30/5/2022

Statement of the Food and Agriculture Organization of the United Nations to the Open-Ended Working Group "End plastic pollution: towards an international legally binding instrument"

1. The Food and Agriculture Organization of the United Nations (FAO) welcomes the decision made at the United Nations Environment Assembly (UNEA) 5.2 to establish an intergovernmental negotiating committee (INC) to develop a new international legally binding agreement on plastic pollution. FAO supports the aims of the OEWG in preparing the procedures for the INC.
2. FAO is encouraged that the resolution at UNEA includes addressing all forms of plastic pollution at all stages in its life cycle. Plastic products are used throughout agricultural and food system value chains, from production to consumption. Whilst they can play a role in improving food security and food safety, their mismanagement threatens both and the natural resources upon which they rely.
3. Tackling plastic pollution is paramount to achieving more efficient, inclusive, resilient and sustainable agrifood systems. As a specialized agency of the United Nations leading international efforts to achieve food security and nutrition, and sustainable management of natural resources, FAO aims to continue playing an important role in dealing with the issue of agricultural plastics. The Organization will promote a holistic approach that covers all plastics in the food and agriculture sectors, including marine plastic litter, and provide technical support where needed to promote effective governance, research and innovation to find suitable solutions for people and the environment.
4. Developing an international legally binding treaty that can help balance the benefits and trade-offs of agricultural plastics and tackle wider plastic pollution will mark a crucial step towards achieving sustainable food security for the planet.
5. FAO provided a Briefing Note to the UNEA on plastics used in agriculture which is reproduced as an annex to this statement.

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Briefing note on the work of the Food and Agriculture Organization of the United Nations (FAO) as it relates to Cluster 1 Resolutions on plastic pollution

1. Plastic has become an integral part of agrifood systems; it has increased productivity, reduced water demand and use of agrochemicals. Introduction of plastic coated fertilizers improved nutrient management. Greenhouses and tunnels extended growing seasons and gave farmers access to new markets; plastic use also reduced food loss and waste.
2. FAO estimated that in 2019, agricultural production used **12.5 million tonnes** of plastic, of which the crop production and livestock sectors, together contributed 10 million tonnes, followed by fisheries and aquaculture with 2.1 million tonnes and forestry with 0.2 million tonnes. Additional 37.3 million tonnes were used in food packaging annually. The amount of plastics used in agriculture is roughly equivalent to the amount of plastics entering the oceans annually. Limited data suggest that significant amount of agricultural plastic products becomes a waste or is leaked to the environment, with only a small fraction recycled.[1]
3. Films are the largest category used in terrestrial agriculture for greenhouses, mulching and silage. The use of plastic films is projected to increase by about 50% in this decade.
4. Growing body of evidence shows that poor design, selection, usage, and end-of-life management of plastic in agriculture leads to adverse impacts in the source-to-sea continuum from terrestrial to marine ecosystems. Often farmers don't have the capacity for selection, application, management, and retrieval needed for adequate plastic removal from the fields, nor do they have access to sound environmental end-of-life management. Other actors of the chain, such as producers and distributors, do not have clear guidance or requirements to facilitate a sustainable management of the plastics life cycle.
5. Plastics used in agrifood systems is becoming increasingly a major source of contamination for terrestrial and aquatic ecosystems. An example of the latter is abandoned, lost and otherwise discarded fishing gear (ALDFG), which is considered to be one of the most harmful forms of marine litter, however current data and knowledge gaps prevents accurate estimation of contribution of ALDFG to the pollution of aquatic environments.[2] FAO are addressing these data gaps through the design and implementation of standardized ALDFG surveys.

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[1] FAO. 2021. Assessment of agricultural plastics and their sustainability. A call for action. Rome. https://doi.org/10.4060/cb7856en

[2] GESAMP (2021). "Sea-based sources of marine litter", (Gilardi, K., ed.) (IMO/FAO/UNESCO-IOC/UNIDO/WMO/IAEA/UN/UNEP/UNDP/ISA Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection). Rep. Stud. GESAMP No. 108, 109 p. http://www.gesamp.org/publications/sea-based-sources-of-marine-litter

6. Evidence suggests that after high concentration of plastics in soils reached during multiannual use, the initial benefits of plastic use for production reverse and result in decreased crop yields, jeopardizing food security.

