

NIGERIA NATIONAL ACTION PLAN ON MARINE PLASTIC LITTER



Federal Ministry of Environment



NIGERIAN MARITIME ADMINISTRATION AND SAFETY AGENCY



NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS AGENCY



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1. Introduction

The main drivers of marine litter are the growing volumes of plastics being supplied to the national and global economy. Marine litter comes from land and sea-based sources (UNEP 2018e; IRP 2019; van Truong et al. 2019). The land-based sources include agriculture (e.g., irrigation pipes, protective meshes, greenhouse covers, containers, fencing, pellets for the delivery of chemicals and fertilizers, seed coatings and mulching); building and construction materials (e.g., pipes, paints, flooring, roofing, insulants and sealants); transportation activities (e.g., abrasion of tyres, road surfaces and road markings); and a wide variety of personal care, pharmaceutical and healthcare products, including the personal protective equipment used during the COVID-19 pandemic (Adyel 2020). Approximately 36 per cent of all plastics produced are used in packaging, including single-use plastic products for food and beverage containers, approximately 85 per cent of which ends up in landfills or as unregulated waste and much of which will eventually enter the marine environment. Figure 1 indicates the major sources and pathways of land-based human generated plastic waste in the marine environment.

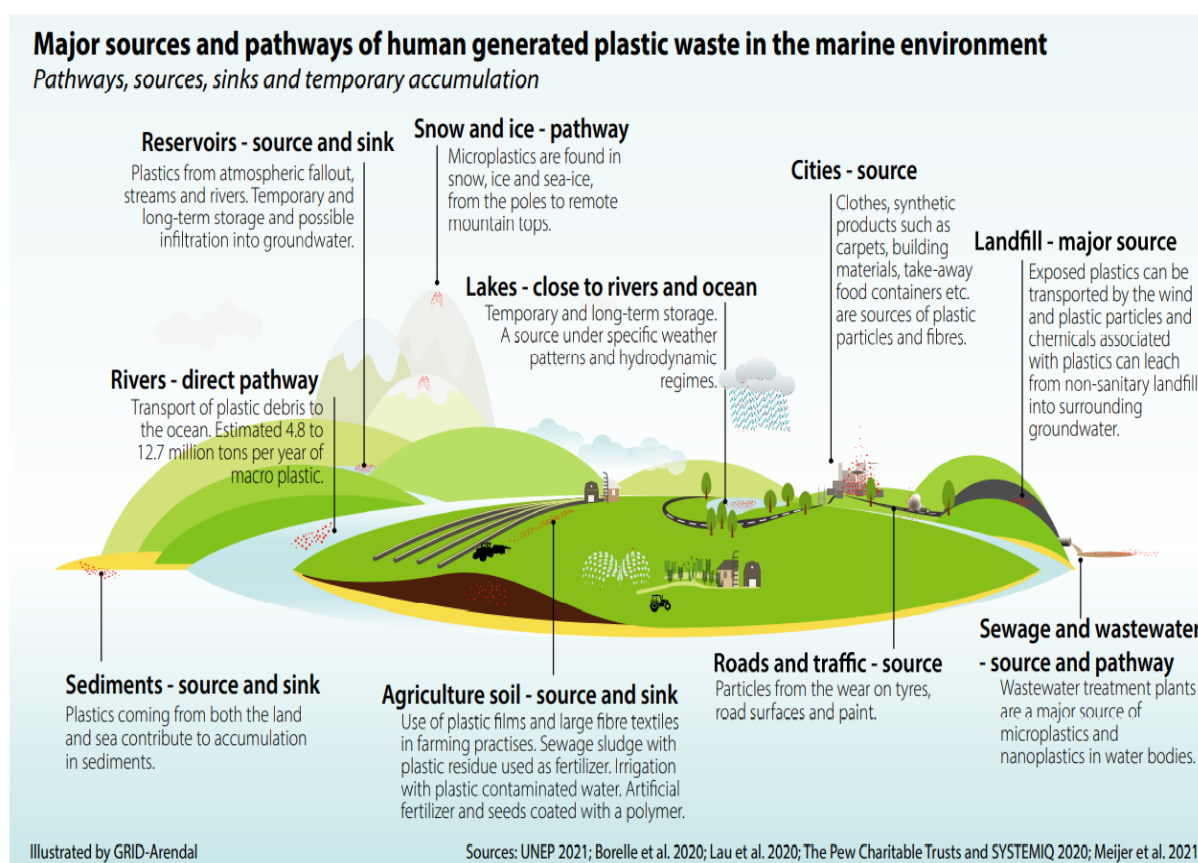


Figure 1.1: Multiplicity of land-based sources and pathways for plastic debris in the ocean. Source: UNEP 2021; Borelle et al. 2021, Lau et al 2020, The Pew Charitable Trusts and SYSTEMIQ 2020; Meijer et al. 2021.

Marine litter from sea-based activities arises from multiple sources (GESAMP 2015; GESAMP 2020b). Most affordable, lightweight and durable maritime equipment is made of plastics. Major sea-based sources of plastics and micro plastics include fisheries and aquaculture activities (e.g., sealants, storage boxes, packaging, buoys, ropes and lines, nets, various types

of structures, and fishing gear such as fish aggregating devices (FADs)) (FAO 2020); shipping and offshore operations (e.g., packaging, cargo, paints, end-of-life dismantling, ballast water); and ship-based tourism (e.g., packaging, personal goods). Ryan et al. (2019) observed that discarded plastic drink bottles show the highest growth rate, increasing at 15 per cent per year compared with 7 per cent for other types of debris.

