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free
from
plastic

Rwanda: A Global Leader in Plastic Pollution Reduction



2021

Acknowledgments

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GAIA is a global network of grassroots groups, NGOs, and individuals, in over 90 countries. The organisation envisions a just, zero waste world built on respect for ecological limits and community rights, where people are free from the burden of toxic pollution, and resources are sustainably conserved, not burned or dumped. GAIA works to catalyse a global shift towards environmental justice by strengthening grassroots social movements that advance solutions to waste and pollution.
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The #breakfreefromplastic (BFFP) Movement is a global movement envisioning a future free from plastic pollution. Since its launch in 2016, more than 11,000 organisations and individual supporters from across the world have joined the movement to demand massive reductions in single-use plastics and to push for lasting solutions to the plastic pollution crisis. www.breakfreefromplastic.org

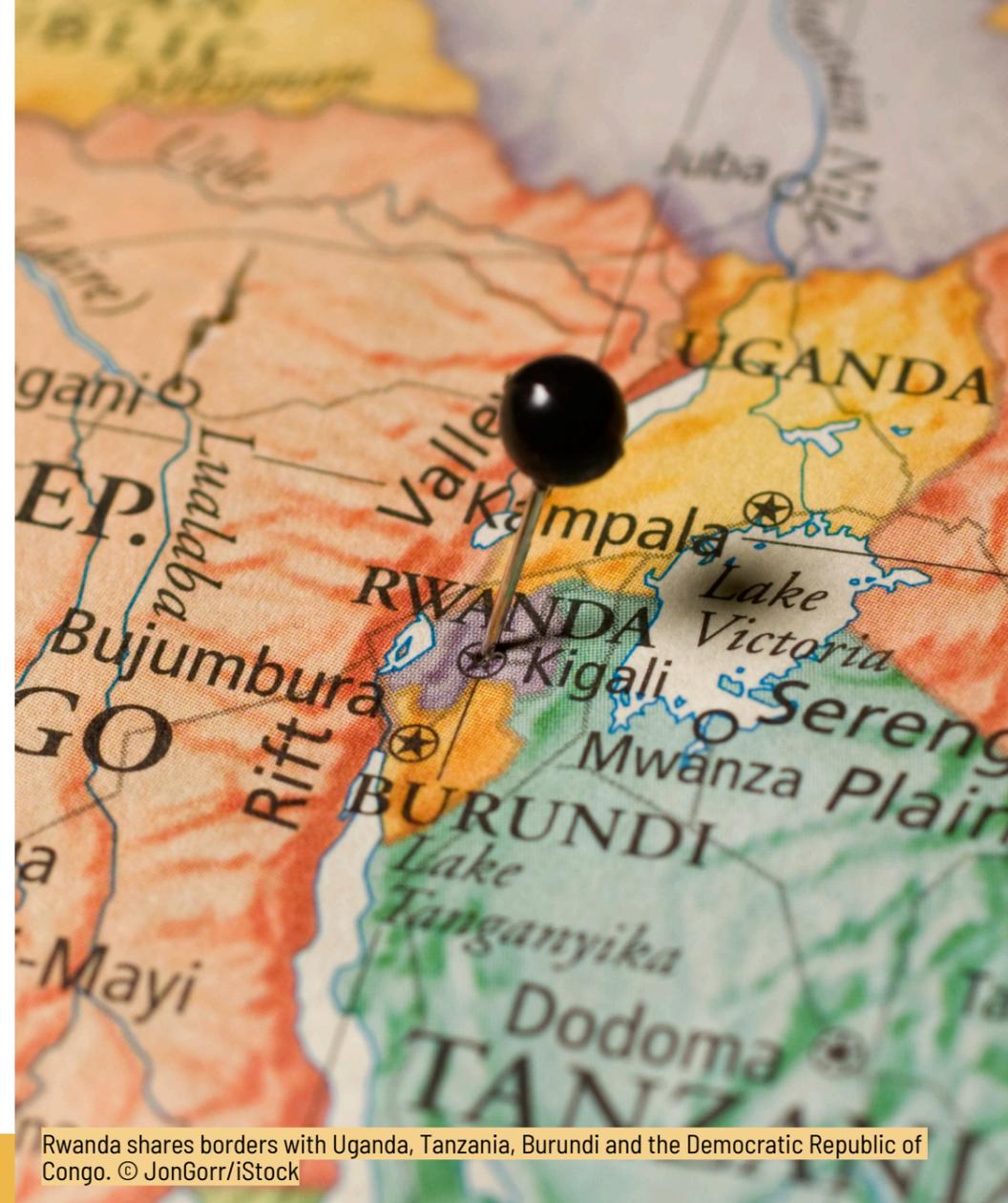
Global Initiative for Environment and Reconciliation (GER) is a non-governmental organization based in Rwanda. GER was founded in 2015 with the mission of contributing to peace and reconciliation process and improving environmental conditions in Rwanda, Great lakes as well. The organisation supports the existing reconciliation process, community recovery and prevention of future violence. We facilitate interactions of communities, authorities, religious leaders, young people to address the existing effects of the 1994 Genocide against the tutsi, and consider environment as a driving factor of peace building, healing the past and improving relations and lives through development actions.
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Table of Contents

