

NAVIGATING SUCCESSFUL POLICY REFORM

# Reducing Plastic Pollution in Kenya

*Clare Cummings and Francis Oremo*



**Reducing Plastic Pollution in Kenya**  
Navigating Successful Policy Reform  
Case Study No. 1 | May 2023

Clare Cummings and Francis Oremo

*All rights reserved. No part of this publication may be reproduced in any form or by any means without the written permission of The Asia Foundation.*

*This case study is independently produced by La Trobe University, with support from the Australian Government and The Asia Foundation. The views expressed in this publication are those of the authors and do not necessarily represent those of The Asia Foundation or the Australian Government.*

CASE STUDY NO. 1 | MAY 2023

NAVIGATING SUCCESSFUL POLICY REFORM

# Reducing Plastic Pollution in Kenya

*Clare Cummings and Francis Oremo*



# Table of Contents

<b>Series Introduction</b>	<b>v</b>
<b>Acknowledgements</b>	<b>viii</b>
<b>Acronyms</b>	<b>ix</b>
<b>Summary</b>	<b>1</b>
<b>The Development Challenge</b>	<b>3</b>
<b>The Protagonists</b>	<b>5</b>
<b>The Reform Experience</b>	<b>8</b>
<b>Impact of the Reform</b>	<b>17</b>
<b>Ways of Working and Relevance of Development Entrepreneurship</b>	<b>20</b>
<b>A Personal Note from Judi Wakhungu</b>	<b>23</b>
<b>List of References</b>	<b>26</b>
<b>List of Interviews</b>	<b>28</b>
<b>Annex</b>	<b>30</b>

# Series Introduction

This paper is part of the ‘Navigating Successful Policy Reform’ series undertaken by Coalitions for Change and the Institute for Human Security and Social Change at La Trobe University. It is one of three case studies<sup>1</sup> exploring developmental policy reforms in Vanuatu, Kenya and Indonesia that demonstrate politically smart and learning-oriented ways of working to achieve change in challenging political contexts. In particular, the cases investigate whether those reform stories bear similarities to the development entrepreneurship model that has been highly successful within the Philippines.

The development entrepreneurship model emerged from experiences of various Philippine economic policy reforms dating back to the early 1990s, including in telecommunications, civil aviation, sea transport, tobacco and alcohol tax, land governance and other areas (Fabella and Faustino, 2011). Around 2010, some, including the Governance Advisor at the Australian embassy, wondered if the model was applicable to other types of development challenges. Out of those discussions, two developments emerged. One was a publication of [Room for Maneuver: Social Sector Policy Reform in the Philippines](#) (Fabella et al., 2014). One of the volume’s lead editors was Adrian Leftwich, a of the founder of the [Developmental Leadership Program](#), a research initiative that explores how leadership, power and political processes drive or block processes of social change.

The second was the creation of the Coalitions for Change Program (2011-2024), a partnership between the Australian Government and The Asia Foundation in the Philippines. The Asia Foundation uses the development entrepreneurship model to implement the program, identifying twelve principles focused around three strategic questions to increase the likelihood that development interventions make a difference. The table below summarises the model:<sup>2</sup>

## Strategic question 1: Which reform will improve outcomes?

*To answer this, the model suggests looking for reforms with these three criteria:*

<b>(1) impact</b>	the likelihood the reform will change the incentives and behaviour of organisations and individuals that will lead to better outcomes for people and society
<b>(2) sustainability</b>	the likelihood the reform will continue beyond the time-bound intervention or without additional donor support
<b>(3) political feasibility</b>	the likelihood the reform will be introduced given existing political realities

<sup>1</sup> The three cases are: introduction of single-use plastics ban in Kenya; securing reserved seats for women in Vanuatu’s municipal councils; and passing of the Disability Law in Indonesia.

<sup>2</sup> <https://developmententrepreneurship.org/about/>.

**Strategic question 2: How will the reform be identified and introduced?***To answer this, the model suggests using the five principles of entrepreneurial logic:*

- |  |  |
|--|--|
| <b>(4) just start</b>                        | begin with who you are, what you have, and who you know  |
| <b>(5) make small bets to learn by doing</b> | test and act to see what might work, adjust based on those tests, then eventually make larger bets |
| <b>(6) expect and exploit surprises</b>      | the ability and courage to recognise and act on unexpected opportunities                           |
| <b>(7) build coalitions and networks</b>     | the ability and willingness to identify individuals and organisations who can help                 |
| <b>(8) influence the future with action</b>  | a mindset that the future cannot be predicted but can be influenced through action                 |

**Strategic question 3: Who will do it?***To answer this, the model suggests collaborating with leaders who exhibit these four behaviours:*

- |                        |   |
|------------------------|---|
| <b>(9) grit</b>        | the willingness to persevere with limited resources   |
| <b>(10) confidence</b> | the willingness and courage to tackle large problems  |
| <b>(11) humility</b>   | the willingness to listen to others, to be challenged, to admit mistakes, and to let others take credit |
| <b>(12) autonomy</b>   | the strong desire to be self-directed, take initiative, and change the status quo                       |

For Coalitions for Change, the outcome of using the model has been positive. As of July 2023, Coalitions for Change and Philippine leaders have helped successfully introduce 94 policy reforms. The reforms cover a wide range of areas including electoral reform, gender and disability inclusion, disaster risk reduction, education, mobility, Internet broadband and others (Sidel and Faustino, 2019).

Development entrepreneurship has built a significant following in international development, as well as in policy reform in the Philippines (Booth and Faustino, 2014 and Green, 2015). An online training course on *Development Entrepreneurship* has run since 2021, attended primarily but not only by Filipinos, with the goal of exposing developmentally-minded reformers to ideas and stories of how change can be achieved. Yet there has been an open question about the extent to which this model of developmental change applies outside of the Philippines or not. Does the

development entrepreneurship model work elsewhere? The answers to this question are pertinent for the Australian Government's aid program – and other development partners – who are interested in supporting locally-led reforms.

Through a partnership between the Institute for Human Security and Social Change and Coalitions for Change, these case studies explore instances of developmental policy reform in settings outside of the Philippines, detailing the reform experience and reflecting on the relevance of the development entrepreneurship model. The cases were identified through an initial literature scan to longlist examples of successful developmental policy reform and key informant interviews with international development experts who have backgrounds in supporting locally-led, adaptive reforms that 'think and work politically.' From this longlist, the cases were interrogated further through literature review and a small number of initial interviews to determine whether they appeared to be a good fit with the development entrepreneurship model. Ultimately, four reform stories were selected for case studies, with three proceeding. The three case studies are: banning single-use plastic bags in Kenya, securing reserved seats for women in Vanuatu's municipal councils and passing of the Disability Law in Indonesia.

The three cases reveal a number of shared features across contexts that provide important learning about how developmental policy reform can be achieved. They demonstrate the potential relevance of the development entrepreneurship model outside of the Philippines alone and the similar ways in which reform leaders in multiple contexts navigate their environments. While in each case study different development entrepreneurship principles emerge as more or less relevant, in all of them there are resonances, suggesting that the model indeed has potential outside of the Philippines context. Notably, all of the shortlisted cases of reform occurred in democratic settings, raising questions about the applicability of the development entrepreneurship model in other political contexts. This is yet to be explored.

This case study was developed through review of relevant academic and grey literatures, as well as interviews with key stakeholders centrally involved in the reform to ban single-use plastics in Kenya. In particular, the personal account of Professor Judi Wakhungu was central to unpacking the reform story and strategies used to achieve change. The accounts of reform that are captured here thus tell the stories from the point of view of those directly involved in reforms. These are not disinterested voices – but they are critical to understanding the detailed *process* and *ways of working* that enabled reforms to be achieved. Revealing these ways of working is the primary aim of the case studies in this series and opens up the possibility for greater learning across contexts about how change happens, as well as about the roles external actors can play (or not) in supporting such reforms.

**Dr. Lisa Denney**  
**Deputy Director and Senior Research Fellow**  
**Institute for Human Security and Social Change**



# Acknowledgements

We are pleased to acknowledge and express our gratitude to the individuals and institutions who assisted us in this study. We are particularly grateful to all our interviewees who generously gave their time and shared their knowledge and insights. This study was funded by Coalitions for Change, a partnership between the Australian Government and The Asia Foundation in the Philippines. The paper has benefitted from peer review by Lisa Denney, Chris Roche and the Coalitions for Change team, including Sam Chittick, Rene Sanapo, and Jaime Faustino. Responsibility for any errors lies with the authors alone.