Solid wastes generated on a ship include glass, paper, cardboard, aluminum and steel cans, and plastics. They can be either non-hazardous or hazardous in nature. The most ubiquitous is the plastic waste. Cruise ships typically manage solid waste through a combination of source reduction, waste minimization and recycling activities. The everyday use of plastic bags and other single-use plastic products in packaging of food, beverage and water in addition to food packs, straws, cups, and spoons, among others, is widespread in Nigeria,

Nigeria is participating in the GloLitter Partnerships project (GloLitter) as a Lead Partnering Country (LPC). GloLitter is a project funded by the Government of Norway represented by the Norwegian Agency for Development Cooperation (NORAD) and implemented by the International Maritime Organization (IMO) in cooperation with the Food and Agriculture Organization of the United Nations (FAO). The project assists developing countries in preventing, reducing and controlling Sea-Based Marine Plastic Litter (SBMPL) from the shipping and fisheries sectors.

As part of the components of the GloLitter project the country assessment for SBMPL was conducted. The Country assessment report notes that marine plastic litter enters the marine environment as a result of a wide range of land- and sea-based activities, outlined above. Both macroplastics (e.g., large plastic items such as plastic bags, water bottles and fishing gear) and microplastics (small plastic particles generally five millimeters or less in size) persist in the marine environment and result in harmful effects on marine life and biodiversity, as well as negative impacts on human health. In addition, marine plastic litter negatively impacts on activities such as tourism, fisheries and shipping. This plastic material has the potential to be brought back into the economy by means of reuse or recycling. Studies demonstrate that despite the existing regulatory framework to prevent marine plastic litter from ships, discharges into the sea continue to occur. The key issues identified include:

- Inadequate data on monitoring of waterways and ships' wastes.
- Inadequate awareness of the different levels of society on the danger of marine litter
- Inadequate implementation of laws/ polices / regulations regarding marine litter by enforcement agencies
- Inadequate maritime action plan to address the marine plastic litter issues
- Weak infrastructure and waste management program for specific marine litter hotspots including beaches
- Increase in the demand and production of plastics

In order to effectively tackle SBMPL, actions are required to implement and enforce MARPOL Annex V and the London Protocol, noting that Nigeria is a party to both conventions. Nigeria is making efforts in managing litter /garbage from ships by implementing Annex V of the MARPOL Convention that deals with the prevention of garbage pollution from ships. A key

requirement is ensuring adequate provisions of waste reception facilities by the Nigeria Ports Authority (NPA), among other things, and its regulation by the Nigeria Maritime Administration and Safety Agency (NIMASA) and other relevant agencies of government.

The key priorities requiring specific action from the country assessment include:

- Improved understanding of the contribution of ships to marine plastic litter
- Reduction of marine plastic litter generated from, and retrieved by, fishing vessels
- Reduction of shipping's contribution to marine plastic litter
- Improvement of the effectiveness of port reception facilities and treatment in reducing marine plastic litter
- Enhanced public awareness, education and seafarer training
- Improved understanding of the regulatory framework associated with marine plastic litter from ships
- Strengthened international cooperation and targeted technical cooperation and capacity-building

1.1. Objectives of the National Action Plan (NAP)

The overarching objective of the National Action Plan (NAP) is to establish a guiding framework that contains concrete actions to prevent and reduce Sea-based sources of Marine Plastic Litter (SBMPL) in Nigeria.

1.2. Country Context

The country context in terms of information such as population and description of the country in terms of coastline and adjacent seas, its geographical situation, and an overview of the current state of knowledge at a country level regarding production of marine plastic litter from maritime and fisheries activities, scale and impacts, with other country profile data is summarized in Table 1.1.

Country context, including current state of knowledge on SBMPL at national and local levels, key initiatives/projects/programs that address SBMPL are as follows:

1. Nigeria expressed its interest to become one of the GloLitter Lead Partnering Countries (LPCs), showing its commitment to developing and implementing compulsory legislation that regulates marine litter, as well as the improvement of controls for the management of SBMPL and promoting training aimed at public officials, citizens, the private sector, NGOs, and volunteers, with the purpose to address the global issue of the SBMPL.
2. The Federal Ministry of Environment, Nigeria, in concerted effort to combat the menace of plastic waste has a nationally approved Policy on Plastic Waste with specific targets. Furthermore, it made efforts at the local level to establish plastic recycling facilities in 26 cities to curtail plastic waste pollution in the environment across Nigeria. It also included the Establishment of Integrated Wastes Management Facility project and the evacuation of solids wastes along water canals under the Marine Contamination, Clean and Remediation programme.
3. The National Policy on Plastic Waste Management has a strategic and specific section which states that

“All states shall Invest in waste collection infrastructure and services (including at ports), All states shall ensure waste management infrastructure and wastewater treatment facilities avoid dispersion of litter into the marine environment - particularly in coastal areas or near rivers”