Country information	1
Background	2
The need for a plastic ban	3
Enforcement of the plastic bag ban	5
Introducing alternatives	8
Community resistance and challenges	10
Current perceptions	11
Positive outcomes	12
Local perspectives	15
A way forward	17
References	19

Country information

Rwanda is a small, land-locked country located in East Africa, dubbed 'the land of a thousand hills', thanks to its mountainous topography (FAO, 2020). The country shares borders with Uganda in the north, Tanzania in the east, Burundi in the south and the Democratic Republic of Congo in the west (REMA, 2018). The country's major economic sectors are agriculture, tourism, the industrial industry, trading and mining (National Institute of Statistics Rwanda, 2011).



Rwanda shares borders with Uganda, Tanzania, Burundi and the Democratic Republic of Congo. © JonGorr/iStock

Background

In 2003, the Rwandan Ministry of Environment carried out an assessment on the country's plastic problem, highlighting the impacts of plastic waste. These observations mainly related to topics such as cleanliness, human health, agricultural productivity, drainage systems, cattle health, air quality, water quality, and safety for packaged food. In 2004, the government of Rwanda started the journey of banning plastic shopping bags through raising awareness and launching education campaigns regarding the side effects of plastics, with a special focus on plastic shopping bags.

In August 2004, with the Ministry of Environment in charge, the country released instructions on the use and manufacturing of plastic bags in Rwanda. Certain types of plastics were prohibited and banned from manufacturing. This ban began with shopping bags of less than 60 microns in thickness. In 2008, the parliament established the Law N57/2008 of 10 September 2008 relating to the prohibition of manufacturing, importation, use and sale of polyethylene bags in Rwanda. This law was later extended to include additional single-use plastic items in Law No.17/2019 of 10 August 2019. This law prohibits manufacturing, importation, use and sale of single-use plastic such as straws, bottles and food containers. Both laws provide penalties and strong means of their enforcement.

Details

Total area: 26,338 km² (National Institute of Statistics Rwanda, 2017)

Population density: 445 people/km² in 2018 (National Institute of Statistics Rwanda, 2012)

Population: 12,374,397

Capital city: Kigali

National languages: Kinyarwanda, English, French and Kiswahili.

Currency: Rwandan francs

Climate zone: Rwanda is located within the equatorial belt, but its climate is not of the equatorial rainy type. It has a modified humid climate including rain forest and Savannah ecotones. The central and eastern parts of the country are generally semi-arid as a result of the rain shadow caused by the western highlands (Rwanda Meteorology Agency, 2020)