# Acronyms

<b>EAC</b>	East African Community
<b>EPR</b>	Extended Producer Responsibility
<b>KAM</b>	Kenyan Association of Manufacturers
<b>MPs</b>	Members of Parliament
<b>NEMA</b>	National Environment Management Authority
<b>PET</b>	Polyethylene Terephthalate
<b>UNEA</b>	United Nations Environment Assembly
<b>UNEP</b>	United Nations Environment Program
<b>WWF</b>	Worldwide Fund for Nature





# Summary

*In 2017, a ban on thin plastic bags was introduced in Kenya to address a visible environmental and reputational challenge.*

Single-use plastic bags were building up in open dump sites, along roadsides, in lakes and rivers and were clogging drainage systems and being ingested by livestock. While Kenya historically had a strong environmental reputation, the country was increasingly overshadowed by neighbouring Rwanda, which in 2008, banned the import and use of non-biodegradable plastic bags. Taking action on plastic waste was a growing international concern and Kenya, host to the United Nations Environment Programme (UNEP), needed to take clear and tangible action on plastic pollution in to protect its reputation as a leader in environmental policy and wildlife tourism in East Africa.

Early interventions in 2005, 2007 and 2011 were focused on the regulation of the thickness of plastic carrier bags and imposed taxes on thin plastics. These interventions failed to achieve the intended reduction in plastic pollution. This was owed in part to weakness in strategy as well as resistance from plastic manufacturers, who have considerable political influence due to their role as employers and the revenue they

create. However, in 2013, then President Kenyatta appointed Professor Judi Wakhungu as Cabinet Secretary for the Environment, Water and Natural Resources. Wakhungu, a technocrat with a strong academic background in environmental policy issues, entered the position with determination, energy, and a strong commitment to tackle the problem of plastic pollution.

Before Wakhungu began working on a plastics ban, she ensured that she had the support of the president, her colleagues in the Cabinet, the Director General of the National Environment Management Authority (NEMA) (Professor Geoffrey Wahungu) and members of the Parliamentary Committee for Land, Environment, and Natural Resources. Although Wakhungu initially hoped to ban all PolyEthylene Terephthalate (PET) plastics, considering the strength of the manufacturers' lobby, she opted to focus on outlawing thin plastic bags first. Wakhungu was strategic and politically astute in her approach. Rather than attempting to pass a ban on plastic bags directly through parliament, which

would face a significant challenge from some parliamentarians and strong pushback from the Kenyan Association of Manufacturers (KAM), the Cabinet Secretary initially proposed an amendment to the Environment Management and Coordination Act that was not ostensibly about plastic bags. The amendment granted the Cabinet Secretary the power to ban any pollutant deemed harmful to the environment. Parliament approved the amendment in 2015, seemingly unaware of the power this gave to Cabinet Secretary to list thin plastic bags as a pollutant and thus ban their production or use in Kenya.

Rather than announcing a ban on plastic bags immediately, the Cabinet Secretary then spent time building up support for a ban within government and sought the support of UNEP. Wakhungu waited for a moment in the political cycle when parliamentarians would be distracted. The moment arrived in February 2017, several months before a national election, at which time parliamentarians were focused on securing support in their constituencies. After enacting the ban by publishing it in The Kenyan Gazette, Wakhungu faced fierce opposition from the manufacturers lobby, including over 200 court cases aimed at derailing the ban and pressure on Parliament to overturn it. However, the court ruled in favour of the ban and President Kenyatta received praise from the international community for taking decisive action on plastic pollution. Although there are limitations to the ban, the government

estimates that it has resulted in an 80-93% reduction in the use of thin plastic bags and has made a visible improvement to the volume of plastic bags polluting the environment.

The Kenyan reform is notable for its resonance with some of the principles of development entrepreneurship. In particular, the process to ban single-use plastics demonstrated a focus on politically feasible reforms that were possible in the prevailing context that was not obviously pro-reform. The reform strategy was developed through learning from previous efforts to tackle the problem, adeptly exploited political opportunities to push for change, worked through coalitions with parts of government, technical agencies and development partners, and – perhaps most critically – saw the possibility to influence the future, or change as possible despite the odds. Banning single-use plastics in Kenya thus demonstrates the potential applicability of the development entrepreneurship model outside of the Philippines context.

# The Development Challenge

*Kenya has a large plastic manufacturing sector, which contributes to the national economy through employment creation and taxable revenues.*

However, the production, use and disposal of plastic products and packaging poses a serious challenge to waste management, especially in major urban centres (Worldwide Fund for Nature [WWF], 2022). The main plastic products of concern have been polythene bags, plastic bottles, and other plastic packaging materials (Ong'unya et al., 2014).

Prior to the ban, plastic waste generated in Kenya's urban areas constituted up to 21 percent of the solid wastes (Kimani et al. 2014; Oyake-Ombis et al. 2015). A 2014 study found that 24 million thin plastic bags were handed out monthly, making them the most commonly used carrier bags for shopping (Ong'unya et al. 2014). Due to inadequate waste management, single-use plastic bags were easily blown out of open dump sites and were visible on roadsides and in trees. Plastic bags blocked storm water drains where they contributed to flooding

during rainy season, and eventually found their way into water bodies, posing a serious threat to public health, the environment and marine life (Nyangena et al., 2017). "If it rained, there would be floods in the city mainly because the stormwater drains were clogged [...]. It was the immediate impact we could see" (interview with Gerphas Opondo, Executive Director, Environmental Compliance Institute, and former consultant to NEMA, 24 April 2023).

Plastic bags were also ingested by livestock while grazing in the fields where discarded plastic bags end up in the vegetation. A study by the National Environment Management Authority (NEMA) in 2017 found that 50% of livestock slaughtered in Nairobi's abattoirs had plastics in their stomach (Lange et al., 2018). "It had been a problem that had been going on for a while [...]. There were quite some complaints from communities, especially pastoralists - their livestock

were turning up with plastic bags in the stomach...” (interview with NEMA official, 24 April 2023). The livestock which had eaten plastics bags had health problems, making them weak and bloated and this affected milk and beef production (Lange et al., 2018).

Historically, Kenya has had a strong environmental reputation, with Nairobi known in the 1970s as ‘The Green City in the Sun’ (Njeru, 2006). However, in 2008, it was overshadowed by neighbouring Rwanda, which introduced a law ‘banning the importation and use of non-biodegradable packaging bag’ (Behuria, 2019, p. 12). Kenya’s international reputation on environmental issues was further tarnished by global reporting on the country’s ‘flying toilets’ (Behuria, 2019, p. 16). Media reports described how, due to a lack of safe and accessible sanitation, people living in Nairobi’s informal settlements resorted to using plastic bags as toilets and throwing the waste away from their home, resulting in serious health risks (ibid).

Unlike Rwanda, Kenya has had a long and winding journey in efforts to tackle the plastics waste menace. NEMA attempted to reduce the production of thin plastic bags in 2005, 2007 and 2011 (Opondo, 2020). Both the 2005 and 2007 bans imposed a manufacturing standard for the thickness of plastic carrier bags at a minimum of 30 microns. The 2007 ban went further and imposed a high tax – 120% excise and custom duty – on thin plastics. This double-pronged intervention aimed to make plastic carrier bags more costly, ensure that any plastic

materials in the Kenyan market would be recyclable and raise additional revenue to be channelled towards plastic waste management (ibid).

However, these interventions failed to achieve the intended reduction in plastic bag production, use and pollution. The tax was not ring-fenced and nor was it transferred to NEMA to support the cost of plastic bag collection and safe disposal (interview with Geoffrey Wahungu, Former Director General of NEMA, 21 April 2023; interview with Gerphas Opondo, 24 April 2023). The tax intervention was also soon weakened due to lobbying by the Kenya Association of Manufacturers (KAM) who, in 2009, managed to convince the Government to reduce the tax to 50% in order to protect local manufacturing companies and avoid potential job losses (Alderman, 2022; interview with Opondo, 24 April 2023). The restriction on thickness did not have much impact due to the difficulty enforcement officers faced in determining thicknesses during inspections (interview with Wahungu, 21 April 2023), coupled with a severely weak recycling sector in the country (Opondo, 2020). In 2011, a new plastics regulation was brought in that raised the minimum thickness of plastics to 60 microns (Interview with Wahungu, 21 April 2023). However, the regulation was not implemented and action on the production, use and disposal of plastics was thus stymied.

# The Protagonists

## Professor Judi Wakhungu

Professor Judi Wakhungu served as the Cabinet Secretary for Environment, Water and Natural Resources (2013- 2017) – one of the largest Ministries with 28 Semi-Autonomous Government Agencies (SAGAs). While Cabinet Secretary, Wakhungu embarked on what many consider to be her crowning achievement, the 2017 ban on plastic carrier bags and flat bags.