7. Microplastics pose an increasing concern through their potential to accumulate in food chains, threatening food safety and potentially human health[3]. The application of sewage sludge as a fertilizer is a pathway for microplastic contamination of agricultural soils[4]. A study has estimated that 64 000 tonnes of microplastics are released annually into soils in Australia, China, the European Union and North America combined through the application of sewage sludge[5].

8. Strong scientific evidence shows that plastics in agriculture can be both beneficial and also detrimental to food security and food safety. There is no silver bullet solution to this complex material problem. Many of them lie in a systemic application of the 6Rs approach: Refuse, Re-design, Reduce, Reuse, Recycle and Recover. But options should be assessed for each particular application and in specific contexts. Solutions include for example adopting agricultural practices that avoid the use of plastics; using biodegradable plastic mulch film; and using reusable boxes for transporting fish.
9. FAO supports the need for scaling up collaboration and coordination efforts combating marine litter and microplastic pollution among all relevant stakeholders. The Organization has a long track record of working on marine litter through the Ecosystem Approach to Fisheries - Nansen Programme[6], an initiative funded by NORAD and operated by FAO in collaboration with the Institute of Marine Research Bergen, where research on mapping the distribution and impacts of marine litter and microplastics forms a key component. An example is the ongoing study on the social, economic and ecological impact of marine litter on the beach-seine fisheries of four countries in West Africa (Benin, Côte d'Ivoire, Ghana, and Togo). The results of the study will be used to support improvements in both fisheries management and waste management, working with local and regional partners.

10. Another example of collaboration in the area of marine plastics is the GloLitter Partnerships project implemented by the International Maritime Organization (IMO) and FAO and funded by Norway, Australia and Saudi Arabia. The project focuses on addressing marine plastic litter from the maritime transport and fishing sectors through supporting the implementation of relevant international instruments like MARPOL Annex V, the London Convention/London Protocol and the Voluntary Guidelines for the Marking

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[3] Lusher, A.L.; Hollman, P.C.H.; Mendoza-Hill, J.J. 2017. Microplastics in fisheries and aquaculture: status of knowledge on their occurrence and implications for aquatic organisms and food safety. FAO Fisheries and Aquaculture Technical Paper. No. 615. Rome, Italy. https://www.fao.org/3/i7677e/i7677e.pdf

[4] https://www.unep.org/news-and-stories/story/how-plastic-infiltrating-worlds-soils

[5] Microplastics and pollutants in biosolids have contaminated agricultural soils: An analytical study and a proposal to cease the use of biosolids in farmlands and utilize them in sustainable bricks Mohajerani A. and Karabatak B. 2020. https://doi.org/10.1016/j.wasman.2020.04.021

[6] https://www.fao.org/in-action/eaf-nansen/areasofwork/science/en/

of Fishing Gear (VGMFG)[7]. Furthermore, FAO and IMO co-host the GESAMP Working Group 43 on Sea-based Sources of Marine Litter with the support of UNEP[8].

11. Beyond the scope of marine plastic and microplastics, recently FAO started working with UNEP on the subject of agricultural plastics. The FAO Committee on Agriculture at its 28th session meeting in July 2022 will discuss the issue of agricultural plastics and explore knowledge gaps and policy response measures.

12. Based on a review of the existing global legal, policy and management frameworks, FAO's 2021 study concluded that there is no overarching international policy or legislative instrument that addresses all aspects of the use of plastics in all agricultural sectors (crop production, livestock, fisheries and aquaculture, and forestry) **holistically**, in a manner that allows to balance its environmental and socio-economic benefits with the trade-offs. Furthermore, the review of frameworks did not identify any one single measure that could be applied in isolation in order to facilitate good management practices.[9]

13. Tackling agricultural plastic pollution is paramount to achieving more efficient, inclusive, resilient and sustainable agrifood systems. As a specialized agency of the United Nations leading international efforts to achieve food security and nutrition, FAO aims to continue playing an important role dealing with the issue of agricultural plastics. The Organization will promote a holistic approach that covers all plastics in the food and agriculture sectors, including marine plastics and provide technical support where needed to promote effective governance, research and innovation to find suitable solutions for people and the environment.

[7] https://www.fao.org/documents/card/en/c/CA3546T/
[8] http://www.gesamp.org/work/groups/wg-43-on-sea-based-sources-of-marine-litter
[9] FAO. 2021. Assessment of agricultural plastics and their sustainability. A call for action. Rome. https://doi.org/10.4060/cb7856en