Time zone: Central African Time (CAT) GMT +2

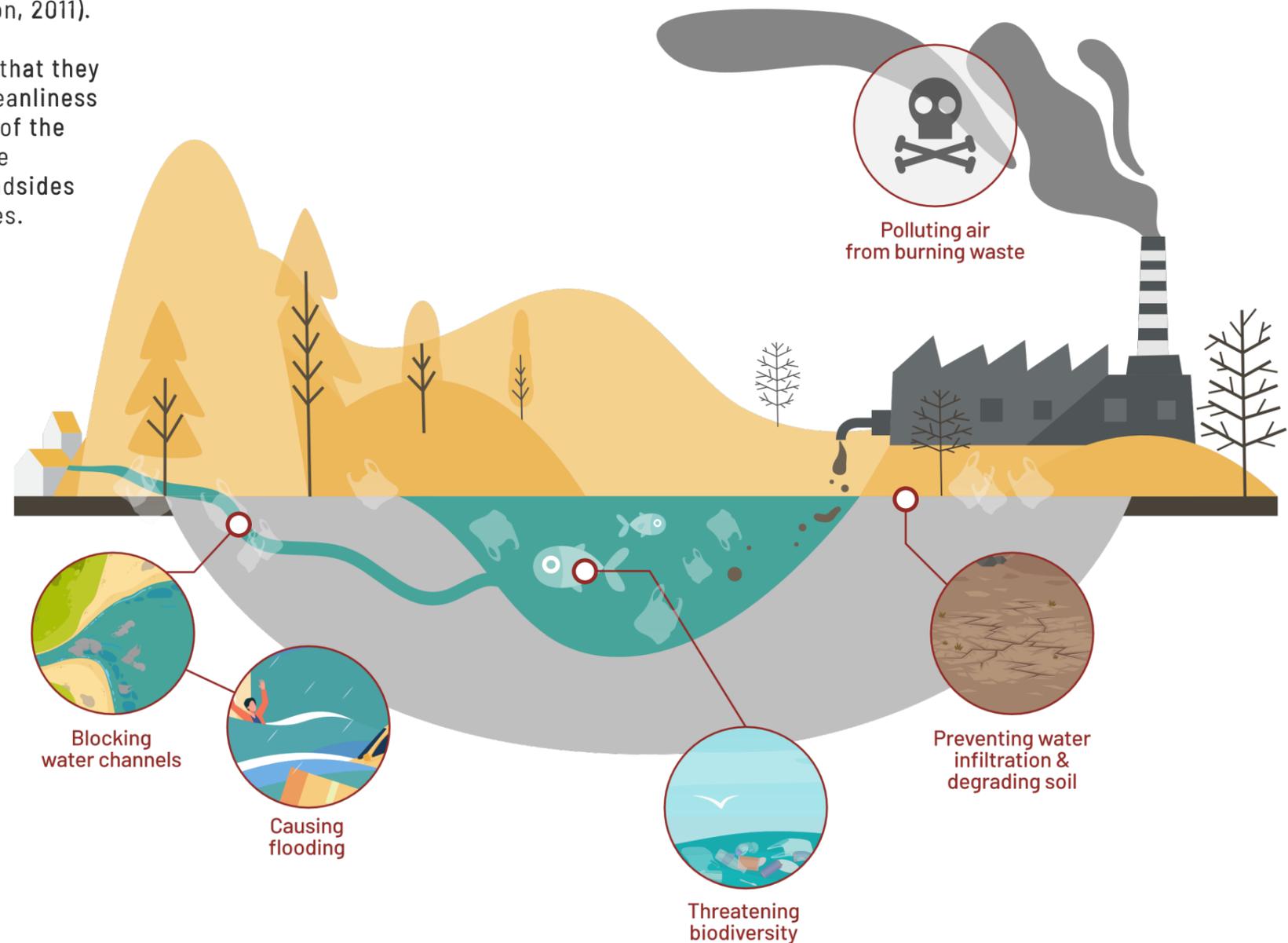
The need for a plastic ban

The Rwanda Environmental Management Authority (REMA), which operates under the supervision of the Rwandan Ministry of Environment, acknowledges the various environmental challenges posed by single-use plastic items, including plastic bags. These environmental challenges include: blocking of water channels; preventing water from infiltrating the soil; threatening biodiversity in water bodies like lakes and rivers; clogging of drainage systems, which triggers flooding; and air pollution from the burning of waste.

Moreover, plastic stays in the soil for a long time, resulting in soil degradation, which poses a big challenge for the agricultural sector in Rwanda. The former Director of REMA, Dr. Rose Mukankomje said that the problem with plastic was beyond what was just seen on the surface: **"Layers of plastic were found under the surface and in our soil, hindering agricultural production in Rwanda, as plants cannot grow with its roots past the plastic. Our water sources were becoming highly polluted with**

plastic being found inside many dead fish," (The Dominion, 2011).

Local communities said that they witnessed the lack of cleanliness before the enforcement of the ban, as plastic bags were scattered across the roadsides and in other public places.



