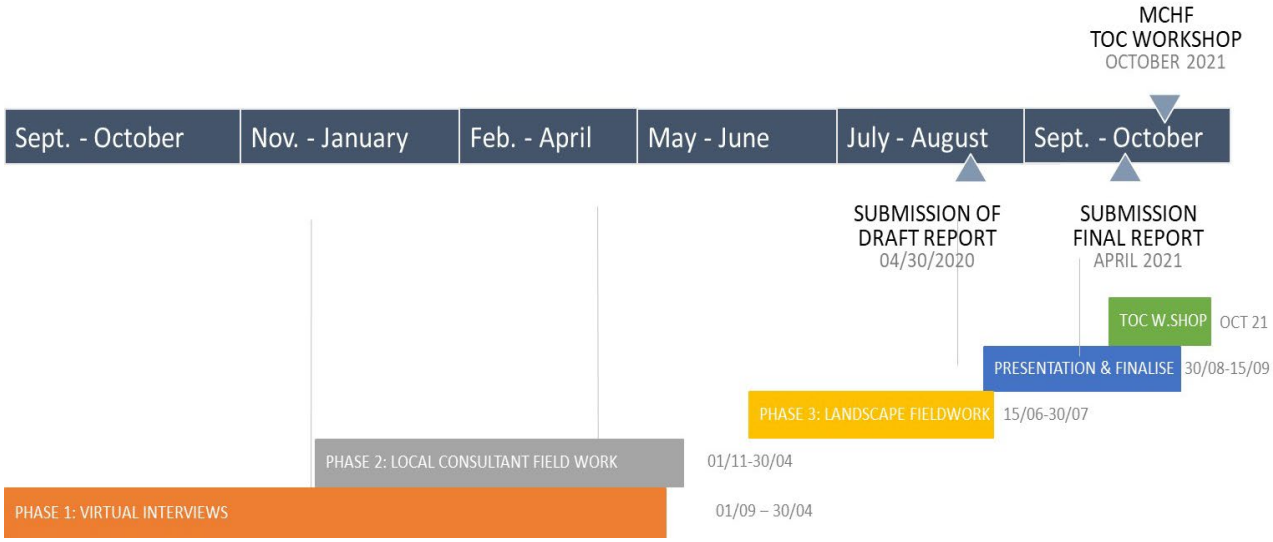
With this in mind, we present this report as a stock taking of what we currently understand regarding the political economy of the charcoal value chain.

2.2 TIMELINE

Due to the travel restrictions and the uncertainty precipitated by the COVID-19 pandemic, the original timeline for this analysis shifted quite significantly. The team initially amended the timeline assuming that the fieldwork would eventually be conducted as planned. Unfortunately, this has not been possible.

The below diagram indicates the revised timeline, indicating the activities intended to conclude this PEA exercise as far as possible.

FIGURE 1. MCHF PEA TIMELINE



2.3 DATA COLLECTION METHODS

The PEA team intended to use a number of data collection methods to inform the analysis. These included a remote desk review and in-country fieldwork. To date, however, a field visit to Malawi by

the international PEA consultants has not been possible due to COVID-19. Following regular check-ins over the course of 2020 with the MCHF team, many of the activities planned to be done in-person and in-country were subsequently carried out remotely. This worked reasonably well for the PEA workshops and for some of the key informant interviews, particularly those conducted with government officials. It worked less well as a way of having what are usually rather sensitive and off-the-record conversations. Consequently, the insights and observations we drew from these interviews are somewhat more limited than in an ordinary PEA.

The below sub-sections outline the data collection methods and our progress in each.

2.3.1 LITERATURE REVIEW

One of the team's first activities was a literature review. This examined the current literature on the economic, political, and social situation in Malawi, including academic literature, relevant GoM policy documents, strategies and action plans, and germane analyses from other development partners and civil society organizations. The team also reviewed relevant MCHF project documents (and PERFORM documentation) including program evaluations and data. Due to the fieldwork delays it was possible to perform a more thorough literature review with a separate deliverable outlining what the literature tells us about the political economy of the charcoal sector in Malawi (submitted August 2020).

2.3.2 PEA AND PLANNING WORKSHOP

Between May and August 2020, the team conducted three remote PEA workshops for all international and local members of the MCHF team. The main aims of these sessions were:

- To fully brief the team on the PEA approach.
- To help guide the assessment team on the context and purpose of the research and to finalize the key questions that needed to be addressed.
- To undertake an initial stakeholder analysis to identify key stakeholders along the value chain that needed to be consulted during the research, what is already known (or assumed) about the interests, incentives, and relative influence of stakeholders, and to highlight gaps and issues for follow-up and triangulation.

2.3.3 KEY INFORMANT INTERVIEWS

A central part of the fieldwork plan was key informant interviews. The primary aim of these interviews was to identify and assess the interests and level of influence of the various actors in the value chain. Given that much of what we hear in such interviews tends to be individual viewpoints, it is essential to triangulate information from different sources to substantiate the information.

Due to delays to the fieldwork, the team decided in September 2020 to conduct some of the interviews remotely, via videoconferencing platforms (Zoom and MS Teams). Interviews were conducted with a broad range of informants, including those representing:

- Department of Forestry (DoF) personnel (various levels/ranks)
- Department of Energy
- Malawi Police Service (MPS) personnel (various levels/ranks)
- Malawi Defense Force
- Prosecutors (various levels)
- Magistrates (various levels)

- Members of Parliament
- Transporters
- Civil society organizations
- Journalists

For some of the stakeholders, videoconferencing was either inappropriate or unfeasible, so a number of interviews were carried out in person by the local consultants, Bennet Mataya, Nyuma Mughogho and Tuntufye Mwalyambwire.

2.3.4 GROUP MEETINGS

A number of group meetings took place as part of the landscape level research. For the Central Landscape research, four group meetings took place with an average of 10 people per group. For the Northern Landscape research, six group meetings took place with an average of 48 people in each group. Further details about these groups are provided in the landscape reports provide in Appendix 2.

2.3.5 LANDSCAPE VISITS

A core part of the data collection process at the MCHF landscape level is conducting PEAs in both Central and Northern landscapes and additional research in the urban charcoal demand centers of Blantyre and Zomba. This work is designed to provide a detailed analysis of the stakeholders, networks systems, and processes at the local level. With the international consultants unable to participate in the fieldwork due to COVID-19 restrictions, Bennet Mataya and Nyuma Mughogho conducted the landscape research focusing on Northern and Central Landscapes, respectively. Landscape reports from this fieldwork are presented in Appendix 2.

3.0 THE POLITICAL ECONOMY CONTEXT

3.1 MALAWI GOVERNANCE AND POLITICS

The successful implementation and outcomes of the MCHF initiative requires numerous changes in social and economic behavior by consumers and producers in response to market forces, such as cost, availability of alternative fuel sources, consumer preferences, and so on. Among the five "Building Blocks" (BB) articulated in the MCHF Work Plan,[1] only one, "Improve the enabling environment" (BB 3), explicitly entails and envisions a role for government. Yet the effectiveness of MCHF depends on Malawi's politics and governance, considerations that cut across all five BBs.

Indeed, the behavior and incentives of all non-state actors along the charcoal value chain are shaped by the political, institutional and governance environment in Malawi. Thus, the capacity of the state to influence woodfuel supply and demand (BB1 and BB2), "improve the enabling environment" (BB 3) or "strengthen information systems for decision-making" (BB4) speak *directly* to the state's capacity to enact and implement regulations and legislation, make credible commitments, and enforce appropriate sanctions for misbehavior—in other words, governance. This recognition of political economy functions is reflected in the 2020 MCHF Work Plan (p. 8), which recognizes that GoM cooperation, "buy-in," and a sense of ownership will be necessary to achieve the program objectives.

Yet the history of good governance and capacity for such cooperation in Malawi is characterized at best by inconsistency. This requires that we review the constraints on governance in Malawi, which have proven to be persistent obstacles to effective policy reform (Bridges & Woolcock, 2017), including, but hardly limited to, policies governing the charcoal sector. These constraints are not necessarily insuperable but understanding them is essential to devising viable interventions.

3.1.1 POLITICAL TRANSITION IN MALAWI

Like most countries in sub-Saharan Africa, Malawi underwent a transition from single party authoritarianism in the 1990s. Amidst political and economic crisis and escalating social pressures, "President for life" Hastings Kamuzu Banda was forced to capitulate and in June 1993 held a national referendum on the introduction of multiparty democracy.

Today, following seven national elections, including five peaceful transitions of presidential power, Malawi is variously described as partly free (Freedom House) and democratic (Polity IV; V-Dem), and ranks in the fiftieth percentile for political stability in the World Bank's World Governance Index (https://info.worldbank.org/governance/wgi/Home/Reports). Given Malawi's performance over three decades, marked by political triumphs as well as glaring governance failures, most scholarship characterizes Malawi as a mixed or hybrid regime. Institutions of horizontal and vertical accountability are inconsistent, and political power tends to be centralized in the executive, consistent with the pattern political scientists labeled "neopatrimonial rule" (Cammack et al., 2007).[2] Yet Malawi does boast a relatively strong and autonomous judiciary, a relatively robust civil society,

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[1] Building Block 1: Reduce wood fuel demand; Building Block 2: Increase sustainable wood fuel supply; Building Block 3: Improve the enabling environment.; Building Block 4: Strengthen information systems for decision-making; Building Block 5: Collaboration, learning and adaptation

[2] Note that the renowned late Malawian economist, Thandika Mkandawire (2015) offered one of the most damning critiques of the neopatrimonial hypothesis in which he questioned its very tenets as well as the universal way it has been applied to Africa.

often led by the church, a history of competitive multiparty elections, and peaceful transitions of power. Each of these factors, clearly, if somewhat episodically, offset the presumptive dominance of presidentialism or "big man" politics that underlies the neopatrimonial thesis. At the same time, however, since the return of multipartyism in 1994, the stability of Malawi's nascent democracy was challenged repeatedly by mis-governance and corruption, episodes of autocratic elite and presidential behavior, and persistently fragile institutions.

3.1.2 CORRUPTION IN MALAWI

The elicit use of public resources for personal or political gain is a near constant theme in Malawi since independence. Malawi is plagued by elite corruption and numerous instances resulted in public scandals, particularly since political liberalization, which affected both the breadth and visibility of corruption (Ihonvbere, 1997).

Malawi's first president, Hastings Kamuzu Banda, ran a centralized state under a single party, which used state resources to maintain a firm grip on power (Meldrum, 1995). With the transition to democracy and a more liberalized economic environment—both of which facilitated increased donor flows as well as investment, and corresponding opportunities for rent-seeking—corruption became considerably more decentralized and widespread. President Bakili Muluzi administration's (1994-2004) corruption was entrenched and even broadened during subsequent administrations.

During President Bingu wa Mutharika's first term (2004-09), however, economic growth, investment, and generally sound fiscal policies may have helped to obscure the extent of corruption, and the popular Mutharika and his Democratic People's Party won reelection in 2009 with an overwhelming two thirds of the vote.

Especially under Joyce Banda, who assumed the presidency in 2012, corruption in Malawi took the form of what former ACB official Z. Allen Ntata (2013) labeled a "cartel" and a "syndicate" in which government and bureaucratic officials alike arrogated to themselves a "license to loot." Corruption thus became even more pervasive, manifested in undermining institutions, ghost worker schemes, and, paradoxically, the manipulation of the Financial Management Information System (IFMIS), the very system intended to combat fraud and abuse (see Z. Allan Ntata who describes the cartel surrounding Joyce Banda). The peak of this was the "Cashgate" scandal.

Cammack and Kelsall (2011) observed that the top-down, centralized corruption that characterized the Kamuzu Banda era became widely dispersed. Kita (2017), for example, demonstrates the extent of corruption in local government institutions, particularly the role of local actors in disaster risk management. Tambulasi (2009) finds similar high-level corruption in public sector management and procurement at the local government level. These studies are consistent with a range of studies on decentralization in Malawi that find corruption and abuse of resources at the local authority level (e.g., Chasukwa, et al., 2013; O'Neil, et al., 2014; Tambulasi & Kayuni, 2007).

Public opinion data suggests deep levels of distrust in government. In 2017, 78 percent of survey respondents indicated government was doing a poor job of combatting corruption, which they viewed as rampant across a swath of public institutions. Fully two-thirds of respondents believed corruption was worse than the previous year, and that even more petty forms of corruption, such as bribe-taking, were accelerating (Chunga and Mazalale, 2017, p. 3). Although there are some suggestions of a tougher anticorruption stance under President Lazarus Chakwera, vicious circles of corruption and corresponding loss of faith in government have a deleterious impact on democratic governance. Elected in the special rerun presidential election of 2020, President Chakwera made

anti-corruption a signature issue, albeit with mixed results thus far (Kaunde, 2021, July 11; Pensulo, 2020, July 23).

3.1.3 GOVERNANCE INSTITUTIONS

Malawi has multiple institutions and initiatives—including the Corrupt Practices Act, the Anti-Corruption Bureau (ACB), the IFMIS—which, on paper, are intended to combat the scourge of corruption. The GoM established the ACB in 1995 with a mandate to engage in investigations, prosecutions, prevention, and public education around corruption. Anticorruption efforts under institutions like the ACB generally failed to capture the "big fish," however, and therefore fail to inspire the public's confidence (Chingaipe, 2017; Chunga, 2020, p. 7). Afrobarometer data from 2019 (Centre for Social Research, 2020, p. 82) indicated just 55.5 percent regarded the ACB as a neutral body. Importantly, as Bridges and Woolcock (2017, p. 4) indicate, among three major institutional interventions to combat corruption, including the creation of the ACB, the passing of the Corrupt Practices Act (which was first promulgated in 1995 and established the ACB), and the implementation of the Medium-Term Expenditure Framework and the IFMIS**,** *none* actually mitigated corruption. As a result, Bridges and Woolcock (2017, p. 9) conclude, Malawi's "creation of anticorruption entities has been largely superficial."

VonDoepp (2001, p. 235) notes that following Malawi's transition from authoritarian rule, "the judiciary emerged as a primary locus of political activity, deciding numerous cases relevant to the political and personal interests of the opposition." Opposition leaders "turned to the courts for injunctions to halt government actions antithetical to their interests—whether state efforts to go ahead with poorly managed by-elections, extralegal state attempts to block opposition rallies, or plans to strip assets from MCP elites. They have also used the courts to challenge the results of electoral contests that they feel were rigged or inappropriately conducted" (VonDoepp, 2001, p. 237).

One of the important bulwarks against democratic backsliding is civil society. Although the strength of Malawi's civil society is contested in the literature, civil society has been both a driver and a beneficiary of democratization in Malawi and elsewhere. According to Makuwira (2011, p. 625), Malawian CSOs[3] remain both largely donor dependent and reliant on the "relatively stable environment" fostered by early post-Banda governments under Muluzi and wa Mutharika. Like other African states, Malawi placed some legal restrictions on nongovernmental organizations (NGOs). "NGOs in Malawi are governed through the NGO Board and coordinated through the Council for Non-Governmental Organizations in Malawi (CONGOMA), both established under the [Government of Malawi] NGO Act of 2001. The NGO Board is appointed by and reports to government *and is perceived by NGOs as an imposition on their autonomy,* while CONGOMA is led by NGOs" (Kita, 2017, *emphasis added*). Registration requirements and foreign support suggest a degree of vulnerability, although NGOs, and especially church-based CSOs such as the Public Affairs Committee, have been able to maintain their advocacy. Malawi has 1,031 NGOs registered with CONGOMA as of 2016, although paid-up NGOs totaled just 537 (165 international and 372 local; Kita, 2017).

