

ENVIRONMENTAL INJUSTICES AND PLASTIC POLLUTION: AN EXAMPLE FROM SOUTH AFRICA

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THIS INFO-SHEET ANALYSES:

Key human-rights (info-sheet 5) and environmental-justice (info-sheet 3 and 4) issues related to plastic pollution and ocean plastics in South Africa. This case study highlights:

- knowns and unknowns about ocean plastics in South Africa,
- incorrect assumptions and messaging about ocean plastics,
- links between racism, various dimensions of environmental justice and ocean plastic, and
- human rights implications of current approaches to ocean plastics.

MARINE PLASTIC POLLUTION IN SOUTH AFRICA: A BRIEF OVERVIEW

South Africa is one of the largest economies on the African continent, and is also one of the largest polluters of marine plastics. It is currently ranked by mass in the top 20 countries worldwide for the mismanagement of plastic waste,¹ and the 11th polluter globally for plastic leakage into the ocean.² Plastic contributes significantly to marine litter along South Africa's coastline.³ The source of marine plastic in South Africa overwhelmingly originates from land-based waste that enters the ocean through a complex riverine system. Research suggests that sediment in the country's rivers may hold a substantial amount of plastic waste.⁴ The severe flooding experienced in the city of Durban in April 2022 illustrates just how much plastic and other waste is flowing into the ocean. The weekend after the floods over 40 000 bags of marine litter were collected from beaches in the city



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of Durban.⁵ There have also been in recent years two significant ocean nurdle spills from container ships. In both 2017⁶ and 2021⁷ these tiny plastic pellets, used for feedstock in the production of plastic, caused environmental damage to both the East and West Coast of South Africa. Plastic pollution is a major environmental and public health challenge for South African waterways, coastal areas, and ocean. Marine plastic pollution is an environmental issue, as well as a threat to economic livelihoods linked to coastal tourism and fishing, which are also adversely impacted by other forms of marine litter.⁸

South Africa has urbanised rapidly, during and after apartheid. The growth in urban population has resulted in overburdened solid and water waste infrastructure. Around 40% of the country's wastewater is untreated, which then enters rivers and the ocean without any removal of macro and microplastics.⁹ Under apartheid townships, designated residential areas for people racialised as Black, were purposefully under-served in terms of social infrastructure, as well as waste management, sanitation and water infrastructure. In contemporary South Africa the advent of democracy has not sufficiently rectified service delivery to these areas. In addition, South Africa has very high levels of unemployment, which fuels significant internal

5 <https://www.dailymaverick.co.za/article/2022-06-14-huge-volume-of-plastic-flood-debris-trapped-inshore-by-agulhas-current/>. See too a breakdown of the number of bags per beach here: <https://www.timeslive.co.za/news/south-africa/2022-04-19-more-than-40000-bags-of-litter-collected-at-durban-beaches/>.

6 <https://www.dailymaverick.co.za/article/2017-10-27-groundup-government-probes-kzn-cargo-spill/>

7 <https://www.dailymaverick.co.za/article/2021-07-22-nurdle-spills-point-to-a-bigger-problem-of-too-much-plastic/>

8 Sadan, Z. and De Kock, L. 2020. Plastics: Facts and Futures: Moving beyond pollution management towards a circular plastics economy in South Africa. WWF South Africa, Cape Town, South Africa

9 Verster C, Bouwman H. 2020. "Landbased sources and pathways of marine plastics in a South African context". South African Journal of Science. 116(5/6), Art. #7700, 9 pages. <https://doi.org/10.17159/sajs.2020/7700>

1 Pattiaratchi, C., van der Mheen, M., Schlundt, C., Narayanaswamy, B. E., Sura, A., Hajibane, S., ... & Wijeratne, S. 2022. Plastics in the Indian Ocean—sources, transport, distribution, and impacts. Ocean Science, 18(1), 1-28.

2 Ryan, P.G. (2020) "The transport and fate of marine plastics in South Africa and adjacent oceans", South African Journal of Science, 116(5/6).

3 Williams-Wynn, Mark D., and Paramespri Naidoo. 2020. "A review of the treatment options for marine plastic waste in South Africa." Marine Pollution Bulletin 161: 111785.

4 Verster C, Bouwman H. 2020. "Landbased sources and pathways of marine plastics in a South African context". South African Journal of Science. 116(5/6), Art. #7700, 9 pages. <https://doi.org/10.17159/sajs.2020/7700>

migration to cities to seek job opportunities and access to services. Many internal migrants find shelter in informal settlements within already densely populated urban areas. Poor service delivery, overburdened waste-management infrastructure, and a growing population living in informal settlements means that widespread non-collection, illegal dumping and burning of waste exists across the country. It is worth noting that there is currently a research gap on how many tonnes of illegal waste is dumped and/or burned annually.¹⁰ When developing responsive policy frameworks on marine plastics, it is important that this research gap is addressed through the consistent collection and analysis of quantitative data on tonnage and type of plastics entering the ocean due to waste mismanagement on land.

