Charter

of the
Global Partnership on
Nutrient Management

Operational Framework and Guidelines

February, 2018

Disclaimer:

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the UN Environment or the Global Partnership on Nutrient Management concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the UN Environment or the Global Partnership on Nutrient Management; nor does citing of trade names or commercial processes constitute endorsement.

Table of Contents

Annexes

1. Vision

1. The cycles of nitrogen, phosphorus and other nutrients are among the most disturbed aspects of the Earth System, being associated with multiple benefits and threats at local to global scales. Nutrient use is vital to sustain the human population with present diets, while also being critical for fiber and bio-energy production. Conversely, losses of nutrients to the environment are at the heart of many environmental challenges, including water pollution, air pollution, disturbance of greenhouse gas balance, stratospheric ozone depletion, threats to ecosystems and soil quality. In many parts of the world, these threats are the result of high nutrient supply, while in other regions the problems are exacerbated by insufficient nutrients. In all cases, there are opportunities to reduce pollution and improve human-wellbeing by better nutrient management.

2. The goal of the Global Partnership on Nutrient Management is to highlight the importance of nutrient flows and impacts for global society, working to identify and promote effective solutions. By developing a multi-actor approach that links governments, academia, business and civil society, it aims to raise the global profile of the Nutrient Challenge and to mobilize implementation of the solutions. In this way, better nutrient management can become a core a contribution to meeting the Sustainable Development Goals, with multiple environmental, social and economic benefits.

2. Background

3. The world needs to keep pace with population growth and food production to ensure global food security for its 7 billion inhabitants that is projected to reach 9.6 billion by 2050. Nitrogen and phosphorus are key nutrients for growing crops and the food security of two-thirds of the world's population depend on the availability of these nutrients as fertilizers. Some 120 million metric tons of reactive nitrogen are produced and approximately 20 million metric tons of phosphorus is mined every year. However, the efficiency of nutrient use is very low; considering the full chain, on average over 80% of nitrogen and 25-75% of phosphorus consumed (where not temporarily stored in agricultural soils) end up lost to the environment, wasting the energy used to prepare them, and causing pollution through emissions of the greenhouse gas nitrous oxide and ammonia to the atmosphere, plus losses of nitrate, phosphate and organic nitrogen and phosphorus compounds to water[1]. Globally, synthetic fertilizer, agricultural crops and livestock excreta account for around 80% of total ammonia emission, while the Food and Agriculture Organization (FAO) prediction indicates that global nitrous oxide (N_2O) emission from fertilizers will increase to between 35 and 60% by 2030[2].

4. The publication *"Our Nutrient World: the challenge to produce more food and energy with less pollution"* was produced in 2013 jointly by the Global Partnership on Nutrient

[1] Sutton et al., (2013) Our Nutrient World: The challenge to produce more food and energy with less pollution. Global Overview of Nutrient. http://nutrientchallenge.org/document/our-nutrient-world
Management. Centre for Ecology and Hydrology, Edinburgh on behalf of the Global Partnership on Nutrient Management and the International Nitrogen Initiative. http://www.unep.org/gpa/documents/publications/ONW.pdf
[2] UNEP (2013). Drawing Down N_2O to Protect Climate and the Ozone Layer. A UNEP Synthesis Report. United Nations Environment Programme (UNEP), Nairobi, Kenya. http://www.unep.org/pdf/UNEPN2Oreport.pdf

management (GPNM) and the International Nitrogen Initiative (INI) through the efforts of a group of 50 scientists from 15 countries. The report clearly outlined that sustainable nutrient management constitutes a nexus that unites many global resource management concerns. The report also underscores how improved management of nutrients would simultaneously make quantified contributions toward meeting existing global commitments for improving/protecting water, air, soil, climate and biodiversity resources. At the same time it would deliver consequent contributions to food and energy security with major net social and economic benefits. The report articulates the basis for global actions to improve nutrient use efficiency[3]. It concluded that a 20% improvement in global nutrient use efficiency by 2020 would allow the world community to save nearly US$170 billion a year through contributions to improved human health, climate and biodiversity.

5. Poor nutrient management and associated challenges are a consequence of how nutrient inflows from fertilizers and manures are managed by crop and livestock producers, and how wastewater discharges from domestic, commercial, industrial sources are managed. In the context of crop production, in parts of Europe, China and India for example, the challenge is typically associated with excess fertilizer application to maximize yields, while in some other parts of the developing world, notably in parts of Africa, the challenge is mainly application of too little nutrients that leads to nutrient mining or depletion. In intensive livestock production there are issues with excess nutrient loading from direct manure discharges to the environment.

6. Poor nutrient management is manifested in five key threats in terms of (1) Water quality, (2) Air quality, (3) Greenhouse balance, (4) Ecosystems and (5) Soil quality, in short WAGES. It should be noted that air and greenhouse balance are inter-connected and that the ecosystems dimension is cross-cutting over all these threats.

7. Water quality: The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) through the Washington Declaration of 1995 and the Manila Declaration of 2012 is mandated to address excessive nutrient loading into fresh and marine waters from the local level, up to the regional trans-boundary, and global levels. Nutrient loads lead to eutrophication[4] in fresh and coastal receiving waters, and under extreme conditions, lead to the onset of hypoxic[5] conditions and impairment of aquatic ecosystem health that alters biodiversity status. This either creates conditions where sensitive species are negatively impacted and become threatened, or opportunistic species capable of surviving in such conditions displace the original species, transforming the ecosystem. This invariably leads to altered and in many cases to reduced marine resource productivity in terms of commercial and artisanal exploited resources, in turn impacting livelihoods at both the local community and national levels. It has been estimated that about 80% of large marine ecosystems are

[3] For definitions concerning nutrient use efficiency see: Norton, R., Davidson, E., Roberts, T., (2015), Nitrogen Use Efficiency and Nutrient Performance Indicators, Position Paper from the GPNM's Task Team Workshop, December 2014 Washington, DC. http://www.unep.org/gpa/documents/publications/NUEandNPIGPNM2015.pdf
[4] Nutrient enrichment of water bodies leading to excessive algal growth and oxygen depletion as the algae die.
[5] Condition attained where dissolved oxygen levels are depleted due to algal and bacterial respiration and decaying organic matter.

subject to significant eutrophication in coastal waters[6] [7]. The full damage cost has not yet been assessed, but annual global loss of ecosystem services including damage to fisheries from coastal nitrogen and phosphorous pollution-related hypoxia alone is estimated to cost in the hundreds of billions of dollars. A related problem associated with eutrophication and degraded quality of recreational fresh (rivers and lakes) and coastal waters is diminished aesthetic and recreational use value, which has serious socio-economic implications on local and national economies that are heavily dependent on tourism for example.

8. Secondary problems but no less important, are associated with contamination of drinking water resources at the local scale where nutrient-laden runoff from crop and livestock operation and wastewater disposals may permeate aquifers, rivers and lakes that are used for sourcing potable water. This contamination risk invariably leads to adverse health impacts at the local level particularly with respect to nitrates and nitrites in drinking water[8] translating to rising economic costs for treating illness with increased burden on the health care sector.

9. Air quality is a major concern resulting from human disturbance of global and regional nutrient cycles. In particular volatilized forms of reactive nitrogen such as ammonia (NH_3) and soil emissions of nitric oxide (NO) from fertilizer application and manure management contribute to fine particulate matter (PM) formation in the atmosphere which in turn contribute to increased human morbidity and mortality. In addition, millions of tonnes of nitric oxide and nitrogen dioxide (NO_2) are formed as a result of fuel consumption in energy generation, manufacturing and transport. These contribute to air pollution in the form of PM and tropospheric ozone (O_3 in the air we breathe), threatening human health and leading to loss of crop and forestry productivity. The amounts of reactive nitrogen (all N compounds except unreactive N_2) lost to the atmosphere as pollution simultaneously represent a loss of a potential fertilizer resource for farmers.

10. Greenhouse gas balance: Nutrients have a major impact on the balance of greenhouse gases and other processes that affect global climate forcing. The primary and most long term disturbance is the release of nitrous oxide (N_2O) from soils, which is a greenhouse gas 300 times more powerful than carbon dioxide (CO_2). In addition, the loss of forest productivity as a result of tropospheric O_3 formation (linked to NO releases to the atmosphere) reduces the biosphere CO_2 sink. Other interactions also have a potential cooling effect, including the effect of O_3 in shortening the atmospheric lifetime of atmospheric methane (CH_4), the formation of fine particulate matter from reactive nitrogen emissions, which leads to lighter scattering and cloud formation, and the fertilizing effect of atmospheric nitrogen deposition on carbon sequestration. The complex interplay of these processes mean that disturbance of nutrient cycles is at the heart of understanding interactions between the biosphere and human driven climate

[6] Selman M., Sugg Z. Greenhalgh S. & Diaz R. (2008): Eutrophication and Hypoxia in Coastal Areas: A Global Assessment of the State of Knowledge, WRI Report, http://www.wri.org/publication/eutrophication-and-hypoxia-in-coastal-areas

[7] Diaz R., Selman M. & Chique C. (2010) Global Eutrophic and Hypoxic Coastal Systems. World Resources Institute. Eutrophication and Hypoxia: Nutrient Pollution in Coastal Waters. http://www.wri.org/project/eutrophication

[8] World Health Organization (2011) Nitrate and Nitrite in Drinking-water. Background document for development of WHO Guidelines for Drinking-water Quality. http://www.who.int/water_sanitation_health/dwq/chemicals/nitrate.pdf

change. In addition, to these interactions, nitrous oxide (N_2O) is now also the main cause of stratospheric ozone depletion, increasing the risk of skin cancer from UV-B radiation exposure[9] . The net effects are manifested on wide spatial scales of trans-boundary and global dimensions that have implications for changing climate and potential for increasing economic losses and adverse social impacts.

11. Ecosystems and Biodiversity impacts are considered as cross-cutting given the interaction with water, atmospheric and soil nutrient cycling, where too much reactive nitrogen and phosphorous within the system can lead to the loss of species of high conservation value which are adapted to a specific natural nutrient balance. The linkage between atmosphere, soil and water can be illustrated by the case of nitrogen losses which follow multiple pathways. For example, emissions of NH_3 and NO to the air from agricultural systems represents a loss of soil fertility, while deposition to natural habitats adapted to limited nutrient supply can cause eutrophication of terrestrial ecosystems. As these become saturated, excess nitrogen in the form of nitrates, ammonium and organic nitrogen compounds find their way to water courses contributing to freshwater and aquatic eutrophication. There are also challenges of both too much and too little nutrient supply. Too little nutrient supply in agricultural landscapes has been suggested to provide a driver for increased exploitation of virgin ecosystems.