An illustration depicting the environmental challenges caused by plastic bags in Rwanda. © Doun Moon



As a result of the plastic bag ban, shoppers now bring reusable bags to the market. © OscarEspinosa/iStock

Enforcement of the plastic bag ban

The 2008 law created national sensation and raised awareness to implement the ban on plastic bags. This ban was enacted using various channels, such as community work, media campaigns on television, radio, and print. Furthermore, training, school environmental clubs, environmental committees, and the involvement of different stakeholders in the private sector, revenue authorities, local government, standards bureau, and security sector were implemented. The government began campaigns

aimed at raising community awareness and behavior change on the negative impacts that plastic has on human health, and biodiversity, as well as on community development. Campaigns included activities lined up during the national environment weeks, countrywide inspection of the illegal use of plastic bags, community work (Umuganda), 'Beat Plastic Pollution Walk' in Kigali during Car Free Day, media campaigns and roadside billboards (FONERWA, 2018). There were also 'Green Drinks Kigali' discussions on

plastic management, exhibitions on plastic recycling, as well as flight announcements before flying and landing in Rwanda, of which the announcements stated 'please refrain from bringing plastic bags to Rwanda. Banned by law since 2008, any plastic bags in your luggage will be confiscated at the airport or other point of entry.' Furthermore, the 'Visit Rwanda' website, which encourages visitors to come to Rwanda, displays a message stating, 'as a country we strive to protect, safeguard and promote the environment – a matter which is written into our constitution and carefully observed by our citizens, who all participate in a community service on the last Saturday of every month,' (Visit Rwanda, 2020).

The ban was further enforced by strict control at the borders and at all the country's entry points, along with regular enforcement inspections. One of the challenges that arose from the strict monitoring of plastic bags was a black market. Plastic bags were smuggled into the country from neighboring countries and then sold illegally (Global Citizen, 2015). While the country's enforcement of the plastic bag ban has been successfully implemented, it has also been met with international criticism for the strict measures put in place, to ensure national compliance. Law No.57/2008 bears strong fines for manufacturers and dealers of plastic bags (Republic of Rwanda, 2008).

Offense	Punishment
Factories using plastic bags	Fine of between RWF 100,000 (USD 101.95) and RWF 500,000 (USD 509.77) and owners facing jail time of 6-12 months
Individual selling banned bags	Fine between RWF 10,000 (USD 10.20) and RWF 300,000 (USD 305.86)
Individual purchasing banned bags	Fine between RWF 5,000 (USD 5.10) and RWF 100,000 (USD 101.95)

The law states that any person found manufacturing, selling or using prohibited polyethylene bags shall be dispossessed of their bags, and the bags shall be taken to the appropriate stores established by REMA (Republic of Rwanda, 2008). In the case of repeated incidents, the penalty shall be doubled (Republic of Rwanda, 2008).

Agents of REMA and the Ministry of Environment in collaboration with Rwanda National Police and other social security organisations carried out law

enforcement and control. Anyone seeking an exception to use polyethylene bags should request a signed authorization from REMA. The private sector recognises this as the fairness of the law and its enforcement, since campaigns included the preparedness of the private sector and community to adapt to the law and seek sustainable alternatives.



A food market in Huye Rwanda, operating without single-use plastic. © OscarEspinosa/iStock

Policy exceptions

The law banning plastic bags allows exceptions for packaging of meat, chicken, fish and milled cassava leaves because it makes it easier to refrigerate them. An Order of the Prime Minister establishes a list of polyethylene bags necessary to be used in exceptional cases for particular goods (Republic of Rwanda, 2008). Furthermore, the law states that the list of polyethylene bags shall be updated at any time where it is deemed necessary.

Rwanda devotes much focus on single-use plastic items which contribute to environmental destruction and degradation. The law leaves space for some high-density polyethylene (HDPE) products since their intended design and purpose allows for reusability, primarily used in sectors such as roofing and water storage.

Introducing alternatives

Since introducing the law banning plastic bags, the Rwandan government began supporting local factories that started the transition to producing materials made out of bamboo and paper, as well as other alternatives to plastic. While Rwanda introduced paper as a biodegradable alternative, the material comes with its own set of environmental challenges. Paper has been said to be a significant contributor to deforestation. The Global Forest

Resources Assessment (2020) reported **"an estimated 420 million hectares of forest has been lost worldwide through deforestation since 1990."** In response to this, the country has developed progressive reforestation plans to restore the environment. One of these being a 10-year tree planting initiative that aims to "focus on monitoring tree growth and impact on ecosystems and biodiversity" (Sabiiti, 2020).