Policies, laws and advocacy materials require careful checking to avoid narratives that promote and contribute to incorrect assumptions as to why more plastic pollution exists in some areas in relation to others. It is important to reflect on how environmental messaging such as 'banish plastic waste pollution' can be utilised to entrench discriminatory ideas around race and class. For example, because informal settlements are poorly serviced in terms of waste collection, they are often perceived as 'dirty' and a cause of litter that ends up in rivers and waterways. However, higher income households consumes and generates substantially more waste than poorer households.¹¹ This waste generation may be masked as higher income households' have more opportunities to take up actions that have environmentally friendly messaging, such as supporting clean-up campaigns, buying organic food, and having space to compost food waste and biodegradable packaging. The materiality of plastic is experienced differently across race and class lines, and it may be a means of safe food and water for some communities. As such, homogenous 'anti-plastic' narratives can have adverse political and environmental justice implications for communities that are already marginalised.¹²

Another incorrect assumption stems from the scant attention given to big polluters in South Africa, such as local and international producers and chain store retailers who use plastic packaging for their goods.

¹⁰ Department of Environmental Affairs. 2018. South Africa State of Waste. A report on the state of the environment. Final draft report. Department of Environmental Affairs, Pretoria. 112 pp.

¹¹ Swilling, M. (2006). Sustainability and infrastructure planning in South Africa: a Cape Town case study. *Environment and Urbanization*, 18(1), 23-50, and Adeleke, O., Akinlabi, S., Jen, T. C., & Dunmade, I. (2021). Towards sustainability in municipal solid waste management in South Africa: a survey of challenges and prospects. *Transactions of the Royal Society of South Africa*, 76(1), 53-66, for the correlation between wealthier areas and increased waste generation.

¹² Kalina, M., Kwangulera, J., Ali, F., Abera, Y. G., & Tilley, E. (2022). "Where does it go?": Perceptions and problems of riverine and marine litter amongst South Africa and Malawi's urban poor. *PLOS Water*, 1(3), e0000013.



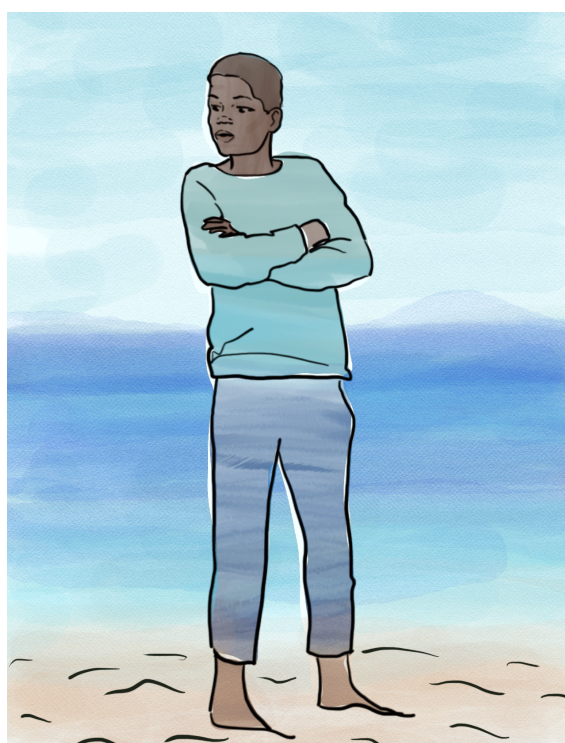
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Environmental activists are starting to make public the profit-making practices which lie at the root of the plastic problem in South Africa and globally.¹³ This issue is slowly changing as South Africa passed Regulations regarding Extended Producer Responsibility in 2020, which holds producers, rather than consumers, accountable for their waste products.¹⁴ Brand audits in beach clean-ups are also making visible the largest plastics producers and polluters in South Africa to ensure policy development is correctly targeted.¹⁵

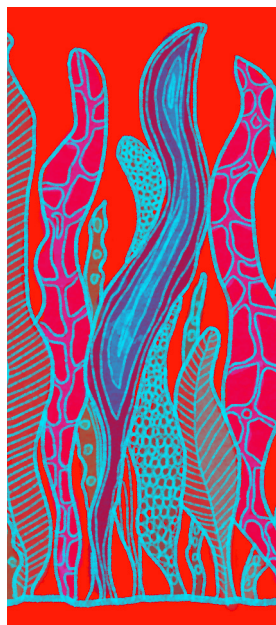
¹³ <https://www.no-burn.org/wp-content/uploads/2021/11/Plastic-is-Carbon-Oct2021.pdf>