Wakhungu is a technocrat with a strong academic background in environmental policy issues. Previously, she served as the Director of the African Centre for Technology Studies, offering advice to African governments on science, technology, and environmental policy issues. Professor Nick Oguge, a Professor of Environmental Policy at the University of Nairobi, recalled “I have worked with her [Wakhungu] a little bit before her appointment [...]. She was very passionate, thoughtful, and forward looking about specific environmental policy issues” (interview, 24 April 2023). Wakhungu’s appointment to the Cabinet by President Kenyatta allowed her to bring her technical expertise as well as leadership skills to bear directly on government policy.

When Wakhungu began her work, she was under no illusions about the challenges and risks she would face in pursuing reform. She had a formidable team of great minds and experts in the Ministry to help push her reform agenda. “I had world experts in forestry, in water and in waste management. They have ideas, but the ideas were sitting on the shelves. What was lacking was the boldness and leadership that I provided.” (Interview with Wakhungu, 12 April 2023). Wakhungu also built on past efforts by her predecessors, including Nobel laureate Wangari Maathai’s personal engagement and activism on pollution from the manufacturing industry (Behuria, 2019). Wakhungu was also a strong negotiator, she resisted intense lobbying by the manufacturers against the plastic ban. She described, “My style was always to [ask for] everything so that even if they strip off half, we are still going home with something. And that is the advice I give to everybody in terms of negotiation, if you want three, come with ten” (interview with Wakhungu, 12 April 2023).



### Professor Geoffrey Wahungu

Professor Geoffrey Wahungu<sup>3</sup> was the Director General of NEMA when the government pronounced the nationwide ban on the use, manufacture and importation of thin plastic carrier bags and flat bags. He was among the professionals who worked closely with Cabinet Secretary Wakhungu, and other collaborators to reach the momentous decision to ban plastic bags. As the Director General of NEMA, he was the first point of contact for the Cabinet Secretary in the planning and implementation of the ban.

“I think this was not a one-person initiative – it was teamwork. From the President to the Cabinet Secretary, to myself and my team – and our partners and the public goodwill” (interview with Wahungu, 21 April 2023). The Director General was fully aware of the previous attempts to regulate plastics and had carefully analysed the loopholes and the opportunities. With the 2017 attempt to ban plastic bags, he was determined to overcome the sustained political lobbying and resistance from KAM. The Director General recalled, “Among all other pressures, I resolved to concentrate on plastic and focus on the ultimate goal [...]. I didn’t want to disappoint the Cabinet Secretary (who I assured we would be successful) or the President because I was well aware that if we failed this time, it wouldn’t be easy to get another opportunity” (interview, 21 April 2023).

The Director General was praised by others who collaborated to bring in the ban, especially for his diligence in keeping records of the government’s consultations with the private sector, which were used by the Lands and Environment Court as evidence to dismiss lawsuits against the ban. “I think credit has to be paid to him [Wahungu]. He has been extremely instrumental; He was very tough [...] and consistent [...] in all the decisions and interactions that he was having [over the ban]. He was very methodical.” (Interview with Dr. Cyrille-Lazare Siewe, UNEP Kenya, Head of Country, 9 May 2023).

### James Wakibia

Outside of government, civil society activists, especially James Wakibia, were calling for decisive action against single-use plastics. Wakibia, a Kenyan environmental campaigner and photo-journalist, described how he was angry at the sight of mounting plastic waste and organized petitions calling for the government to take action against plastics (interview with James Wakibia, 26 April 2023). In 2015, Wakibia launched a Twitter campaign in which he took photos of people holding a banner with the hashtag ‘#ISupportBanPlasticsKE’, and tweeted them under the same hashtag. The campaign attracted widespread attention, including that of Cabinet Secretary Wakhungu, who retweeted one of Wakibia’s tweets showing her support for a ban on plastics.

---

<sup>3</sup> No relation to Professor Wakhungu.

## United Nations Environment Program (UNEP)

The UNEP Kenya Country Office supported efforts to ban plastic bags mainly through research and communicating Kenya's plastic bag problem. The UNEP Head of Kenya Country Programme, Dr Cyrille-Lazare Siewe recalled how "We developed a lot of visuals [...]. The data was used to do various [anti-plastic] campaigns on television and radio, in newspapers, and local-based community [platforms] [...]. We came with simple messages that can speak to someone from the informal settlements and that academics cannot disagree with" (interview, 9 May 2023). UNEP also targeted government officials for training so they would understand the magnitude and scope of the plastic bag problem. Siewe was responsible for coordinating UNEP's support for the ban. "I was coordinating what UNEP was doing, all the support, even working on the messaging that the Executive Director [of UNEP] was tweeting" (interview with Siewe, 9 May 2023). Siewe's strong background in toxicology helped him to understand different aspects of plastics and the environmental challenges and so he could boldly engage with the "world class" lawyers hired by the manufacturers to oppose the ban (ibid).

# The Reform Experience

*Efforts to tackle plastic pollution in Kenya have been evident since the early 2000s. Yet, despite earlier failures, a ban on plastic bags was finally achieved in 2017. Here, the key steps in the process are set out.*

## Gaining Experience

Wakhungu became Cabinet Secretary for the Ministry of Environment and Natural Resources in 2013. She was appointed to the position by then-President Uhuru Kenyatta and she immediately set about modernising the laws governing a range of environmental issues so that they would be compatible with the 2010 Kenyan Constitution. The Ministry had oversight of 28 SAGAs, which granted the Cabinet Secretary significant power to coordinate reforms across related areas (interview with Wakhungu, 12 April 2023).

To achieve rapid and coordinated results, Wakhungu started amending policies across the whole Ministry simultaneously. At that time, high rates of wildlife poaching were a particularly urgent problem (interview with Wakhungu, 12 April 2023). Just eight months into her role, the Cabinet Secretary, working across the relevant agencies, succeeded in passing the Wildlife Conservation and

Management Act, which increased the penalty for wildlife poaching, despite resistance (ibid). This rapid success set a precedent for Wakhungu's approach to modernising environmental policies and achieving results through strengthening related legislation.

Learning from her success, Wakhungu was determined to find a lasting solution to pervasive plastic pollution (interview with Wakhungu, 12 April 2023). Given that the previous three attempts to reduce plastic bag production had been resisted by the industry lobby, Wakhungu was aware of the powerful opposition she would face. However, President Kenyatta assured her of his support to bring about a ban and told her to try to see what she could achieve (ibid). With the President's backing and having already worked well with others in the Executive and the legislature to push through other policy reforms and legislation, the Cabinet Secretary resolved to bring in a ban on plastics (ibid).

## Strategizing

Initially, the Cabinet Secretary hoped to put in place a broad ban on all single-use plastics (Ngei and Karmali, 2020). However, noting the strength of the manufacturers' lobby against anti-plastic legislation, Wakhungu opted to narrow the focus of her efforts and target plastic carrier bags and flat bags (interview with Wakhungu, 12 April 2023). These were considered the most prevalent plastics at that time in Kenya because plastic carrier bags were given out freely in supermarkets and in markets and, due to their flimsiness, were not reusable and were easily blown away by the wind into trees, bushes, and drains (interview with Opondo, 24 April 2023). Focusing on banning these bags was anticipated to bring about immediate visible environmental and health benefits while increasing the ban's political and economic feasibility by targeting only one part of plastic manufacturing. To this end, Wakhungu reinvigorated an existing task force to oversee the phasing out of plastic bags and the transition to environmentally friendly alternatives (interview with Wakhungu, 12 April 2023).

## Working Politically

President Kenyatta came to power in 2013 as leader of the National Alliance Party in coalition with several other parties (Alderman, 2022). Despite the 2010 Constitution awarding greater legislative power to the Kenyan parliament, in practice, the President exercised significant control, and accountability to citizens was very weak (ibid). Kenya's democracy is characterised by political clientelism and the then President Kenyatta was known to have strong personal

connections to large businesses (Behuria, 2021). Manufacturers were among these political players and had established their political power by funding political campaigns as well as providing employment and revenues to the state (Behuria, 2021). In this context, it was necessary for any reform leader to have the support of the President, especially if their intended reform would damage business leaders' interests. Without the president's support, other members of the executive, the senate, the national assembly and the judiciary would have been unlikely to also support the plastic bag ban. Indeed, it was President Kenyatta who appointed Wakhungu to the position of Cabinet Secretary in the knowledge that she was a capable technocrat who could improve Kenya's environmental reputation on the international stage (interview with Behuria, 2 May 2023).