Malawi witnessed periods of civil society activism and expressions of civic power. Church bodies, for example, served as near-constant social critics and "conduits" (Karreth, 2017) of democratic activism. The level of civil society activism holds clear relevance for MCHF. If sustained and strong,

[3] This report primarily uses the more encompassing "CSO" rather than the more contested term "NGO" (Tomlinson, 2013, pp. 123-5). However, since some sources, and Malawian legislation, refer explicitly to NGOs, where the term appears in the text, it should be considered synonymous with CSO.

CSOs have the capacity to resist any imposition of regulations on charcoal. Absent biting sanctions or credible alternative fuels at low costs, CSOs may regard reforms as an infringement on the lifestyles and livelihoods of the poor. Hence, it is imperative that organizations representing economic interests, the environment, and the preservation of democracy be marshalled in support of charcoal reform as allies.

3.1.4 THE LEGISLATIVE AND REGULATORY ENVIRONMENT

LEGISLATION ON CHARCOAL PRODUCTION

The GoM has numerous policies and laws dealing with conservation of natural resources and the environment. For example, the National Environmental Action Plan (NEAP, 1994) identified deforestation as one of the key environmental issues nearly three decades ago, and the main driver of deforestation and forest degradation remains charcoal and firewood production. (Importantly, despite acknowledged environmental harms of charcoal production, few policies have provided a framework for sustainable biomass energy, although this lacuna was addressed with the passage of the 2016 National Forest Policy.)

The Malawi Constitution promotes responsible management of the environment in order to: i) Prevent the degradation of the environment; ii) Provide a healthy living and working environment for the people of Malawi; iii) Accord full recognition to the rights of future generations by means of environmental protection and the sustainable development of natural resources; and iv) Conserve and enhance the biological diversity of Malawi. The country's failure to quash deforestation and the destruction of forestry resources through woodfuel production thus can be seen as a breach of Malawi's constitutional obligations to its people.

Yet, perhaps ironically, Malawi does have numerous laws governing environmental issues, including the:

- Environmental Management Act (Cap 60.02), providing for the protection and management of the environment and the conservation and sustainable utilization of natural resources;
- Water Resources Act (Cap 72.03), which makes provisions for the protection of water catchment areas from deforestation and other land degradation activities;
- National Parks and Wildlife Act (Cap 66.07), which aims to conserve wildlife throughout Malawi and to support sustainable utilization of wildlife for the benefit of the people of Malawi; and the
- Forestry Act (Cap 61.01), which deals with conserving and protecting forests.

The Forestry Act provides for licensing charcoal production where a management plan exists. Section 81 of the Act (1) stipulates that no person shall make or sell charcoal from indigenous timber or trees except pursuant to a license issued under this section.[4] However, almost no licenses have been issued to produce charcoal from indigenous timber—although recently, licenses were issued to produce timber from planted wood and bamboo. Whereas state officials may fear that licensing might legitimize the practice of cutting down indigenous trees, even in the absence of effective licensing, the destruction of indigenous forests continues apace, and charcoal continues to be produced and sold openly.

[4] The GoM developed Charcoal Regulations (to help regulate charcoal production, transportation, and sale). The Ministry of Justice is expected to gazette the Charcoal Regulations before the end of November 2021.

POLICIES ON CHARCOAL

In line with the Forest Act, the National Forest Policy (2016) recognizes charcoal and firewood as the main sources of energy, due to unreliable electrical power. Priority Area No. 7 of the policy deals with biomass energy development and aims to promote sustainable production and efficient utilization of biomass fuels in the form of firewood and charcoal. This is envisaged to be achieved by promoting tree growing and allowing natural regeneration of indigenous wood. It also promotes the use of alternative sources of energy to reduce consumption of fuelwood.

The National Energy Policy (2018) also recognizes the importance of biomass energy for Malawi. Priority area 3.2 of the NEP acknowledges that, due to the lack of affordable and reliable alternatives, biomass will remain an important source of energy for the foreseeable future. Unlike the Forest Policy, the Energy Policy simply promotes the production and use of efficient cookstoves. As we note below, however, alternatives to charcoal, particularly as a cooking fuel, have not been adopted widely in Malawi, due to supply, cost, and cultural preferences.

The charcoal sector is also guided by the National Charcoal Strategy (2017-2027), which outlines the context to the sector and seven pillars to the government's strategy to promote legal licensed charcoal production and use, and the use of alternative cooking fuels. These pillars are outlined below:

- Pillar 1: Promote alternative cooking and heating fuels
- Pillar 2: Promote adoption of fuel-efficient cookstove technology
- Pillar 3: Promote sustainable wood production
- Pillar 4: Strengthen law enforcement
- Pillar 5: Regulate sustainable charcoal production
- Pillar 6: Support livelihoods
- Pillar 7: Promote information, awareness, and behavior-change communications

4.0 TAKING STOCK

4.1 THE CHARCOAL VALUE CHAIN ACTORS

4.1.1 PRODUCERS

The supply of charcoal in Malawi comes from resources, including national forest reserves and other protected areas, that are subject to massive illegal harvesting. Yet despite the overwhelming illegality of the woodfuel trade, Malawians involved in the sector essentially regard trees as a public good. With inadequate or often coopted security, national forests are insufficiently protected from producer harvesters who treat them as a free resource, often with impunity. Thus, the value chain for charcoal in Malawi begins with a raw material that is acquired at no cost (save the cost of inputs).

Charcoal producers in Malawi are often informal, casual labor, who have access to forest resources. Women appear to be well represented in the sector, and Bennet's Mataya's investigation for our team in Northern Landscape communities revealed nearly 50 percent women in the trade (confirming findings by Smith et al. in the Zomba area). Our inquiry revealed that the robust female representation among producers is not a cause for celebration, however. Instead, it suggests deepened financial hardship in rural communities as well as the limits of alternative livelihoods. In their examination of charcoal production near Zomba, Smith et al. (2017, p. 32) indicated that Malawi's charcoal sector offers income-generating opportunity, in their examination, as a critical supplement to other work. In fact, "Charcoal production generated the biggest source of income for all producers, provided start-up capital required for other income generating activities and was prioritized by some over alternative livelihood strategies such as agriculture." Smith et al. determined that charcoal contributed 26 and 45 percent of men's and women's respective annual income. Paradoxically, charcoal production represents an attractive pursuit for many rural dwellers, whether male or female yet, at the same time, the work is considered undesirable due to community stigma, risks to personal safety, and illegality. Nonetheless, the incentive remains strong for many, as the investment is short-term and delivers an almost guaranteed income, without the need for investment or inputs apart from their own labor.

Typically, once charcoal is produced in makeshift and highly inefficient traditional (e.g., unimproved earthen) kilns, it is distributed through various networks, often carried by bicycle to larger centers, where it is aggregated into larger volumes for transport to the marketplace. This is not always a seamless transaction. Indeed, in our investigation of the Central Landscape, our team member (Nyuma Mughogho) reported that producers are routinely cheated, beaten, and some women producers report having been raped, indicating the precariousness of the trade. Yet these same producers are unable or unwilling to abandon the charcoal business as it is such a deeply entrenched survival strategy that enables people to meet their daily needs more adequately than other available options. Coupled with Smith et al.'s (2017) findings about the shameful attractiveness of charcoal production, the "stickiness" of the pursuit in Northern Malawi also indicates both the inherent challenges of promoting alternative livelihoods and the unlikelihood that locals will end the trade themselves (e.g., voluntarily). They are unreliable and too vulnerable to be partners in reform, a point we revisit later in this paper.

In some areas, at least, the historically informal exchange between producers and transporters is increasingly mediated by another set of actors: charcoal agents or brokers.[5] Such brokers introduce

[5] As a longtime civil servant in the forestry sector, Nyuma Mughogho suggested that the use of agents is a new phenomenon.

another layer of illicit exchanges in the form of bribes, and may arrange both production and delivery of charcoal, as intermediaries between producers and transporters. The investigative journalist for *The Nation* newspaper, Bobby Kabango, posed as a broker and detailed the experience in a May 2021 article (Kabango, 2021, May 31). We were unable to determine definitively the degree to which the emergence and apparently growing importance of brokers as middlemen is evidence of opportunism by savvy individual actors, or increased organization and sophistication by organized crime operations in response to a growing market. Brokers acting as individual agents, rather than as representatives of criminal cartels, are far easier to curtail through legal enforcement measures. This could be considered an opportunity area for MCHF as an easier (and more politically palatable) entry point to controlling production and distribution of illegal charcoal.

4.1.2 TRANSPORTERS.

As noted, the smallest but most numerous transporters convey small loads of charcoal by bicycle, while the bigger players use 5-ton or larger vehicles that can transport 120-200 bags of illicit charcoal at a time (Kabango, 2021, January 30). The balance between the larger scale more urban-based transporters and the smaller-scale rural transporters appears to vary depending on the local characteristics of the area. For example, in the Zomba area, where charcoal resources are situated close to the urban market with a relatively small consumer population, most transporters are rural-based bicycle transporters. Whilst these conditions exist, the urban-based motorized middlemen are unlikely to be able to compete with their rural counterparts.

In areas where distances between production sites and consumption are greater, larger and more urban-based transporters enjoy market dominance. Such trade, in turn, tends to be controlled by powerful urban elites who own or contract vehicles. Given their long-term vested interests, economic clout and political connections, these elites can block reform of the charcoal trade (Zulu, 2010).

The transporters themselves are not powerful actors. Smith et al. (2015) in a study of charcoal transporters in Zomba, showed the general profile of transporters as mostly "married (78.1%), had primary-level education (70.6%), were from the regional ethnic group Yao (55.7%), transported twice or three times per week (51.2%) and did not live in urban areas (95.1%). Transporters tended not to have an alternative source of income (63.3%) and did not own a mobile phone (62.2%)." Furthermore, for more than half of the transporters surveyed, transporting charcoal was considered an interim activity, "either as a seasonal activity (10.1%), until they could upgrade to a more profitable activity (48.5%) or until they no longer required as much money (13.1%)." Therefore, charcoal transporting was not perceived as a long-term employment activity for the majority of those involved; rather it was either a "gap-filling" activity between other, often seasonal, livelihood activities, or a "stepping-stone" activity used to earn capital for a less arduous and less risky business with better long-term prospects (Smith et al., 2015). This profile, and informality of the charcoal sector, leave these players in the value chain very vulnerable to shocks and change, which can drive them to engage in additional charcoal trips to cover their losses in case of asset confiscation. These predominantly rural players are a far cry from the urban elites involved in the more profitable end of the process.

Somewhat paradoxically, the big players in the trade have in the past routinely escape fines, forfeiture, or punishment, due to widespread bribes throughout the sector. The team learned of driver-operated seven-ton vehicles sitting on "taxi ranks," effectively proclaiming their availability for hire. These trucks are hired by charcoal traffickers, which pays the drivers much better than construction piece-work. Evading police and forestry roadblocks, which typically come down or are

vacated around 11pm, the trade continues to thrive. Those few that are apprehended are fined minimally. There are occasional examples of vehicles being confiscated (Kondowe, 2021, February 11), although such norms are not yet entrenched. Transporters are seldom owners of the vehicles, rather, they are owned by financiers and cartel leaders who largely benefit from the trade unfettered. Even when drivers are caught and prosecuted, they absolve the owners of any knowledge of their illegal transport activities, thereby ensuring the return of the vehicle to the owner (J. Kwatiwani, interview, April 15, 2021)—and the vehicle's almost certain redeployment in the charcoal trade. Moreover, Tuntufye Mwalyambwire reported (April 28, 2021) that the fines for vehicle impoundment range from MK500,000-700,000, which is not sufficiently high to act as a deterrent to wealthy owners of the trucks (See "Enforcement," below). Recent data collection by MCHF indicates significant shifts in convictions and charges for forest crimes, such that:

- The number of people charged with forestry crimes increased from a baseline average of 72 people/year to 412 people in FY2021, reflecting a 472 percent increase;
- The number of people convicted of forest crimes increased from a baseline average of 65 people/year to 343 people in FY2021, reflecting a 428 percent increase;
- The number of people acquitted decreased from an annual average of 4 people/year to 0 people in FY2021;
- The percent of people fined increased by 12.44 percent;
- The percent of people receiving custodial sentences increased by 4.39 percent; and
- The number of people receiving community service and suspended sentences decreased by 2.21 percent and 9.46 percent, respectively.

The direction and magnitude of change are similar regarding penalties, and include:

- A 92.3 percent increase in the average duration of custodial sentence; and
- Fines ranged from MK5,000 to MK3,000,000 (mean of MK283,575), which is a 353 percent increase in the average fine.

Charcoal often is sold along the road. Once delivered to urban centers such as Mzuzu or Lilongwe, however, the charcoal is sold in the illicit markets, which then offer the bags on the retail market. Margins for small sellers and wholesalers are quite narrow (Bertrams & Gercama, 2017). Given the illegal nature of the vast majority of the charcoal trade, it is surprising to see such large quantities of charcoal being sold very openly in the markets, without any fear of consequences. This trade is also legitimated through market fees paid to local councils. Is there scope to undertake consultations with local councils on this apparent paradox within the MCHF program?

4.1.3 CONSUMERS

The 2018 Malawi Population and Housing Census indicated that reliance on charcoal as the primary cooking fuel in urban households increased from 44.6 percent in 2011 to 76 percent in 2018. In urban areas charcoal is sold at significant profit to consumers. Given both cultural preference, low connectivity and the scarcity of affordable electricity, and the current cost of LPG relative to charcoal, charcoal remains the fuel of choice.

All of these illicit activities along the value chain, and the actors who engage in them—producers, agents and traders, truck drivers and retailers, and consumers—benefit from the complicity of other actors, including those ostensibly charged with protecting an exhaustible natural resource. The journalist Bobby Kabango most recently exposed the complicity of officials from Malawi Police Service, Malawi Revenue Authority, the Directorate of Road Traffic and Safety Services and

Department of Forestry, as well as traditional chiefs. As our field researcher confirmed, many chiefs pretend to help government conservation, but in fact are directly involved in the trade and receive payoffs from brokers. Indeed, it is likely that most traditional authorities are engaged in the charcoal trade: no one does anything in the village without chief/headman approval or knowledge (Kabango, 2021, May 31). Given their cultural influence within their communities, any involvement in illegal charcoal by traditional leaders is problematic, as it implicitly sanctions similar behavior in the community. Interventions targeted at rural communities (discussed below) ideally would target traditional leaders as well, both as key beneficiaries as well as partners.

4.1.4 POLITICIANS IN THE (WOOD/FUELWOOD) TRADE

Reportedly, many political and bureaucratic elites are directly or indirectly involved in the charcoal trade. Most of them retain some measure of plausible deniability, however, occasionally they are exposed. For example, DPP (Democratic Progressive Party) MP Noel Masangwi [Later UTM- United Transformational Movement] was implicated in "Timber Gate" in 2015. Authorities confiscated nine trucks of round wood from (Viphya) Chikangawa, intended for (illicit) export (Muheya, 2015, February 22). Given the limitations of this study, it was impossible to ascertain precisely the level of politicians' involvement in the charcoal trade, beyond rumor and supposition.[6]

4.1.5 POTENTIAL CHAMPIONS

The subject of "champions" for reform came up repeatedly in interviews with would-be reformers. Numerous individuals were mentioned in the forestry sector as potential champions, including the new administration's Minister of Forestry and Natural Resources, Nancy Tembo; Secretary Yanira Ntupanyama; and Director of Forestry, Clement Chilima. There also appears to be at least some support for reforms within the political class, the locus of which is the Malawi Parliamentary Conservation Caucus, in which MP Werani Chilenga plays a prominent role. Martha Chizuma, who took over as director general of the ACB in May 2021, is also reputed to have an interest in changing the culture of corruption in the country, including that involving the illegal charcoal trade.