4. NIMASA in collaboration with UNEP, carried out a case study on the impacts of marine litter on the coastal communities of Lagos state. NIMASA’s Establishment of Government Sponsored Marine Litter Marshalls Patrols and campaign on marine litter in the coastal states of Nigeria serve as initiatives to enforce anti-litter practices in coastal communities by using education, advocacy and outreach campaigns to foster compliance.
5. The Nigerian Liquefied Natural Gas shipping arm, NLNG Ship Management Limited (NSML) set the ball rolling by launching the “Clean Water Initiative”, a campaign that is part of the firm’s Corporate Social Responsibility efforts to highlight the effects of plastics, debris and other marine litter on the waterways in Nigeria.
6. The initiative focuses on actions, advocacy and public awareness campaigns aimed at tackling the devastating effects of plastics, debris, and litter on the aquatic ecosystem and their overall impact on the global maritime environment. It is also an integral part of NSML’s corporate Brand Management planned activities. The initial scope of coverage will be NSML’s primary areas of operation which include the NLNG Terminal in Bonny, as well as its Jetties in Rivers State.

Table 1.1: Summary of Country Profile Data for the Federal Republic of Nigeria

Capital	Abuja
Area	923, 768 km ²
Land boundaries	4,047km (Benin 652 km, Cameroon 773 km, Chad 87 km, Niger 1,497 km)
Coastline	853 km, Nigeria, as a coastal state, is entitled to 12 nautical miles, territorial Sea (Article 3), a contiguous zone of 24 nautical miles (Article 33), an Exclusive Economic Zone up to 200 nautical miles from the baselines of where the territorial sea is measured (Article 57) of the UN Convention on the Law of the Sea (UNCLOS)
Adjacent seas	Nigeria faces the Gulf of Guinea, which is a part of the Atlantic Ocean. The Bight of Benin is to the west and the Bight of Biafra to the southeast; both of these are inlets of the Gulf of Guinea. There are a number of lagoons along the westerly coastal areas.
Climate	Equatorial in the south, tropical in the centre, arid in the north.
Environmental issues	Marine litter, soil degradation; rapid deforestation; urban air and water pollution; desertification; chemical and hazardous waste pollution, oil pollution - water, air, and soil; loss of arable land; rapid urbanization
Marine litter scale of impact	Marine litter transports disease-causing pathogens and invasive species, which displaces indigenous benthic species. Shipping and other marine activities, such as fishing, and tourism are hampered thereby affecting Nigeria’s socio-economic goals.

Geography notes	The Niger River enters the country in the northwest and flows southward through tropical rain forests and swamps to its delta in the Gulf of Guinea
Population	More than 216 million as at June 2022, (United Nations)
Governance System	Federal Presidential System
Administrative divisions	36 States and 1 Federal Capital Territory
No of L.G.A.	774
Languages	English(official), Hausa, Yoruba, Igbo (Ibo) Fulfulde, Ibibio, Kanuri, Tiv, Nupe, Kupa,

1.3. Guiding Principles

The following principles shall be applied for the attainment of the Objectives of the National Action Plan (NAP):

- i. Environmental Right, which ensures that every Nigerian has a right to a clean and healthy environment and a duty to safeguard and enhance the environment;
- ii. Circular Plastic Economy- A circular economy aims to design out waste. Basically, from a take-make- use-dispose model to a re-use- recycle-re- use-recycle- re-use- recycle model.
- iii. Zero Waste means designing and managing products and processes to reduce the volume and toxicity of waste and materials as close to zero as possible, conserve and recover all resources and not burn or bury them.
- iv. Extended Producer Responsibility (EPR) is an environmental protection strategy with the objective of decreasing total environmental impact from a product, including its packaging, by making the producers of the product responsible for the entire lifecycle of the product, and the take back recycling and final disposal of the product, including its packaging.
- v. Environmental Offsetting, which requires that where, for exceptional reasons of overriding public interest, the general obligation to protect threatened or endangered species and natural systems that are of special importance to sustaining life, providing livelihoods, or general wellbeing cannot be provided, such cost-effective offsetting measures must be undertaken by the proponents of an activity to restore as nearly as may be feasible the lost environmental services to the community;
- vi. Pollution Prevention Principle, which encourages Industry to invest responsibly to prevent pollution;
- vii. The Polluter Pays Principle, which prescribes that the polluter should bear the cost of preventing, and remediating pollution;
- viii. The User Pays Principle, in which the cost of a resource to a user must include all the environmental costs associated with its extraction, transformation and use (including the costs of alternative or future uses forgone);
- ix. The Precautionary Principle, which holds that where there are threats of serious or irreversible damage, the lack of full scientific knowledge shall not be used as a reason for postponing cost-effective means to prevent environmental degradation;
- x. The Subsidiarity Principle, which reflects a preference for making decisions at the lowest level of government or social organization where the issue can be effectively managed;

- xi. The Principle of Inter-Generational Equity, which requires that the needs of the present generation are met without compromising the ability of future generations to meet their own needs;
- xii. The Principle of Intra-Generational Equity, which requires that different groups of people within the country and within the present generation have the right to benefit equally from the exploitation of resources and that they have equal right to a clean and healthy environment;
- xiii. The Principle of Participation, which requires that decisions should, as much as possible, be made by the people or on their behalf by representatives chosen by them;
- xiv. International Cooperation in which the country will domesticate multilateral environmental agreements (MEAs) and regional instruments and implement them cooperatively for better environmental management of shared resources.
- xv. Good Environmental Governance, in which rule of law, effective institutions, transparency and accountability, respect for human rights and the meaningful participation of citizens will be integrated in environmental management; and
- xvi. Integrated Ecosystem Approach to conserving environmental resources is adopted and enhanced to ensure that all the country's ecosystems are managed for sustainable development and benefits of the people.