While developing the draft legislation, the Cabinet Secretary had frequent meetings with private sector associations, which expressed opposition to further measures limiting plastic bag manufacturing (interview with Wakhungu, 12 April 2023). KAM argued that the ban would result in over 60,000 job losses and render their equipment obsolete. They pointed out that manufacturers were already paying taxes on plastic bags, and it was the government that was failing to do its part in using the tax revenue for effective clean-up (interview with KAM official, 26 April 2023). KAM officials lobbied government at all levels, including the President to impress upon decision makers the risk that a plastic bag ban posed for manufacturers, employees, and potential foreign investors in Kenya's economy (ibid).

Given the heavy lobbying by KAM, the Cabinet Secretary knew that it would be difficult to pass a bill banning plastic bags through parliament. MPs would likely be swayed by the pressure of manufacturers due to their significant role in the economy and personal connections between manufacturing companies and individual MPs (interview with Wakhungu, 12 April 2023). To work around this strong opposition, the Cabinet Secretary developed an alternative plan with the support of her collaborators in the Parliamentary Committee for Lands, Environment and Natural Resources and two house-speakers (Alderman, 2022). Knowing that little attention would be paid to an amendment to the 1999 Environmental Management and Coordination Act, Wakhungu proposed a new clause to the Act that would grant the Cabinet Secretary the power to ban any pollutant deemed harmful to the environment (ibid). Using the provisions of the 2010 Constitution that provided Kenyans the right to a clean and healthy environment as a justification, the amendment was passed in 2015. The Cabinet Secretary described how the parliament ‘somehow just approved [the amendment] without really understanding the magnitude of what I was trying to do’ (quoted in Alderman, 2022, p. 22). The amendment to the Act now allowed the Cabinet Secretary to include plastic bags on the list of banned pollutants without requiring parliament’s prior approval. However, rather than doing this immediately, Wakhungu spent time building an alliance within and beyond government that would support the ban and she waited for an opportune moment in the political cycle in which to enact it.

### **Building an Alliance**

Building on the work of the predecessors, such as Nobel Laureate Wangari Maathai, and working closely with the members of the Parliamentary Committee on Lands, Environment and Natural Resources, Wakhungu began gathering support within parliament and the executive for a ban on plastic bags (interview with Wakhungu, 12 April 2023). Wakhungu was also working closely with the judiciary, and her ministry supported training programmes for the Environment and Land Court. She noted, “We had training programs for the judiciary, and we also had training programs for the legislature, the senate, and the members of parliament. We were working very closely together” (interview, 12 April 2023). A former consultant to NEMA, Mr Gerphas Opondo also noted that the judiciary received environmental law trainings to strengthen awareness among judges and judicial officers of environmental and sustainability challenges and jurisprudence in the field of environment, as per the 2010 Constitution (interview, 24 April 2023).

Wakhungu was very well connected within the executive. Having won Kenyatta’s support, she was able to secure the support of many of the Ministers too, even those who were lobbied by manufacturers to oppose the ban (interview with Wakhungu, 12 April 2023). Wakhungu also had notable support from the Secretary General of the Central Organisation of Trade Unions. Wakhungu recalled, “[He] just said to me, “continue my sister, the analysis we have done on jobs is being exaggerated” (interview, 12 April 2023). A former consultant to NEMA agreed that the manufacturers who were producing

plastic bags were large conglomerates and so the ban did not pose an existential threat to them (interview with Opondo, 24 April 2023). He surmised that the ministers and advisors to the President had concluded that any negative economic impact of a plastic bag ban would not be severe and that factories producing plastic bags were producing many other plastic items and so would not be forced to close. Dr Behuria, a researcher who has studied the plastic ban, suggested that although the manufacturers are politically powerful, Kenya's broader economic strategy requires foreign exchange gained through tourism, which had been waning while Rwanda's tourism industry boomed instead (interview, 2 May 2023). A desire to project Kenya as a modern, clean environment for foreign investment and as the destination for wildlife tourism was likely to be an important factor in the political calculation to support the ban (ibid).

Wakhungu also reached out to the UNEP which was keen to collaborate. The UNEP Head of Kenya Country Programme described how UNEP had supported the Cabinet Secretary by producing data and reports on the plastic problem in Kenya, communicating simple messaging about plastic pollution and encouraging the Ministry to create incentives or "carrots" for the private sector, as well as "sticks" (interview, 9 May 2023). UNEP's resources and international platform helped to promote the need to address plastic pollution within and beyond Kenya, keeping the issue firmly in the spotlight. UNEP also provided important scientific expertise on the dangers of plastic pollution so that NEMA was prepared for the fierce opposition to the ban from very well resourced, multinational

manufacturing companies (interview with UNEP Kenya's Head of Country, 9 May 2023). While UNEP does not have a mandate to be directly involved in domestic political negotiations, it played a networking and coordinating role to ensure civil society was supported to speak out on plastics, to reassure manufacturers that they would not lose their investments and to provide technical advice and communications support to NEMA (ibid). Moreover, UNEP's involvement gave the ban international credibility, which was publicly demonstrated when the then Executive Director of UNEP, Erik Solheim tweeted in support of a ban during the 2016 United Nations General Assembly. Such a public show of support for action against plastic bags by UNEP was valuable in ensuring domestic political commitment to the ban (ibid).

### **Listening to Civil Society**

Meanwhile, it was clear that support from civil society to tackle plastic pollution was strong. Campaigns had been growing within Kenya and internationally as people decried the waste that was so visibly polluting their environment. One campaigner who repeatedly caught the attention of NEMA and the Cabinet Secretary was James Wakibia, a photojournalist from Nakuru, a Kenyan town known for its lake and national park. Wakibia described how angry he felt when he saw plastic bags stuck in trees and plastic waste filling drains, rivers and collecting in Lake Nakuru (interview, 26 April 2023). He began by calling for the local waste site to be closed but soon realised that it was the plastic itself that was the problem because it was easily blown out of dustbins

and waste sites and was not biodegradable. Using his skills in photography and journalism, he began a social media campaign using the hashtag #BanPlasticsKE (ibid).

The campaign quickly caught the attention of local people who supported action against plastic pollution and Wakibia's Twitter handle gained thousands of followers. Wakibia explained how he would write to government officials accusing them of failing in their duty and demanding a full ban on plastics in Kenya (interview, 26 April 2023). He was not surprised that the government did not respond directly since he was taking an adversarial tone, but he kept campaigning, sharing photos of the pollution, writing articles in daily newspapers, and posting comments on social media platforms (ibid). At times, he felt despondent and exhausted from spending all his spare time campaigning, but people encouraged and thanked him for his work, which helped him to stay motivated (ibid).

Although government officers and politicians did not engage directly with Wakibia at the time, they had seen his campaign and knew he had many followers and supporters. Wakhungu recalled, "Somebody who was in my face all the time was James Wakibia. [...] And you know, being a photojournalist, he just used to bombard us with all the horrible, horrible images of the challenges that we face with the plastic pollution. [...] We knew the public were with us. Everyone could see the problem" (interview, 12 April 2023). When the Cabinet Secretary retweeted one of Wakibia's tweets saying, 'I support #BanPlasticsKE', Wakibia was delighted. "I felt like finally government was

listening. I was very touched by the minister responding" (interview with Wakibia, 26 April 2023). Wakibia then changed the hashtag to 'ISupportBanPlasticsKE' to underline that this campaign was about Kenyans coming together to support an end to plastic pollution.

In addition to social media campaigns, NEMA was aware of the risk that plastic pollution was posing to pastoralists and the fishing industry. A NEMA official noted that NEMA was receiving complaints from farmers and from people fishing at the Kenyan coast, who described how plastic waste was killing fish and livestock (interview, 24 April 2023). NEMA also received complaints from the wildlife tourism sector asking for action against plastic litter in national parks. A NEMA official concluded, "[Kenya was] the largest plastic bag manufacturer in the region and if the trajectory of plastic waste continued, it would become a crisis. It was better to bite the bullet" (interview, 24 April 2023).