12. Soil quality: In terms of impacts to soils, too much atmospheric reactive nitrogen deposition acidifies natural and agricultural soils altering productive capacity. On the other hand, an inability to match crop harvests with sufficient nutrient return to the soil leads to nutrient and organic matter depletion, leading to land degradation and increasing the risk of erosion. This has often been termed "soil nutrient mining". The net effect is reduced crop productivity and yield output, with consequent livelihood impacts from local community to the national level.

13. The culmination of the 'WAGES' of poor nutrient management is worsening socio-economic conditions particularly in parts of the globe where countries are resource-constrained to address the nutrient challenge.

3. A global response to address the nutrient challenge

14. At the United Nations Commission on Sustainable Development (CSD) in May 2009, it was agreed to establish the Global Partnership on Nutrient Management (GPNM) as a global mechanism to bring together and harmonize otherwise fragmented efforts to address the nutrient challenge amongst a great many number of stakeholders. These diverse stakeholders include government, research and academia, agricultural and fertilizer producer organizations in the private sector, regional and international intergovernmental organizations, non-governmental organizations and the UN agencies. These stakeholders are committed to promoting effective nutrient management to achieve the twin goals of

[9] Drawing Down N_2O to Protect Climate and the Ozone Layer: A UNEP Synthesis Report http://wedocs.unep.org/bitstream/handle/20.500.11822/8489/-Drawing%20down%20N2O%20to%20protect%20climate%20and%20the%20ozone%20layer_%20a%20UNEP%20synthesis%20report-2013UNEPN2Oreport.pdf?sequence=3&isAllowed=y

food security through increased productivity and conservation of natural resources and environmental protection.

15. The GPNM recognizes the need for strategic global advocacy to foster dialogues among the governments and other key stakeholders to trigger actions in moving towards lower nitrogen and phosphorus inputs to human activities. It provides a platform for governments, private sector, scientific community, civil society organizations and UN agencies to forge a common agenda, mainstream best practices and integrate assessments, so that policy making and investments are effectively 'nutrient proofed'. The GPNM also provides a space/platform including through its electronic platform[10] where countries and other stakeholders can meet and initiate dialogues to forge more co-operative work across the variety of international and regional fora and agencies dealing with nutrients.

16. The GPNM is registered with the secretariat of the CSD as a CSD partnership and has organized events during CSD sessions with participation of various partners. The UN Environment GPA Coordination Office acts as the Secretariat of the GPNM (see details in Section 6 on GPNM Governance).

4. Mandate of the GPNM

17. For the benefits of nitrogen and phosphorus fertilizers to be realized effectively, including their contribution to food security, countries need access to improved information and assessment of the multiple and linked impacts of these nutrients. Countries also need access to knowledge to promote integrated management approaches, as well as tools and training to address the root causes of unsustainable agricultural production and how to use nutrients in ways that prevent the release of excess nutrients.

18. The GPNM seeks to mobilize support through its members' network to facilitate necessary changes by offering access to existing information and knowledge through a central platform and make it available to all partners for their use to raise awareness among policy makers and other stakeholders about the causes and harmful impacts of current nutrient management practices and the benefits of taking action.

19. The GPNM aims to foster engagement of stakeholders and exchange of information, good practice and expertise with a view to assisting the delivery of knowledge-based remedial action and training tailored to the circumstances of countries. Through this process, the Partnership can help its members and countries to engage actively in identifying, assessing, and implementing cost effective and workable solutions.

20. Drawing on the work of its members and other initiatives, the Partnership offers a web-based platform at the Nutrientchallenge.org, presenting information on major emission sources and impacts, cross-media transfer of nutrients, environmental costs of nutrients over-enrichment and identification and analysis of impacts on coastal, marine and other ecosystems. Nutrient management initiatives, practices and lessons learned by countries and other organizations are made available through the Partnership platform for the

[10] GPNM online portal at http://www.nutrientchallenge.org

benefit of all its members and non-members as well. The aim is to provide all partners with a consolidated source of causal impacts, their costs and future trends, and access to effective tools, approaches and training to support their actions in promoting sustainable nutrient management. The GPNM through its collaborative work with governments and other stakeholders have designed and implemented on-the-ground projects notably the project "Global Foundations for Reducing Nutrient Enrichment and Oxygen Depletion from Land-based Pollution in Support of Global Nutrient Cycle" (2012-2018) with support from the Global Environment Facility and various partners of GPNM (see www.gpa.unep.org and www.nutrientchallenge.org).

21. By synthesizing the accumulated experiences of various partners, GPNM produces periodic guidance documents to promote sustainable nutrient management. Such publications highlight the work of various partners to facilitate mainstreaming of key messages and best practices leading to effective nutrient management and the benefits this will bring to meeting the key global challenges of food security and a healthy and sustainable environment. *The Foundations for Sustainable Nutrient Management*[11] and *Our Nutrient World*[12] are two keynote publications of the GPNM that explore all the dimensions of the nutrient challenge. Recently, the GPNM produced a position paper *Nitrogen Use Efficiency and Nutrient Performance indicators* (see footnote 3.) that is anticipated to contribute to the process of target setting within the scope of the Sustainable Development Goals.

22. In summary, the GPNM can offer the following in support of its members' work in a way that maximizes the contribution of nutrient management to achievement of a food-secure society, a natural environment that is less polluted by nutrient excess and realizing more sustainable global development pathways:-

    - Advancing improved understanding of the nutrient life cycle and its socio-economic and environmental impacts through direct observation and modelling approaches;
    - Building knowledge through sharing of lessons learned to assist in analysis of policies, business models and technological options for sustainable production and use of nutrients;
    - Creating a global base of knowledge on policy experience and ways to adapt that experience to specific national circumstances;
    - Promoting activities that raise awareness and disseminate information for improving capabilities of partners;
    - Facilitating development of new approaches and projects to complement governments' efforts to reform/develop policy frameworks as a necessary foundation for sustainable nutrient management;
    - Identifying key research, education and extension needs that would fill gaps in knowledge;
    - Providing a network to support cooperation on the nutrient challenge among the members.

[11] UNEP (2010) on behalf of the Global Partnership on Nutrient Management (GPNM) http://www.unep.org/pdf/Building_the_foundations-2.pdf
[12] http://nutrientchallenge.org/document/our-nutrient-world

5. The GPNM's work in a global setting

23. The work of the GPNM from both angles of managing nutrient use efficiency through the productive sectors, agriculture and industry and through management of nutrient excess and leakage to the environment is anchored in many national, regional and international development frameworks given the cross-cutting nature of the nutrient management agenda. The following are some of the key frameworks of relevance.

5.1 The GPNM in the context of sustainable development frameworks

24. During the Third Inter-Governmental Review Meeting of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA/IGR3) held in January 2012 in Manila, Philippines, UN Environment reported on the GPNM and requested governments to endorse this partnership and provide guidance. During the GPA/IGR3 there were intense discussions and dialogues between the GPNM members and many governments to seek clarity and scientific details on the issue of nutrient use efficiency and agreeing on a target setting. The 64 governments[13] and the European Union through the adoption of the Manila Declaration gave their full endorsement to the GPNM and clearly articulated their views; to quote *"Decide actively to engage ourselves and step up our efforts to develop guidance, strategies or policies on the sustainable use of nutrients so as to improve nutrient use efficiency with attendant economic benefits for all stakeholders, including farmers, and to mitigate negative environmental impacts through the development and implementation of national goals and plans over the period 2012-2016, as necessary; and …to support the further development of the Global Partnership on Nutrient Management and associated regional and national stakeholder partnerships, as well as their activities, including assessments as agreed by the partnership, and sharing of best practices using extension and advisory services for policy makers and farmers"* (Manila Declaration Para 4 and 5a). The Manila Declaration gives a clear mandate to GPNM and also outlined key areas of activities that the GPNM should focus on during the period 2012-2016.

25. The Heads of State and Government and high-level representatives, attending the United Nations Conference on Sustainable Development (Rio+20 Summit) in Rio de Janeiro, Brazil, from 20 to 22 June 2012 in the conference outcome document 'The Future We Want' noted *"with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution, including marine debris, especially plastic, persistent organic pollutants, heavy metals and nitrogen-based compounds, from a number of marine and land-based sources, including shipping and land run-off. We commit to take action to reduce the incidence and impacts of such pollution on marine ecosystems, including through the effective implementation of relevant conventions adopted in the framework of the International Maritime Organization (IMO), and the follow-up of the relevant initiatives*

[13] Algeria, Argentina, Austria, Bangladesh, Brazil, Burkina Faso, Burundi, Cambodia, Canada, Cape Verde, China, Colombia, Comoros, Côte d'Ivoire, Cuba, Democratic Republic of the Congo, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Fiji, Germany, Georgia, Ghana, Grenada, Guinea-Bissau, Haiti, Iceland, India, Indonesia, Iraq, Japan, Kenya, Kiribati, Madagascar, Malaysia, Maldives, Mauritania, Mauritius, Mexico, Mozambique, Nepal, Netherlands, Nicaragua, Norway, Oman, Palau, Philippines, Republic of Korea, Russian Federation, Saint Lucia, Samoa, Seychelles, South Africa, Sri Lanka, Thailand, Togo, Tuvalu, United Republic of Tanzania, United States of America, Vanuatu, Viet Nam, Yemen and Zimbabwe. Palestine also participated as an observer.

such as the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, as well as the adoption of coordinated strategies to this end".

26. During the Rio+20 Summit, the global leaders also reiterated their commitment to promote, enhance and support more sustainable agriculture, including crops, livestock, forestry, fisheries and aquaculture, that improves food security, eradicates hunger and is economically viable, while conserving land, water, plant and animal genetic resources, biodiversity and ecosystems and recognized *"the need to maintain natural ecological processes that support food production systems"* (Para 111). Furthermore, they committed *"to take action to enhance agricultural research, extension services, training and education to improve agricultural productivity and sustainability through the voluntary sharing of knowledge and good practices…."* and called "*for the strengthening of international cooperation on agricultural research for development"* (Para 114).