Even in landscape interviews, participants identified various people (or even self-identified) as "champions" of reform in the sector, including traditional leaders and local smallholders. These latter individuals, whatever their commitment to reducing illegal charcoal production and trade, are clearly miscast as champions, however. By contrast, the civil servants appear, at least at first blush, to bear some resemblance to the kinds of reformers Daniel Carpenter (2001) described in his path-breaking book, *The Forging of Bureaucratic Autonomy*. Chronicling the American historical experience, Carpenter demonstrates how even mid-level bureaucrats can create formidable bureaucracies that deliver meaningful reforms. He describes how individual champions, whom he labels "bureaucratic entrepreneurs," amassed power by gaining the support of key organizations and interest groups. These were entrepreneurial public servants who created thick networks that cut across economic, social and ethnic boundaries, thereby carving out autonomy for their organizations and insulating them from political interference.

In a developing context like Malawi, such bureaucratic entrepreneurs would need to be technocratic, enjoy autonomy, and have personal and political reward structures that offer incentives for reform. Autonomy, however, is hard to secure internally and organically, and it is difficult to maintain without the thick networks described by Carpenter, especially in the face of hostile interference by

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6 Although clearly a sensitive area, this subject would benefit from a focused investigation, including forensic accounting methods, extensive consultation with ACB and triangulation among and across political actors.

political elites. Thus, the Malawian individuals identified above—and perhaps other would-be reformers who as yet lack similar visibility—might be characterized best as "proto-champions." It is unclear whether these proto-champions in Malawi's forestry bureaucracy, however visionary and reform-minded, can achieve the level of success attributed to their American counterparts. Although they might be considered champions eventually, at present, they lack sufficient autonomy and authority to effect change, even within the Ministry of Forestry and Natural Resources (MFNR), because of the ministry's subordinate position among Malawi line ministries. In brief, the MFNR lacks financial and human resources and the convening power necessary for its proto-champions to follow Carpenter's historical model. Moreover, the Ministry itself—and hence the reform-minded actors who currently comprise its leadership—is dependent on the goodwill and cooperation of more powerful institutions, especially the Ministry of Finance, the Ministry of Energy, and the Ministry of Home Affairs and Internal Security to enact its agenda for reform. In addition, our investigation, serious doubts about the integrity of numerous mid- and low-level officials in the MFNR and the Department of Forestry, suggesting that conditions are less than auspicious.

At bottom, as Bridges and Woolcock assert, "Broad sets of agents must be mobilized into communities of change by conveners, connectors, and motivators, fostering emergence and diffusion of local solutions" (Bridges & Woolcock, 2017, p. 24). While the number of actors/proto-champions mobilizing in support of charcoal sector reforms in Malawi continues to grow, they do not yet occupy sufficiently powerful bureaucracies, or represent a formidable community of change. What is needed, therefore, is some kind of "league of champions," that is, like-minded bureaucratic leaders across ministries (including powerful core ministries) and agencies, that can cooperate to effect reform. Our research (S. Gama, interview, September 2020, and others) revealed that cross-ministerial meetings of the Charcoal Taskforce are not taken seriously or not attended by those outside of Forestry and Natural Resources, however, so the work of identifying, and shielding, such counterparts is essential. (This was echoed in numerous interviews, including MPS's Wellington Chindzakazi.)

4.2 AN OVERVIEW OF POSSIBLE ENTRY POINTS FOR MCHF

Charcoal will remain a key part of the fuel mix in Malawi for the foreseeable future. Indeed, the failures of a range of efforts over recent decades suggest that the GoM's efforts to curtail charcoal production are something of a charade; the negative outcomes in Malawi have proved so resistant to resolution because no individual actor has the incentive to change behavior. "The sector's business runs entirely through and is powered by the dealer–transporter–wholesaler networks" (Sander et al., 2013, p. 123). Hence, government, local authorities, and other entities appear unwilling to prioritize this issue and exercise little restraint over these actors, in whom much of the power and resources lie in the charcoal sector. They also have vested interest in maintaining status quo. If not government officials themselves, these actors have informal "revenue sharing" relationships with government officials. Indeed, this seems to be the trend everywhere. One example of this is where District Councils collect market fees from charcoal vendors selling in the local markets. So how to effect change to charcoal production, distribution, and consumption in such an environment?

The following sub-sections explore some potential solutions that emerged in the course of the PEA. None can be described as completely novel, however, we aim to shed new light on the advantages and disadvantages of different approaches given the contemporary Malawian political economy. The need for holistic responses is evident, as there is no single intervention—for example, stepped-up enforcement—that is sufficient to enable lasting reforms in the charcoal sector.

We begin with enforcement, as respondents widely decried its failings. Indeed, although overwhelmingly illegal, the charcoal trade is thriving throughout Malawi, providing a prima facie case for increased enforcement. Yet we argue that an overemphasis on enforcement will backfire. We then turn to energy market-based solutions, namely alternative energy such as LPG, electricity, or legal licensed charcoal, and assess their viability in this context. Finally, whether due to accelerating degradation or increased enforcement, ultimately—inevitably—opportunities for charcoal production will be foreclosed for many Malawians currently involved in the trade, thus we consider the prospects for alternate livelihoods. Any of these prospective interventions require substantial outlays of capital, which, to date, Malawi is unwilling or unable to provide. And given the country's legacy of corruption, donor partners may be hesitant to foot the bill. However, if the GoM does not prioritize charcoal and forest resources, it will face the consequences of collapsed markets, irreparable environmental devastation, and political instability.

4.2.1 INCREASED ENFORCEMENT CAPACITY

There is little disagreement about the need for greater enforcement of forestry laws and regulations. In many areas, there is a significant personnel shortage. Existing forestry guards are severely underequipped, face wide variations in their equipment, weaponry, and morale. Nyuma Mughogho reported that Dzalanyama, for example, has armed guards with uniforms (although the origins of these uniforms are unclear). Katete, by contrast, has unarmed guards and no uniforms. The latter example gives the impression of a lack of professionalism and low morale.[7] The risk to unarmed guards is great, thus a significant disincentive for action. DoF officials who confiscate charcoal may face death threats and potential harm. For example, MP Werani Chilenga (interview, April 14, 2021) informed us that there are only six forestry officers in Dzalanyama Forest Reserve, covering nearly 1,000 square kilometers. One officer was murdered this year, partly due to this insufficient coverage. Jurisdictional authority also confounds enforcement efforts. It appears that the MPS (Police) have power at roadblocks, while forestry guards only have authority at the production source.[8]

As is indicated elsewhere in this report and corroborated by other studies (see Smith et al., 2015, and Sibale, et al., 2014), to improve enforcement and strengthen punitive measures against the illegal charcoal trade, in the absence of viable alternatives of either livelihoods or energy, would be counterproductive and is morally questionable.

4.2.2 ADDRESSING CORRUPTION INSIDE AND OUTSIDE INSTITUTIONS

Undoubtedly, well-intentioned and committed individuals can be found at all ranks, throughout the various forestry-related and governance bureaucracies, though they are starved of resources and equipment and, too often, like-minded compatriots. Indeed, it is widely known that corruption is rampant, chronicled most recently in a blistering Sunday Nation exposé by investigative journalist Bobby Kabango (January 30, 2021). He documented abuses by police and forestry officials, particularly related to the transport of illicit charcoal, but it is evident all along the value chain (as addressed in the landscape reports, and in Section 4.1). One investigative journalist (G. Khombe, interview, March 24, 2021) informed us that even micro- and small-scale woodcutters pay minimal bribes. Forestry officials will accept just MK1,000 ($1.25) to let them pass. Further, as noted above,

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7 **This observation demands triangulation**: Indeed, does it matter, or not, for charcoal volumes whether guards are relatively better equipped and outfitted? The deforestation occurring in Dzalanyama would seem to suggest not, however, resources are just one aspect of the dilemma of illegal harvesting of woodfuels.

8 Another area for follow up: Should these jurisdictional boundaries be decreased? Would doing so ease enforcement and/or compensate for less qualified or less honest officials in one unit vs. another?

despite the bribe-taking environment, even petty actors do not fear police or forestry security. (Indeed, rather than the sympathetic caricatured small-scale producer, Khombe describes cutters as "ruthless people."). Although materials and equipment are routinely confiscated by officials, in contravention of the Forestry Act, these same assets are regularly returned to their owners in exchange for a bribe (T. Kachere interview, March 23, 2021).

Corruption is widely tolerated in all departments of the MFNR and infects other regulatory and enforcement bodies, including the MPS and Malawi Revenue Authority (MRA). A well-placed analyst (Nyuma Mughogho) estimated that in the section of the Department of Forestry responsible for national forests "almost everybody"—more than three fourths of the personnel—could be considered corrupt, at least until recent changes under the Chakwera presidency. Yet even where attention to forestry/charcoal corruption is heightened,[9] the limitations of the current enforcement regime are apparent and punitive measures are, at best, applied inconsistently.[10] While certainly an artifact of resource constraints, this may be a function of time as well, as new appointees gain, or seek to gain, traction as proto-champions.

4.2.3 THE COURTS AND LEGAL SYSTEM

Overall, Malawi's judicial system is plagued by the same institutional hurdles affecting most government offices. Thus, according to Magistrate for Salima District, Joan Kwatiwani (interview, April 15, 2021), the Forestry Amendment Act (6/2020) does not currently stipulate sentencing guidelines for forestry crimes and there are "insufficient resources" to develop them.[11] However, Section 64 states clearly that court shall require vehicle forfeiture, unless vehicle owners can demonstrate lack of knowledge or involvement in the offence. Numerous vehicles are forfeited nationally, but there is a lack of transparency about their disposition, that is, whether they are auctioned, returned, or privatized illicitly. Similarly, fines range widely, prior to the amendment of the Forestry Act from a minimum of MK5,000, to a maximum of MK600,000, and after the amendment from a minimum of MK5,000 to a maximum of MK3,000,000.

There are increasing reports of charcoal cases being prosecuted and of the state winning conviction, providing some basis for optimism about the government's stance toward criminality and corruption in the sector. Occasionally, there are big cases that attract headlines, but historically, prosecutions, and convictions, have been relatively limited. Once again, financial resources are a major constraint on bringing charcoal cases to the judicial system. Additionally, however, prosecutors have broad discretion about whether to bring charges. A lack of resources and the fact that forest crimes are often not taken seriously often leads prosecutors to prioritize other cases. Corruption also exists in the prosecutorial ranks, as well as fear of reprisals from cartels and powerful elites (J. Kwatiwani, interview, April 15, 2021). Hence, the apparent variance across magistrate courts in Malawi requires some close scrutiny. (One legal practitioner informed us that they heard no forestry cases while sitting as a magistrate for six months in Lilongwe, yet within one year of relocating to a more remote center [Salima], the caseload jumped to ten. As an urban capital awash in charcoal, it begs

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9 For example, the DoF responded to journalist Bobby Kabango's *Sunday Nation* article by taking legal action against three forestry officials and communicating a zero tolerance for corruption policy among its personnel (http://www.dof.gov.mw/post/department-forestry-update-actionsadress-corruption).

10 The literature on bureaucratic corruption in Africa demonstrates little progress toward its eradication. Although "political will" is essential, it must be backed up by sufficient resources (Amundsen, 2019, p. 5). It is too soon to judge the government of President Lazarus Chakwera on this front, but Malawi's history of corruption provides little basis for optimism.

11 It should be noted that MCHF is already supporting DoF in the development of sentencing guidelines.

belief that no charcoal cases were deemed worthy of prosecution in the country's largest city. However, recent cases suggest some movement.)

4.2.4 NECESSARY BUT NOT SUFFICIENT

On paper, Malawi already has developed a strategic and legal framework for addressing the problem of charcoal, including the 2017 NCS, and an increasingly robust regulatory framework. It is evident that regulation is not sufficient and there are widespread calls for a more vigorous enforcement regime that will hold malefactors, wherever they sit on the charcoal value chain, accountable. Yet whereas regulation clearly is ineffective absent enforcement, we argue below that even a rigid enforcement regime will produce negative, even destabilizing, consequences without addressing community needs and incentives.

Tanzania's experience with regulation reveals the shortcomings of the former. Even where a local licensing and regulatory regime already exists that legalizes charcoal trade, local communities see little benefit because revenues are designed to flow to the central government. As local entities are tasked with monitoring and revenue collection but receive no share of the proceeds, "the lack of an effective benefit-sharing mechanism accounts for the chronic under-collection of charcoal revenues across the country" (Sander, et al., 2013, p. 120). Locals have no incentive to monitor because they cannot receive the fees at their level. The point is, even where charcoal is subject to some measure of regulation, local communities may hold veto power over certain interventions and need to be incentivized to participate.

Many interlocutors rightly see the confounding issues of enforcement capacity and corruption as institutional problems whose solution lies mainly in increased funding. Although greater coordination across agencies is required, this too might be alleviated by more personnel and financial resources[12]. Thus, MP Chilenga, echoed by MCHF and other actors, called for more rangers along with higher pay and incentives, as well as more and better arms for forestry officers. MCHF proposed a Forestry Crimes Investigation Unit, although it does not have sufficient funding.[13] Advocates for stepped up enforcement and the creation of rapid-response units draw insights and inspiration from the wildlife sector, which saw some reduction in crime and trafficking since the enforcement regime was strengthened, beginning around 2013 and especially after 2015 (e.g., W. Chindzakazi, interview, October 1, 2021). For example, the GoM established a specialized Wildlife Crime Investigations Unit (WCIU) and several other initiatives that resulted in the apprehension of wildlife criminals and their adequate sentencing in the courts. Forestry crimes regarding wildlife and wildlife trafficking attracted a host of cooperating partners among international and local NGOs, including the Lilongwe Wildlife Trust, which also partners with MCHF, donor partners, and government agencies (see Kumchedwa & Jurisic, 2019).

For many observers, therefore, the experience of the wildlife sector provides a useful model for those seeking to stem the illegal charcoal trade. Yet there are important political economy limitations to the applicability of the wildlife model. First, wildlife has a singular ability to unite a domestic and international coalition in favor of enforcement, and to attract substantial resources to

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[12] It may be worthwhile supporting DoF to conduct an assessment of what the optimum institutional capacity might look like in order to ensure they can meet the needs for effective enforcement. What would enforcement look like if they had all the resources they need?