### **Economic and Political Incentives**

Internationally, concern over plastic pollution was intensifying. Countries across the world had already taken action against plastic waste. Anti-plastic bag laws had been passed in Indian states in the 1990s and in Bangladesh in 2007, while Denmark, Germany and the Republic of Ireland had imposed financial disincentives to reduce plastic bag use (Behuria, 2021). Around the time of Kenya's plastic bag ban, 36 countries in the Global South had already adopted plastic bag bans and 28 countries in the Global North had imposed plastic bag taxes

(Knoblauch et al., 2018). Within East Africa, Rwanda had received significant international attention over its 2008 plastic bag ban and several interviewees mentioned this, suggesting that regional competition was on the minds of politicians and government officials. The former Director General of NEMA recalled, “Rwanda was looking very good before the East African Community [...] we weren’t competing with Rwanda, but we [Kenya] felt a bit awkward to be a bigger economy and we seemed to be struggling [on plastic waste] where smaller nations were doing well”. Likewise, researcher Dr Behuria also noted that when discussing the ban with Kenyan government officials, comparison was frequently made with Rwanda’s action on plastic waste (interview with Behuria, 2 May 2023).

The manufacturing sector in Kenya, although important, accounted for around 12% of Kenya’s GDP since Kenya’s independence (Behuria, 2021). This was far less than the services sector, which constituted between 40% and 50% of GDP every year and of which tourism is a key contributor (Behuria, 2021). Kenya’s Vision 2030, a plan for national development, prioritised tourism as a growth sector but this ambition was threatened by reports of election violence and multiple terror attacks in Nairobi and at the coast (ibid). As the interviews revealed, government officials were conscious that Kenya was losing its competitive advantage in tourism to its neighbour, Rwanda. Therefore, although targeting plastic bags damaged relations between government and manufacturers at first, the negative economic impact was minor and Kenya stood to gain economically from boosting its international

reputation as an environmental leader and as a tourism destination.

The plastic bag ban created an opportunity for the Kenyan government to signal that it could lead on the international agenda of plastic pollution and justify its position as host to international conferences and also protect its wildlife tourism. As the UNEP Kenya Head of Country Programme described, “We [Nairobi] cannot be called [the] environmental capital and still do things as usual” (interview, 9 May 2023). A former consultant to NEMA, Mr Opondo, described how, since 2014, every United Nations Environment Assembly (UNEA) session discussed plastic waste, and the theme of the 2017 UNEA session, which Kenya was due to host, was pollution. Kenya was also due to host the first ever global ‘Blue Economy’ conference in 2018 in partnership with the governments of Canada and Portugal, and the theme of United Nation’s World Environment Day 2018 was ‘Beat Plastic Pollution’. Mr Opondo noted, “Prof Wakhungu was keen to show that Kenya was a leader in this” (interview, 24 April 2023). Likewise, the then Director General of NEMA commented, “By achieving the plastic bag ban, we have more reason to justify why we have UNEP in Nairobi [...]. NEMA was intent on capitalizing on the global forums” (interview, 21 April 2023).

### **Seizing a Window of Opportunity**

Knowing that announcing a ban on plastic bags would provoke a strong reaction from the manufacturing lobby who would demand MPs to challenge the ban, the Cabinet Secretary saw an opportunity to limit the



political backlash. The 2017 general election was due to be held on 8 August 2017. In the period leading up to an election, MPs are focused on campaigning in their constituencies (interview with Wakhungu, 12 April 2023). Legislation approved in that period also has little immediate significance to MPs since it is the future parliament that will face the consequences (Alderman, 2022). Wakhungu explained, “There is a period in which if you actually legislate or gazette a notice – about 3-4 months to elections, it is the next successful Parliament that can deal with it.” (Interview with Wakhungu, 12 April 2023). Seizing the moment, on 28 February 2017, the Cabinet Secretary published a notice in The Kenya Gazette that a ban on the use, manufacturing or import of plastic carrier bags and flat bags would come into force on 28 August 2017 (Republic of Kenya, 2017). The ban carried a maximum penalty of up to four years in prison or a fine of \$40,000 for anyone caught contravening the new regulation – some of the harshest penalties in a plastic ban globally.

Manufacturers, suppliers, and the general public had six months to adjust to the ban before enforcement commenced. Wakhungu and her team had discussed whether a six-month adjustment period would be sufficient. The then Director General of the NEMA recalled:

“ I had a discussion with the Cabinet Secretary, and we agreed that NEMA could prepare for implementation within six months’ time. This was agreed in 2016. [...] The more time you give, the more you have to prepare [...] but the Cabinet Secretary and I also agreed that six months was convenient because it coincided with the election period.

*We knew that manufacturers would rush to the political class and make pronouncements about job losses but if the ban is announced in the election period, no-one has anyone to rush to. (Interview, 21 April 2023)*

Although six months did not give the government or industry much time to adjust to the coming ban, the pre-election period was judged to be an important opportunity for protecting the law from political attack. It was also envisaged that the UNEA session later in the year would be a timely opportunity for the president to promote the ban to the applause of international organisations and leaders and so this would further bolster the president’s support for the ban’s enforcement (interview with former NEMA consultant, 24 April 2023).

### Being Bold

The reaction from manufacturers and plastic bag suppliers to the announcement of the ban was immediate. Protesters camped outside the NEMA offices, and business owners descended on the KAM offices for a meeting with the Cabinet Secretary (interview with NEMA official, 24 April 2023). Around 700 industry representatives tried to join the meeting forcing KAM to find a larger room to accommodate them (interview with KAM official, 26 April 2023). Despite the anger, the Cabinet Secretary held firm. Sensing the mood, the Director General of NEMA offered to face the manufacturers and provide a buffer but the Cabinet Secretary was prepared to meet them. Wakhungu also had to face a ‘very harsh’ parliament (Alderman, 2022, p.21).

However, with the amended Environmental Management and Coordination Act, the 2010 Constitution and the President backing her, Wakhungu could face the criticism and anger and the ban was not overturned (Alderman, 2022).

Among the manufacturers' demands was a call for clarification on which plastic bags were banned. The then Director General of NEMA admitted that the ban was wide-reaching and had not specified the "other" different types of plastic bags that would not be included under the ban (interview, 21 April 2023). However, by drawing on the existing East African Community (EAC) classification for different plastics and in negotiation with KAM, NEMA agreed there would be exemptions for certain plastics (interview with NEMA official, 24 April 2023). NEMA's former Director General described how the 2016 EAC Polythene Materials Control Bill on plastic waste meant that "we did not need to reinvent the wheel on definition of types of plastics" (ibid). Exemptions were made for primary packaging, such as confectionary plastic bags and as a result, some large plastic manufacturing companies did not lose their full investments (Behuria, 2021).

Despite making clarifications to the ban, Wakhungu faced over 200 legal challenges from the private sector, all of which were ultimately dismissed in her favour (Alderman, 2022, p. 22). In court, a manufacturer claimed that the government had not consulted stakeholders before passing the ban. However, the government was prepared for this accusation. The then Director General of NEMA had records of the 89 meetings

that NEMA had held with KAM since 2007. "A government's strength is data", he said (interview, 21 April 2023). A former consultant to NEMA also described how the judiciary had remained independent and had appreciated the importance of environmental law (interview, 24 April 2023). This sentiment was echoed by Professor Oguge of the University of Nairobi, who noted that "Kenya's judiciary have been strong on environmental issues, imposing sanctions [...] the strength of the court may have been important in the passing of the ban" (interview, 24 April 2023).

### **Anticipating Backlash**

Wakhungu and her allies within government were prepared for the backlash from manufacturers once the ban came into force. Collaborating with State House and UNEP, they had strategized ways of bolstering the President's support for the ban in the weeks following its announcement. The then Director General of NEMA recalled how NEMA arranged for the Executive Director of UNEP and heads of other foreign missions in Kenya to congratulate the President on the announcement of the ban. "UNEP turned out to be a very important partner" (interview with former Director General of NEMA, 21 April 2023). A former consultant to NEMA remembered, "UNEP was happy. For the first time the Executive Director came out of the complex to join in street clean-ups with the President" (interview, 24 April 2023). Several interviewees also recalled proudly how, before landing, Kenya Airways announced to passengers that Kenya is a plastic bag free country and so they must not bring plastic bags with

them. The Head of Conservation for WWF Kenya described this as “a good way of telling people that they were landing somewhere different” (interview, 26 April 2023). Organising high profile public events to publicise the ban as an action against pollution helped to amplify the political rewards for passing the ban and so cemented political commitment to it despite the anticipated outcry from manufacturers.

Knowing that the ban would receive significant international and national attention, NEMA officials prepared for its implementation. The then Director General of NEMA recalled how the Cabinet Secretary had instructed him saying, “I hope you know what is required on Monday – you have to have your phone on and have NEMA in every corner of the Republic” (interview, 21 April 2023). On the first day of the ban, the Director General reported to the Cabinet Secretary every hour on how implementation was going. NEMA also had the support of the Minister for the Interior who had allocated 200 police officers to help enforce the ban and NEMA collaborated with the Customs authority, Ports authority and the Airports authority to monitor plastic bags entering Kenya at the borders (ibid). In the weeks after the ban came into force, arrests were reported, fines given, and Nairobi’s Burma market was even closed after multiple incidents of noncompliance (Watts, 2018).