During the campaigns against plastic bags, there was a slogan used which stated ‘what plastics do, paper and wood can do it’. This resulted in paper shopping bags taking the place of plastic bags in shopping packaging (KT Press, 2019). On the other hand, paper bags are sometimes said to be too fragile to carry fresh food and other products for a long period of time. There are no recycling facilities for paper bags as yet, but these were preferred due to the fact that they can decompose after a short period of time and prevent water clogging. There has been no concrete study done in Rwanda to identify the negative impacts that paper has had on human health and biodiversity in general. Studies have shown that reusables are the most sustainable option, with a lower environmental impact compared to single-use plastic (Russo, Stafford, Nahman, 2020). The use of reusables have been gaining more traction in Rwanda, so much so that REMA’s national Beat Plastic Pollution campaign is focused on “choosing

reusable alternatives” and adhering to sustainable environmental practices (Rema, 2018).

While paper packaging is used as an alternative to plastics, authorities believe that environmentally friendly materials were used prior to the introduction of single-use plastic materials. The former Director General of REMA, Eng. Coletha Ruhamyia said that **“most single-use plastic, including plastic bags, used in the country were introduced to replace other reusable materials that were already in use. What is required is to go back to our original practices abandoned while they are more environmentally friendly. It is time to pay the cost to the environment.”**

Community resistance and challenges

One of the initial challenges during the outset of the plastic bag ban was a lack of community awareness regarding plastic bags’ impact on the environment and ecosystems (Duhuze, 2018). This resulted in resistance from local plastic manufacturers and the private sector food industry. A local business dealer from Kigali said that the plastic ban was hard to adopt in the beginning because plastic bags were readily available and cheap. **“It was not easy for us to stop using plastic straight away, and the alternatives to plastic bags were hard to find at that time. However, now that we have adapted, the local manufactures of paper bags are providing the packaging alternatives,”** said the local business dealer.

Furthermore, this initial resistance gave rise to the black market of plastic bags. The plastic bag black market has become less of an issue over the years, and authorities in charge of the enforcement of the plastic bag ban have said that fewer cases of plastic bags found on the black market are seen every year (Danielsson, 2017).

Another challenge that arose after the ban was the increased cost of locally produced products. As a result, local manufacturers blamed their poor performance on the high cost of packaging. Kigali-based food processing and packaging companies faced the price increase of packaging material from RWF 29.55 (USD 0.03) to RWF 118.20 (USD 0.12) after the ban was enforced. According to The East African (2016), **“Sosoma packed its products in aluminium bags, the cost of the final product increased from RWF 236.40 (USD 0.24) to RWF 305.35 (USD 0.31) per unit. At Inyange Industries, the cost of packaging increased from RWF 59.10 (USD 0.06) to RWF 295.50 (USD 0.30). At Uruburto, it increased from RWF 39.40 (USD 0.04) to RWF 177.30 (USD 0.18) and at Ruhango Cassava from RWF 98.50 (USD 0.10) to RWF 423.55 (USD 0.43)”**.

Rwanda reverted to its traditional practices, where handmade baskets are used as alternatives to plastic bags.
© Stellalevi/iStock



Current perceptions

Since the enforcement of the plastic bag ban, Rwandan citizens are becoming more aware of the environmental impacts of plastic bags, thus resulting in the reduction of plastic packaging. Citizens say that they see the advantages of using plastic bag alternatives.

Ngango Jean de Dieu, a fast food shop owner at Nyamirambo, Kigali said: **"I am glad about the law because now customers bring their own bags or reuse the old ones. It is cheaper than always giving plastic bags away."**

Claire Uwimana, a local from Kigali said: **"for us Rwandans, we understand the value of maintaining a good environment. It is great to live and work in a clean city like Kigali."**

A plastic-free landscape is a benefit of the plastic bag ban. © Grauy/iStock

Positive outcomes

As a result of Rwanda restricting the importation of plastic bags, creating awareness of the plastic policy within the country's basic education curriculum, and addressing the plastic bag black market, the behaviours of citizens have changed and the use of plastic bags has been greatly reduced. The outcomes of the plastic bag ban in Rwanda has demonstrated its benefits socially, economically, and politically.