27. SIDS Accelerated Modalities of Action [S.A.M.O.A.] Pathway. The outcome of the Third International Conference on Small Island Developing States (SIDS Conference) which took place in September 2014 in Samoa saw the endorsement by the Heads of States and Government of several key areas for priority action. Of direct relevance to the issue of nutrient management was within the 'Oceans and seas' priority area where governments agreed "To address marine pollution by developing effective partnerships, including through the development and implementation of relevant arrangements, such as the United Nations Environment Programme Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, and, as appropriate, instruments on marine debris and on nutrient, wastewater and other marine pollution, and through the sharing and implementation of best practices."

28. Third United Nations Environment Assembly (UNEA-3). In December 2017 at the third session of UNEA, governments agreed to resolutions with high relevance for sustainable nutrient management in respect to curbing air, water and land pollution. Resolution UNEP/EA.3/L.8 'Environment and Health', invites Member States to increase the awareness of the risks posed to human, animal and environmental health from the improper use of fertilizers and pesticides and to promote measures to address them. Resolution UNEP/EA.3/L.14 'Managing soil pollution to achieve Sustainable Development' requests the Executive Director of UN Environment, in collaboration with lead agencies to prepare a report on extent and future trends of soil pollution, considering both point source contamination and diffuse pollution, along risks and impacts of soil pollution on health, the environment and food security including land degradation and the burden of disease resulting from exposure to contaminated soil. This report is to be tabled by 5th Session of UNEA. Resolution UNEP/EA.3/L.23 'Preventing and Reducing Air Pollution' encourages governments to pursue synergies and co-benefits between national clean air policies and policies in key areas such as transport, including vehicle emissions and fuel standards, urbanization, climate change, energy access and agriculture and to take advantage of synergistic effects of efficient nitrogen management on reducing air, marine and water pollution. Resolution UNEP/EA.3/L.27 'Addressing water pollution to protect and restore water-related ecosystems' invites Member States, in collaboration with relevant stakeholders, including the Global Programme of Action partnership for wastewater and management of nutrients, to further efforts to prevent and mitigate water pollution and to protect and restore water-related ecosystems to minimize adverse impacts on human health and the environment. The resolution also directs UN

Environment to cooperate with other relevant organizations, including through UN-Water, to develop a World Water Quality Assessment for consideration at UNEA-5.

29. The GPNM has now been embedded within UN Environment's Programme of Work. The work of the GPNM falls under the Chemical and Waste Sub-program of UN Environment, where sustainable nutrient management and the reduction and, where possible, elimination of threats to aquatic environments from land-derived nutrients has been defined among the outputs under expected accomplishments of the sub-programme.

5.2 The Sustainable Development Goals and the nutrient management agenda

30. Given the fact that nutrient management is integrally linked with food security and environmental sustainability, management of nutrients must be considered by countries while formulating plans to achieve the Sustainable Development Goals by 2030. The following are the key goals and most relevant targets to nutrient management, however, recognizing the interlinkages between other goals and targets.

31. Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. *Target 2.4:* *By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.* Achieving this target will need to incorporate the concept of nutrient use efficiency (NUE) where application of nitrogen and phosphorous fertilizers are based on plant requirements, and that there is adequate nutrient replenishment to mitigate soil degradation.

32. Goal 6: Ensure availability and sustainable management of water and sanitation for all. *Target 6.3:* *By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.* This target is linked to minimizing excessive nutrient (reactive nitrogen and phosphorous) leakage to the environment that can result in adverse environmental conditions and pollution. *Target 6.a:* *By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.* Nutrient recycling will feature prominently particularly in the area of wastewater reuse and capture of nutrients for recycling into agricultural production in particular. This is closely linked to building circular economies and enhancing cleaner production efforts.

33. Goal 12: Ensure sustainable consumption and production patterns. *Target 12.2:* *By 2030, achieve the sustainable management and efficient use of natural resources.* Achieving this target will include the aspect of nutrient management particularly related to use efficiency. Management of phosphorous reserves and micro-nutrients is of interest. *Target 12.4:* *By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil to minimize their adverse impacts on*

human health and the environment. Achieving this target is related to abatement of excess nutrient leakage to the environment and pollution of fresh and coastal waters, and the atmosphere, particularly in the form of volatilized nitrogen compounds. *Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.* Improved nutrient use efficiency and recycling of waste streams, particularly wastewater to harvest nutrients for re-use will be relevant in achieving this target.

34. Goal 13: Take urgent action to combat climate change and its impacts. *Target 13.2: Integrate climate change measures into national policies, strategies and planning.* Nutrient management has direct relevance to this target particularly in the context of airborne emissions from nitrogen compounds emitted to the atmosphere (with greenhouse gas potential) released from agricultural cropping and livestock production systems in particular. In addition, emission of inert di-nitrogen (N_2) can contribute to low NUE and therefore indirectly to increased greenhouse gas emissions. An emerging issue is the potential increasing persistence and occurrence of prolific harmful algal blooms, caused by altered ocean and surface water body dynamics (temperature, chemistry and circulation) driven by climate change influences.

35. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. *Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.* This target is directly related to addressing nutrient loading into the marine environment from land-based sources that include agricultural runoff (crop and livestock production), discharge of untreated domestic and industrial wastewater.

36. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. *Target 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.* Addressing nutrient use efficiency will contribute to reducing land degradation particularly in circumstances where nutrient removal through crop/biomass harvest exceeds replenishment. Under these conditions the soils become fatigued and less productive, eventually leading to erosion as the capacity to sustain vegetative cover is diminished.

37. In June 2017 the high-level United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development[14] was co-convened by the Governments of Fiji and Sweden. The Conference primarily sought to consolidate modalities to support the implementation of Sustainable Development Goal 14 and seek out means to strengthen and foster innovation in partnerships between Governments, the United Nations system, intergovernmental, non-governmental and civil society organizations, the private sector and the scientific community in tackling issues of ocean resource degradation, The conference contributed to wider review processes of the 2030 Agenda for Sustainable Development by providing inputs to the high-level political forum on sustainable development.

[14] https://oceanconference.un.org/about

38. The Conference culminated with the "Our Ocean Our Future, Call for Action"[15] an expression of commitments among governments to accelerated action on conservation of the world's oceans across all the targets of Goal 14. In specific relation to nutrient management agenda the Call for Action urges all countries and stakeholders to *"(g) Accelerate actions to prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris, plastics and microplastics, nutrient pollution, untreated wastewater, solid waste discharges, hazardous substances, pollution from ships,"*.

6. Program of Work

39. The following outlines the key elements of a workplan of the GPNM as guided by national, regional and international frameworks, driven by priorities in addressing the nutrient challenge. The work of the GPNM is to assist coordinate the efforts amongst the partnership towards realizing common consensus in policy setting, implementation of appropriate action based on science and socio-economic considerations, and assessment of results and outcomes. This is supported under four pillars of work; (1) Knowledge generation, (2) Policy and technical support, (3) Outreach and awareness raising and (4) Partnership and network development, within which a series of primary actions have been identified.

6.1 Knowledge generation

- Build knowledge through sharing of lessons learned to assist governments and other stakeholders in the analyses of policies, develop business models and choose technological options for sustainable production and use of nutrients;
- Create/develop a global knowledge-base on policy experiences and ways to adapt such experiences to specific national circumstances and make it available to all stakeholders through web-based tools;
- Identify key research needs that would fill gaps in knowledge and foster/strengthen integrated assessment and analysis to generate new knowledge;
- Develop indicators to assess progress towards globally agreed tragets (e.g., CBD Aichi traget 8, GPA/IGR-3 declaration, Rio+20 outcomes etc.).

6.2 Policy and technical support

- Facilitate and/or develop new approaches and projects to complement governments' efforts to reform/develop policy frameworks as a necessary foundation for sustainable nutrient management;
- Set regional/national specific targets on NUE, nutrient load into coastal waters, and biodiversity (e.g., CBD Aichi target 8, Sustainable Development Goal targets under Goals 2, 6 and 14);

[15] https://oceanconference.un.org/callforaction

- Develop indicators to assess progress towards globally agreed targets (e.g., SDG targets under Goals 2, 6 and 14, CBD Aichi target 8, GPA/IGR-3 Manila Declaration, Rio+20 outcomes etc.); .
- Secure commitments from stakeholders on regular reporting on the progress towards NUE and publishing periodic reports on progress;
- Develop/strengthen webbased tools to disseminate knowledge and experiences to support stakeholder actions on the ground;
- Develop a "policy toolbox" related to managing nutrient impacts from key sources/sectors, to support national actions, especially development of nutrient reduction strategies and designing training modules and associated curriculum;
- Design training modules and associated curriculum to disseminate the key contents of the "policy toolbox", targeting resource managers and policy makers;
- Develop eXtension (electronic extension) training programs;
- Facilitate and design of cost-effective on the ground interventions reflecting interests of the partners;
- Facilitate exchange of scientific data, methodologies and research applications among various stakeholders to support national/country-level research and extending the BMPs to farmers through eXtension, outreach and technology transfer;
- Promote activities that raise awareness and dissemination of information for enhancing capabilities of partners.

6.3 Outreach and awareness raising

- Offer opportunities to develop networks among the members to establish and strengthen communities of practice;
- Identify, review and compile best nutrient management practices (covering cost-effective and sustainable technology and policy options) under different socio-political settings and disseminate through web and face-to-face meetings/workshops;
- Produce policy briefs, information documents and case studies to promote sustainable nutrient management;
- Hold special sessions/side events on GPNM and nutrient related issues in the margins of global and regional meetings of relevance to exchange knowledge and raise the profile of the sustainable nutrient management agenda.
- Facilitate wider engagement of the full GPNM membership to strengthen inputs to national, regional and global policy processes and technical support around improved nutrient management.

6.4 Partnership and network development

- Hold periodic meetings of partners to share experiences and create action agendas;
- Facilitate dialogues for policy reform using technological and management innovation to promote nutrient use efficiency.
- Facilitate linkages with partners at national and regional levels to enhance networking and integration of work within existing projects and programmes within the scope of regional platforms;
- Solicit interest from new members to join and contribute to the work of the partnership;

40. Biennial work plans will be formulated by the GPNM Secretariat based on guidance from the Steering Committee. These work plans that will contribute to the nutrient management portfolio of UN Environment's Programme of Work and will follow the thematic pillars as set out above. The GPNM Workplan will be reviewed by the Steering Committee through the Chair, and approved prior to submission for consideration by UN Environment. Progress under the Workplan will be reported as part of proceedings of meetings of the Steering Committee and other meetings as necessary.