# Impact of the Reform

*The ban on plastic bags is considered a relative success by the government, civic actors, and manufacturers.*

The success is visible on the ground as streets, public places, trees and grazing fields are noticeably freer of plastic bags (interview with Opondo, 24 April 2023). A government report published three years after the ban came into force showed that the ban has been largely successful with an over 80 percent reduction in thin plastic bags (Republic of Kenya, 2020). The report also found that the amount of marine polythene litter has significantly reduced (ibid). Another study led by NEMA found that the number of livestock ingesting plastic bags had dropped from six in ten animals to one in ten (Lange et al., 2020). The harsh fines or prison sentences may have served as an initial deterrent. In 2020, Kenya's Cabinet Secretary for Environment and Forestry reported that around 300 people had received fines of between US \$500 and \$1,500, with some receiving prison sentences of up to eight months (BBC News, 2020). The harshest penalty reported was applied to a manufacturer who received a one-year prison sentence (BBC News, 2020).

In 2020, NEMA, in partnership with the Kenyan Wildlife Service and WWF Kenya went further and imposed a ban on plastic bottles, straws and related products in national parks, reserves and conservation areas. The ban is in line with the provisions of the Wildlife Management and Conservation Act (2013) which provides for the protection of wildlife, their habitats and eco systems, and lists measures for the protection and management of endangered and threatened species (Republic of Kenya, 2013: Section 48).

Despite visible success in the implementation of the ban, further empirical studies are still required to measure its impact (interview with Nicholas Oguge, 24 April 2023). No monitoring structures have been put in place to track the environmental, economic, and social benefits of ban. The lack of scientific evidence makes it difficult to monitor progress or demonstrate the benefits (ibid). The Head of Compliance at NEMA also noted that while the enforcement of the ban was initially strong, the government

does not usually take suspected offenders to court due to the cost and time involved. Instead, NEMA uses its resources strategically by targeting manufacturers contravening the law rather than individuals or small vendors (interview, 24 April 2023).

While the ban was a bold step to address plastic bag pollution, the manufacturers were successful in gaining exemptions for materials used for industrial primary packaging, such as confectionary bags and wrappers, bags for handling of biomedical and hazardous waste, garbage bin liners and plastic carrier bags used in duty free shops (interview with KAM official, 26 April 2023; Republic of Kenya, 2017). These materials continue to leak into waterways and the environment. In addition to the exemptions, several interviewees believed that a few business outlets are still secretly dispensing plastic carrier bags, apparently smuggled from Kenya's neighbouring countries of Somalia, Tanzania and Uganda, where plastic regulation is weakly enforced (Lange et al., 2020; Opondo, 2020).

Moreover, plastic alternatives were not well thought out prior to the ban. The non-woven reusable shopping bags are not recyclable and are frequently discarded in dumpsites (Asari and Omondi, 2021; interview with Joyce Gachugi, Country Manager at PETCO, 5 May 2023). The smuggling of plastic bags through porous borders means that a regional approach to plastics may be more effective (interview with Nicholas Oguge, 24 April 2023), and that there is a need to revisit the ban to make appropriate adjustments (interview with Dipesh Pabari,

Co-Founder and Project Leader, FlipFlopi, 4 May 2023). Currently, FlipFlopi, an East African civil society organization, is leading a campaign to find a harmonised regional approach to legislate against plastic production and use (interview with Dipesh Pabari, 4 May 2023). The East Africa Legislative Assembly is exploring options for regional legislation to ban certain categories of plastics and consider environmentally-friendly alternatives (ibid).

Although the ban allowed certain exemptions, it did appear to catalyse greater private sector entrepreneurship in waste management and recycling. Following the introduction of the ban, the Director General of NEMA announced that the government was also considering an outright ban on plastic (PET) bottles (interview with KAM official, 26 April 2023). The manufacturers, facing the prospect of another ban, established a joint framework of intervention for PET bottles with the Ministry of Environment and NEMA (interview with Joyce Gachugi, Country Manager, PETCO Kenya, 5 May 2023). The outcome was the incorporation of a PET Recycling Company (PETCO) – a voluntary 'Extended Producer Responsibility' (EPR) organisation – to promote the recycling of PET bottles. Branching out from South Africa, PETCO Kenya is a private sector initiative which charges manufacturers for the collection and recycling costs of the PET bottles that they produce. PETCO is responsible for contracting and coordinating waste collectors and selling the bottles to recycling plants, following the concept of a circular economy (interview with Joyce Gachugi, 5 May 2023).

PETCO claims that such initiatives have increased waste management activities, including collection and recovery. Notably, Kenya recently enacted the National Sustainable Waste Management Policy and Act (2022) which incorporates a mandatory and comprehensive EPR mechanism, requiring all manufacturers to join an EPR scheme and adopt a circular economy approach. Officials from PETCO and KAM described how the ban on plastic bags created an unpredictable policy environment that was detrimental to businesses. Joyce Gachugi, Kenya Country Manager of PETCO explained how agreeing to a framework of intervention with the government and partnering with private sector EPR organisations allowed businesses to feel more secure in their investments and some are even considering whether plastic bags can be re-introduced under the principle of a circular economy (interview, 5 May 2023). A NEMA official described the ban as a “win-win situation” with manufacturers now taking credit for the phasing out of plastic bags (interview, 24 April 2023).

Imposing a ban on plastic bags is, of course, limited in its ability to address the full problem of plastic pollution. However, in a context where government capacity and coordination are undermined by clientelist politics, a more systematic, expensive and transaction intensive approach to solid waste management was unlikely to be feasible in the short term.

As the problems with implementing the ban reveal, in Kenya, political incentives to invest sufficiently in environmental monitoring and management are still lacking (Alderman, 2022). While many challenges related to plastic production and pollution persist, the ban was successful in provoking a response from manufacturers and catalysing the private sector into finding business opportunities in plastic recycling and non-plastic packaging.

# Ways of Working and Relevance of Development Entrepreneurship

*This section reviews the key characteristics and principles that the reformers described and compares them to the development entrepreneurship (DE) criteria.*

Interviews with those involved in leading the reform mentioned several ways of working that were important to their success. First, the reformers held a **strong personal commitment** to achieving the change. Despite the failed earlier attempts to ban plastics and the strength of the manufacturers' opposition, the Cabinet Secretary was determined to see change and, crucially, had the president's backing. She thus demonstrated the development entrepreneurship leadership traits of **grit** and had the **autonomy** and **confidence** to act. KAM lobbied very hard against the ban, but the Cabinet Secretary and her team were simply steadfast and refused to give in (interview with Wakhungu, 12 April 2023).

Similarly, James Wakibia was also described as persistent in sending the Cabinet Secretary and her team images and articles about the plastic waste problem (interview with Wakhungu, 12 April 2023). The personal perseverance and belief that plastic pollution had to be addressed even if previous attempts had failed or if government seemed to not be listening allowed both Wakhungu and Wakibia to maintain their campaign within and outside of government. Both reformers thus saw the **future as something that could be influenced** and shaped by their actions.

Second, **bravery and risk-taking** were necessary. Wakhungu recognised the risks she was taking for her own career and even her personal safety. The former Cabinet Secretary described how she had announced the ban when she was in the United States to protect herself from the anticipated backlash. She knew that the expertise and willingness to ban plastics existed in government, “all they needed was a brave champion” (interview with Wakhungu, 12 April 2023). “I’m one of those people who always hit the ground running at top speed without fear” (ibid). Wakhungu knew that she might lose her job because imposing stricter environmental protection was going to “annoy people” but, she said, “I was bold, and I was courageous” (ibid). This speaks again to Wakhungu’s **confidence**.

Third, in addition to demonstrating personal commitment and boldness, Wakhungu and her collaborators worked hard to **build a coalition** of support for the ban. Beginning with President Kenyatta, Wakhungu ensured she had the very highest political support for what would be a controversial regulation. Professor Oguge remarked how the Cabinet Secretary had strong relationships with the Executive, who would back her as a friend, as well as a colleague (interview, 24 April 2023). Although the Cabinet Secretary knew she would face an angry parliament, she had already ensured she had the support of key ministers, including the Minister for the Interior (interview with Wakhungu, 12 April 2023). Wakhungu described how three quarters of the National Assembly were on her side, as well as the Senate and the Parliamentary Committee on Land,

Environment and Natural Resources. She also commented on how she worked very closely with the judiciary and with the government’s principal legal advisor, the Attorney General, to make sure that she was ready to face the uproar from manufacturers when the ban was announced. “They were all on my side, they understood, so with that all the court cases were lost and that’s how we’re able to go about it” (interview with Wakhungu, 12 April 2023).