¹⁴ https://www.gov.za/sites/default/files/gcis_document/202105/44539gon400.pdf

¹⁵ <https://brandaudit.breakfreefromplastic.org/>



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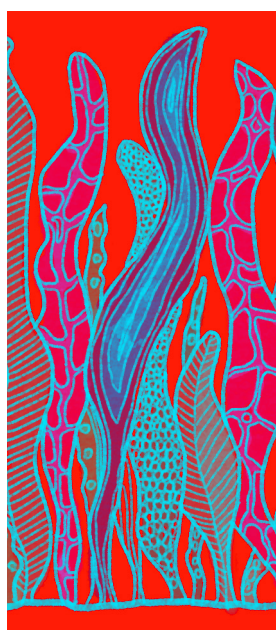
ENVIRONMENTAL RACISM & ENVIRONMENTAL JUSTICE

Addressing marine plastic pollution in South Africa means understanding the social and economic inequalities that fuel the production and disposal of plastic. Environmental justice is a useful lens for doing this as it intertwines local history, social contexts, structural injustices and environmental issues (see [info-sheet 3](#)). Colonisation and apartheid created environmental racism in South Africa, which continues today. Environmental racism occurs when there is an unequal distribution of negative health, wellbeing and environmental costs associated with industrial developments placed on racially marginalised groups.



Under apartheid, Black¹⁶ communities were often forcibly removed to townships, or designated areas, to make way for industries and/or White residential or leisure areas, as well as marine protected areas and coastal parks.¹⁷ In cities many township areas served as buffer zones between White neighbourhoods and noxious industrial zones. Across South Africa, Black communities have suffered the unfair burden of environmental pollution which has negatively impacted on their constitutional right to a healthy environment.

After the end of apartheid, South Africa developed a democratic constitution and related legislation that outlined people's rights and guides policy development, these include the right to participate in decisions-making processes and the right to a healthy environment. Constitutional rights however are not always implemented into policy development or review processes. Like many other countries, South African policy and legislation around ocean governance, such as the Ocean Economy Master Plan and the Marine Spatial Planning process, privilege scientific knowledge and economic development over cultural and Indigenous knowledge.¹⁸ This means that decision-making spaces around environmental issues in the ocean are not yet equitable or inclusive. For example, government processes frequently overlook informal livelihoods – such as small-scale fishing and/or subsistence ocean harvesting – in favour of big industrial developments on the coastline that promise



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jobs and economic growth, which the small-scale fishers may not be qualified or able to obtain. There are also poor consultation processes linked to blue-economy activities such as oil and gas exploration. Recently, coastal communities and small-scale fishers have turned to the courts to ensure their cultural and economic rights, as well as their right to a healthy environment are upheld. To protect their livelihoods and cultural relationship with the ocean from noise pollution, and other ocean disturbances arising from oil and gas exploration, fishers and other coastal community groups successfully opposed a seismic survey application that was granted to an international company for offshore oil and gas exploration.¹⁹ Legal cases such as this demonstrate that people in South Africa are prepared to take legal recourse on, and the national judiciary is prepared to respond, to issues of environmental justice and the human right to a healthy environment in relation to the ocean. Since plastic pollution is an increasing issue in regards to maintaining a healthy environment, potential legal court cases may well shift policy and legislation around marine plastics in the near future.

WHAT DOES THIS MEAN FOR MARINE PLASTICS IN SOUTH AFRICA?

Scientific data indicates the risks for human health and the environment resulting from micro-plastics (see [info-sheets 1](#) and [5](#)).²⁰ However, not all people are negatively impacted in the same way. Subsistence harvesters and small-scale fishers are immediately and directly impacted by ocean pollutants like micro-plastics that diminish food security and threaten their livelihoods. Subsistence harvesters and small-scale fishers often come from the same communities who have historically faced environmental injustices.

Even the most well-meaning solutions to marine plastics can exacerbate or entrench inequalities if they are not informed by local contexts and the perspectives and experiences of local communities. Equally problematic is when policy frameworks on marine plastics are not developed with the inputs and consultation of people on the ground. Marginalised communities have the most to lose through the adoption of solutions that are abstracted from the inequalities that shape their

¹⁶ A collective term used in Black Consciousness movements in South Africa to refer to people who are oppressed through being racialised as Black, Indian and Coloured.