7. Governance

41. The Partners, during the launch of the GPNM in May 2009 requested that the Global Programme of Action for the Protection of the Marine Environment from Land Based Activities (GPA) of UN Environment (UNEP) act as the Secretariat for the GPNM. UN Environment/GPA in pursuance of its mandate agreed to host the Secretariat and provide resources. In a follow-up meeting in The Hague (October 2009) hosted by the Government of the Netherlands there was considerable discussion on the nature of the Partnership, and the meeting recognized the need for some form of management structure to steer the process forward. It was recognized that the Partnership needed to move forward incrementally and in a focused way given the breadth and depth of nutrient issues, and that it would be important to recognize and complement the various roles of UN agencies, industry, science community and international organizations.

42. The term "partnership" in the context of GPNM is regarded as a 'voluntary partnership' of stakeholders working on the nutrient management agenda and making contributions in promoting sustainable nutrient management. The Partnership is open to all stakeholders who have interests in addressing nutrient challenges at any level and in any forms. GPNM being a voluntary initiative does not create any legally binding rights or obligations between or among its members or any other entities under domestic or international law. The partnership adheres to the following fundamental principles:
    - To foster a community of interest among partners, all partners are asked to provide access to relevant information, tools, cases of best management practices etc. that they have at their disposal for wider dissemination and use in making policy and investment decisions for remedial actions.
    - The partners are not obligated in any way to contribute financially to the GPNM nor do they receive regular funding from the GPNM secretariat for their activities.
    - An interested stakeholder, who wishes to join the partnership as a member, is obliged to apply to the Secretariat indicating its request to join the partnership and submit its logo (in the case of organizations) for posting on the GPNM website.
    - Partners are invited to periodic meetings of the GPNM. It is envisaged that Partnership Forums will be hosted on a biennial basis that will allow the membership to exchange knowledge and experiences, and provide guidance to the workings of the Partnership. These forums may be held in association with the Intergovernmental Reviews (IGRs) of the Global Programme of Action or Global Land-Oceans Connections conferences, typically held in conjunction with the IGRs. Meetings of the GPNM could also be held in conjunction with other Organisational fora such as the International Nitrogen Initiative.

7.1 GPNM Secretariat

43. The partnership is supported by a Secretariat hosted by the Global Programme for the Protection of the Marine Environment from Land-based Activities (GPA) of UN Environment. Day-to-day management and administration of the GPNM is handled by the Secretariat hosted by UN Environment, acting in conformity with the guidance and decisions of an international Steering Committee of the GPNM. Given that UN Environment is governed by UN rules and procedure, the Secretariat will act within the guidelines, procedures and policies of UN Environment. All activities initiated through the Secretariat must conform to these regulations. The Secretariat is managed by staff of UN Environment within the GPA at the Programme Officer and General Staff levels. Other staff resources may be committed to the Secretariat as available. The Terms of reference for the Secretariat are contained in Annex 1.

7.2 GPNM Steering Committee

44. An international Steering Committee gives structure and provides strategic guidance to the GPNM. The Steering Committee shall be constituted only by representatives from partner organizations; that is, the Steering Committee cannot be constituted by members in individual or personal capacities. Functions of the Steering Committee shall include but not be limited to:

    - Guide the GPNM with insights on emerging issues, drawing on the cutting edge knowledge of world experts;
    - Provide high quality, peer-reviewed and evidence-based information and background material to policy makers and practitioners at all levels the GPNM Secretariat;
    - Provide advice and support, and facilitate sharing of knowledge and experiences at regional and country levels;
    - Review and give approval to GPNM work program;
    - Review and where appropriate endorse reports of GPNM activities
    - Provide guidance on program/project development and their implementation;
    - Approve the GPNM work plan, budget, and any changes thereto, in accordance with Partnership mandate and vision;
    - Guide the GPNM Secretariat in setting agenda and holding of periodic global and regional meetings in mobilizing opinion and actions for addressing the nutrient challenge.

45. Given the wide breadth and depth of global nutrient management issues at both technical and policy levels, there must be broad stakeholder representation on the Steering Committee. The following is the indicative stakeholder organization representation on the GPNM Steering Committee[16]:

- Government organisations (from OECD and non-OECD countries)
- Science and academic institutions
- Private sector
- Civil society organisations
- UN organisations

46. The Steering Committee may decide, in its absolute discretion, to vary this membership through the addition of representatives from any specific stakeholders group. Such a decision should be carried by at least two-thirds majority of the Steering Committee membership. The individual organizational designates should rotate every three (3) years. The terms of reference for the Steering Committee are contained in Annex 2.

7.3 Appointment of a Chair and Vice-Chair and procedure for nomination

47. The Steering Committee shall appoint a **Chair** ideally from within its membership to provide guidance to the work of the Steering Committee in discharge of its mandate and represent GPNM in various global and regional meetings as appropriate. The Chair must be a representative of a government organization and shall serve for a three (3) year term. The Chair shall rotate between OECD and non-OECD countries following successive terms. The terms of reference for the GPNM Chair are contained in Annex 3.

48. The GPNM Chair shall be supported by a **Vice-Chair** who shall also be elected by members of the GPNM Steering Committee, and shall serve for a three (3) year term. If the Chair is from an OECD country, the Vice-Chair shall then be from a non-OECD country, and vice-versa. Unlike the position of Chair, the Vice-Chair does not have to be from a government organization. The Vice-Chair should be elected at the same time as the Chair. The terms of reference for the GPNM Vice-Chair are contained in Annex 4.

[16] Membership on the GPNM steering committee (June 2017)

Organization	Gov't	Science/ academia	Private sector	Civil society	IGO	UN
Ministry of Environment and Forests, India	X					
Ministry of Environment, The Netherlands	X					
Chilika Development Authority, India	X					
US Department of Agriculture	X					
US Environmental Protection Agency	X					
NERC Centre for Ecology & Hydrology, under the Department of Business, Enterprise and Industrial Strategy, UK	X	X				
International Nitrogen Initiative		X				
China Agricultural University		X				
Fraunhofer Institute, Germany		X				
UK-China Sustainable Agricultural Innovation Network		X				
International Plant Nutrition Institute		X				
International Fertilizer Industry Association			X			
International Fertilizer Development Centre					X	
Indian Nitrogen Group/Society for Conservation of Nature				X		
United Nations Environment Programme						X
United Nations Development Programme						X
United Nations Food and Agriculture Organization						X

49. A Nomination Committee comprising of at least three (3) members of the Steering Committee shall be constituted on direction of the out-going Chair within 6 months before the end of the terms of the Chair and Vice-Chair. The Nomination Committee shall be chaired by one of its members. The Nomination Committee shall consider suitable candidates from within either the Steering Committee or from outside the Steering Committee, and through criteria determined by the Nomination Committee and approved by the Steering Committee, shall make recommendations to the Steering Committee for consideration and approval. The Rules of Procedure for election of the Chair and Vice-Chair are contained in Annex 5.

7.4 Appointment of Task Teams

50. The Steering Committee shall appoint special **Task Teams** (or working groups) comprised of advisors for conducting specialized work *inter-alia* in development of specific knowledge products that in general will contribute to the GPNM's achievement of its mandate in response to needs. The following GPNM Task Teams have been appointed; (i) Policy development, (ii) Partnership building, (iii) Nutrient Use Efficiency, (iv) Tools and technical extension, (v) Communications, (vi) Phosphorous management. The Task Teams are headed by an appointed lead from among the Task Team members and will serve for duration of time until the objective of the Task Team has been met. Chairs of GPNM Task Teams shall normally serve for three years. The membership of each Task Team shall also be reviewed by the Steering Committee of GPNM every three years with the aim to encourage new members. The terms of reference for the GPNM Task Teams are contained in Annex 6.

7.5 Membership to the GPNM

51. There are two types of GPNM partner members; **(1) Organisational Partners** and **(2) Individual Partners**. Organisational Partners are organizations that provide representation on the GPNM based on alignment of their organizational mandate (or elements of) with the aims and objectives of the GPNM. The organization may designate any one of its representatives as a contact point for the GPNM and should do so upon application for membership. The representative may be changed by the partner organization at any time with written notification to the GPNM Secretariat. Individual Partners are persons who have interest and/or competencies in the field of nutrient management and wish to be associated with the work of the GPNM in advancing the aims and objectives of the Partnership.

52. Application to the GPNM at both organization and individual levels may be done in writing to the GPNM Secretariat via the prescribed form (Annex 8). This form is also available on the GPNM website at www.nutrientchallenge.org. The GPNM, through the Steering Committee may also reach out to establish partnerships with organizations and individuals, based on areas of recognized mutual interest, through solicitation by the GPNM Secretariat.

53. In applying for partnership in the GPNM, applicants agree to contribute to general mandate and scope of work of the partnership as laid out in Sections 3 and 5. Applications will be reviewed and cleared by the Secretariat for consideration of the Steering Committee and formalized through signing of a **Declaration of Commitment** (see

Annex 9). The Steering Committee retains the right to exclude any member that significantly breaches its commitment to the objectives of the GPNM or the roles and responsibilities set out in the Declaration of Commitment.

7.6 GPNM Regional Platforms

54. GPNM Regional Platforms will be established to facilitate transfer the work of the GPNM to the national level based on country clusters by geographical region where nutrient management policy and implementation will likely share similarity. These platforms will foster sharing of knowledge and practices, following alignment as appropriate, to the four main work programme pillars of the overall work programme of the GPNM. These platforms will be encouraged to report up to the global community through the GPNM Steering Committee and other complementary mechanisms, facilitated by the GPNM Secretariat.

55. Each GPNM Regional Platform should be constituted by national governmental representatives, ideally from ministerial portfolios that are of closest relevance to nutrients management, and other stakeholders from business and industry, the science community and civil society organizations. The Regional Platforms should be led by a country-chair that will provide overall leadership in both technical and policy arenas. Where practical, existing mechanisms could be used to host and/or facilitate the work of the regional platform. The platform should develop its own rules of procedure that includes *inter-alia* functional roles and institutional relationships, turn-over of membership and chair rotation.

56. The work of each GPNM Regional Platform should be generally aligned to the workplan of the GPNM at the global level, however with due consideration to variation according to priorities and areas of interest for the region. Based on the four work pillars of the GPNM programme, suggested activities for engagement by the regional platform may include:
    (1) Contribution to development of knowledge (policy & technical) products to inform decision making amongst policy makers, professionals, farmers, private sector;
    (2) Provision of support for piloting and replication of appropriate solutions and improved management and mitigation practices, with focus on developing countries, exchanging lessons with developed countries;
    (3) Generation of awareness resources and social marketing tools and facilitating easy dissemination (via the GPNM platform and other ICT tools) to influence farmers, extension agents, policy makers and other stakeholders to drive change in behaviors and practice; and
    (4) Contribution to continued strengthening of the GPNM to facilitate expanded global and regional partnerships, particularly through regional-level nutrient management platforms.
    (5) Cooperate to partnership-building with existing regional partnerships and platforms with relevance for nutrients (e.g. regional centers of the International Nitrogen Initiative, regional phosphorus platforms, regional multi-lateral environmental agreements).