[13] In the wake of the Bobby Kabongo reporting, DoF announced redoubled cooperation with the Criminal Investigation Unity (CIU) of MPS, but progress toward establishment of a Forestry CIU body remains unclear (http://www.dof.gov.mw/post/department-forestry-update-actions-adress-corruption).

enable such enforcement.[14] International conventions such as the Convention on International Trade in Endangered Species and Wild Fauna and Flora (CITES) provide a strong normative framework, whereas leading international NGOs such as the World Wildlife Fund and African Wildlife Foundation, and local actors like Lilongwe Wildlife Trust, together with substantial donor resources, not only pressure governments, but can offset institutional weaknesses in government bureaucracies. Secondly, very few individuals actually profit from wildlife crimes. As a consequence, increased efforts to eradicate illegal wildlife trade are not only politically attractive, they can also be portrayed as economically helpful, through linkages to tourism development, for example. Thus, progress in the wildlife sector, showing near-term positive impacts, can be made relatively rapidly (Kumchedwa & Jurisic, 2019). Charcoal, unlike wildlife, is widely regarded as a "victimless" crime. Moreover, the beneficiaries from illicit charcoal are nearly universal, as some 90 percent of Malawians are either engaged in the trade or rely on the fuel, directly affecting individual wellbeing. Policing and enforcement are also considerably more difficult since we are dealing with a much more dispersed geography than in the wildlife sector. The short-term impact of increased enforcement in the charcoal trade is therefore the destruction of livelihoods and widespread economic hardship, which is a certain political loser for any elected government. We elaborate on this below.

Increased enforcement and punitive approaches to charcoal, while necessary, are insufficient on their own. Indeed, pursued in isolation, such measures may backfire. Thus, an enforcement-only regime makes for bad policy—and bad politics—particularly in a polity like Malawi, for four key interrelated reasons.

- First, the suppression of the charcoal trade will necessarily require interdiction at the level of production and transport. Given the lack of available alternatives, however, these individuals will pursue other illicit activities, such as the drug trade.
- Second, as growing charcoal scarcity leads to price increases and lost livelihoods, the remaining players will be compelled to use increased levels of violence to maintain their position; this will merely strengthen the role of organized crime syndicates that currently operate in the sector.
- Third, the public resources necessary to severely curtail the charcoal crisis are likely astronomical. Hence, the scope of enforcement application is unlikely to be sufficient to preclude the lateral proliferation of forest abuse. At least in the short term, therefore, charcoal extraction will extend further and faster into areas, such as the Northern Landscape, that are relatively less exploited currently. This merely diffuses rather than addresses the problem of charcoal and deforestation.
- Finally, purely enforcement-centric solutions disregard Malawi's political economy, because they are politically untenable. Whether all or merely part of the value chain is the focus, the result is to reduce the availability of charcoal on which 90 percent of Malawians rely, and to threaten the livelihoods of tens of thousands of rural dwellers. In a closely contested, substantially democratic political environment, such policy moves would amount to political suicide for an incumbent government. Any proposals, therefore, must account for Malawi's democracy.

Many informants spoke of "political will" to raise costs of charcoal through stepped up regulation, punitive measures against producers, and so on. Further, as noted by Amundsen (2019), as well as by many informants, "political will" is an important first step. Problematically, the state effectively provides a subsidized good—fuelwood from public or traditional lands—to the populace, the

[14] This is not to say that there are not lessons that can be learned from the relative success of the wildlife model. Indeed it is worth looking at what has succeeded with regards to controlling the illegal trade in wildlife, for example the coordination between MPS and DPW, and the involvement of ACB, and seeing how this can be applied to the charcoal sector.

market. If private market conditions prevailed instead, in which producers had to pay for their raw material (fuelwood), it would reduce what was regarded as an inexhaustible supply, cost considerably more and force people to explore alternatives. But given Malawi's democracy and competitive electoral environment, a government that depends on votes cannot impose shortages and higher costs on its constituents! Appeals to Malawi's environmental inheritance constitute post-materialist luxuries that the majority of Malawians cannot afford and are unlikely to constitute a "compelling narrative" for behavior change. Consequently, there is no politically saleable or tenable environmentalist argument here—at least not a local one. Other solutions are needed. We consider three principal areas, legal licensed charcoal, alternative energy, which is a central element of MCHF's goals, and alternate livelihoods promotion.

4.2.5 LEGAL LICENSED CHARCOAL

"Charcoal is potentially a renewable forest product. But current production methods and distribution modalities in Malawi prevent reinvestment in the next cycle of harvest. Reversing the lack of incentives for reinvestment is a political and economic issue" (Kambewa, et al., 2007)

Across much of Africa, charcoal's staying power is borne out by the available data. For example, excluding South Africa, woodfuels (charcoal and firewood) "meet 90 percent of sub-Saharan Africa's household energy needs and about 80 percent of "total final energy consumption" (IEA, 2014: 131, quoted in Branch & Martiniello, 2018, p. 242, and Nair & Tieguhong, 2004, p. 9). Branch and Martiniello's (2018, p. 242) research suggests that "(c)harcoal is the primary energy source for about 80 percent of urban households, while firewood is the primary source for about the same percentage of rural households." Ouya (2013) notes that "The importance of woodfuel, and particularly charcoal, is strong and growing… by 2030 charcoal is expected to become a US$12 billion industry, employing 12 million people." Kituyi (2020) says that charcoal "will remain the key sources of energy for most of the population in sub-Saharan Africa for several decades to come," and other studies point out that charcoal production is expected to increase (Babalola & Opii, 2012, p. 69; Mugo & Ong, 2006, p. 2). Already, some 61 percent of global charcoal production occurs in Africa (Doggart & Meshack, 2017) and rapid urbanization on the continent means that charcoal consumption is expected to rise another 50 percent between 2010 and 2030 (Branch & Martiniello, 2018, p. 242).

There are indications that sustainably produced charcoal would increase overall charcoal supply and alleviate both environmental and political economy stresses of the status quo. In fact, the MCHF agenda explicitly promotes the scaling up of legal licensed charcoal. However, according to the recent Urban Cooking Consumer Market Research survey conducted by MCHF, only 0.4 percent of households currently use legal licensed charcoal as an energy source for cooking, compared with 86.3 percent using illegal charcoal. This poor record of not supporting the production and scaling up of legal licensed charcoal is despite more than a decade of research and lobbying by organizations such as Malawi's Forest Governance Learning Group (Sibale, et al., 2014; FGLG, 2011).

From discussions with one legal licensed charcoal producer (T. Clark, Kawandama Hills plantation, interview, November 2, 2020), it appears that significant barriers to entering the legal licensed charcoal market remain, not least of which is its competitive disadvantage: the main competitor to legal licensed charcoal is that the illegal trade provides much cheaper charcoal than the legal product. It is not a level playing field since legal licensed charcoal producers have significant overhead costs (labor, machinery, costs of compliance, etc.). The process of entering the market also remains rather cumbersome and is only possible in the Malawi context with significant external help (notably PERFORM), and subsidies. However, there are some signs of hope in this area, in large part due to

the concerted efforts of MCHF. Over the last 12 months, the number of licensed producers of legal licensed charcoal increased from three to seven. The DoF is currently reviewing two additional applications and it is likely that the number of licensed charcoal producers will exceed 10 by the end of the year. While most of these producers could be classed as "small," some of the recently licensed producers (notably, Pyxus Ag Malawi and Raiply) have the potential to become bigger producers.

4.2.6 ALTERNATIVE ENERGY SOURCES

In the 1980s and 1990s, a predominant thesis articulated a fuel or "energy ladder," first proposed by Leach (1992). This argued that people graduate to more efficient, more environmentally friendly fuels as a consequence of increasing urbanization and affluence; relative wealth and development lead to more efficient energy sources. More recent scholarship largely dismisses the intrinsic logic of the energy ladder hypothesis as too linear and too teleological, as it misunderstands charcoal as merely "a step in a supposed energy ladder," rather than a major historical and materially important energy source (Branch & Martiniello, 2018, p. 243). Indeed, for Malawi and other developing countries, urbanization and relative improvement in wealth is connected to charcoal use as a preferred fuel (e.g., Zulu, 2010; Mwampamba et al., 2013). Yet, as Mwampamba et al. (2013, p. 76) demonstrate, "for users of dung, firewood, and crop residues, cooking with charcoal can represent a significant upgrade in terms of exposure to smoke, safety, and convenience." Thus, the transition from firewood to charcoal is such a move up the ladder, although not, as the thesis might suggest, to higher rungs, such as LPG or electricity.

For Malawi, despite some availability of alternative energy sources, charcoal and other woodfuels still constitute a large proportion of the energy mix, even in the relatively more affluent urban areas. MCHF's recent Urban Cooking Energy Consumer Market Research and Baseline Survey (USAID, 2020b) reported that 86.3 percent of surveyed households used unsustainable illegal charcoal for cooking, some 40.4 percent used firewood, 26.8 percent used electricity, and only 2.4 percent used LPG. For heating water, the figures are 50.1 percent use charcoal, 40.1 percent firewood, 17.4 percent electricity, and 1.3 percent use LPG. The Clean Cooking Market Information Package (USAID, 2020a) indicates a year-on-year growth of LPG importation from 200,000 in 2013 to 900,000kgs in 2019, with the main suppliers being Afrox and Delta Gas. Much of the LPG consumption is amongst the middle to high-income urban households, who switched to LPG due to the erratic and increasing cost of electricity (rather than as a switch from charcoal) (USAID, 2020a, p. 15).

LPG use is significantly lower in Malawi than in other parts of sub-Saharan Africa; the biggest LPG consumers are Senegal, Ivory Coast, Angola, South Africa, Ghana, and Sudan, where uptake and use are incentivized by long-term government support and subsidies. However, in Malawi, there remain significant challenges in terms of affordability (where cost is often compared to charcoal prices), accessibility (where distribution and storage remain limited), and acceptability (where understanding of LPG, particularly in relation to safety, remains low).

TABLE 1: PRIMARY SOURCE OF HOUSEHOLD COOKING ENERGY SOURCE, BY CITY (%)

	Blantyre	Lilongwe	Mzuzu	Zomba
Firewood	7.2	13.2	22.3	18.9

Charcoal	81.2	74.1	69.1	66.8
Electricity	10.8	10.7	7.8	13.4
Other	0.8	2.0	0.8	0.9

Source: Government of Malawi. 2018, p. 222.

Malawi is one of the least electrified countries globally with only 11 percent of the population connected to electricity overall, 42 percent of the urban population, and only four percent of the rural population (USAID, 2020b, p. 7). Within the four urban centers of Blantyre, Lilongwe, Mzuzu, and Zomba, using electricity for cooking is still quite low compared to charcoal and firewood, as summarized in Table 1 above.

How can alternative energy be made more competitive?

One reason that electricity plays such a small part in the energy mix is that it is not competitively priced in Malawi, and costs went up when electricity tariffs increased 5.72 percent in 2021 (Chimulala, 2021). Apparently, the Finance and Energy ministries increased the tariff without widespread consultation, including from Werani Chilenga's Parliamentary Committee on Natural Resources and Climate Change. The lack of coordination is itself alarming, and this provides additional evidence that environmental constituencies have little voice. Although electricity prices are not especially sensitive politically, given the limited access most citizens have to the grid, the price increase merely widens the gulf with charcoal, resulting in more pressure on illegal production.

Governance of electrical energy is haphazard in other ways. We learned, for example, that the previous government, under President Peter Mutharika, "killed" what described as sub-grids[15], which were located near Zomba and were not owned by the ESCOM utility (D. Kafumbata, interview, October 21, 2020).[16] Thus, instead of promoting the spread of cheaper, reliable local electric power, the GoM limited its availability. Would restoration of these practices, along with subsidies for petroleum-based fuels, help save forests? Although fossil fuel subsidies are beyond the scope of MCHF, Kafumbata (2020) suggested the subsidies for imported kerosene/paraffin in the 1960s helped suppress the charcoal market for over 20 years, revealing that state incentives can fundamentally affect market conditions and demand for fuels, including charcoal.

A further disincentive for electricity as a source of energy for cooking stems from improperly structured tax policy. Some stakeholders felt that the GoM should remove the value-added tax on electric cookstoves (J. Kalowekamo, interview, October 9, 2020) to make them less expensive. Additionally, it should remove or reduce import levies on LPG, at least in the near term. There must be favorable conditions and incentives for importers to wean urban dwellers from charcoal. By mixing incentives, government can foster competition in the marketplace, between traders/importers of electric cookstoves, and charcoal producers. The government's Ministry of Commerce and Industry and the Malawi Confederation of Chambers of Commerce and Industry (MCCCI) might be of help mobilizing lobbying campaigns on behalf of local retailers and importers, and identifying politicians involved in the wholesale/retail import trade. If MCHF and its

15 Even if the enabling environment for sub-grids were improved, it is unlikely to make a significant impact on charcoal use since electricity from these grids is generally not used for cooking

16 As sub- or micro-grid development represents one avenue for energy diversification, the circumstances surrounding these closures require additional examination and explication.

environmental allies can partner with these business interests, they can squeeze the margins of illicit charcoal producers and other actors on the charcoal value chain. Charcoal, after all, represents a competitive sector, illegally subsidized by the state via "free" inputs; mobilizing the interests of importers and retailers, whose own profits are at risk, may hold some promise.

MCHF Chief of Party Ramzy Kanaan noted that the price of charcoal reached MK10,000 for a "50kg bag" in June 2021, arguing that if it hits MK14,000, it will be competitively priced with electricity or LPG. This illustrates the potential effectiveness of minor interventions in the alternative energy market as well, to push the prices closer to a tipping point with charcoal. The key is to provide consumers access to other sources of cooking fuel at a low enough price to not induce undue financial hardship.

4.2.7 ALTERNATIVE LIVELIHOODS

The highest earnings from the charcoal sector accrue to retailers. According to Zulu (2010, p. 3721) retailers claim nearly 60 percent (58.4 percent) of retail value of each ton of charcoal, earning profit margins of some 43.5 percent (exceeding their 35.1 percent profit margin for firewood). Roadside sellers and charcoal producers claim just 12.2 percent of the retail value per ton, but still enjoy strong markups of 16.4 percent over their costs (primarily because the main cost is their labor). Zulu finds that wholesalers see the lowest markups due to their higher transportation costs. It is unclear which, if any, of these actors, especially larger market players, are even partially vertically integrated and might therefore claim greater shares of the profits.

Kambewa et al. (2007) estimated that 92,800 people's livelihoods were supported through charcoal production, distribution, and retailing, although Zulu (2010) placed the market at 200,000 people. More recent figures suggest a market size of at least 2.5M people in 2021. In any event, the number of Malawians directly and indirectly involved in the charcoal industry (including family members and consumers) presents a formidable obstacle to change. The potential sites of resistance to reform are thus much broader than a group of well-placed elites who have a considerable stake in a market estimated at over $81M in 2008 in Malawi's four main cities alone.

The informal nature of the charcoal trade imposes an economic and psychological burden on those engaged in the trade, since it leaves people at greater risk of income loss than those engaged in formal employment. This is particularly true for those at the lower end of the income scale. Furthermore, those engaged in the sector are vulnerable to insecurity through confiscation of assets or loss of income through arrest and conviction. Despite this risk, people continue to engage in this illegal activity in part because of a lack of credible alternatives. Below, we examine how it may be possible to promote alternative livelihoods, given the current political economy.

HOW CAN ALTERNATIVE LIVELIHOODS BE PROMOTED?

