

The role of the informal recycling sector in reduction of the plastic pollution and recommended policy changes

M. Tsakona¹, I. Ruczevska¹, S.Heerema²,

¹Waste and Marine Litter Programme, GRID-Arendal, Arendal, N-4836, Norway

²Polar and Climate Programme, GRID-Arendal, Arendal, N-4836, Norway

Keywords: informal recycling waste pickers, plastic pollution, marine litter

Presenting author email: maria.tsakona@grida.no

During the UN Environment Assembly 5th meeting that convened in Nairobi, Kenya from 28 February-2 March 2022, members states agreed to undertake negotiations toward an international legally binding instrument on plastic pollution. Yet, the Informal Recycling Sector (IRS) has received rather limited attention in this process.

The IRS plays a crucial role in increasing the recovery of plastics and could provide a solution to plastic pollution and marine litter, especially in countries of the Global South that lack robust waste management services and where the main leakage of plastics occurs. Estimates suggest that 58% (Lau et al, 2020) of post-consumer plastic waste globally is collected for recycling and handled informally.

Despite its significance, recycling workers remain under-recognized for their contribution to waste management and their role in preventing plastic pollution. Knowledge gaps regarding the informal sector's scale, collection capacity, network structures, as well as on socio-economic aspects of its workers hinders their role in establishing a circular economy. Furthermore, there is a wider ignorance, concerning the actual health and safety challenges associated with their activities as well as the harder conditions and violence that women of the IRS are facing.

Under this framework, the paper aims to provide a holistic understanding of the IRS and its characteristics across national and international contexts and recommend key elements of a global plastic pollution agreement that is inclusive of the IRS.

Literature and data review on the social, economic, and environmental context of the IRS has been performed and existing efforts policy protection instruments of informal waste sector has been examined (e.g. the Minamata Convention on Mercury). In addition to extracting more data the work builds upon stakeholder's consultations currently being conducted as part of the implementation of other relevant international projects, with the intent to significantly enhance the analysis of the collected literature data on the role of the IRS in preventing plastic pollution.

A number of recommendations have been proposed through this work highlighting the need of the historical and ongoing contribution of the IRS to be recognized. Transition of the IRS needs an eco-system approach which will take into account the overall value chain of plastics and introduce a number of regulatory and market-based measures that are matched with financial assistance, improve health and safety aspects, gender inclusion and capacity building for developing countries.

Furthermore, there is a need to support systematic, robust, and holistic data collection methodologies and studies on the informal recycling sector to assess quantity, values, and flows in its material ecosystem and quantify their contribution to tackling plastic pollution.

References

Lau WWY, Shiran Y, Bailey RM, Cook E, Stuchtey MR, Koskella J, Velis CA, Godfrey L, Boucher J, Murphy MB, Thompson RC, Jankowska E, Castillo Castillo A, Pilditch TD, Dixon B, Koerselman L, Kosior E, Favoino E, Gutberlet J, Baulch S, Atreya ME, Fischer D, He KK, Petit MM, Sumaila UR, Neil E, Bernhofen MV, Lawrence K, Palardy JE. Evaluating scenarios toward zero plastic pollution. *Science*. 2020 Sep 18;369(6510):1455-1461. doi: 10.1126/science.aba9475. Epub 2020 Jul 23. PMID: 32703909.