57. In guiding the work of each GPNM Nutrient Platform, participating countries should agree on the priority areas of common interest. Emphasis needs to be on building on existing

initiatives, but with due recognition of the contributions of collaborating partners. Each GPNM Regional Platform will endeavor to demonstrate value-addition in its contribution, where support is needed to realize synergistic impact and cost savings in pooling and harmonizing efforts. It is recommended that the work of the regional platform be planned and implemented over five-year horizons.

58. It is recognized that ministerial portfolios may either encompass all or part of the nutrient management spectrum (food, energy, agriculture, wastewater management, air quality, climate mitigation, biodiversity protection, coastal zone /marine resource management, water resources management) in any given country, hence it will be left to countries to determine institutional representation on the platform. It should be noted however that given the orientation of the GPA and the wider governing framework within the Manila Declaration, and the close nexus to the Regional Seas Programmes, countries are encouraged to maintain close alliances to the Regional Seas focal point agencies (and other regional processes, e.g. air quality and climate change) in cases where the Platform focal point agency may be different. In this regard the UN Environment Regional Seas Programmes and other non-UN Environment administered programmes can be considered as primary entry points given that they are inter-governmental mechanisms with formal governmental constituents. Other relevant intergovernmental processes include the UN Framework Convention on Climate Change and the Convention on Long-range Transboundary Air Pollution (CLRTAP).

59. Regional platforms are envisaged for country clusters in the major global regions of the world namely in Asia, Africa, Europe, the Caribbean, Latin America, North America and the Pacific. Large geographical regions may be sub-divided into sub-regions based on geographic similarity and other common attributes.

60. The GPNM Asia Platform was launched in June 2010 in Delhi, India in partnership with the International Nitrogen Initiative (INI) South Asia Regional Centre. Follow-up meetings were held in November 2011 in Beijing, China, hosted by the China Agricultural University of Beijing in collaboration with the INI East Asia Centre and in November 2015 in DaNang Vietnam during the East Asian Seas Congress in collaboration with the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). It should be noted that there has been collaboration with the South Asia Co-operative Environment Programme (SACEP) that has contributed to regionalization of activities on nutrient pollution in the Bay of Bengal Large Marine Ecosystem.

61. The GPNM Caribbean Platform was launched in May 2013 in Trinidad and Tobago in partnership with the Institute for Marine Affairs of Trinidad and Tobago and the Secretariat of Cartagena Convention, Caribbean Environment Programme Regional Coordination Unit. A follow-on meeting was held in February 2016 with the same partners.

62. GPNM regional platforms for Africa, Europe, North America, Central and South America and the Pacific are to be established over time. However, where existing mechanisms exist these will be utilized. There may be possibilities to embed within Regional Seas Programmes and related frameworks, or other regional frameworks and programmes such as the UN Economic Commission for Europe's air and water conventions. The

GPNM Secretariat on behalf of the partnership through UN Environment, will need to explore these avenues through negotiation.

63. Application for membership by organizations and individuals under the Regional Platforms will follow the same procedure as laid out in the 'Membership to the GPNM' section above.

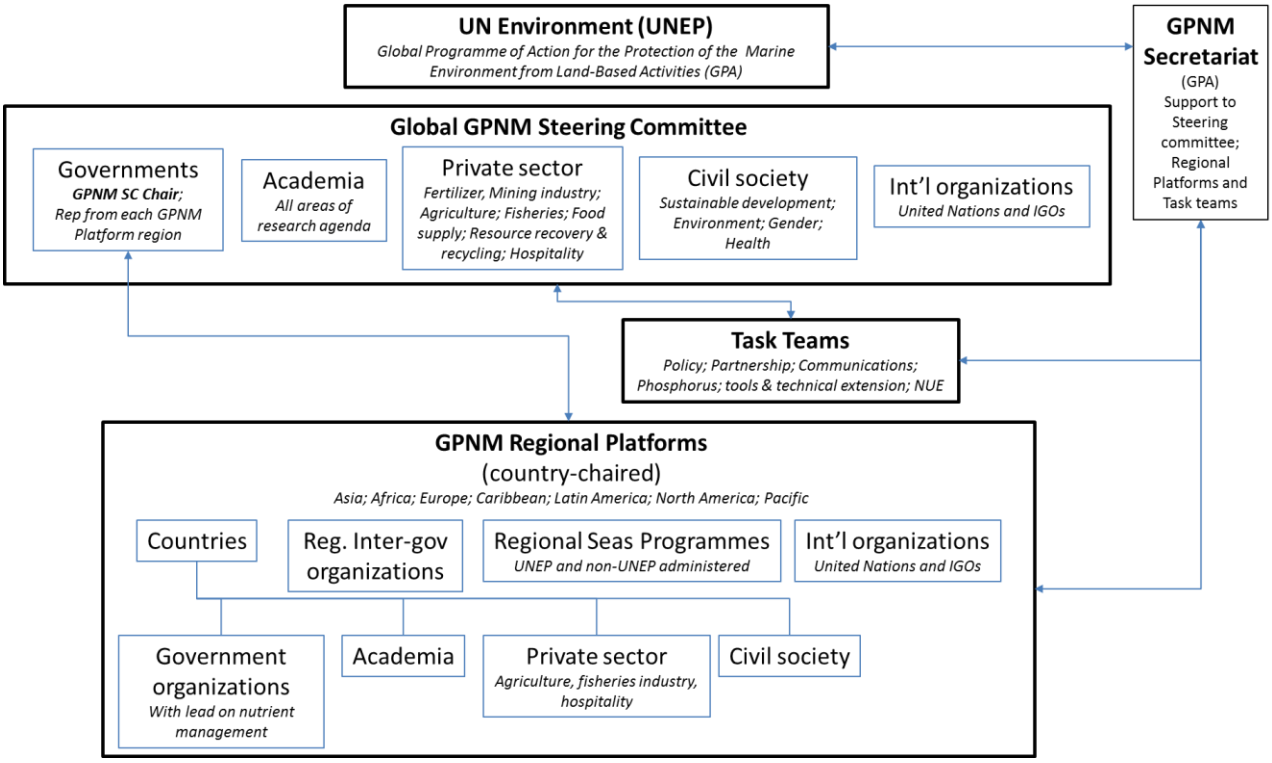

Photo: Relationships between entities within the GPMN framework

64. The terms of reference for the GPNM Regional Platforms are contained in Annex 7.

8. Finance and fund-raising policies

65. There is no membership fee for the GPNM. However the GPNM aims to develop projects/programs and enter into collaboration with agencies to mobilize resources from various sources. The GPNM Secretariat will also support members' initiatives/efforts to mobilize resources from national, regional and international sources.

66. GPNM will work with its members to design global projects for submission to funding mechanisms such as the Global Environment Facility (GEF) through its various focal areas e.g., International Waters, Biodiversity, Land Degradation, Climate Change, etc. The Green Climate Fund is another potential source of funds that may be targeted in the context of

addressing compounding influences of nutrient management and outcomes as a result of changing climate.

67. A coherent approach for resource mobilization from the national through to the regional and global levels is highly desirable. Raising resources through project and programme development will need to be consistent with priorities as recognized by countries. Planned and existing initiatives that have elements of improved nutrient management embedded within will benefit from the GPNM partnerships and where possible, facilitated through the regional platform mechanism. These initiatives could be considered as contributory to the work of the GPNM, underscoring the need to build strong partnerships.

68. GPNM partners should commit to contribute resources either in the form of financial support, in-kind contributions and/or technical expertise for the development and implementation of GPNM activities.

9. Communications, outreach and publications

69. The GPNM seeks to reach out to internal audiences within the Partnership as well as external audiences in communicating on the range of issues of relevance within the nutrient management agenda. The following are the key communications objectives:
    - Develop and share a common vision and message among stakeholders;
    - Build the broadest possible awareness about issues in relation to the inefficient use of nutrients and consequences and the need for a coordinated global crosscutting response;
    - Build stronger global and regional engagement processes and encourage action;
    - Communicate and mainstream best practices tools and promote integrated approaches;
    - Improve understanding of the benefits resulting from multi-stakeholder partnerships involving NGOs, public organizations and private actors;
    - Facilitate cooperation, coordination, information sharing and synergy among the different players to reduce the negative impact of overuse or mismanagement of nutrients on the environment and society.

70. The target audiences for the GPNM include:

    - Governments, including senior policy makers, technical and policy advisors across relevant government sectors/portfolios to include *inter-alia*: agriculture, environment, water, marine affairs, natural resource management, finance. ***Key interest:*** Access to norms, standards, tools and methodologies for effective design, application and mainstreaming of principles of sustainable nutrient management in wider national development frameworks. Provide leadership and assistance to other countries in replication and uptake of good practice.
    - Extension and advisory support services including government and non-government (NGO) extension services. ***Key interest:*** Building and enhancing technical and policy skill sets among stakeholders to facilitate uptake and adoption of best practices.
    - International and United Nations organizational affiliates to include special coordination and development mechanisms and fora: ***Key interest:*** Enhanced ability to coordinate

multi-lateral international and regional-level policy and action, and ability to leverage cooperation from governments, technical partners and donors.

- Private sector to include *inter-alia* fertilizer manufacturers and distributors, the mineral mining industry, farmers, and other crop and livestock production sector interests, the fisheries sector, the food supply chain sector, resource recovery and recycling interests (wastewater recycling), manufacturing sectors and the hospitality sectors. Companies in the field of communication could be targeted to assist in raising awareness and advocacy. *Key interest:* Sharing of technical expertise to assist adoption of good practice in operations.
- Academia such as applied research organizations and universities. *Key interest*: Contributing to building the knowledge base on nutrient cycles and strengthening ability to communicate innovative research-based approaches on efficient nutrient management and reduction of leakage to the environment, and capacity building towards narrowing the science-policy gaps.
- Civil society organizations to include NGOs and other entities. *Key interest*: Lending empowerment to help advocate and convey messages to the targeted interest groups, gender-based interest groups, youth groups and general public.
- International conventions, specifically conferences of parties, associated intergovernmental fora and scientific and technical support mechanisms associated with the convention. *Key interest:* Integrating and mainstreaming the nutrient management agenda in relevant convention articles, commitments and strategic directives.
- Media and the general public. *Key interest*: Improved understanding of the issues of the nutrient challenge and its relevance to audiences and enhanced capability to communicate effectively to audiences in influencing opinions, attitudes and behaviors.