Fourth, while building a coalition of support, Wakhungu was quietly developing a strategy for how to bring in a ban on plastics without needing the MPs approval, who could easily be swayed by manufacturers’ lobbying. Wakhungu emphasised three aspects of her approach: **results-oriented, politically clever and working quietly** (interview, 12 April 2023). Although the Cabinet Secretary needed to be bold and brave, at the beginning of the process she emphasised the importance of quietly working out a strategy. The then Director General of NEMA confirmed this,

“*If we had fought from the beginning it would not have worked. The Cabinet Secretary said, “We don’t fight these people because all they want is an all-out war”. Because of humility, they could not read our minds in negotiations. We appeared soft, we appeared indecisive, but this was deliberate. The humility was a resource. When they realised that we were being crafty or foxy, that is when they rushed to court. (interview, 21 April 2023)*

The Cabinet Secretary added, “I work very quietly, because I don’t like to make pronouncements unless I have delivered [...] I am results oriented”. I may be quiet [...]



but I'm very good at following up, and I'm very good at closing deals" (interview with Wakhungu, 12 April 2023). Wakhungu was also strategic in ensuring the ban would deliver political benefits to the President and she collaborated with UNEP to maximise the international prestige that the ban would bring, and so consolidated political support. Drawing on her experience as a technocrat, her understanding of parliamentary processes in Kenya, and her determination to deliver results regardless of the risks to her public profile and political career, Wakhungu was able to identify and seize a window of opportunity for a controversial legislative change. This speaks to the development entrepreneurship principles of **expecting and exploiting surprises**, as well as the importance of **politically feasible** approaches that will work in context.

Clearly, many of the DE principles resonate strongly with this story of change and all of the criteria are reflected in the case to an extent (see annex A). In particular, the reform had a tangible **impact**, has been **sustained** and was **politically feasible**, even if this was not certain at the outset. The DE principles of **just start** and **build coalitions and networks** are shown in this case in the way in which Wakhungu and her colleagues set out to "just give it a try" (interview with Wakhungu, 12 April 2023). Backed by the president, who stood to gain international political capital from the reform, as well as potential economic gains for Kenya's tourism sector, Wakhungu could amplify the political incentives to bolster commitment to the controversial reform.

She **learnt from previous reform attempts** and was astute in **exploiting opportune moments** to push the reform through.

Wakhungu, as the lead reformer, demonstrated all four DE leadership qualities of **grit, autonomy, confidence and humility**. The ability to be **bold** and have **confidence** and resilience in the face of strong opposition, while remaining humbly focused on the goal of a plastic ban was critical to Wakhungu's success. Interestingly, while Wakhungu was exceptionally politically savvy, it was important that she did not appear so and therefore was able to hide her strategy from the opposition. This element of 'working quietly' may be an additional principle to the 12 DE principles that emerges from the Kenyan case. Gradually ensuring she had key political figures and decision-makers on her side, Wakhungu created an **informal coalition** of supporters. This, combined with the **autonomy** Wakhungu was granted as Cabinet Secretary, gave her the freedom to pursue a reform that would make a clear difference to plastic bag pollution and to Kenya's international environmental reputation.

# A Personal Note from Judi Wakhungu

Coming into the position of Minister of Environment as a technocrat, my technical expertise meant that I knew what needed to be done and gave me credibility to act. I was also bold and courageous – even if that meant I only stayed in the job for two-weeks, I wanted to make a difference.

My starting point was the Kenyan Constitution. It states that every Kenyan has the right to a clean and healthy environment. As Minister of Environment, it was my job to live up to that. At the time, that right was endangered because single-use plastic bags were everywhere. We were being given plastic bags for everything – mangoes at the market, bottles of water. Bags littered the trees and waterways. Although our country is very beautiful, before the ban there were plastic bags strewn all over the place. In the informal settlements, people did not have adequate sanitation and so we had this awful problem of “flying toilets”. And people were fed up – activists like James Wakibia were raising the profile of this issue and bombarding us with photos of the problem and its impacts.

I spent hours quietly going to see and understand the enormity of the challenge. I’m a field person by orientation – you can’t work in the office on these issues. You have to put on your boots if it’s required – you can’t rely on a report from a government officer in a suit and tie. I was approaching it from firsthand experience.

But the issue of plastic bags had become too political, which is why previous efforts to pass the ban had failed. I knew I needed to act dexterously and quietly. I had worked closely with the Environment Committee in Parliament on other legislation but they were hesitant regarding plastic bags. So, I opted for a clever back-door route.

This approach to reform required taking significant personal and professional risks. When I published the ban in the Kenya Gazette, for instance, I did it from Washington DC – because it was too risky for me to do it while in Kenya. But I was following what I knew was right and what the Kenyan Constitution enshrined – I had to be a champion on this issue. I thought, if I was sacked, at least I was going down for a good cause!

I also made sure I brought the right people along – across government, civil society and key Ministries. My team did their homework and got key political support in place so we were ready to go when the moment arrived. We knew our approach was watertight.

To make transformational legislation you have to seize that very rare opportunity of – what Shakespeare would say – the characters sitting at the table at the time. And we have to agree in that moment. Policies are not written in stone – they capture all the difficulties and opportunities of a particular political moment. The challenge would be different if we were pursuing the reform today. In the end, you can only make change from where people are at in that moment.

**H.E. Professor Judi Wakhungu**



# List of References

Alderman, P. (2022) *Legislative leadership on environmental issues*, London: Westminster Foundation for Democracy.

Asari M. and Omondi I. (2021) 'A study on consumer consciousness and behavior to the plastic bag ban in Kenya,' *Journal of Material Cycles and Waste Management* 23: 425-425.

BBC News (2020, 18 February) 'Kenya plastic bag ban: Three fruit sellers arrested in Nairobi,' *BBC News*, Available at: <https://www.bbc.co.uk/news/world-africa-51546277>, Accessed 9 May 2023.

Behuria, P. (2019) 'The comparative political economy of plastic bag bans in East Africa: why implementation has varied in Rwanda, Kenya and Uganda,' GDI Working Paper 2019-037, Manchester: The University of Manchester.

Behuria, P. (2021) 'Ban the (plastic) bag? Explaining variation in the implementation of plastic bag bans in Rwanda, Kenya and Uganda,' *Politics and Space* 39(8) 1791–1808.

Booth, D. and Faustino, J. (2014) 'Development entrepreneurship: how donors and leaders can foster institutional change,' London: Overseas Development Institute and The Asia Foundation.

Domínguez, Jorge I. (ed.) (1997) *Technopols: Freeing Politics and Markets in Latin America in the 1990s*, University Park, PA: Penn State University Press.

Fabella, R., and Faustino, J. (2011) *Built on Dreams, Grounded in Reality: Economic Policy Reform in the Philippines*, Manila: The Asia Foundation.

Green, D. (January 14, 2015) 'Is this the best paper yet on Doing Development Differently/Thinking and Working Politically?,' *From Poverty to Power blog*, Available at: <https://frompoverty.oxfam.org.uk/is-this-the-best-paper-yet-on-doing-development-differentlythinking-and-working-politically/>, Accessed 18 July 2023.

Joignant, A. (2011) 'The Politics of Technopols: Resources, Political Competence and Collective Leadership in Chile, 1990–2010,' *Journal of Latin American Studies* 43(3): 517-546.

Kimani, M., Njoroge, B. and Ndunge, D. (2014) 'Review of Municipal Solid Waste Management: A Case Study of Nairobi, Kenya,' *International Journal of Engineering and Science* 4: 16–20.

Lange, N. C., Inganga, F., Busienei, W., Nguru, P., Kiema, J. and Wahungu, G. (2018) 'The prevalence of plastic bag waste in the rumen of slaughtered livestock at three abattoirs in Nairobi Metropolis, Kenya and implications on livestock health,' *Livestock Research for Rural Development* 30: 182.