2. Specific Actions

2.1. Structure of the National Action Plan (NAP)

To sustainably reduce marine litter in Nigeria's marine domain to levels where they do not endanger the marine environment, behavioural change of coastal communities and urban dwellers on the dangers of marine litter is critical as well as collaborations with various stakeholders.

A range of actions are identified under each of the 8 key priorities arising from the country assessment to meet the national action plan objectives. These are outlined in section 2.1.1-2.1.8, below, with responsible authorities, institutions and timelines identified.

2.1.1. Improved understanding of the contribution of ships and the fisheries sector to marine plastic litter. Measures include:

- i. Conduct and support a study on marine plastic litter, including macro and microplastics, from all ships and the fisheries sector in Nigeria;
- ii. Consider extending the reporting requirements of MARPOL Annex V to include reporting data on discharge or accidental loss of fishing gear by the flag State to IMO;
- iii. Encourage international organizations that have conducted any scientific research related to marine litter to share the results of such research, including any information on the areas contaminated by marine litter from ships, and;
- iv. Invite international organizations to undertake studies to better understand microplastics from ships.

2.1.2. Reduction of marine plastic litter generated from, and retrieved by, fishing vessels

Measures include:

- i. Domestication of the requirement for the IMO ship identification number;
- ii. Mandating that fishing vessels over a certain size have the IMO ship identification number;
- iii. Consider making marking of fishing gear with the IMO Ship Identification Number mandatory, in cooperation with FAO;
- iv. Further investigate logging of the identification number for each item of fishing gear onboard a fishing vessel;
- v. Collect information on any discharge or accidental loss of fishing gear; and
- vi. Incorporate the Extended Producer Responsibility (EPR) principle as part of the best management practices to facilitate incentives for fishing vessels to retrieve derelict fishing gear and deliver it to port reception facilities, in collaboration with FAO.

2.1.3. Reduction of the shipping sector's contribution to marine plastic litter

Measures include:

- i. Ensure strict implementation of MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships):
- ii. review the application of placards, garbage management plans and garbage record-keeping in MARPOL Annex V;
- iii. establish a compulsory mechanism to declare loss of containers and identify number of losses;

develop a tracking system to communicate the locations of containers lost overboard and

- iv. develop guidelines and requirements for the end-of-life management of pleasure boats and small craft.

2.1.4. Improvement of the effectiveness of port reception facilities and treatment in reducing marine plastic litter. Measures include:

- i. Audit the adequacy of existing; Port/ Offshore/ Non-Convention Vessels' Waste Reception Facilities;
- ii. improve the port reception facilities to provide for separate garbage collection for plastic waste from ships, including fishing gear to facilitate reuse or recycling;
- iii. deploy Integrated Waste Management Systems for Ports, Coastal, Offshore activities;
- iv. strengthen mechanisms to enhance the enforcement of MARPOL Annex V requirements for the delivery of garbage to reception facilities;
- v. development of financial framework tools to support the implementation of cost frameworks associated with port reception facilities;

- vi. effectively implement national obligations to provide adequate facilities at ports and terminals for the reception of garbage; and
- vii. further consider the impact on coastal communities and on remote locations when planning for the disposal of waste to land-based facilities.

2.1.5. Enhanced public awareness, education and seafarer training

Measures include:

- i. Reviewing fishing vessel personnel training to ensure that all fishing vessel personnel, before being assigned any shipboard duties, receive basic training on marine environment awareness oriented on marine plastic litter including abandoned, lost or otherwise discarded fishing gear (ALDFG);
- ii. Improve the seafarer courses on environmental awareness to specifically address marine plastic litter
- iii. NIMASA will collaborate with the Federal Ministry of Agriculture in developing a fishing gear and fishing technology management policy.

2.1.6. Improved understanding of the regulatory framework associated with marine plastic litter from ships

Measures include:

Reviewing the current Legislation and policies framework to take cognisance of the gaps analysis where necessary, dealing specifically with marine litter management.

2.1.7. Strengthened international cooperation

Measures include:

- i. continue work with other United Nations bodies and agencies, in particular FAO and UN Environment, as well as with other international fora, who are active in the matter of marine plastic litter from shipping and fisheries sectors, such as through the Global Partnership on Marine Litter (GPML).

2.1.8. Targeted technical cooperation and capacity-building

Measures include:

- i. Address implementation issues related to the IMO Action Plan to Address Marine Plastic Litter from Ships in the context of IMO technical cooperation and capacity building activities;

- ii. Consider the establishment of externally funded and major projects under the auspices of IMO, in support of the Action Plan to Address Marine Plastic Litter from Ships.