71. The outreach of GPNM will be done under close direction of the GPNM Steering Committee. A special Communications Task Team has been established with the mandate to support the Secretariat in the development of communications and outreach resources. UN Environment's Communications Division will be solicited to provide advisory support through the Secretariat.

72. All available avenues will be used to disseminate resources; this will include online media (social media), radio, television and print media. The Partnership will also produce a quarterly newsletter, factsheets and media-friendly information products derived from technical and policy reports and other sources. The GPNM 'The Nutrient Challenge' web portal will be a primary conduit for dissemination of resources. All GPNM partners are expected to contribute resource material to maintain vibrancy and diversity of information products to capture the interest and engagement of target audiences.

73. Where possible and practical the GPNM through its Secretariat will seek to organize joint events (conferences, seminars, meetings, other mass events) in collaboration with allied partners to raise the profile of the GPNM and its work to mutual benefit.

74. The name "Global Partnership on Nutrient Management" cannot be used for commercial purposes. Official GPNM documents and reports prepared by the Secretariat will include the GPNM logo, the UN Environment logo and accompanying GPA logo, along with a disclaimer in accordance with the relevant guidelines of UN Environment. The logo of the

GPNM should only be used by participants on projects, publications or communications that fall within the scope of work of the Partnership. The collaboration of participants should be duly acknowledged in publications unless a participant does not wish to be associated with the publication. Further, GPNM Partners shall not use the name, emblem or trademark of UN Environment in publications, documents oral/written communications without the expressed prior written approval of UN Environment or of other partners without their expressed permission.

75. The copyright of any publication resulting from or relating to any of the agreed activities carried out under the collaboration of the GPNM or contributing to it will be retained by the participant(s) who prepared the publication. However, the Secretariat has the right to use the information included in these publications for reporting purposes, where due credit and full citation is given to the authors of the parent document being reproduced. UN Environment will follow its copyright approach for use of its own documents.

10. Amendment of charter and operational guidelines

76. This charter and operational guidelines may be reviewed and amended as required. Proposals for amendments may be submitted by any of the Partnership members to the Chair through the Secretariat for consideration. These amendment proposals will be tabled and considered at a meeting of the Steering Committee with the proposed amendment circulated to the Partnership for feedback and adoption by consensus.

****

Annex 1. Terms of Reference for the GPNM Secretariat

At the launch of the GPNM in May 2009 the partners requested the Global Programme of Action for the Protection of the Marine Environment from Land Based Activities (GPA) of the UN Environment (UNEP) to act as the Secretariat for the GPNM. The Secretariat is managed by staff of UN Environment within the GPA at the Programme Officer and General Staff levels. Other staff resources may be committed to the Secretariat as available.

The following are the responsibilities of the GPNM Secretariat:

- Serves as the Secretary of the GPNM Steering Committee;
- Receives, reviews, clears new membership applications on advice of the Steering Committee;
- Supports the setting of the agendas for Steering Committee meetings under the direction of the Chair;
- Facilitates the scheduling of quarterly Steering Committee meetings and other meetings of GPNM entities such as Task Teams and Regional Platforms;
- Prepares and finalize minutes of meetings within which the Secretariat participates and seeks to record of minutes from other meetings the Secretariat may not be involved with (e.g. Task Team meetings, Regional Platform meetings), for purposes of documentation;
- Circulates all relevant documentation in advance of meetings of the Steering Committee and other meetings as required;
- Prepares biennial work plans for the GPNM that includes the work of the regional platforms, and finalize based on inputs from the Steering Committee toward adoption;
- Ensures the realization of the targets and milestones of the work Plans, report on implementation progress, challenges and recommendations for modification at each Steering Committee meeting, and as required;
- Assists countries in provision of relevant policy and technical information as requested;
- Prepares any reports as required by the Steering Committee, the Task Teams and the Regional Platforms to support their work;
- Maintains a database of all communications between the GPNM, internal and external stakeholders and makes available on request to the Steering Committee and UN Environment;
- Maintains the GPNM web portal for information dissemination through the direct contribution of information by the Secretariat and through solicitation of information inputs from the Steering Committee, the wider Partnership and external stakeholders;
- Maintains a database and mailing list of GPNM partners and relevant entities at the global level and for the Regional Platforms;
- Publishes the GPNM quarterly newsletters based on inputs from the Steering Committee, the wider Partnership and external stakeholders;
- Publishes under direction of the Steering Committee, any contributory Task Teams and authors, policy and technical documentation following review and adoption;
- Organizes and facilitates the convening of special meetings (e.g. those of Task Teams) of the GPNM as required;
- Liaises and communicates between the GPNM and UN Environment on joint matters at the UN Environment agency management level and in respect to fora such as the United Nations Environment Assembly (UNEA) and Regional Seas Programmes;

- Supports the conceptualization, development and implementation of project initiatives through donor resource mobilization and partnership building in consultation with the Steering Committee and the GPNM Chair.

Annex 2. Terms of Reference for the GPNM Steering Committee

The constitution of the global Steering Committee shall reflect the diversity in institutional engagement on the nutrient management agenda at the global level. Members of the GPNM Steering Committee must represent organizations; that is, not to serve in individual capacities. There should be representatives from (1) government organizations with lead responsibility for nutrient use and pollution abatement, (2) academia engaged in active research on the subject, (3) the private sector, including but not limited to the fertilizer industry, food supply industry, manufacturing sector, (4) technical support agencies specializing in capacity building, outreach and education, (5) non-governmental organizations with responsibility for relevant aspects of the nutrient agenda with focus *inter-alia* on health, gender issues, environmental management and livelihoods strengthening, (6) relevant United Nations bodies, specifically the Food and Agriculture Organization, UN-Habitat and UNDP and (7) lead national designates from each of the GPNM Regional Platforms. UN Environment is represented on the Steering Committee as Secretariat.

To realize adequate sectoral diversity in representation without making administration unwieldy, the number of organization members on the Steering Committee should not exceed 20 (inclusive of representatives from Regional Platforms). A minimum of 10 organization members should serve on the Steering Committee to achieve viable decision making. The maximum and minimum number of members serving on the Steering Committee is however left to the discretion of the Steering Committee, depending on prevailing circumstance.

Members shall be appointed to the GPNM Steering Committee by the Chair, in consultation with the Steering Committee and the Secretariat. Solicitation of members to the Steering Committee shall be in writing to the organization concerned, where on receipt of expression of interest and nomination of the designate, confirmation of same will be returned by the Secretariat in writing.

There are no fixed term limits of organization members of the Steering Committee. Member organizations shall serve for as long as there remains expressed interest, however the individual organizational designates should rotate every three years. In cases where the organization representative no longer functions actively in the work of the Steering Committee, the GPNM Chair will reserve the option to remove that member on advice of the Steering Committee and the Secretariat.

In case of unavailability for a specific meeting, designates of organization members that serve on the Steering Committee may appoint an alternate to represent them at that meeting with prior notification to the Steering Committee through the Secretariat.

The Steering Committee members have the following responsibilities:

- Attend and actively participate in Steering Committee meetings either via virtual teleconferencing or in person;
- Contribute to the review of Steering Committee minutes, and make inputs toward finalization as required;

- Advise the wider Partnership on relevant policy and technical issues and priorities on sustainable nutrient management;
- Serve on special Task Teams and Regional Platforms based on specific area of knowledge and experiences in support of the work of the Partnership;
- Contribute to development, review, adoption and implementation of Work Plans of the Partnership and any changes thereto, in accordance with Partnership mandate and vision;
- Assist in the conceptualization and development of proposals for funding targeted initiatives in sustainable nutrient management on behalf of countries and/or regions and their implementation;
- Identify, evaluate and approve potential new funders and partners;
- Serve as GPNM representatives in various fora (meetings, conferences) to promote awareness of and represent the partnership;
- Review and provide inputs to GPNM policy and technical documentation in a timely manner;
- Guide the GPNM Secretariat in setting agenda and holding of periodic global and regional meetings in mobilizing opinion and actions for addressing nutrient challenge.
- Make decisions on the removal of partners from GPNM, in the case that the partner continues to act against the interests of the partnership.

The quorum for convening meetings shall be at least 2/3 of the members of the Steering Committee.

The Steering Committee will seek in as far as practical, to make decisions based on consensus. Failing to decide by consensus, the Committee will take its decisions by 2/3 majority of the members present in the case of meetings, or of the total membership of the Committee as the case may apply. Further rules of procedure for voting may be determined as necessary at the discretion of the Steering Committee, to be actioned by the Chair.

Annex 3. Terms of Reference for the GPNM Steering Committee Chair

The Chair shall be elected by members of the GPNM Steering Committee, and shall serve for a term of three years. The Chair should be a charismatic and strategic leader who can take the Partnership forward with a focus on the contribution of sustainable nutrient management to food security and sustainable development.

The Chair should be a governmental representative (from a government organization) who has been duly authorized to serve on behalf of the country from which he or she originates. The level of seniority is not considered a deciding factor but it is highly desirous that the candidate is known within the country as an authority on the topic either through work at the technical and/or policy level.

The Chair should ideally be selected from among the GPNM Steering Committee in consideration of the need to be familiar with the work of the Partnership and understand the political and networking dynamic of the Partnership. The Chair should rotate between OECD and non-OECD countries following successive terms.

The Chair shall be supported by a Vice-Chair who will be elected following the similar procedure as for nomination and appointment of the Chair. If the Chair is from an OECD country the Vice-Chair shall be selected from a non-OECD country and vice-versa. If the Chair resigns within 24 months of his/her appointment, then a new Chair shall be appointed from the same country group (OECD / non-OECD) as the predecessor. During the period until the new Chair is appointed, the Vice-Chair shall act as Chair. If the Chair resigns before 24 months from commencement of his/her term, then the Vice-Chair will act as Chair until for the remainder of the 3-year term.