A positive impact of the 2008 ban is that plastic bags are almost nonexistent in Rwanda and cleanliness is evident throughout the city of Kigali, and other urban areas of the country. Claire Uwimana, from Kigali, gave an account of life before the plastic ban, **"I can recall how the streets and public places were polluted by a lot of thin plastic bags before they were banned. Now you can see how clean the city is, even people from abroad know that Kigali is clean, not only of plastic bags but also other waste materials."**

Furthermore, Kigali is known as the tidiest urban area in the

African continent and it sets a high standard for the rest of the continent, and the world (Africa Renewal, 2016). Thanks to an ambitious national development plan, the city is an ultramodern metropolis that boasts recognizable social, economic, and environmental successes. In 2008, UN-Habitat awarded its Scroll of Honour to Kigali for its upgrading of urban amenities, particularly refuse collection and the provision of housing, water, and sanitation (Africa Renewal, 2016). The success of the Plastic Bag Ban has led to the development of further measures and targets towards a sustainable and clean country free of plastic waste.

The country established a new law, passed in 2019, which bans single-use plastic (Republic of Rwanda, 2019). The former Minister of Environment, Vincent Biruta, said that the law was intended to check unnecessary consumption and disposal of single-use plastic items, which are harmful to the environment (KT Press, 2019). The newly banned products include, but are not limited to, water bottles, packaging of fizzy drinks, juice, milk, single-use plastic straws, plates and forks. The single-use plastic law, which was gazetted on the 23rd of September 2019, states that local government officials fine any individuals who dump waste in public spaces RWF 50,000 (USD 51.28) (Republic of

Rwanda, 2019). Moreover, individuals will be required to remove their waste and repair any damages made. In addition to this, local governments can fine manufacturers, retailers, and importers up to RWF 5,000,000 (USD 5,128.21), if they violate the single-use plastic legislation (Republic of Rwanda, 2019).

The new single-use plastic ban states that businesses dealing in the production of single-use plastic materials like plastic cups, forks and straws have three months to start the process of shifting to manufacturing other product materials to replace plastic (Republic of Rwanda, 2019). Factories have two years to begin this process. **“We have already started talks with three local factories that have started the process of shifting to producing materials made out of paper, bamboo among others, and the government is supporting them in this transition,”** said Vincent Biruta, the former Minister of Environment (KT Press, 2019).

Another positive outcome of the plastic ban is that the city's cleaning companies established smart garbage bins by roadsides that are well-placed and well-managed. Waste collectors also attest to the positive impacts of the ban, which they attribute to the fact that plastic bags made it harder to differentiate degradable

waste and recyclables from other waste.

Furthermore, while most plastic bags were imported from other countries, the alternatives to plastic bags like paper bags and wooden packages were found locally. This has boosted employment, generated income for local factories and contributed to the country's development (KT Press, 2019). The Rwandan government invests itself in supporting and empowering local factories that are involved in the production of alternatives to single-use plastic materials. Rwanda has seven established plastic recycling facilities in the country. The plastic bag ban has boosted the tourism industry in Rwanda, which is a significant contributor to the country's economy. The resulting ban has seen Kigali become renowned as the cleanest city in Africa. In 2019 an estimate of 1,219,529 international tourists visited the country, as a result within the sector almost 89,607 jobs exist (Odunga, Manyara, Yobesia, 2020).



Kigali in Rwanda is known as the tidiest urban area in the African continent. © Andreas/Pexels

Local perspectives

It is more than 26 years after the 1994 genocide against Tutsis that took more than 1 million lives, destroyed the country's development and infrastructure, crippled essential services and spoiled environmental conditions in general (Moodley, Gahima and Munien, 2010). The swift transformation of Kigali and the entire country was due to determined efforts to forge national unity and formulate a new vision for the country.

Kigali has environmental and sustainability goals that include a vision for a safer, cleaner and more competitive modern city (Africa Renewal, 2016). President Paul Kagame speaking at the 35th session of IFAD's Governing Council in 2012 said that **"there is reason to remain optimistic because experience in some parts of the world indicates that with the right policies and adequate investment, we can increase food production while protecting our environment,"** (IFAD, 2012).

Environmental welfare is among the top priorities of the country's development, and the

collaboration between the government, civil society and communities has made this policy possible. The government invested in the policy since they had a clear vision, and was in line with the Article 22 of the National Constitution of 2003, with amendments through 2015 guaranteeing rights to a clean environment (Constitute Project, 2020).