A familiar refrain from those who favor supply-side solutions is to stop charcoal production at the source (including MP W. Chilenga, interview, April 14, 2021). For the reasons previously discussed, this is both morally suspect—punish the poorest via a "let them eat cake" approach—and politically untenable. It is hard to justify supply side interventions alone, rather than targeting consumption and demand, in a Malawian context that is 80 percent rural, staggeringly poor, and dominated by the informal sector (including charcoal). On the other hand, should demand for charcoal decrease, rural

producers would eventually need to find other livelihoods and, as noted above, a post-charcoal world would be dominated by other illegal activities, absent legal alternatives.[17]

One available vehicle for such alternatives is the National Economic Empowerment Fund, or NEEF (formerly Malawi Enterprise Development Fund [MEDF] established in 2014; itself a successor to the Malawi Rural Development Fund [MARDEF], established in 2005). NEEF is a government-owned microfinance institution intended to empower ordinary and underserved Malawians through the provision of micro-credit, established in 2020. However, reporter Grace Khombe (interview, March 24, 2021) informed us that NEEF and its predecessors are corrupted and coopted by elites, especially DPP, who used it as free money for them and their supporters. This was widely reported in the media and through an independent audit probe which the Secretary to the Treasury commissioned in July 2020, which exposed gross abuse of funds (Chimjeka, 2020). Yet *a properly managed* NEEF, utilized for its intended purpose rather than as a slush fund, could provide the soft-landing needed for rural Malawians alienated from the charcoal trade. Public Service Reforms posted a recent news article (2021) entitled "NEEF Operational Reforms Bearing Fruit," indicating that just such a cleanup operation has begun, and that MK8.2bn was disbursed between October 2020 and June 2021 with a 97 percent repayment and an average loan of $2,876 US or MK2.4M. Such celebratory accounts, however, are tempered by an article in *The Times* in Malawi barely two months later, which suggested that repayment on a total loan disbursement of MK 6.4bn (Kasanda, 2021) was just eight percent. Thus, while the NEEF remains a potentially promising avenue to support livelihoods if trust in it can be rebuilt, far more investigation is needed. Indeed, the fact that the architecture already exists—despite its historically poor track record—means that there's already a vehicle to promote alternative livelihoods for those affected by moves against charcoal producers on the supply side. Of course, the NEEF needs to be sufficiently capitalized and protected to enable it to perform this development finance function. Furthermore, MCHF would need to determine how to make a compelling case for making loans available to charcoal producers, including explaining why this would be a worthwhile investment.

Moreover, while numerous respondents alluded to bee-keeping or other small business as possible alternatives, we should be realistic about the market for Malawi's honey. Small business development, if it is to be sustainable, has to be part of a larger economic development strategy that extends far beyond charcoal. On their own, such "sustainable livelihoods" do not change the overall demand for charcoal; they simply shift production elsewhere. As forests are a finite resource, this hardly solves the problem unless paired with demand-side solutions such as those discussed above.

TABLE 2: OPPORTUNITIES FOR MCHF INTERVENTION

Objective	Issues	Opportunities
OBJECTIVE 1: Alternative energy sources and cooking technologies adopted to reduce unsustainable wood fuel demand	• Despite some availability of alternative energy sources, charcoal and other woodfuels still constitute the largest proportion of the energy mix, even in	• To review the conditions and incentives for importers of alternative energy and related equipment, such as electric cookstoves, etc., to support a transition from

[17] MCHF has recently undertaken a Forest-Friendly Enterprises Value Chain Assessment, which may help to shed some light on what could be viable value chains to invest in, to provide potential livelihood options in the different landscape areas.

Objective	Issues	Opportunities
	relatively more affluent urban areas. • Utilization of LPG is significantly lower in Malawi than in other parts of sub-Saharan Africa, and Malawi remains one of the least electrified countries globally. • The enabling environment for legal licensed charcoal production still faces significant challenges to entering the market.	charcoal (thereby fostering greater competition in the marketplace). • Partner with MCI and MCCCI to mobilize lobby campaigns on behalf of local retailers and importers, including identifying politicians involved in the wholesale/retail import trade to add their weight behind such a campaign.
OBJECTIVE 2: Local delivery of forestry services and sustainable use of forestry resources	• Co-management • Alternative livelihoods	• To use the data generated through the MCHF Forest-Friendly Enterprises Value Chain Assessment, to identify potential value chains that can be supported through MCHF. • To continue to monitor for any opportunities to support alternative livelihoods, and potential sources of finance for such approaches (e.g., through NEEF). • To explore in greater detail any existing success stories of co-management to see if any elements can be replicated or scaled up.
OBJECTIVE 3: Regulatory and enforcement framework to support sustainable wood fuel production and use	• Jurisdictional boundaries between MPS and DoF are not clear. • Expanding enforcement and punitive measures, absent alternative energy sources or alternative livelihoods, is unlikely to gain political traction. • Understanding the seriousness of forest crimes is patchy. As a result, the number of	• Invest in higher salaries and greater availability of resources to law enforcement and forestry officials. • Facilitate/host meetings of the Charcoal Task Force to enable relationships between DoF and government partners; foster emergence of "League of champions"—interdepartmental and

Objective	Issues	Opportunities
	prosecuted cases and the fines levied in those cases are highly variable across the country. • To date, institutions such as the ACB play little part in investigating and curtailing forest crimes, although the recent change in Director holds some hope for change.	inter-ministerial advocates empowered to promote reform. • Ensure that Forestry Crimes Investigation Unit receives sufficient funding and training.
OBJECTIVE 4: Government of Malawi's implementation capacity of low emissions development in REDD+ and/or other land use increased	• Tools and technology to manage and monitor forest landscapes. • Data management and improved capacity to manage and monitor.	• Facilitate/host meetings of the Charcoal Task Force to enable relationships between DoF and other government units. Provide technical and financial resources to Malawi Parliamentary Conservation Caucus. Both are potential sources of reformers—a "League of champions"—that can be empowered as changemakers.
OBJECTIVE 5: Interventions leveraged with other USAID and development partner resources		• To explore if there are any opportunities for synergistic interventions alongside the USAID STEPS program, which is supporting the National Assembly to advance evidence-based policy making and supporting Malawian organizations to be a more powerful advocate for change. • Explore potential synergies with the DFID (FCDO) TRACTION program. • To explore any synergy in interests/interventions with USAID agricultural programs (Feed the Future), particularly in relation to alternative

Objective	Issues	Opportunities
		livelihoods and alternative energy sources.

5.0 NEXT STEPS

Given the limitations we faced undertaking this study, there remain some unanswered questions and analytical gaps that warrant further investigation once the situation in Malawi allows. Many of these are indicated or implied at various points in the preceding analysis and are listed below:

- Although this report outlines the stakeholders within the charcoal value chain and their interests, a more granular level of detail explaining the connections and relationships between certain stakeholders and institutions would be useful to provide a better understanding of the political landscape. For example, within the MPS, who reports to whom? How are people hired and promoted through the system? What is the system for rewarding good police work? Perhaps more importantly, how are malefactors disciplined: through transfers and reassignments, suspension, or termination? Investigating the various institutions in this way would provide insights into how MCHF could work more effectively within the operational terrain.
- There appears to be some indication from the research of the emergence of "brokers" in the value chain. Research in the Central Landscape suggested this is a relatively new phenomenon. Further investigation into where these brokers, the reasons for their emergence, and what this might mean for the charcoal sector is critical. A greater understanding of this could reveal new opportunities for MCHF intervention or support.
- The landscape level research undertaken during the course of this PEA exercise did not find clear triangulated evidence on the dynamic between forestry personnel and police staff at the local level. It is worth investigating further the dynamic between MPS and Forestry staff at the roadblocks, the jurisdictional boundaries and power relations, and evidence of corrupt collaboration in support of the illicit charcoal trade. Investigative journalists such as Bobby Kabango researched this issue, although further detail may give a clearer picture of where the power lies.
- To ensure that program delivery continues to take account of the political realities on the ground, and that any potential opportunities are seized when they arise, it is important that the MCHF team keep their fingers on the social, political, and economic pulse. On a routine basis and at key points in the program cycle, for example when drawing up a new annual work plan, it is important to take stock of the political landscape and update any previous analysis based on any changes that may have taken place. The MCHF team can sit with trusted partners to update any changes in the stakeholder table provided in Appendix 3. You can supplement your understanding through informal one-to-one conversations with key informants to learn how things operate compared to how they are supposed to operate. Questions to help aid your understanding of what motivates the different stakeholders include:
  - What do they want? Is it to secure a source of income/livelihood? To secure political or social power? To repay a favor? To leave a legacy? Etc. …
  - What constraints do they face? Are the constraints formal (e.g., policies, laws)? Are they informal (e.g., unwritten rules, such as gender norms or expectations of what they should do or not do)?
  - Who and what is influencing them? Does their behavior reflect the interests of others and who is missing from that interest group? How are the interests of those they work with, or other organizations of individuals, influencing them? Think outside their organization or ministry too.
  - What about non-local actors including donors, or your own project or team? Do you have any influence over them?
- Identifying champions and where there is room for change: using the information you have on stakeholders and their interests, and the information you have on potential champions (section 4.3.5), you can identify who may be the change-makers that can influence MCHF outcomes on

an ongoing basis. Questions to help aid your understanding of champions and change-makers include:

- Who are the key decision-makers at your stakeholder table? Who gets to decide, vote, sign off, fund, and chair the process? This is not just about the formal decision-making chain but those people and organizations that hold informal power over a decision. Who has the power to make a change? Or in other words, who is in a position to be a champion of change?
- Do these influential individuals have potential partners? Are there any like-minded individuals or groups, perhaps within other agencies or institutions, that could join them in championing change? Is there the potential for a "league of champions" and if so, what role could MCHF usefully play in convening or facilitating this process? Are there any individuals and groups beyond the usual suspects (e.g., in the private sector, faith-based groups) who could join this group?
- What are their key decision points? Is there a timeline that is important to take into account (e.g., election cycles)? Are there any windows of opportunity? What are the chances of success for the "pro" side? What kind of resources or support might they need to help them succeed?

APPENDIX 1. BIBLIOGRAPHY

Amundsen, I. (2019). "Extractive and power-preserving political corruption." In I. Amundsen (Ed.), *Political corruption in Africa: Extraction and power preservation.* Edward Elgar Publishers Ltd.

Babalola, F. D., & Opii, E. E. (2012). Factors influencing consumption of charcoal as household energy in Benue State, Nigeria. *International Journal of Organic Agriculture Research and Development, 6*(Sep. 2012). https://www.researchgate.net/publication/282152027_Factors_influencing_consumption_of_charcoal_as_household_energy_in_Benue_State_Nigeria Accessed: 11/06/2020.

Bates, R. (1981). *Markets and States in Tropical Africa*. University of California Press.

Bauer, G., & Taylor, S. (2011). "Malawi: Institutionalizing Democracy." In *Politics in Southern Africa: Transition and Transformation*. Lynne Rienner Publishers.

Bergmann, C., Roden, P., & Nüsser, M., (2019). Contested fuelscapes: Producing charcoal in sub-Saharan drylands. *Area*, *51*(1), 55-63. https://doi.org/10.1111/area.12394

Bertrams, N., & Gercama, I. (2017). "Malawi's black gold." *New Internationalist.* https://smokeandmirrors.newint.org/blackgold.html

Blundo, G., & Olivier de Sardan, J.-P. (2006). *Everyday corruption and the state: Citizens and public officials in Africa.* Zed Books.

Branch, A., & Martiniello, G. (2018). Charcoal power: The political violence of non-fossil fuel in Uganda. *Geoforum*, *97*(Dec. 2018): 242-52.

Bridges, K., & Woolcock, M. (2017). *How (not) to fix problems that matter: Assessing and responding to Malawi's history of institutional reform.* World Bank Policy Research Working Paper.

Brockington, D., Duffy, R., & Igoe, J. (2008). *Nature unbound: Conservation, capitalism, and the future of protected areas.* Earthscan.

Cammack D., Golooba-Mutebi F., Kanyongolo E., & O'Neil T. (2007). *Neopatrimonial politics, decentralisation and local government: Uganda and Malawi.* Overseas Development Institute (ODI).

Cammack, D. (2017). Malawi's political settlement: Crafting poverty and peace, 1994–2014. *Journal of International Development, (29)*, 2017.

Cammack, D., & Kanyongolo, E. (2010). *Local governance and public goods in Malawi.* Overseas Development Institute (ODI).

Cammack, D., & Kelsall, T. (2011). Neo-patrimonialism, institutions, and economic growth: The case of Malawi, 1964-2009, *IDS Bulletin.*

Carpenter, D. (2001). *The forging of bureaucratic autonomy: Reputations, networks, and policy innovation in executive agencies, 1862-1928.* Princeton University Press.

Centre for Social Research. (2020). "Summary Of Results: Afrobarometer Round 8 Survey in Malawi in 2020."

https://afrobarometer.org/sites/default/files/publications/summary%20of%20results/afrobarometer_sor_mlw_r8_en_2020-05-10.pdf

Chasukwa, M., Chiweza, A. and Chikapa-Jamali, M. (2013). "Public Participation in Local Councils in Malawi in the Absence of Local Elected Representatives-Political Eliticism or Pluralism?" *Journal of Asian and African Studie*s. 49. 705-720. 10.1177/0021909613509218.

Chidumayo, E. N. (1993). Zambian charcoal production. Miombo woodland recovery. *Energy Policy* · DOI: 10.1016/0301-4215(93)90042-E. Source: RePEc.

Chidumayo, E. N., & Gumbo, D. J. (2013). The environmental impacts of charcoal production in tropical ecosystems of the world: A synthesis. *Energy for Sustainable Development, 17*(2): 86-94.

Chimjeka, R. (2020, November 16). "Audit exposes rot at NEEF." *The Times.* https://times.mw/audit-exposes-rot-at-neef/

Chimulala, M. (2021, April 27). "Malawi Energy regulatory authority: ESCOM in blame game over electricity tariff hike." *The Maravi Post.* https://energycentral.com/news/malawi-energy-regulatory-authority-escom-blame-game-over-electricity-tariff-hike

Chingaipe, H. (2017). "Malawi." In *Effectiveness of anti-corruption agencies in Southern Africa Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe: A review by OSISA [Open Society Institute of Southern Africa]*.

Chunga, J. J. (2020). "Malawians see declining quality of elections, express little trust in the electoral commission." *Afrobarometer Dispatch No. 341* (Feb 4, 2020). http://afrobarometer.org/sites/default/files/publications/Dispatches/ab_r7_dispatchno341_malawians_see_declining_election_quality_mistrust_mec.pdf

Chunga, J. J., & Mazalale, J. (2017). Is Malawi losing the battle against "Cashgate"? *Afrobarometer Dispatch No. 149.* https://afrobarometer.org/publications/ad149-malawi-losing-battle-against-cashgate

Doggart, N., & Meshack, C. (2017). The marginalization of sustainable charcoal production in the policies of a modernizing African nation. *Frontiers in Environmental Science*, *5*, 27.

Eggen, Ø. (2011). Chiefs and everyday governance: Parallel state organisations in Malawi. *Journal of Southern African Studies, 37*(2), 313-331.

Eggen, Ø. (2012). Performing good governance: The aesthetics of bureaucratic practice in Malawi. *Ethnos, 77*(1), 1-23. DOI: 10.1080/00141844.2011.580357

FAO (United Nations Food and Agriculture Organization) and United Nations Environmental Programme. (2020). Forests, biodiversity, and people. *The state of the world's forests 2020*. https://doi.org/10.4060/ca8642en

FAO. (n.d.). "Improved charcoal technologies and briquette production from woody residues in Malawi." Bioenergy and Food Security (BEFS) Case Study. http://www.fao.org/3/CA2087EN/ca2087en.pdf

FGLG (Forest Governance Learning Group). (2011). "Sustainable charcoal production by and for local communities." Malawi Policy Brief No. 1.