The responsibilities of the Steering Committee Chair, with the support of the GPNM Secretariat, are as follows,

- Direct the setting of Steering Committee meeting agendas in consultation with the Secretariat
- Schedule meetings of the Steering Committee;
- Chair regular meetings of the Steering Committee and any other meetings deemed necessary;
- Direct the Secretariat to transmit as appropriate relevant documentation to Steering Committee members in advance of meetings;
- Ensure that minutes of all meetings are adequately kept;
- Communicate regularly with members of the Steering Committee to ensure that they maintain regular input to the work of the GPNM
- Ensure that decisions of the Steering Committee are followed through and actioned;
- Appoint Task Teams and their members to support the work of the GPNM as required, advise on scope of work of these Task Teams and review the turn-over of Task Team chair and membership to encourage new members. Dissolve any Task Teams once the mission objectives of the Task Team have been deemed complete;

- Direct the Secretariat on solicitation of new members to the GPNM and sign off on solicitation correspondence;
- Lead in the review and acceptance of new members to the GPNM in consultation with the Steering Committee and the Secretariat;
- Advise and contribute to the conceptualization and development of proposals for funding targeting initiatives in sustainable nutrient management at national and regional levels and play active role to support the Secretariat in accessing financial resources;
- Act and communicate on behalf of the GPNM in making formal representation at various fora; meetings, conferences, at national, regional and international levels;
- Constitute a committee (the Nomination Committee) and its membership for the purpose of selection of the incoming GPNM Chair;
- Review and sign-off in consultation with the Secretariat and authors, all GPNM publications, and where necessary, identify individuals as delegates in order to focus on the most important publications the Chair and Steering Committee consider appropriate;
- Ensue that the GPNM Secretariat performs effectively in support to the Partnership.

Annex 4. Terms of Reference for the GPNM Steering Committee Vice-Chair

The Vice-Chair shall be elected by members of the GPNM Steering Committee, and shall serve for a term of three years. The Vice-Chair should have strategic leadership qualities and be effective in supporting the Chair in taking the Partnership forward, with a focus on the contribution of sustainable nutrient management to food security and sustainable development.

The Vice-Chair should ideally be selected from among the GPNM Steering Committee in consideration of the need to be familiar with the work of the Partnership and understand the political and networking dynamic of the Partnership. If the Chair is from an OECD country, the Vice-Chair shall be from a non-OECD country, and vice-versa. The Vice-Chair position will then alternate between OECD and non-OECD countries.

Unlike the position of Chair, the Vice-Chair does not have to be a governmental representative. Level of seniority is not considered a deciding factor but it is highly desirous that the candidate is an authority on the topic through related work within public or private sectors, within research/academia or other non-governmental entities.

The Vice-Chair does not automatically assume the post of Chair at the end of his/her mandate. To become Chair, he/she must be nominated and elected, following general procedures that apply to election of the Chair. The election for the Chair and the Vice-Chair will be held at the same time. It follows that the Vice-Chair may not be appointed for a 2nd term as Vice-Chair. At the end of his/her term, he/she may be nominated for the position of Chair should he/she represents a government organization.

It should be noted that if the Chair resigns within 24 months of his/her appointment, then a new Chair shall be appointed from the same country group (OECD / non-OECD) as the predecessor. During the period until the new Chair is appointed, the Vice-Chair shall act as Chair. If the Chair resigns before 24 months from commencement of his/her term, then the Vice-Chair will act as Chair until for the remainder of the 3-year term.

The responsibilities of the Steering Committee Vice-Chair, with the support of the GPNM Secretariat, are as follows:

- In the absence of the Chair, chair meetings of the Steering Committee and any other meetings deemed necessary;
- Support the Chair in ensuring that decisions of the Steering Committee are followed through and actioned;
- Support efforts of the Chair and Secretariat in solicitation of new members to the GPNM;
- Support the Chair in contributing to the conceptualization and development of proposals for funding targeting initiatives in sustainable nutrient management at national and regional levels and play active role to support the Secretariat in accessing financial resources;
- In the absence of the Chair, act and communicate on behalf of the GPNM in making formal representation at various fora; meetings, conferences, at national, regional and international levels;

- Support the Chair in review, and edit in consultation with the Secretariat and authors, all GPNM publications;
- Support the Chair in ensuring that the GPNM Secretariat performs effectively in support to the Partnership;
- Support the Chair in execution of all duties as deemed necessary.

Annex 5. Procedure for election of the GPNM Chair and Vice-Chair

A Nomination Committee (NC) comprising of members of the Steering Committee will be appointed by the GPNM Chair, on endorsement by the Steering Committee. The NC should comprise either 3 or 5 members so as to ensure an odd number should of voting be necessary to arrive at a decision. The NC should have 'balanced representation' so as to draw from (i) Government, (ii) Industry, (iii) Academia and (iv) Non-governmental organisation representatives on the Steering Committee. The NC shall be chaired by one of its members.

The Chair of the NC will invite potential candidates from the eligible global region that is next in line, to submit written Expressions of Interest (EoIs) that includes (1) a statement of motivation emphasizing his/her commitment to GPNM and his/her vision and priorities, (2) a CV and (3) a letter of authority from the organisation whom the candidate represents.

The NC shall review the EoIs from applicants and reduce to a shortlist of ideally no more than 3 candidates for consideration. The NC shall review the candidate suitability based on criteria contained within the Terms of Reference for the Chair and Vice-Chair (Annexes 3 and 4 respectively) and make a recommendation on final selection to the Chair and Steering Committee for consideration.

The NC will nominate candidate(s) to the GPNM Chair and Steering Committee. Where the NC decides to nominate only one candidate to the Steering Committee it is open for the Steering Committee to accept, reject or request that other candidates be considered for nomination. Should there be unanimous agreement by the Steering Committee on the successful candidate as per the evaluation, the GPNM Chair will first inform the Secretariat on the selection, and notify the successful candidate in writing. In cases where there is a split of opinion among Steering Committee members in recommendation for selection, the Chair may request that the nominees be put up to a vote by the Steering Committee.

This may be done either at the time of meetings of the Steering Committee or through email within a prescribed time limit.

Once the candidate selection is complete, confirmation of acceptance from the candidate will be required.

Annex 6. Terms of reference – GPNM Task Teams

Task Teams may be appointed for the purpose of conducting specialized work in development of specific knowledge products and other outputs that will contribute to the GPNM's achievement of its mandate in response to stakeholder needs. Members of Task Teams may be drawn from the Steering Committee or external to the Steering Committee or the GPNM altogether. Addition members may be drawn in depending on how needs may evolve with the task(s). The following GPNM Task Teams have been appointed[17]; (i) Policy development, (ii) Partnership building, (iii) Nutrient use efficiency, (iv) Tools and technical extension, (v) Communications, (vi) Phosphorous management.

Each GPNM Task Teams is headed by a chair, appointed from among the Task Team members by the GPNM Steering Committee. The chair and members will serve for duration of time until the objective of the Task Team has been met in the case of short duration tasks of less than three years. For tasks requiring longer duration activity, the Task Team Chair and membership shall be reviewed every three years, anticipating a turn-over to allow new members and contributions, according to the discretion of the GPNM Steering Group. The organization of work of the task teams will be left to the Chair and its members. The GPNM Chair and by extension the Steering Committee will be obliged to request updates on Task Team work-program, progress and deliverables as required.

The following GPNM Task Teams are identified, though other Task Teams may be identified in future:

Policy development

- Identify emerging policy issues and articulation of approaches for addressing these issues from national to global level within the capacity and capability of the GPNM;
- Define linkages between the nutrient management agenda to the wider SDG development agenda and position the GPNM to contribute to global policy development and reform;
- Organize events related to GPNM and policy development.
- Contribute to policy shaping on relevant UN Environment initiatives that involve sustainable nutrient management;
- Contribute to the drafting and production of policy briefs for stakeholder awareness-raising;
- Promote the GPNM as a premier forum for advancement of the global nutrient management agenda;
- Report on the work of the Task Team and achievements for meetings of the GPNM Steering Committee (and as otherwise required) and gain feedback toward enhancement of its work.

Partnership building

- Solicit engagement of new partners and support the Secretariat in reaching out to potential new partners;

[17] As at June 2017

- Review expressions of interest from new partners and make appropriate recommendation to the GPNM Steering Committee on approval of membership;
- Contribute to development awareness-raising resources to assist in soliciting new partnerships;
- Support the Secretariat in the maintenance of a database of relevant partners and keep track of innovation in sustainable nutrient management among partners that can be incorporated into the work of the GPNM;
- Support the work of the Secretariat in strengthening the regional GPNM platforms particularly in engagement of governments and regional-level partners in representation on the regional platforms;
- Report on the work of the Task Team and achievements for meetings of the GPNM Steering Committee (and as otherwise required) and gain feedback toward enhancement of its work.

Nutrient Use Efficiency

- Contribute to global science of indicators development related nutrient use efficiency with relevance to the SDG targets and other monitoring frameworks;
- Develop policy briefs and other relevant knowledge products on NUE and contribute resources to the global nutrient management toolbox;
- Provide technical advisory support as necessary and review technical resources on NUE contributed by other partners;
- Support the work of the other GPNM Task Teams around NUE as relevant;
- Advocate for nutrient use efficiency to the policy (political) agenda; provide support for decision and policy makers (at the scientific-policy interface);
- Report on the work of the Task Team and achievements for meetings of the GPNM Steering Committee (and as otherwise required) and gain feedback toward enhancement of its work.

Tools and technical extension

- Review and assess the uptake of resources provided in on-line tools developed through GPNM (e.g. the “global nutrient management toolbox”);
- Lead the upgrading on-line tools for improved nutrient management and secure resources as needed;
- Actively promote the awareness and the use of tools developed by GPNM among stakeholders and solicit partnerships to promote their use;
- Develop relevant promotional resources related to tools and technical extension for nutrient management (e.g. eXtension services);
- Contribute to the development and execution of capacity building initiatives on sustainable nutrient management with partners;
- Report on the work of the Task Team and achievements for meetings of the GPNM Steering Committee (and as otherwise required) and gain feedback toward enhancement of its work.

Communications

- Review and further develop the Communications Strategy in support of the work of the GPNM;
- Oversee the general execution of the Communications Strategy;
- Contribute to the development of targeted outreach resources by the GPA and the Partnership members, including special projects;
- Articulate guiding principles for communications and information content and dissemination between the GPNM and UN Environment;
- Identify and collaborate with focal points with responsibility for communications/outreach amongst GPNM partners (and associates) to assist in disseminating information and products within their own networks and provide feedback to the Task Team on further outreach opportunities;
- Review website content and advise on structure;
- Report on the work of the Task Team and achievements for meetings of the GPNM Steering Committee (and as otherwise required) and gain feedback toward enhancement of its work.