Theodette, a waste collector from Bugesera in Rwanda, said:

"you cannot see any plastic bag of that type [polyethylene] in the whole volume of waste we collect from different places, you will never find any plastic bags."



Rwanda's investment into plastic alternatives has boosted employment and generated income for local businesses in the country. © King County, WA/Flickr

Innocent Musore, the director of Global Initiative for Environment and Reconciliation (GER) said that Rwanda has a lot of experience to share,

"especially in the neighbouring countries where plastic bags are still an environmental and social issue. There should be a joint effort for awareness campaigns that cross borders since pollution is borderless, we will still suffer the flow of cross border plastic if nothing is done."

Rwanda was the first country in the African region to introduce a law banning plastic bags and is now recognized as one of the few countries in the world that progressively reacted to the pressing environmental issues of plastic waste and pollution.

Musore said that, **"in Rwanda, 75% of the total population is the youth, most of them do not know of plastic bags and have quickly adapted to alternatives and the policy. Therefore, this will enhance the sustainability of this plastic ban policy."**

A way forward

Rwanda envisions Kigali as a city of green transport, ensuring the reduction of air pollution and congestion to conserve the city's environment (REMA, n.d).

The country is currently enforcing the law banning single-use plastic, through awareness-raising and engaging with the private sector to avoid excess loss within internal production. The public has responded positively to the use of single-use plastic alternatives, this includes the use of bamboo straws, non-plastic takeaway food packaging at restaurants, reusable water bottles and many other behavioural changes between traders and customers as a result of the progress of the single-use plastic policy.

REMA's former Director of Environmental Regulation and Pollution Control, Remy Norbert Duhuze, said that **"this is a positive step in the right direction. We have mainly been dealing with plastic**

bags. But other single-use plastics are just as bad or even worse than plastic bags. At the global level, countries are also discussing how to ban single-use plastic. Rwanda must be at the forefront."

These measures go hand in hand with developing policies to protect the environment, not only from plastics but all kinds of pollution and strengthening the waste management sector. Rwanda has made notable achievements thus far, however there is still a long way to achieving the goal of the total zero pollution plan, which is included in the first National Strategy for Transformation (NST1).

Furthermore, the former REMA Director, Eng. Coletha Ruhamyia said that there is no accurate data on quantities of single-use plastic generated in Rwanda.

"Most of the single-use products in the country are imported. It is important that we avoid any single-use plastic because of the negative

impacts on the environment. We are planning to conduct a study to get the data that will support monitoring and evaluating the impact of the ban, as well as other initiatives such as recycling investment."

GER recommends an extended quantitative study on the impacts of Rwanda plastic bag ban on environmental health and socio-economic impacts in Rwanda. GER's Innocent Musore said that **"those of us who have been in the field, have viewed the positive changes through the cleanliness in the country, how the public adapted to alternatives can see a vivid reduction of plastic bags in collected waste, but there is no tangible data showing the impacts of the ban, as well as the extent to which the process is towards the ban goals."**

Rwanda has seen the benefits of implementing a plastic bag ban, through the noticeable reduction of plastic in the country. Innocent Musore also recommends that

"since plastic is a continental and global issue, the experience of Rwanda, in plastic banning, needs to be shared with other countries that are still struggling to beat plastic. Compared to other African countries I have managed to reach, Rwanda has lessons and a good record to share. However we have not reached 100% of the ban, plastic ban is a process. In this process, we appreciate the collaboration of the government with civil society, private sector and the population in general."

The country is striving to achieve the same success with their newly implemented single-use plastic ban, to create a sustainable and plastic free environment for all citizens.

Rwanda has demonstrated that plastic pollution reduction is possible through strict bans on single-use plastic, and have reaped environmental, social and economic benefits, as a result of its progressive plastic bans.

Manufacturing, importation, use and sale of single-use plastic such as straws, bottles and food containers were banned by Law No.17/2019

2008

Manufacturing, importation, use and sale of polyethylene bags were prohibited in Rwanda by Law No.57/2008.

2019

2003

The Rwandan Ministry of Environment carried out an assessment on the country's plastic problem

2004

Certain types of plastics were prohibited and banned from manufacturing; shopping bags of less than 60 microns in thickness were banned

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