Fisher, M. (2004). Household welfare and forest dependence in Southern Malawi. *Environment and Development Economics, 9*(2), 135-154. doi:10.1017/S1355770X03001219

Gabay, C. (2011). Consenting to "Heaven": The Millennium Development Goals, neo-liberal governance, and global civil society in Malawi." *Globalizations, 8*(4), 487-501. https://doi.org/10.1111/j.1759-5436.2011.00214.x

Gabay, C. (2014). Two transitions: The political economy of Joyce Banda's rise to power and the related role of civil society organizations in Malawi. *Review of African Political Economy, 41*(141), 374-388.

Gamula, G. E. T., Hui, L., & Peng, W. (2014). An overview of the energy sector in Malawi. *International Journal of Sustainable Energy Development (IJSED), 3*(1), June 2014. Accessed: 28/04/2018

Ghilardi, A., Mwampamba, T., & Dutt, G. (2013). "What Role Will Charcoal Play in the Coming Decades? Insights from up-to-Date Findings and Reviews." *Energy for sustainable development* 17.2 (2013): 73–74

Girard, P. (2002). "Charcoal production and use in Africa: What future?" *Unasylva* 211, *53*. https://www.fao.org/3/y4450e/y4450e05.pdf Accessed: 11/06/2020.

Government of Malawi. (2001). Non-Governmental Organizations Act, No. 3 of 2001. Parliament of Malawi. https://www.congoma.mw/download/ngo-act/

Government of Malawi. (2010). Malawi State of Environment and Outlook Report: Environment for Sustainable Economic Growth. Ministry of Natural Resources, Energy and Environment, Lilongwe. Accessed: 20/03/2018

Government of Malawi. (2018). Malawi Population and Housing Census Report, 2018. https://malawi.unfpa.org/sites/default/files/resource-pdf/2018%20Malawi%20Population%20and%20Housing%20Census%20Main%20Report%20%281%29.pdf

Government of Malawi. (n.d.) National charcoal strategy, 2017-2027. https://afr100.org/sites/default/files/Restoration_Malawi_Charcoal-Strategy_lowq.pdf

IEA (International Energy Agency). (2014). Africa Energy Outlook, Paris.

Ihonvbere, J. (1997). From despotism to democracy: The rise of multiparty politics in Malawi. *International Studies, 34*(2), 193-219.

Johnson, T., Menczer, K., & Mwanjela, G. (2012). Malawi environmental threats and opportunities assessment. International Resources Group January 2012 (version 3). USAID. Accessed 11/06/2020

Kabango, B. (2021, January 30). "Forest, police cash in on charcoal business." *The Nation*. https://www.mwnation.com/forest-police-cash-in-on-charcoal-business/

Kabango, B. (2021, May 31). "Under siege." *The Nation*. https://www.mwnation.com/under-siege/

Kambewa, P., Mataya, B., Sichinga, W., & Johnson, T. (2007). "Charcoal—The reality: Charcoal consumption, trade, and production in Malawi." Technical Report to the Forest Governance Learning Group. Malawi COMPASS II.

Karreth, A. K. (2017). "Schools of democracy: How trade union membership impacts political participation in Africa's emerging democracies," *Democratization* (June 2017): 1-20.

Kasanda, M. (2021). "NEEF disburses K23 billion." *The Times*. https://www.mwnation.com/forest-police-cash-in-on-charcoal-business/

Kaunde, S. (2021, July 11). "Malawi: A fight against corruption in Malawi." *Nyasa Times*. https://allafrica.com/stories/202107110038.html

Keefer, P. (2004). "What does P.E. tell us about economic development and vice versa?" World Bank Working Paper #3250.

Kirby, M. (2016). "Malawi and the transition and adherence to multi-party democracy." *Commonwealth Law Bulletin 42(*3): 443-452.

Kita, S.M. (2017), "Government doesn't have the muscle": State, NGOs, local politics, and disaster risk governance in Malawi. *Risk, Hazards & Crisis in Public Policy, 8*: 244-267. doi:10.1002/rhc3.12118

Kituyi, E. (2020). Towards sustainable charcoal production and use: A systems approach. African Centre for Technology Studies, Nairobi, Kenya. Accessed: 12/06/2020.

Kondowe, R. (2021, February 11). "Siku van impounded for smuggling charcoal." *Malawi 24*. https://malawi24.com/2021/02/11/siku-van-impounded-for-smuggling-charcoal/

Kumchedwa, B. & Jurisic, I. (2019). Illegal wildlife trade progress report, 2015-18. https://www.giz.de/de/downloads/giz2019-en-progress-report-illegal-wildlife.pdf

Leach, G. (1992). "The Energy Transition." *Energy Policy, 20*, 116-23.

Lubilo, R., & Child, B. (2012). "The rise and fall of community-based natural resource management in Zambia's Luangwa Valley…" In Nelson, F. (Ed.). *Community Rights, Conservation, and Contested Land: The Politics of Natural Resource Governance in Africa* (pp. 202-226). Routledge.

Luoga, E.J. et al. (2000). Economics of charcoal production in miombo woodlands of eastern Tanzania: Some hidden costs associated with commercialization of the resources. *Ecological Economics, 35*, 243-257. Accessed: 11/06/2020

Lust, E., & Waldner, D. (2015). Unwelcome change: Understanding, evaluating, and extending theories of democratic backsliding. Research report for USAID.

Makuwira, J. (2011). Civil society organizations (CSOs) and the changing nature of African politics: The case of the CSO–government relationship in Malawi. *Journal of Asian and African Studies,* (46)6, 615-628.

MARGE (*Marchéage et Gestion de l'Environnement*). (2009). Malawi Biomass Energy Strategy, BEST. Consultancy Study for Government of Malawi and European Union Partnership Dialogue Facility. (MARGE), Lilongwe.

Mattes, R. (2019). "Democracy in Africa: Demand, supply, and the "dissatisfied democrat." *Afrobarometer Policy Paper #54.* http://www.afrobarometer.org/publications/pp54-democracy-africa-demand-supply-and-dissatisfied-democrat

MBC.mw. (2018, August 2). *Charcoal trade fuelling deforestation in Malawi.* MBC.mw. https://www.mbc.mw/news/sports/item/6746-charcoal-trade-fuelling-deforestation-in-malawi

Meldrum, A. (1995). Legacy of a dictator. *Africa Report, 40*(2), p. 56. Retrieved from http://proxygt-law.wrlc.org/login?url=https://www.proquest.com/scholarly-journals/legacy-dictator/docview/195173347/se-2?accountid=363393

Minten, B., Sander, & K., Stifel, D. (2013). "Forest management and economic rents: Evidence from the charcoal trade in Madagascar." *Energy for Sustainable Development, 17*(2), 106-115.

Mkandawire, T. (2015). "Neopatrimonialism and the political economy of economic performance in Africa: Critical reflections." *World Politics, 67*, 563-612.

Mugo, F., & Ong, C. (2006). "Lessons of eastern Africa's unsustainable charcoal business." World Agroforestry Centre. Working Paper No. 20.

Muheya, G. (2015, February 22). "MRA suspends commissioner Namalomba over 'timber-gate': Malawi MP Masanqwi implicated." *Nyasa Times*. https://www.nyasatimes.com/mra-suspends-commissioner-namalomba-over-timber-gate-malawi-mp-masangwi-implicated/

Munthali, K. G., & Murayama, Y. (2015). Modeling deforestation in 2 Forest Reserve, Lilongwe, Malawi: A multi-agent simulation approach. *GeoJournal, 80*(5): 743-757.

Mutimba, S., & Kamoto, J. (2013). "Consultancy to review policies and regulations on charcoal and how to promote a systems approach to sustainable charcoal production and use in Malawi." United Nations Development Programme.

Mwampamba, T. H., Ghilardi, A., Sander, K., & Chaix, K. J. (2013). "Dispelling common misconceptions to improve attitudes and policy outlook on charcoal in developing countries." *Energy for Sustainable Development, 17*(2): 75-85 *(Special Issue).*

Nair, C. T. S., & Tieguhong, J. (2004). African forests and forestry: An overview. (March 2004) FAO/CIFOR.

Neufeldt, H., Langford, K., Fuller, J., Liyama, M., & Dobie, P. (2015). From transition fuel to viable energy source: Improving sustainability in the sub-Saharan charcoal sector. ICRAF Working Paper No. 196. Nairobi, World Agroforestry Centre. DOI: http://dx.doi.org/10.5716/WP15011.PDF. Accessed: 11/06/2020

NSO (National Statistical Office). (2019). 2018 Malawi Population and Housing Census. Government of Malawi NSO.

Ntata, Z. A. (2013). "License to loot. A report on the Cashgate corruption scandal in Malawi." https://www.whatdotheyknow.com/request/202520/response/524932/attach/html/5/MALAWI%20CASHGATE%20SCANDAL%20REPORT.pdf.html).

O'Neil, T., Cammack, D., Kanyongolo, E., Mkandawire, M. W., Mwalyambwire, T., Welham, B., & Wild, L. (2014). "Fragmented Governance and Local Service Delivery in Malawi." London: Overseas Development Institute. https://cdn.odi.org/media/documents/8943.pdf

Ouya, D.. (2013). "Unpacking the Evidence on Firewood and Charcoal in Africa." http://blog.worldagroforestry.org/index.php/2013/10/03/unpacking-the-evidence-on-firewood-and-charcoal-in-africa/ (Accessed July 2, 2020).

Oyono, P. R. (2004). "Assessing accountability in Cameroon's local forest management: are representatives responsive?" *African Journal of Political Science, 9*(1), 125–36.

Patterson, A. S., & Kuperus, T. (2016). Mobilizing the faithful: Organizational autonomy, visionary pastors, and citizenship in South Africa and Zambia *African Affairs, 115*(459), April 2016: 318–341, https://doi.org/10.1093/afraf/adw003

Pensulo, C. (2020, July 23). Malawi's new president vows to "clear the rubble of corruption." *The Guardian*. https://www.theguardian.com/global-development/2020/jul/23/malawis-new-president-vows-to-clear-the-rubble-of-corruption

Public Service Reform. (2021). "NEEF operational reforms bearing fruit. http://www.reforms.gov.mw/psrmu/neef-operational-reforms-bearing-fruits

Ribot, J. C., (2009). Authority over forests: Empowerment and subordination in Senegal's democratic decentralization. *Development and Change, 40*(1), 105-129.

Rihoy, L., & Maguranyanga, B. (2012). "The politics of community-based natural resource management in Botswana." In Nelson, F. (Ed.). *Community rights, conservation, and contested land: The politics of natural resource governance in Africa* (pp. 55-78). Routledge.

Riley, L., & Chilanga, E. (2018). "Things are not working now": Poverty, food insecurity, and perceptions of corruption in urban Malawi. *Journal of Contemporary African Studies*. 10.1080/02589001.2018.1547373, (1-15).

Sander, K., Gros, C., & Peter, C. (2013). "Enabling reforms: Analyzing the political economy of the charcoal sector in Tanzania." *Energy for Sustainable Development, 17*(2), 116-126.

Schure, J., Ingram, V., Sakho-Jimbira, M. S., Levang, P., & Wiersum, K. F. (2013). Formalisation of charcoal value chains and livelihood outcomes in Central and West Africa. *Energy for Sustainable Development, 17*(2): 95-105.

Seymour, F., & Busch, J. (2016). *Why forests? Why now? The science, economics, and politics of tropical forests and climate change.* Center for Global Development.

Sibale, B., R. Kafakoma, J. Ngalande and D. Macqueen. (2014). "Forest governance learning group: Malawi: Pushing for Justice, opening up the governance of Malawi's forests." Report for the International Institute for Environment and Development (IIED), Forest Governance Learning Group. https://pubs.iied.org/g03865

Smith, H. E., Eigenbrod, F., Hudson, M., Kafumbata, D., & Schreckenberg, K. (2015). "The impact of informal forest product trade on economic outcomes: A case study of charcoal transporters in Zomba, Malawi." XIV World Forestry Congress, Durban, South Africa, 7-11 September 2015.

Smith, H. E., Eigenbrod, F., Kafumbata, D., Hudson, M. D., & Schreckenberg, K. (2015). Criminals by necessity: The risky life of charcoal transporters in Malawi. *Forests, Trees, and Livelihoods, 24*(4), 259-274. DOI: 10.1080/14728028.2015.1062808

Smith, H. E., Hudson, M. D., & Schreckenberg, K. (2017). "Livelihood Diversification: The Role of Charcoal Production in Southern Malawi." *Energy for sustainable development* 36 (2017): 22–36. Web.

Sola, P., Paolo, O. C., Zhou, W., Gautier, D., Iiyama, M., Shure, J., Chenevoy, A., Yila, J., & Dufe, V. Nasi, R., Petrokofsky, G., and Shepherd, G. (2017). "The environmental, socioeconomic, and health impacts of woodfuel value chains in Sub-Saharan Africa: A systematic map." *Environmental Evidence*. 6. 10.1186/s13750-017-0082-2… https://www.researchgate.net/publication/313661219_The_environmental_socioeconomic_and_health_impacts_of_woodfuel_value_chains_in_Sub-Saharan_Africa_A_systematic_map . . .

Tambulasi, R. (2009). The public sector corruption and organised crime nexus: The case of the fertiliser subsidy programme in Malawi. *African Security Review, 18*(4), 19-31.

Tambulasi, R. I. C. (2009). All that glisters is not gold: New public management and corruption in Malawi's local governance, *Development Southern Africa*, *26*(2), 173-188. DOI: 10.1080/03768350902899447

Taulo, J. L. Gondwe, K. J., & Sebitosi, A. B. (2015). Energy supply in Malawi: Options and issues. *Journal of Energy in Southern Africa, 26*(2).

Tomlinson, B. (2013) "Working with Civil Society in Foreign Aid: Possibilities for South-South Cooperation?" UNDP China,

USAID. (2020a). Clean cooking market information package for urban Malawi. October 2020. Modern Cooking for Health Forests in Malawi.

USAID. (2020b). Urban Cooking Energy Consumer Market Research and Baseline Survey. December 2020. Modern Cooking for Health Forests in Malawi.

VonDoepp, P. (2001). The survival of Malawi's enfeebled democracy. *Current History, 100*(646), 232-237.

VonDoepp, P. (2006). Politics and judicial assertiveness in emerging democracies: High court behavior in Malawi and Zambia. *PSQ, 59*(3), 389-399.

VonDoepp, P. (2020). Resisting Democratic Backsliding: Malawi's Experience in Comparative Perspective. African Studies Review, 63(4), 858–882. https://doi.org/10.1017/asr.2019.62

World Bank. (2008). Managing the Miombo Woodlands of Southern Africa: Policies, incentives and options for the rural poor. Sustainable Development Department Environment and Natural Resources Management Unit Africa Region. Report. May 2008.

World Bank. (n.d.) World Governance Index. https://info.worldbank.org/governance/wgi/Home/Reports

Zulu, L. (2010). "The forbidden fuel: Charcoal, urban woodfuel demand and suppl dynamics, community forest management and woodfuel policy in Malawi. *Energy Policy, 38*(2010), 3717–3730

APPENDIX 2. LANDSCAPE REPORTS

A-2.1 CENTRAL LANDSCAPE REPORT

A-2.1.1 INTRODUCTION

As part of the Political Economy Analysis (PEA) of the charcoal value chain for the MCHF program, the team collected data at the landscape level. This report presents the findings of the Central Landscape research (Lilongwe, Dedza, and Salima), drawn from interviews and group discussions held with a range of stakeholders. This research aimed to understand stakeholder interests, and their roles and influence within the value chain. The following sections outline the methodology used in data collection, the landscape context, political economy context, key findings, conclusion, and the next steps.