These actions are organized into the National Action Plan in Table 2.1 along these 5 sections and summarized in a project chart in figure 2.1:

- Actions related to the legal, policy and enforcement reforms
- Actions related to institutional capacity and reforms
- Actions related to education and outreach
- Actions related to regional and global cooperation
- Actions related to private sector engagement

Table 2.1: Nigeria Action Plan on Sea-based Marine Plastic Litter

	Description	Priority Level (high, medium, low)	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
1.	Actions related to the legal, policy and enforcement reforms							
Action 1.1	Review of domesticated shipping regulations on MARPOL and London Convention/London Protocol, respectively, to fully operationalize the MARPOL convention with a focus on Annex V and Domestication of the requirement for the IMO ship identification number. These are I. The Merchant Shipping (Prevention of Pollution by Garbage) Regulations, 2012. II. The Merchant Shipping (Sea Dumping) Regulations, 2012.	High	NIMASA NPA NIWA	2023	2024	Technical staff, Budgetary allocation External Consultant Donor Fund.	1. Stakeholder meeting/ Workshop on legal review organized (virtual or in-person). 2. Draft regulation reviewed. 3. Regulations approved by Attorney General. 4. Regulation promulgated	1. Updated reviewed Regulations validated by NTF and adopted by Government. 2. Gazette notification.
Action 1.2	Review of Fishing shipping ACT and regulations. To fully operationalize the MARPOL convention with a focus on Annex V These include: 1. The Sea Fisheries Decree (Act) of 1971; 2. The Inland Fisheries ACT [28th December, 1992] No. 108.] (Fish Quality Assurance) 3. The Sea Licensing Regulations of 1971; and	High	Federal Department of Fisheries in Federal Ministry of Agricultures and Natural Resources NIWA	2023	2024	Technical staff, External Consultant Donor Fund, Budgetary allocation	1. Stakeholder meeting/ Workshop on legal review organized (virtual or in-person). 2. Draft Legislation bill approved by and passed by the houses of parliament 3. Legislation approved by the Presidency and promulgated 4. Draft regulations reviewed 5. Regulations approved by Attorney General 6. Regulation promulgated	1. Updated reviewed legislation and Regulations validated and adopted by Government. 2. Gazette notification.

	4. The Sea Fisheries (Fishing) Regulations of 1972							
Action 1.3	Review of Plastic Waste Management policy and regulations to fully operationalize the MARPOL convention with a focus on Annex V	High	Federal Ministry of Environment, NESREA	2023	2024	Technical staff, External Consultant Donor Fund, Budgetary allocation	<ol style="list-style-type: none"> 1. Stake holder meeting/ Workshop on legal review organized (virtual or in-person). 2. Draft regulation reviewed. 3. Regulations approved by Attorney General. 4. Regulation promulgated 	<ol style="list-style-type: none"> 1. Updated reviewed Regulations validated by NTF and adopted by Government. 2. Gazette notification
Action 1.4	Evaluation of recordkeeping provisions for the marking, documentation and accounting of all fishing gear	High	Federal department of fisheries NPA NIMASA	2024	2025	Technical staff, budgetary allocation NGOs /consultant	<ol style="list-style-type: none"> 1. Compilation of List of registered industrial and artisanal vessel on a joint platform of Federal department of fisheries, NPA and NIMASA. 2. Port reception facility/ facilities identified. 3. Fishers are sensitized. 4. Fishing gears are marked 5. Fishers report lost gear 6. Fishers can retrieve lost gear. 7. Quarterly compilation of Reporting forms on Data collected on fishing gear being loaded onto fishing vessels and fishing gears that were lost at sea, reported when they return to port. <p>Target of 15,000 tons Number /volume of identified and removed lost, abandoned and discarded fishing gear and fish farming implements reported annually at port facilities</p>	<ol style="list-style-type: none"> 1. Port state control records 2. Report of Fishers training/consultative activity/meetings/Census/ Questionnaires. 3. Reports of fishing gears marked. 4. Quantity and count of MPL gear retrieved over time series 5. Target of 15,000 tons Number /volume of identified and removed lost, abandoned and discarded fishing gear and fish farming implements reported annually at port facilities 6. Annual progress reporting on compilation of Data collection system in place for marine litter generated and retrieved reported by NIMASA

Action 1.5	Evaluation of the recordkeeping requirements for the handling of garbage for ships under 400 GT	Medium	NIMASA NPA NIWA	2024	2025	Technical and administrative, Ongoing budgetary allocation	Flag State Inspections	Flag State Inspections records
Action 1.6	Ensure strict implementation of MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships)	High	NIMASA NPA NIWA FMENV	2023	2024	Capacity building of Technical and administrative staff, for implementation budgetary allocation External Legal advisor/ consultant to support in the capacity	30% compliance improvement level on Reporting obligations on garbage management plans and garbage record-keeping in MARPOL Annex V in place among operators measured annually.	Annual report by NIMASA on improvement of Reporting obligation on garbage management plan compliance level
Action 1.7	Initiate awareness programme on EPR in the shipping and fishing sector to Familiarize them with the key objectives and principles of EPR	Medium	FMENV, FISHERIES DEPARTMENT NIMASA NIWA	2023	2024	Technical staff, allocated budget External and local consultant requirement	1. Awareness workshop and meeting conducted 2. Network or communication between like-minded businesses keen to participate in EPR is created	I. Report of Fishing and shipping sectors consultative activity meetings/Census/ Questionnaires, workshops. II. Network platform for businesses in the fishing and shipping sector keen to participate in EPR
Action 1.8	Undertake research/feasibility studies including on benefits and opportunities of establishing EPR in the shipping and fishing sector.	Medium	FMENV, FISHERIES DEPARTMENT NIMASA NIWA	2023	2024	Technical staff, allocated budget External and local consultant requirement	1. Tender offer advertised 2. Hiring of Consultant 3. Research and Preparation of draft feasibility report. 4. Align the EPR program with the necessary waste collection infrastructure and markets for recycled material. 5. Test running of report on the alignment of the waste infrastructure and market	Reports of feasibility studies and demonstration tests validated in workshop