¹⁷ Sowman, M., Sunde, J., Pereira, T., Snow, B., Mbatha, P. and James, A., 2021. Unmasking governance failures: The impact of COVID-19 on small-scale fishing communities in South Africa. *Marine Policy*, 133, p.104713.

¹⁸ Erwin, K., Pereira, T., McGarry, D., & Coppen, N. (2022). Lalela ulwandle: An Experiment in Plural Governance Discussions. In *The Palgrave Handbook of Blue Heritage* (pp. 383-409). Palgrave Macmillan, Cham.

¹⁹ https://naturaljustice.org/wp-content/uploads/2022/09/Judgment-on-Sustaining-Wild-Coast-v-Minister-of-Mineral-Resources-Energy-Others.pdf?_ga=2.191154538.1544406329.1662882505-944447061.1662882505

²⁰ World Wide Fund for Nature (WWF). 2021. *Plastics: The Costs to Society, the Environment and the Economy*. Available at: <https://europe.nextbook.com/nxteu/wwfintl/tcps/index.php>.



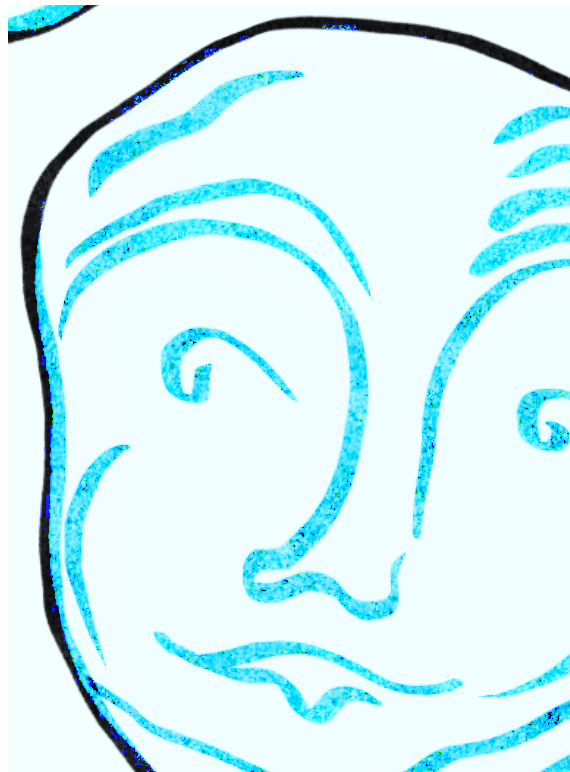
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daily lives. Concerns around recognition and inclusion in decision-making processes are also pertinent in relation to the implications of new treaties and legislation to regulate plastic pollution on the work and livelihoods of informal waste pickers. In South Africa, informal waste pickers contribute a considerable environmental and public health good. Waste pickers divert a substantial amounts of plastics away from landfills, city streets and open dumps to recycling and buy-back centres (see forthcoming info-sheet 8). These informal workers are often stigmatised for this work and currently receive no social protections linked to the services they provide. Environmental activists and policy makers need to ensure that waste picker associations and advocates in South Africa are part of the discussions and decision-making processes on environmental issues related to marine plastic waste. Ensuring the inclusion of waste pickers in policy processes protects livelihoods and works towards the integration of waste pickers into formal waste management structures.²¹ Waste pickers also have extensive knowledge on recyclable waste. They hold detailed knowledge on the recyclable markets and how and why some plastics are reused in marginalised communities. Locally embedded expertise is important to develop responsible and equitable policy and legislation on marine plastics.

²¹<https://www.no-burn.org/wp-content/uploads/2021/12/Strengthening-Waste-Picker-Organising-in-Africa.pdf>

KEY RESEARCH AND POLICY GAPS

- Collect consistent widespread quantitative data on tonnage, and type of plastics, entering the ocean due to waste mismanagement on land, with a view to identifying main sources of pollution and avoiding incorrect assumptions;
- Assess the historical context, distribution of costs and benefits, and actual and potential negative impacts on human rights in any decision about plastic-pollution prevention to ensure that structural inequalities are not reproduced;
- Recognise the knowledge of and identify appropriate ways to actively include informal waste-pickers in relevant decision-making processes and policy development on ocean plastics;
- Identify current ways in which communication, policies and laws on plastic pollution may contribute to prejudice and discrimination against marginalised groups;
- Identify negative impacts on human rights of ocean plastics policies and laws;
- Embed respect for procedural rights as part of inclusive ocean governance processes as well as for cultural rights (recognising the value in Indigenous knowledge systems) and social and economic rights (protecting informal work).



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