A-2.1.2 METHODOLOGY

Data collection methods were key informant interviews (KIIs) and focus group discussions (FGDs). The team conducted these interviews in person except for the interview with the private law enforcer, which occurred by phone. KIIs were held with government officials, an international organization, a private organization, and local communities. Individual interviews were carried out with the Director of Forestry (DF), two staff from the Department of Forestry headquarters, two staff from the Zone Forestry Office (ZFC), the District Forestry Officer (DFO) for Salima, two Plantation Managers (who manage Dzalanyama Forest Reserve as well), an officer for the Japanese International Cooperation Agency (JICA)-supported Project for Conservation and Sustainable Management of Dzalanyama Forest Reserve (COSMA-DFR) involved in law enforcement issues, and the Executive Director for Wildlife Action Group (WAG) who is involved in protecting Thuma and Dedza/Salima Escarpment Forest Reserve. All were done in confidence as issues of corruption were discussed.

The Department of Forestry (DoF) staff were interviewed to gain insight into the effectiveness of the law and policies currently in place; the capacity of the department to deal with the illegal charcoal value chain; how issues of corruption are handled; and if they know of any persons who could be regarded as champions who could play a role in affecting change in the value chain. All the officials selected for interviews, except one, are directly involved in controlling the charcoal value chain. The other person was interviewed to get his perception on general management of and corruption in the charcoal value chain.

The COSMA-DFR official was interviewed because the project is working in Dzalanyama Forest Reserve to control deforestation caused mostly by charcoal production. Among the many activities that the Project is involved in, it also indirectly supports law enforcement. The project does not directly carry out law enforcement as it is supported by JICA, whose policy is not to get involved in law enforcement issues. The project came up with an innovative idea of recruiting members of the local communities as Community Forest scouts.

Another interviewee was with the Executive Director of WAG, a private organization that has a concession agreement with Government to manage Thuma and Dedza Salima Escarpment Forest Reserves. The reserves are a habitat for elephants. The organization is involved in working with Government as well as with chiefs in the control of illegal charcoal production. The forest used to be a hotspot for charcoal production but now it has decreased because the organization fenced the

whole Thuma and Dedza/Salima Escarpment Forest Reserves. The interview was held to determine factors for success and challenges faced.

FGDs were conducted with two charcoal producing communities; one village involved in forest co-management with Government and one Community Forest Scout (CFS) group in Dzalanyama Forest Reserve. The two charcoal producing communities were Mthang'ombe Village in Dzalanyama Forest reserve where five men and six women attended, and Phaka village in Salima where six men and four women attended the discussions; the co-management group was Kafulama Forest Block where five men and three women attended; the CFS group had four men and one woman in attendance.

FGDs with charcoal producing communities were done to establish their motivation and entry point for working with them. The discussion with the co-management group was conducted to determine factors for success and challenges faced. Lastly, the team held discussions with a CFS group in order to determine the success of this innovation as it was a pilot activity. The interviews conducted with charcoal producers were friendly and open, which was surprising considering the illegality of their activity.

A-2.1.3 LANDSCAPE CONTEXT

Charcoal is primarily produced in protected forest reserves as trees on the customary land are depleted. The main sources of charcoal for Lilongwe City are Dzalanyama forest reserve, abandoned agricultural lands in Salima and Nkhotakota, Dedza/Salima Escarpment Forest Reserves, and Mua-Livulezi Forest Reserve in Dedza District. The other source used to be Thuma Forest Reserve, however, with the fencing of the forest by WAG, this is no longer the case.

The main routes for charcoal transportation are Salima-Lilongwe, Nkhotakota-Salima-Lilongwe, Dzalanyama-Mitundu-Lilongwe, Dzalanyama-Malingunde-Lilongwe, and Mua-Livulezi-Dedza-Lilongwe. There are also footpaths used by bicycle transporters from Dzalanyama to high density areas of Likuni and Chinsapo. Lilongwe City, with a population of 989,318 (2018 Population census) is the main consumer of charcoal in the landscape. Other markets include District town centers of Dedza and Salima.

A-2.1.4 POLITICAL ECONOMY CONTEXT

Landscape-level value chain stakeholders

Charcoal producers. Charcoal is produced mainly by people from the surrounding communities of forest reserves and other forests with a few cases of people coming in from other areas. In Dzalanyama, charcoal is produced mostly by young men while in Salima it is produced by both men and women and also young and old as long as they have strength. In Salima, well off people employ others to cut wood and stack the kiln. In this way, they always have charcoal to sell throughout the year. In Dzalanyama each individual makes a few bags in one or two weeks.

The main motivational factor for charcoal producers was the need for ready income. They reported that there is a lack of alternative sources of income to meet their everyday needs and school fees. They also indicated that they are unable to get adequate income from agricultural activities because of a lack of inputs and said that there no jobs.

Interviews revealed that charcoal producers get between 16-20 percent of the final retail value. They are unable to sell directly to the consumers due to lack of financial capital to hire trucks and bribe

the officials along the way. In Dzalanyama the producers sell the 50 kg bags[18] for between MK800 (1 USD)[19] and MK1,000 (1.2 USD) while the same bag sells for between MK6,000 (7.5 USD) and MK8,000 (10 USD) in town. In Salima, producers indicated that they sold their 100 kg bags for between MK3,000 (2.5 USD) to MK4,000 (8 USD). They indicated that they knew that these same bags sold at between MK15,000 and MK18,000 each in town.

In both sites, charcoal producers said that they faced many dangers from law enforcers, such as confiscation of tools and equipment (axes, machetes, and bicycles) and can also get beaten up. In Dzalanyama women producers faced sexual harassment as well. Despite these hardships, they are unwilling or unable to stop the practice as it is their main source of livelihood and felt the risk was quite small since patrols are not done regularly. The Dzalanyama community seemed to accept the fact that they are tortured for trafficking in charcoal, while the Salima community seemed bitter with the treatment from the Malawi Police Service (MPS) and forestry officials who harass them while letting big trucks pass through after paying bribes.

Transporters. Charcoal is transported using big trucks or bicycles. These trucks are either hired or are owned by the charcoal traders. Bicycles are mostly owned by the charcoal traders. Charcoal traders hire vehicles from those who own transportation businesses. Transporters charge about MK 250,000 per truckload. In some cases, truck drivers use vehicles used to carry authorized goods to transport charcoal after deliveries. Occasionally, small scale resellers hire a vehicle as a group.

Transportation businesses are owned by ordinary people. However, in a few cases, they have connections with politicians who use their connections to get their vehicles released when caught. In the past twelve months, four politicians reportedly tried to use their influence to have vehicles caught carrying illegal charcoal released, but they failed.

With the amended Forest Act, which allows for confiscation of vehicles used in charcoal transportation, bicycles are used more as the risk of using big trucks is high. This is quite prominent with Dzalanyama Forest reserve which is less than 30 km from Lilongwe City.

Wholesalers and retailers. The biggest beneficiaries of the charcoal value chain are those who buy at source and resell in town (middlemen) at wholesale or retail. They either use own vehicles or hire them. In both cases, they make the biggest profits. For example: they buy 300 bags at MK1,500 costing MK450,000 and sell those bags at MK6,000 each realizing MK1,200,000 gross. On average, they hire the vehicles at MK250,000 per trip. Their profits are in the range of MK400,000 per truckload if you consider loading and bribery costs.

Consumers. During the survey, most interviewees said that to reduce charcoal use, the government needs to provide alternative cooking energy sources to firewood and charcoal. As long as there is a market for charcoal, people will continue to produce charcoal. According to the national Energy Policy, 2018, it is estimated that only 10.0 per cent of the national population has access[20] to electricity. This means access to electricity for cooking is low. This is coupled with the fact that electricity is perceived as being more expensive than charcoal, although the studies have shown otherwise.

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18 They are called 50 kg bags because when filled with maize, they weigh 50 kg. Charcoal weighs between 15 and 20 kg.

19 1 USD was equivalent to MK800 at the time of the survey.

20 Electricity Access: In the Malawian context, this means connection to and usage of electricity from national grid, mini-grids, own generators, Solar PV home systems, and Pico solar products.

Another alternative fuel source is liquefied petroleum gas (LPG). However, this is also considered expensive and distribution points in the landscape area are few. People in Malawi are not used to cooking with gas and consider it dangerous. There is a drive to sensitize communities on use of gas. The Malawi Energy Regulatory Authority has created public service announcements to advocate for the use of gas. With support from USAID Protecting Ecosystems and Restoring Forests in Malawi Project, the charcoal task force lobbied the government to remove taxes on gas and this was duly done.

Other alternatives being promoted are biogas, legal licensed charcoal, and briquettes. Biogas is not widely produced. There are several companies including Malasha, RAIPLY, and WICO Ltd producing briquettes. However, at the moment, these are not produced/sold in large quantities and not widely used in cooking in the central landscape. Kawandama Hills and Forest and Garden Services are producing legal licensed charcoal from eucalyptus trees and bamboo respectively.

In the landscape area, according to the 2019/20 Fifth Integrated Household Survey, the fuel types used for cooking are as follows:

District	Firewood	Electricity	Charcoal	Crop residue	Other
Malawi	79.1	1.2	18.5	1.2	0
Lilongwe	83.3	0	12.8	3.9	0
Lilongwe City	8.9	6.4	83.8	0.6	0.2
Dedza	**89.1**	**0**	**10.1**	**0.2**	**0**
Salima	**80.6**	**1.0**	**16.1**	**2.2**	**0**

Other stakeholders that influence the value chain

Traditional leaders. The influence of chiefs in stopping charcoal production is minimal. Some of them are facilitating charcoal production. Forestry officials said that they wished chiefs would not allow charcoal makers to rent or stay in their villages if their aim is to produce charcoal. It was alleged that some chiefs receive money from charcoal producers and traffickers to allow them to stay or pass through their village. However, the DFO for Salima indicated that some chiefs work with DoF to stop their citizens from producing charcoal. The Director of WAG said that she is working with some chiefs to sensitize people about the Forest Amendment Act.

In coming up with co-management agreements, Government officials go through chiefs who also act as advisors to the community committees. During the study, the team visited one of the groups involved in co-management agreement with Government, Kafulama Block Management Committee in Dedza District that manages Mua-Livulezi Forest Reserve. The Block visited was supposedly doing much better than the other Blocks in managing the forest. However, even in this Block, some illegal charcoal production is taking place. Dedza was one of the 12 districts that is in a co-management arrangement started under the Improved Forest Management for Sustainable Livelihoods Program supported by the European Union. The program has not been successful in curbing deforestation, especially in areas where there is high demand for charcoal.

The JICA supported COSMA-DFR Project came up with an innovative idea of recruiting "community volunteers" called CFSs to support the GoM in law enforcement. The idea was that when the Project phases out, the CFSs will continue patrolling the forest. However, during the FGD carried out under this study, it became clear that the so-called volunteers would like to be paid for doing the job. The other problem is that one of the volunteers was killed and another one injured. The community would like to have compensation paid for the death and injury. The project temporarily suspended the program after this incident. There seems to be no system in place for compensation in such cases. The idea of volunteerism is not really rooted in Malawi.

Forestry officials. Charcoal production is considered the main cause of deforestation. In order to control illegal charcoal production, the DoF has law enforcers (Forest Guards) in Forest reserves; guards placed at Police roadblocks who also carry out organized patrols. Mostly charcoal (and not vehicles) are confiscated and vehicle owners fined if caught. So far, these measures have not controlled illegal charcoal production due to several factors including: inadequate staff in the reserves, complacency, inadequate resources (vehicles and finances), corruption (getting money and turning a blind eye to what is happening), and inadequate security for the law enforcers.

There is a shortage of law enforcement personnel in all forest reserves. In Dzalanyama Forest Reserve, Lilongwe District, guards said that there are only 10 of them while the ideal number would be 40. The Director said that an application was made to Department of Human Resources to increase numbers in all positions including forest guards and the request was approved. It remains to be seen if the numbers will be increased.

Security for law enforcers is a big problem. There has been an increase in assaults including deaths of law enforcement officers by illegal charcoal producers. In 2018, a community forest scout was killed and another one was injured; and a forest guard was killed in March 2021 as they were involved in forest patrols. Over the years there have been violent clashes between forestry personnel and illegal charcoal producers and vendors. Illegal charcoal dealers have also died. These deaths and assaults are also hindering effective law enforcement. Due to the increase in violent incidents, the DoF started procuring guns and training guards in arms handling in 2017. However, the guards have complained that they have been given inappropriate guns which will kill a lot of people with one shot. Management claims to have been advised by the police to buy this type of gun.

Other problems include complacency and corruption. There are cases where charcoal is being made close to the houses of law enforcement officials, with no action being taken. It could be that the officials are afraid, can't be bothered, or have received bribes from the illegal charcoal producers. The other issue is that there is open corruption at roadblocks where charcoal carrying vehicles are allowed to pass through after paying set prices. Although this did not come up in the interviews, other possible areas where corruption might be taking place could be at the district and zone level where confiscated vehicles could be released after the dealers pay bribes.

In order to deal with the illegal charcoal production, the government enacted a Forest Amendment Act in 2019 that significantly raised penalties for charcoal and forest encroachment offences. There is also a provision of forfeiting the trucks used for transportation of the illegal charcoal to government. Since the program started by July 31, 2021, 14 trucks were confiscated. However, all officials interviewed said that this has not stopped the illegal trafficking of charcoal, but it is being done in a more clandestine way, mostly at night. It is too early to know the real impact, but it does promise a reduction in heavy trafficking of charcoal. It has been observed in Dzalanyama Forest Reserve that there is more use of bicycles now as the cost of the bicycle is relatively low, if confiscated.

The Malawi Police service, Malawi Defense Force and Parks and Wildlife Officers. The MPS is the main law enforcement agency. The DoF are usually accompanied either by Police Officers or Parks and Wildlife Officers in their organized patrols. Forestry officials also work hand-in-hand with the Police at roadblocks. The Malawi Defense Force (MDF) is being used to camp in forest reserves to remove charcoal producers from forest reserves. The Parks and wildlife are often asked to support DoF staff in patrols. One of the interviewees said that Parks and Wildlife officials have high integrity.

The MPS is not considered effective by the DoF in its duties as law enforcers. The DoF prefers to use the Parks and wildlife staff in its patrols. DoF staff also claims that police officials are corrupt and they don't respect forestry officials at roadblocks. However, investigations have shown that both forestry and police officials get bribes at roadblocks.

The MDF used to camp in Dzalanyama Forest Reserve for about two years. However, the success was short lived. The charcoal producers went back in as soon as the MDF moved out. The other problem was that the MDF could not cover the whole forest and therefore charcoal continued to be made in other parts of the reserve.