Action 1.9	Develop operational guidelines on EPR for the shipping and fishing sectors	Medium	FMENV,	2024	2025	Technical staff, allocated budget External and local consultant requirement	Tender offer advertised Hiring of Consultant Draft operational guideline developed.	Shipping and fishing sector EPR Operational guideline developed and validated in stakeholder workshop
Action 1.10	Creation of EPR schemes, including setting up non-profit or for-profit producer responsibility organizations (PROs) in the case of collective EPR in cooperation with key stakeholders	Medium	FMENV	2024	2025	Technical staff, allocated budget External and local consultant requirement	1.The waste streams/ product(s) to be covered by EPR must be clearly defined. 2.Producer definition and registration 3.Design elements for type of scheme Individual VS Collective Schemes	Operational set up of EPR scheme in the shipping and fishing sector. A producer responsibility organization set up for the shipping and fishing sector
Action 1.11	Establish comprehensive and stable EPR laws and enforce them to create a reliable legal framework for all stakeholders	Medium	FMENV	2025	2026	Technical staff, allocated budget External and local consultant requirement	i. Definition of producer's responsibility obligations. ii. Setting targets and responsibilities. ii. Setting fees and costs coverage. iv. Information provisions Transparency monitoring and enforcement. v. Draft regulations development	EPR draft Regulations on management of marine waste stream in the Shipping and fishing sectors validated Gazette notification
Action 1.12	Current draft maritime transportation (draft National Maritime Transport Policy, 2021) and fisheries policies (draft National Fisheries Policy,2000) framework reviewed to take cognizance of the SBMPL gap and undertake analysis where necessary, dealing specifically with SBMPL Management	Medium	MPL National Task Force (NTF) organisations: • Federal Ministry of Agriculture & Rural development (Fisheries & Aquaculture department) • Federal Ministry of Environment, • NIMASA, • NIOMR (Nigerian Institute of Oceanography and Marine Research),	2023	2024	Technical staff, allocated budget Legal advisor/ consultant	1. Stake holder meeting/ Workshop on legal review organized (virtual or in-person). 2. Draft policies reviewed. 3. Policies approved by Federal Executive Councils.	Copies of approved reviewed policy frameworks (draft National Maritime Transport Policy, 2021 and draft National Fisheries Policy, 2000). Government gazette on revised policy framework in place

			<ul style="list-style-type: none"> NIWA (Nigerian Inland Waterways Authority) 					
2. Actions related to institutional capacity and reforms								
Action 2.1	Port facilities audit for adequacy	Medium	NPA NIMASA	2023	2025	Capacity building of Technical staff, allocated budget,	<ul style="list-style-type: none"> i. Establish audit program and objectives ii. Conduct the audit of Port facilities iii. Prepare audit report for all the Port facilities 	<ul style="list-style-type: none"> i. Audit report reviewed and validated by NTF at a stakeholder meeting ii. Preparation of Annual NIMASA Audit Records of port facilities effectiveness and adequacy. iii. Port control records
Action 2.2	Integrated Waste Management Systems deployed for Ports, Coastal, Offshore activities		NPA, NIMASA FMENV	2025	2028	Technical staff, allocated budget External and local consultant requirement	<ul style="list-style-type: none"> i. Tender advertisement ii. Collection of waste from the port zone by specialized vehicles and trucks. iii. Collection of waste from anchorage areas by vessels. iv. Processing / recycling/ energy recovery of special waste streams. v. Sampling – Labelling – Identification. vi. Hazardous Waste Management (classification, packaging, processing and final disposal). vii. Waste collection, transportation and certified Final Disposal of any type of waste. 	<ul style="list-style-type: none"> i. Updated Port Reception Facilities. ii. Management Data Book by the NPA, iii. Quarterly progress reporting of waste collected from port zone and anchorage by NPA. iv. Certification records of final disposal of all generated and retrieved waste by FMENV
3. Actions related to education and outreach								
Action 3.1	Fishing vessel personnel training and manual reviewed to incorporate Sea-based marine litter	High	<ul style="list-style-type: none"> Federal Ministry of Agriculture & Rural 	2024	2026	Technical staff, allocated budget, Trainers	<ul style="list-style-type: none"> i. Reviewed draft training manual ii. Approved training manual iii. Number of Training conducted iv. Training report (s) 	<ul style="list-style-type: none"> i. Reviewed draft Training manual approved and validated