- Ngei, D. and Karmali, A. (2020) 'Reflecting on Kenya's single-use plastic bag ban three years on', 25th November 2020, World Economic Forum, Available at: <https://www.weforum.org/agenda/2020/11/q-a-reflecting-on-kenyas-single-use-plastic-bag-ban-three-years-on/>, Accessed 9 June 2023.
- Njeru, J. (2006) 'The urban political ecology of plastic bag waste problem in Nairobi, Kenya,' *Geoforum*, 37(6): 1046–1058.
- Nyangena J., Muluvi, A. and Gitonga, A. (2017) 'Ban on Plastic Bags: Plastics ban finally takes effect in Kenya,' *Policy Monitor* 9: 8.
- Ong'unya R., Aurah, C., Nabwire, J. and Songok, R. (2014) 'The Plastic Waste Menace in Kenya: A Nairobi City Situation,' *International Journal of Current Research* 6: 6175–6179.
- Opondo, G. (2020) *The Legal, Policy and Institutional Frameworks Governing Marine Plastics in Kenya*. Bonn: IUCN Environmental Law Centre.
- Oyake-Ombis L., van Vliet, B. and Mol, A. (2015) 'Managing plastic waste in East Africa: Niche innovations in plastic production and solid waste,' *Habitat International* 48: 188–197.
- Republic of Kenya, (2017) Gazette Notice No. 2334/2017, 28 February 2017, Available online: [https://www.nema.go.ke/images/Docs/Awarness%20Materials/Gazette\\_legal\\_Notice\\_on\\_carrier\\_bags.pdf](https://www.nema.go.ke/images/Docs/Awarness%20Materials/Gazette_legal_Notice_on_carrier_bags.pdf), Accessed 2 May 2023.
- Republic of Kenya (2020) *The implementation plan for the ban on single-use plastics in protected areas*, Nairobi: Government Printer.
- Roll, M. (2014) *Politics of Public Sector Performance: Pockets of Effectiveness in Developing Countries*, London: Routledge.
- Sidel, J. and Faustino, J. (2019) 'Thinking and Working Politically in Development: Coalitions for Change in the Philippines,' Pasig City: The Asia Foundation.
- United Nations Environment Program (UNEP) (2005) Selection, *Design and Implementation of Economic Instruments in the Solid Waste Management Sector in Kenya: The Case of Plastic Bags*, Nairobi: UNEP.
- Watts J. (2018, 25 April) 'Eight months on, is the world's most drastic plastic bag ban working?' The Guardian, Available at: <https://www.theguardian.com/world/2018/apr/25/nairobi-clean-up-highs-lows-kenyas-plastic-bag-ban>, Accessed 2 May 2023.
- Worldwide Fund for Nature [WWF] (2022) *Extended Producer Responsibility for Single-Use Plastics and Packaging Waste Streams: An Assessment For Kenya*. Berlin, Germany.

# List of Interviews

NAME	POSITION	DATE
<b>Professor Judi Wakhungu</b>	Ambassador of Kenya to the French Republic, Portugal, Serbia & Holy See and former Cabinet Secretary for Environment and Natural Resources, Kenya	12 April 2023
<b>Professor Geoffrey Wahungu</b>	Former Director General of NEMA	21 April 2023
<b>Anonymous</b>	Official at National Environment Management Authority (NEMA)	24 April 2023
<b>Gerphas Opondo</b>	Executive Director, Environmental Compliance Institute, and former consultant to NEMA	24 April 2023
<b>James Wakibia</b>	Environmental activist and founder of the #banplasticsKE campaign	26 April 2023
<b>Dr Cyrille-Lazare Siewe</b>	Kenya Head of Country, United Nations Environment Program	9 May 2023
<b>Jackson Kiplagat</b>	Kenya Country Director, World Wildlife Fund	26 April 2023
<b>Dipesh Pabari</b>	Co-founder and Project Leader, The FlipFlopi Project	4 May 2023
<b>Miriam Bomett</b>	Deputy Director, Policy Research Advocacy, Kenyan Association of Manufacturers	26 April 2023
<b>Joyce Gachugi</b>	Country Manager, PETCO Kenya (PET Recycling Company)	5 May 2023
<b>Dr Pritish Behuria</b>	Senior Lecturer, University of Manchester	2 May 2023
<b>Professor Nicholas Ogue</b>	Professor of Environmental Policy at the Centre for Advanced Studies in Environmental Law Policy, University of Nairobi	24 April 2023
<b>Dr Petra Alderman</b>	Post-doctoral Research Fellow, University of Birmingham	3 February 2023





# Annex: Development Entrepreneurship Principles

## Strategic question 1: Which reform will improve outcomes?

### Impact

The ban has seen an 80-93% reduction in the use of the thinnest plastic bag. The impact is visible as trees and roads are noticeably freer of plastic bags. There has also been a decrease in livestock found to have plastic bags in their stomachs, dropping from 6 in 10 to 1 in 10 cattle.

### Sustainability

The ban has withstood over 200 legal challenges and initial concerns from Parliament. The introduction of a comprehensive extended producer responsibility scheme, wider regional trends and the passing of a bill within the East African Legislative Assembly make it unlikely the regulation will change as there is now wider regional pressure.

### Political feasibility

The reform was made feasible by both political realism (making the focus of reform more modest) and political manoeuvring to circumvent likely opposition. Regional and global attention to plastic pollution was and continues to be high, which creates political incentives for the Kenyan government to uphold the ban.

## Strategic question 2: How will the reform be identified and introduced?

*Use the five principles of entrepreneurial logic*

### Just start

Wakhungu began working right away through existing policy processes and she learnt as she went. She was not fazed by earlier failed attempts by her predecessors but decided to just 'have a go'

**Small bets and learning by doing** Previous attempts at bans in 2005, 2007, 2011 were thwarted by the Kenyan Association of Manufacturers. Initial efforts by Wakhungu to focus on wider PET plastics ban through rejuvenating existing policy processes was found to be a dead end. Through this learning, she arrived at a regulatory reform process.

**Expect and exploit surprises** Wakhungu strategically used opportunities afforded by the Kenyan Constitution and other applicable laws, regional competition with Rwanda and international concern about the environment. She considered when to strategically publish the notice in the Kenyan Gazette to avoid the possibility of the regulation being overturned. She also sought legal advice and worked closely with the judiciary on environmental issues in anticipation of lawsuits against the ban.

**Build coalitions and networks** Wakhungu worked with house speakers and chairpersons of Kenya's Parliamentary Committee on Lands, Environment and Natural Resources to get the initial legal amendment passed. She made sure that she had the President's support and the support of the majority of the Executive and the National Assembly before announcing the ban. Wakhungu and her team collaborated with UNEP to ensure the President would receive international praise for the ban. Wakhungu and her NEMA colleagues also worked closely with Customs, the Port and Airport authorities and the Ministry of the Interior to ensure the necessary government authorities supported the ban's implementation. Wakhungu was also supportive but not in direct collaboration with civil society advocates.

**Future can be influenced with action** While realistic about what was likely to be feasible in the political environment, Wakhungu dedicated her time in office to finding a way to leave a lasting legacy of better environmental management, rather than accepting that reforms would likely fail. The reform would not have been possible without Wakhungu's persistence and courage to take action.

### Strategic question 3: Who will do it?

*Leaders who exhibit four behaviours*

**Grit** Wakhungu's actions came at a personal cost – she faced numerous legal actions and was not reappointed to government after the 2017 election but was appointed foreign ambassador instead. She persevered in the face of significant pressure and did not hide away from angry parliamentarians and manufacturers. Wakhungu was results-oriented, prepared to take personal risks and to work quietly, without fanfare, in order to effect change.

---

**Autonomy**

Wakhungu's position gave her the ability to make key decisions and she negotiated her political space to be able to do so. Amending the Environmental Management Coordination Act granted the Cabinet Secretary the legal power to ban plastic bags without requiring parliamentary approval. However, Wakhungu could not have achieved the ban without the President's backing or the coalition of support across government that she had built. President Kenyatta appointed her to the position of Cabinet Secretary so that she could improve Kenya's environmental reputation.

---

**Confidence**

Wakhungu was confident in her diplomatic skills, the support of the President and her understanding of environmental issues to attempt to bring about a ban on plastic bags. Without confidence in herself, her colleagues, and the necessity of the ban, it would not have been possible to enforce such a controversial measure. Her colleague Wahungu noted her confidence and grit as key characteristics enabling her success (interview with Wahungu, April 21, 2023)

---

**Humility**

Wakhungu demonstrated humility in her determination to work quietly, without seeking public attention or accolade to develop a strategy that would avoid an 'all-out war' with the manufacturers (interview with Wakhungu, April 12, 2023). Maintaining the profile of a technocrat allowed Wakhungu to develop a clever plan and surprise her opposition.

---