A-2.1.5 KEY FINDINGS

This Landscape study was carried out to understand the interests, roles, and influence of various stakeholders within the value chain. Its main findings are:

- Charcoal production is done mainly by people surrounding the forests with a few people from other areas.
- Producers range from small-scale to large producers. Large producers employ some workers and produce charcoal constantly. Producers are aware that it is an illegal activity and that their actions destroy the environment. However, they are unwilling or unable to stop, citing lack of alternative sources of income and jobs. There are some people whose main livelihood activity is trading in charcoal. They are prepared to face abuse including sexual abuse and risk of being imprisoned.
- Transportation of charcoal is done by charcoal dealers, hired vehicles, or unauthorized company vehicles.
- Charcoal is used by almost all households in the Lilongwe City. While electricity is the main source of energy among more affluent households (those in low- and medium-density areas), but they also use charcoal for cooking beans, which take a long time to cook, and barbeques.
- The main cause of overuse of charcoal is low electricity access and undeveloped alternative energy sources.
- The main law enforcement agency against the illegal charcoal value chain is the DoF. Others are the MPS, MDF, and Department of Parks and Wildlife. The DoF has inadequate staff and other resources to effectively enforce the law and protect the forests.
- Both the DoF staff and Police officials are involved in corruption especially at roadblocks. Forest guards at production sites have also been involved in corruption. It is generally felt that corruption is not being adequately dealt with by DoF and MPS. Parks and wildlife staff are considered relatively more ethical.
- Despite the effort by the DoF to control the illegal charcoal production, production and sale of charcoal continues unabated.
- While it is too early to assess the effect of the Forest Amendment Act, which has greatly raised the penalties for charcoal violations, illegal charcoal continues to flood the city. This seems to suggest that corruption at roadblocks is continuing in a clandestine manner.

- The role of traditional leaders in control of charcoal production is low. However, they play an important role in mobilizing communities in forestry activities.
- It has been difficult to identify volunteers or champions as the spirit of volunteerism is low in Malawi. Even so-called volunteers expect to be paid (perhaps as a result of past government and donor-funded interventions).

A-2.2 NORTHERN LANDSCAPE REPORT

A-2.2.1 INTRODUCTION

The team conducted six group meetings with forestry officers and community members representing two sites, each in communities around Kaning'ina (Bwana Mdongo and Chipunga), Bunganya (Chilukwa and Luvwere), and Perekezi (Chinjoka and Shumba) Forest Reserves. These sessions took place June 2–8, 2021, and had the following objectives:

1. To explore respondents' understanding of the actors along the charcoal value chain and their various interests and influence.
2. To find out who they see as potential winners and losers and potential obstacles to change.
3. To identify where the current hotspots for charcoal production are.
4. To ascertain local perspectives on the effectiveness of law enforcement structures.
5. To help identify potential champions within DoF and beyond and possible entry points.
6. To sample residents' perspectives on corruption in the DoF.

Traditional leaders and community members, among them charcoal producers, were interviewed. No attempt was made to identify and interview the producers separately as they would not cooperate, according to the traditional leaders. Thus, there were no specific questions targeted solely at traditional leaders, charcoal producers, or others as discrete actors. Instead, questions based on the above objectives were asked of the larger, inclusive group. Depending on the type of responses given, the team posed follow-up questions. Each time a question was responded to, confirmation was sought from the rest of the group. The next question was asked when no further responses were forthcoming.

A total of 288 people attended the group meetings. Both genders were fairly represented. People were free to express their views and, in some instances, felt this was an opportunity to express their "lack of trust and confidence" in authorities and to report on the "shenanigans" going on in the DoF regarding management and governance of forest resources.

Meeting appointments were made with the North Zone Office and the two District Forestry Offices involved. Community meetings/interviews were made through the forestry office for the Shumba site meeting at Perekezi Forest Reserve while the rest of the meetings/interviews were arranged through traditional leaders.

A-2.2.2 LANDSCAPE CONTEXT

Currently the main areas of charcoal production in the landscape area are Bwana Mdongo and Chipunga in Kaning'ina Forest Reserve, Chilukwa and Luvwere in Bunganya Forest Reserve, and Chinjoka and Shumba in Perekezi Forest Reserve. The main consumption areas are either Mzuzu or Lilongwe and Mzimba town. Charcoal from Kaning'ina Forest Reserve is transported through a feeder road that surrounds the reserve into Mzuzu City. The main consumption area for this charcoal is Mzuzu City. Charcoal from Bunganya Forest Reserve is transported through a road that connects western part of north Mzimba district to the main road system that goes into Mzuzu City. Finally, charcoal from Perekezi Forest Reserve at Chinjoka is sold to motorists on the main road from Mzuzu to Lilongwe, while that from Shumba is transported on a rural road to Mzimba town.

A-2.2.3 POLITICAL ECONOMY CONTEXT

Landscape-level value chain stakeholders

In the main production areas, some local community members are occasional producers, but most members are involved in production full-time. In Kaning'ina FR some producers are considered "foreigners," though they come from elsewhere in Malawi. For example, for Kaning'ina FR, these "foreigners" are former timber sawers from the Viphya Plantations and are mostly young men. For Bunganya FR at Chilukwa the producers are mainly local people and former tobacco tenants who mostly come from elsewhere in the country. The producers have no further role in the value chain other than producing charcoal and selling it on to transporters. Their interests are similar. At Bwana Mdongo, for example, the producers and other community members said they produced charcoal "…to get money for their household needs." This was the same for producers and other community members at Chipunga, Chilukwa and Chinjoka sites. At Luvwere site the producers and other community members said that "…producing and selling charcoal alleviated [their] poverty as [they] have limited means to earn or generate income." At Shumba site they said "[They] are in a low rainfall area as a result [they] don't harvest much maize; [they] need money for food and other household needs." Charcoal production at this level is a means of earning income in the absence of viable alternatives; it provides a social safety net. These producers have limited influence on price and are subject to the vagaries of the market. Only Chinjoka site did one or two respondents indicate that they could impact the setting of the charcoal price; the remainder of the members said they don't. In terms of influence, actors higher up on the value chain, namely transporters and wholesalers, influence the actions of producers through their actions and interests and have more influence over price setting.

Other stakeholders that influence the value chain

At the Bwana Mdongo and Chipunga sites in Kaning'ina Forest Reserve, traditional leaders have little influence on controlling illegal charcoal production, despite the power and authority vested in them. Indeed, they said their role is "to confiscate charcoal" but this role is rarely exercised. In Perekezi Forest Reserve, at Luwawa site, traditional leaders acknowledged that they are supposed "to protect the forest from charcoal production" but seemed also to identify with producers, arguing that they "…have no choice but to produce charcoal to survive." Similarly, at Shumba the leaders expressed their helplessness in dealing with the charcoal issue, noting that they "do visit the forest and meet the charcoal producers but are unable to do much; we can't confiscate the charcoal as it would be dangerous…We just report to the District Forestry Office." They also said they are unable to evict the charcoal producers because any attempts to do so causes friction with their subjects. Traditional leaders at Chilukwa and Luvwere around Bunganya Forest Reserve expressed similar sentiments.

Traditional leaders are sometimes compromised by their own complicity in charcoal production, but many appear surprisingly constrained from playing an enforcement role. For example, all leaders are also supposed to conduct meetings/civic education on the negative impacts of charcoal production in their areas, as called for by the DoF. Yet, they rarely do so. Indeed, the DoF apparently is aware that assigning some of these roles is dangerous and has the potential to erode the leaders' authority and respect in their communities. Hence, a dilemma for traditional leaders: they want to be seen to be supporting government efforts to control illegal charcoal production but at the same time, they do not want to antagonize their subjects. Thus, they have little or no influence at all on the charcoal value chain. Leaders at Bwana Mdongo and Chipunga said their role is to confiscate charcoal while those at Chinjoka, Chilukwa and Luvwere said it to protect the forest from charcoal production.

Neither intervention has been sufficiently pursued to arrest the production of charcoal from these areas.

Patrol teams made of Forestry staff, sometimes backed up by Police, go out at night to confiscate charcoal or destroy charcoal kilns. The teams are issued with shotguns but are under instructions to use them as a last resort. Despite engaging in some punitive activities, enforcement personnel also are said to solicit bribes from communities and other charcoal sector stakeholders. Communities at Bwana Mdongo, for example, said that law enforcement efforts by forestry staff and police are "self-defeating" as the law enforcers "…take bribes and tip off producers of upcoming patrols frustrating efforts to stop illegal charcoal production in Kaning'ina Forest Reserve." Communities at Shumba site in Perekezi Forest Reserve said that law enforcement efforts will come to nothing because "…some community members pay money or goats to Forest Guards to be allowed to produce charcoal." Similar sentiments were made at Chinjoka site in Perekezi Forest Reserve where community members reported that some traditional leaders are allowed by forestry staff to produce charcoal, while some charcoal producers produce charcoal *on behalf* of the forestry staff.

Bribe-taking at roadblocks is also a persistent problem. Mzimba District Forestry Officer said that at roadblocks, especially one at Jenda, there are "…some weeks vehicles transporting charcoal are seized and charcoal confiscated, and some weeks no vehicle and charcoal are seized." Forestry staff influence the value chain by taking bribes and being involved in corruption. The fact that charcoal producers avoid arrest each time they encounter law enforcement agents indicates that they know that what they are doing is illegal and is punishable by law. At all sites, communities were aware and concerned with corruption. This is important as it provides an entry point for further actions against corruption. All charcoal producers and others are concerned. At Chilukwa in Bunganya Forest Reserve asked why charcoal is allowed to pass through the forest roads despite presence of forestry staff: "We don't have incidences of corruption amongst community members but forestry staff at the roadblock and along the road to Mzuzu; it's a chain." At Luvwere, it is similar story; "Not in our community but forestry staff and police at roadblock; vehicles come from town, collect charcoal and drive all the way without being bothered… [Forestry staff] …are no [longer] foresters but thieves."

Interviewees discussed numerous other obstacles to controlling corruption along the charcoal value chain. One of them is the involvement of forestry staff in charcoal production. Charcoal producers and others at Bwana Mdongo and Chipunga in Perekezi Forest Reserve said that it will be difficult for them to stop "…as long as forestry staff continue to put their people in the forest to produce charcoal, we will not stop…let them [forestry staff and Police] kill us." Producer informants at Chinjoka in Perekezi FR cited the continued existence of the market for charcoal: "As long as there is a market for charcoal, we will not stop producing it." Interviewees made similar comments at Shumba in the same Perekezi Forest Reserve, where a noted lack of alternatives exist: although a market for charcoal is still there, "we used to grow Oriental tobacco but when its market closed, [so] we no longer grow it as there is no market…it will be the same with charcoal." The need for money to meet various households needs cuts across all the communities. At Shumba charcoal producers and others said they need the money now, "Instant money, readily available money…We are accustomed/used to producing charcoal." At Chinjoka, informants said that, "Interventions in the past, such as grants for small enterprises, never targeted charcoal producers, therefore [they] had no choice but continue to produce charcoal." Chinjoka community members complained about forestry staff demanding bribes to release confiscated charcoal. Even traditional leaders are not spared. They said, "Some traditional leaders produce charcoal with 'blessings' of forestry staff as well as instruct charcoal producers to produce charcoal on their behalf."

A-2.2.4 CONCLUSIONS AND NEXT STEPS

Charcoal sold in Mzuzu City and Mzimba town is produced in Kaning'ina, Perekezi, and Bunganya Forest Reserves. The main production areas are Bwana Mdongo, Chipunga, Chilukwa, Luvwere, Chinjoka and Shumba. A new site is opening at Chisusu Nyirenda in Perekezi Forest Reserve, suggesting that new areas are likely to continue to open in the other forest reserves as well. The main interest of the charcoal producers is to earn income to meet their needs, although at the individual level, charcoal production is an activity of last resort—a safety net as a result of communities' limited opportunities to earn any meaningful income through more legitimate means. However, charcoal producers have little or no influence in the value chain, meaning they have minimal negotiation and leverage power with other actors. Current law enforcement structures and arrangements are both ineffective and deliberately undermined through corruption, such that illicit charcoal production goes on unabated; the very people entrusted to enforce the law are the same who break it. Penalties given to convicted offenders, whether rural residents or state officials, are highly variable: stiff in some cases and slaps on the wrist in others. Perhaps this explains why the impact of the implementation of the revised Forest Amendment Act is viewed as mixed. This is probably due to inadequate sensitization of the judiciary on the amended Act. As for traditional leaders, they are unable to stop or control illegal charcoal production, and some are involved in illegal charcoal production themselves.

It is important to note that some community members are engaged in forest conservation. This could be an opportunity to promote forest management and development among the communities. It is also an entry point for engaging other members of the communities to join efforts aimed protecting the forest reserves, tree planting and forest conservation.

Further investigation into the nature of the charcoal trade in the landscapes is required. This includes: identifying which areas in the forest reserves are at risk of becoming new charcoal production sites; what sort of forest livelihoods may be viable for concerned communities in the areas; assessing the impact of stopping illegal charcoal production; determining whether *local* actions could be taken to address charcoal-related corruption in particular communities; and finally, getting an accurate accounting of which traditional leaders are genuinely engaged in stopping illegal charcoal production, versus those who are supporting its perpetuation.

APPENDIX 3. STAKEHOLDER ANALYSIS

Stakeholder Group	Stakeholder	Interests pursued	Supportive, Neutral, Opposing	Power to influence (high, medium, low)	Importance of the issue (high, medium, low)	Resources (material and nonmaterial resources to shape the issue)
Government	Ministry of Natural Resources		Supportive	Low	High	
	Department of Forestry	Maintenance of forest cover (but some members pursue opposite!)	Both	Low	High	Limited. Insufficient budget and staffing
	MPS MPS/CID	Law enforcement and internal corruption investigation	Supportive	High	Low	Limited
	Parliament/Agriculture and Natural Resources Cttee	Provide advocacy, legal and regulatory framework to support Malawian environment	Supportive	Low	High	
Private sector	Producers	Minimal income benefits	Opposing	Low	High	Limited
	Petty Traders	Income	Opposing	Low	High	Minimal
	Large-scale traders	Individual profit	Opposing	High	High	Minimal
	Truck owners/Transporters	Modest profit	Opposing	High	High	
	Bicycle transporters	Minimal income benefits	Opposing	Low	High	Minimal

Stakeholder Group	Stakeholder	Interests pursued	Supportive, Neutral, Opposing	Power to influence (high, medium, low)	Importance of the issue (high, medium, low)	Resources (material and nonmaterial resources to shape the issue)
	Syndicates	Collective profit; Large regional national business networks	Opposing	High	High	
	Retailers	Modest surplus	Opposing	High	High	Minimal
Civil Society	Traditional leaders	Control of land and distribution	Both	High	High	Limited/low
	Assn of Environmental Journalists	Visibility and readership	Supportive	Medium	High	High
	Civil Society Network on Climate Change	Action on climate change. Visibility with larger orgs and think tanks.	Supportive	Medium	Medium	Limited/low
	Co-ordination Unit for the Rehabilitation of the Environment (CURE)	Environmental sustainability (although charcoal doesn't currently feature in their programs)	Supportive	Medium	Medium	Limited/low
	Centre for Environmental Policy and Advocacy (CEPA)	Sustainable environment and natural resource management (although charcoal not specifically being tackled by the organization)	Supportive	Medium	Medium	Limited/low
	Church organizations	Community welfare	Supportive	High	Low	
	Academics	Knowledge production	Supportive	Low	Low	

Stakeholder Group	Stakeholder	Interests pursued	Supportive, Neutral, Opposing	Power to influence (high, medium, low)	Importance of the issue (high, medium, low)	Resources (material and nonmaterial resources to shape the issue)
International Development Orgs.		Preservation of forest & woodfuel resources	Supportive	High	High	

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