			development (Fisheries & Aquaculture Department)					ii. 40 nos. fishing vessel personnel trained
Action 3.2	Review of seafarer course on environmental awareness to specifically address marine plastic litter.		<ul style="list-style-type: none"> Federal Ministry of Environment, NIMASA, NIOMR (Nigerian Institute of Oceanography and Marine Research), NIWA (Nigerian Inland Waterways Authority) 	2024	2026	Technical staff, allocated budget, Trainers	Reviewed draft course manual	Validated seafarer course manual
Action 3.3	Development of Public awareness educational materials on marine litter for artisanal fishing communities		<ul style="list-style-type: none"> NIWA (Nigerian Inland Waterways Authority) 	2024	2026	Technical staff, allocated budget, Communication consultants	<p>Educational awareness materials objectives developed for three target areas -</p> <ul style="list-style-type: none"> i. consumption and production practices to address marine litter and microplastics i. waste management solutions for sea based waste. i. mainstreaming of the Extended Producer Responsibility (EPR) principle and potentials for fishing communities among others. <p>Content Development to address target audience, infographics and language to reach audience through all the media format including social media</p>	Production and delivery of for 3 different awareness programmes
Action 3.4	Design and execution of training and awareness courses on MARPOL Convention, London Convention/London Protocol, and the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) address	Medium	<ul style="list-style-type: none"> Federal Ministry of Agriculture & Rural Development (Fisheries & Aquaculture department) 	2023	2025	Technical staff, allocated budget International experts	<ul style="list-style-type: none"> i. Project concept note ii. Project implementation plan iii. Project mid-term review and terminal report. 	<ul style="list-style-type: none"> i. Records of training programmes including website online training, videos and other capacity programmes ii. Project implementation status report after 6 months

	three levels of operational, governmental authorities and personnel in the maritime and fishing sectors, and the environment among others.		<ul style="list-style-type: none"> • Federal Ministry of Environment, • NIMASA, • NIOMR (Nigerian Institute of Oceanography and Marine Research), • NIWA (Nigerian Inland Waterways Authority) 					iii. Project terminal report
Action 3.5	Develop Guidelines and Requirements for the end-of-life management of pleasure boats and small crafts	Medium	NIWA NIMASA	2024	2024		<ol style="list-style-type: none"> 1.Tender offer advertised 2.Hiring of Consultant 3.Preparation of National guidelines for end-of-life management of pleasure boats and small craft 4.Draft guidelines developed 	Validated National guidelines for end-of-life management of pleasure boats and small craft
4.	Actions related regional and global cooperation							
Action 4.1	Information exchange at the regional level on SBMPL matters related to sustainable financial frameworks for port reception facilities	High	NIMASA Fisheries & Aquaculture Department Federal Ministry of Environment,	2023	2024	<p>Technical staff, allocated budget marine, international Technical consultants External Financial Resources required for:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Travel & per diem <input type="checkbox"/> Facilitation of meetings/discussions 	<ol style="list-style-type: none"> 1. Meetings with individual countries as the need arises 2. Participation in regional meetings with other Lead Partnering and Partnering Countries 3. Resultant information exchange regarding Port Reception Facilities 	<p>Documentation of meeting /discussions.</p> <p>2. Steps made by countries in the region towards the development of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Port Reception facilities
Action 4.2	Information exchange at the regional level on SBMPL matters and guidance related to development of regional SBMPL action plans		Fisheries & Aquaculture Department Federal Ministry of	2023	2025	<p>Technical staff, allocated budget marine, international Technical consultants</p>	<ol style="list-style-type: none"> 1. Meetings with individual countries as the need arises 2. Participation in regional meetings with other Lead 	<p>Documentation of meeting /discussions.</p> <p>2. Steps made by countries in the region towards the development of:</p>

			Environment, & NIMASA			External Financial Resources required for: • Travel & per diem • Facilitation of meetings/discussions	Partnering and Partnering Countries 3. Resultant information exchange regarding regional action plans	• regional Action Plans for SBMPL
5.	Actions related to private sector engagement							
Action 5.1	Initiate start up incubator process: Incubation, Competition, Knowledge Transfer and Investment (For example, to investigate/identify innovative technologies and solutions to address SBMPL in Nigeria)	Medium	NTF, (Fisheries & Aquaculture department) Federal Ministry of Environment, & NIMASA	2023	2028	Technical staff, allocated budget External Financial Resources required for: <input type="checkbox"/> Travel & per diem <input type="checkbox"/> Facilitation of meetings/discussions	Tender advertisement Select innovative technologies in focal areas of SBMPL publicity and opportunities for SME. Training and mentoring Recognition and award	At least 4 Approved innovative technologies to address SBMPL

Fig2.1: Project Chart for the Nigeria National Action Plan for Sea-Based Marine Plastic Litter with Specific Reference to Shipping and Fisheries (2023- 2028)

TASK	ASSIGNED TO	PROJECT DATE		2023				2024				2025				2026				2027				2028			
		START	END	1st QTR	2ND QTR	3RD QTR	4TH QTR	1st QTR	2ND QTR	3RD QTR	4TH QTR	1st QTR	2ND QTR	3RD QTR	4TH QTR	1st QTR	2ND QTR	3RD QTR	4TH QTR	1st QTR	2ND QTR	3RD QTR	4TH QTR	1st QTR	2ND QTR	3RD QTR	4TH QTR
Actions related to the legal, policy and enforcement reforms																											
Review of domesticated shipping regulations on MARPOL and London Dumping Convention Respectively to fully operationalize the MARPOL convention with a focus on annex V under the Gio-litter project and plan and Domestication of the requirement for the IMO ship identification number	NIMASA, NPA, NIWA	2023	2024																								
Review of Fishing shipping ACT and regulations. To fully operationalize the MARPOL convention with a focus on annex V under the Gio-litter project and plan	Federal Department of Fisheries in Federal Ministry of Agricultures and Natural Resources, NIWA	2023	2024																								
Review of Plastic Waste Management policy and regulations to fully operationalize the MARPOL convention with a focus on annex V under the Gio-litter project and plan.	Federal Ministry of Environment, NESREA	2023	2024																								
Evaluation of recordkeeping provisions for the marking documentation and accounting of all fishing gear	Federal department of fisheries, NPA, NIMASA	2024	2025																								
Evaluation of the recordkeeping requirements for the handling of garbage for ships under 400 GT	NIMASA, NPA, NIWA	2024	2025																								
Ensure strict implementation of MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships)	NIMASA, NPA, NIWA, FMENV	2023	2024																								
Initiate awareness programme on EPR in the shipping and fishing sector to Familiarize them with the key objectives and principles of EPR	FMENV, FISHERIES DEPARTMENT, NIMASA, NIWA	2023	2024																								
Undertake research/feasibility studies including on benefits and opportunities of establishing EPR in the shipping and fishing sector.	FMENV, FISHERIES DEPARTMENT, NIMASA, NIWA	2023	2024																								
Develop operational guidelines on EPR for the shipping and fishing sectors	FMENV	2024	2025																								
Creation of EPR schemes, including setting up non-profit or for-profit producer responsibility organizations (PROs) in the case of collective EPR in cooperation with key stakeholders	FMENV	2024	2025																								
Establish comprehensive and stable EPR laws and enforce them to create a reliable legal framework for all stakeholders	FMENV	2024	2026																								
Current draft maritime transportation and fisheries policies framework reviewed to take cognizance of the SBMPL gap and undertake analysis where necessary, dealing specifically with SBMPL Management	Federal Ministry of Agriculture & Rural development (Fisheries & Aquaculture department), Federal Ministry of Environment, NIMASA, NIOMR (Nigerian Institute of Oceanography and Marine Research), NIWA (Nigerian Inland Waterways Authority)	2023	2024																								
Actions related to institutional capacity and reforms																											
Port facilities audit adequacy	NIMASA, NPA	2023	2025																								
Integrated Waste Management Systems deployed for Ports, Coastal, Offshore activities	NPA, NIMASA, FMENV	2026	2028																								
Actions related to education and outreach																											
Fishing vessel personnel training and manual reviewed to incorporate Sea based marine litter	Federal Ministry of Agriculture & Rural development (Fisheries & Aquaculture department), Federal Ministry of Environment, NIMASA, NIOMR (Nigerian Institute of Oceanography and Marine Research), NIWA (Nigerian Inland Waterways Authority)	2024	2026																								
Review of seafarer course on environmental awareness to specifically address marine plastic litter.	Waterways Authority)	2024	2026																								
Development of Public awareness educational materials on marine litters for artisanal fishing communities		2024	2026																								
Designing and execution of training and awareness courses on MARPOL Convention, London Convention/London Protocol on dumping, and the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) to address three levels of operational, governmental authorities and personnel in the maritime and fishing sectors, and the environment among others.	Federal Ministry of Agriculture & Rural development (Fisheries & Aquaculture department), Federal Ministry of Environment, NIMASA, NIOMR (Nigerian Institute of Oceanography and Marine Research), NIWA (Nigerian Inland Waterways Authority)	2023	2025																								
Develop Guidelines and Requirements for the end-of-life management of pleasure boats and small crafts	NIWA, NIMASA	2024	2024																								
Actions related regional and global cooperation																											
Information exchange at the regional level on SBMPL matters including discussions on sustainable financial framework for port reception facilities management and guidance on the development of regional action plans for SBMPL	Fisheries & Aquaculture Department), Federal Ministry of Environment, & NIMASA	2023	2024																								
Actions related to private sector engagement																											
Initiate start up incubator process: Incubation, Competition, Knowledge Transfer and investment	Fisheries & Aquaculture Department), Federal Ministry of Environment, & NIMASA	2023	2028																								

Monitoring Progress

The National Task Force (NTF) that currently exists will become a permanent working group. The NTF Coordinator to the GloLitter project will continue with the coordination and monitoring progress of the achievement of the goals and objectives of the project. An annual report and mid-term report for the national five (5) year action plan will be provided to the IMO/FAO PCUs by the respective agencies and organisations.

In the course of the preparation for the National Action Plan, all the governmental institutions involved as members of the task force have formally committed to its execution. Thus, the actions reflected in the National Action Plan automatically become duties that the institutions must undertake in the coming months as scheduled. The NTF will schedule meetings every quarter to map out progress on the National Action Plan implementation and allocated resources.