Phosphorous management

- Contribute to and support technical work to include *inter-alia*: evaluation of key phosphorus management approaches, assessing P soil stocks and understanding the dynamics, assessing P interactions with micronutrients, assessing synergies and co-benefits of P management with other global cycles;
- Identify the benefits of improving phosphorus use efficiency to the policy (political) agenda; provide support for decision and policy makers (at the scientific-policy interface);
- Contribute to improving mechanisms to access P data;
- Promote inclusion of better P management within the SDG agenda;
- Contribute to better understanding of the economics of phosphorus and theory drivers in relation to access and use by farmers;
- Contribute to the agreement and development of appropriate indicators;
- Develop a 'suite of policy options' for governments/stakeholders that outline 'quantified benefits' of committing to a particular combination of policy options to reduce a region's P vulnerability;
- Facilitate knowledge transfer between stakeholders and governments (including the wider community).

Annex 7. Terms of Reference for the GPNM Regional Platforms

GPNM Regional Platforms facilitate transfer of work of the GPNM to the regional level based on country clusters by geographical region where nutrient management policy and implementation will likely share similarity. These Platforms foster sharing of knowledge and practices, following alignment as appropriate, to the four main work programme pillars of the overall work programme of the GPNM. These platforms are expected to report up to the global community through the GPNM global steering committee, facilitated by the GPNM Secretariat.

In guiding the work of the Platform, participating countries should agree on the priority areas of common interest. Emphasis needs to be on building on existing initiatives, where more support is needed to realize synergistic impact and cost savings in pooling and harmonizing efforts. It is recommended that the work of the Regional Platform be planned and implemented over five-year horizons.

It is recognized that ministerial portfolios may either encompass all or part of the nutrient management spectrum (agriculture, wastewater management, coastal zone /marine resource management, water resources management) in any given country, hence it will be left to countries to determine institutional representation on the Platform. It should be noted however that given the orientation of the GPA and the wider governing framework within the Manila Declaration, and the close nexus to the Regional Seas Programmes, countries are encouraged to maintain close alliances to the Regional Seas focal point agencies in cases where the Platform focal point agency may be different. In this regard the UN Environment Regional Seas Programmes and other non-UN Environment administered programmes can be considered as primary entry points given that they are inter-governmental mechanisms with formal governmental constituents. It should be added however that other regional-level frameworks (outside regional seas programmes) could also be considered as entry points for these platforms as appropriate and practical, based on existing collaborations.

Regional Platforms are envisaged for the major global regions of the world namely, Asia; Africa; Europe; Caribbean; Latin America; North America; Pacific. Consideration may be given to designating sub-regions based on geographical commonalities.

The Regional Platform should be constituted by (1) national governmental representatives, ideally from ministerial portfolios that are of closest relevance to nutrients management, and other stakeholders from (2) business and industry, (3) the science community and (4) civil society organizations.

The regional platforms should be led by a country-chair that will provide overall leadership in both technical and policy arenas.

The work of the regional platform should be aligned to the workplan of the GPNM at the global level which is clustered into four key areas;

- Contribution to development of knowledge (policy & technical) products to inform decision making amongst policy makers, professionals, farmers, private sector;

- Provision of support for piloting and replication of appropriate solutions and improved management practices for sustainable nutrient management and pollution reduction with focus on developing and developed countries mutually exchanging lessons from their experience;
- Generation of awareness resources and social marketing tools and facilitating easy dissemination (via the GPNM platform and other ICT tools) to influence farmers, extension agents, policy makers and other stakeholders to drive change in behaviors and practice; and
- Contribution to continued strengthening of the GPNM to facilitate expanded global and regional partnerships, particularly through Regional-level Nutrient Management Platforms.

The following are the proposed key activities of the Regional Platforms:

- Support countries in strengthening laboratory and human resource capacity for monitoring nutrient loading, nutrient mining and impacts;
- Develop and/or strengthen indicator baselines to support assessments;
- Support assessment approaches to identify nutrient load/mining hotspots and impacts;
- Assist the design and development of regional-level initiatives on affected ecosystem restoration, and enhancement of knowledge sharing on nutrient management;
- Contribute to bridging the science-policy interface for improved decision-making;
- Support policy and technical capacity building to implement best practices;
- Assist identification and making available best management practices (e.g. new and emerging technologies; wastewater use, use of animal and human bio-solids) to stakeholders;
- Strengthen national and regional inter-agency cooperation mechanisms;
- Support resource mobilization efforts for national and regional initiatives;
- Lend support to adoption/ratification of relevant national and regional agreements that promote sustainable nutrient management and enhanced environmental stewardship;
- Develop and execute national and regional communications strategies to raise awareness.

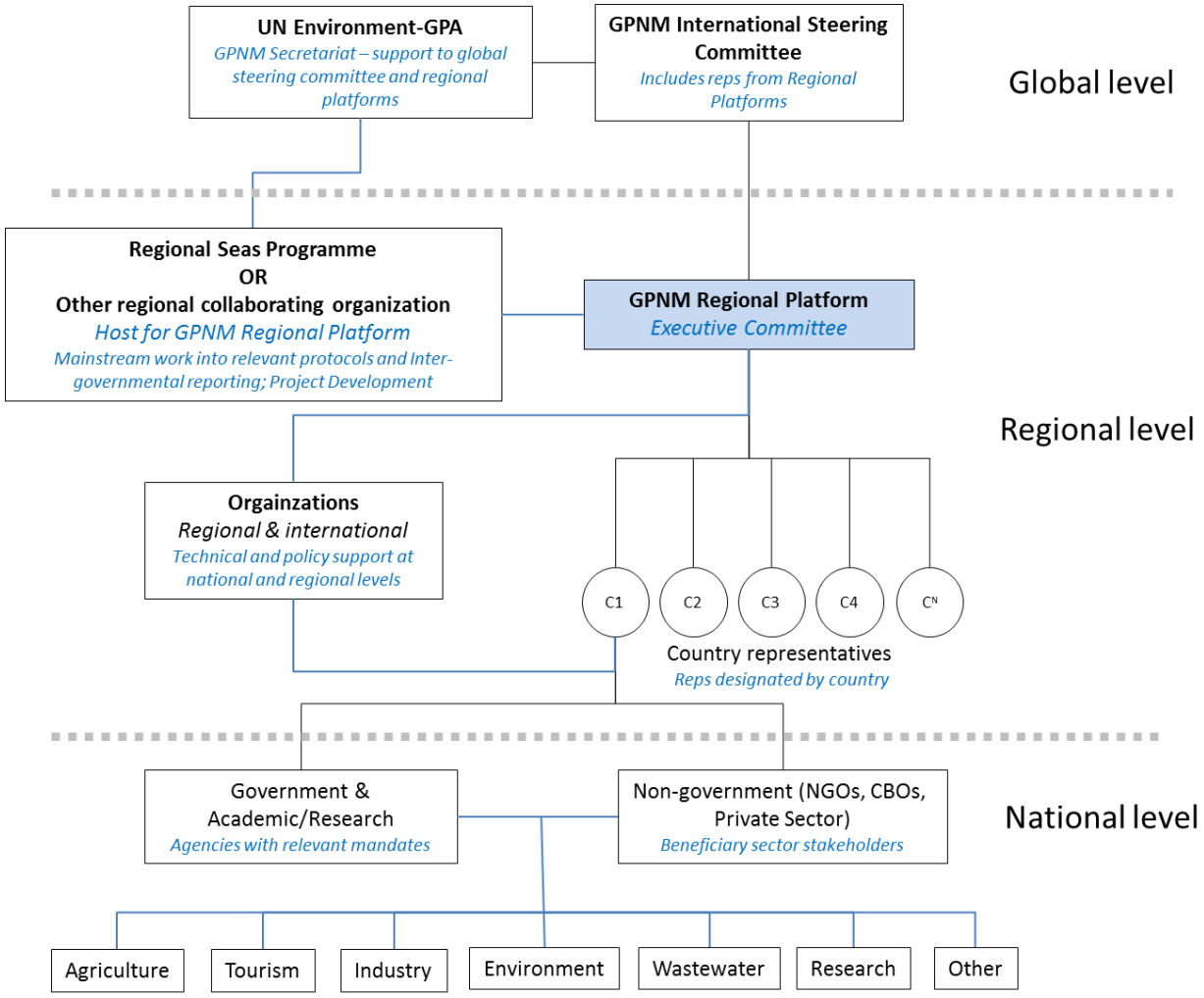

Photo: Proposed relationship structure at Global, Regional and National level for GPNM

Annex 8. GPNM Membership Application

Application to the Global Partnership on Nutrient Management

Please return the completed application to the GPNM Secretariat at: gpa@unep.org

Membership type *(check)*: ☐ Organization application ☐ Individual application

Name of institution OR Name of individual	
Type of institution:	
Department:	
Address:	
Website:	
Areas of expertise:	
Key programmes and projects related to nutrient management:	
Existing collaboration(s) under other initiatives/ frameworks:	
Name of primary focal point:	
Job title:	
Phone:	
E-Mail:	
Name of alternate focal point:	
Job title:	
Phone:	
E-Mail:	

Contribution to the Global Partnership on Nutrient Management

Joining as GPNM Partner it is expected that the applicant will **actively contribute to one or more** of the main pillars (work areas) of the GPNM:

1. **Knowledge generation:** Contribute to the global and regional knowledge-base on technical and policy experiences on nutrient management, identify relevant global to national research needs to fill knowledge gaps and support the development of, and/or strengthening of targets and indicators on progress to improved nutrient use efficiency, relevant socio-economic outcomes and impacts to the receiving environment.
2. **Policy and technical support:** Facilitate and/or develop new approaches, projects on sustainable nutrient management, contribute to dissemination of knowledge and experiences to support actions, facilitate exchange of scientific data, methodologies and research applications.
3. **Outreach and awareness raising:** Develop networks among GPNM partners and other stakeholders to establish and strengthen communities of practice, identify, review and compile best practices, and disseminate through web and face-to-face meetings, workshops and other fora.
4. **Partnership and network development:** Facilitate dialogues for policy reform in support of technological and management innovation, support countries in the development of required legal and regulatory instruments and fiscal incentives to enhance the ability to make and sustain investments in improved nutrient management and pollution control.

The GPNM Steering Committee has established Task Teams[18] (working groups) to focus on key themes to deliver specific results to execute the mandate of the GPNM. Partners are encouraged as needs arise, to actively contribute to the work of these task teams. In consideration of the foregoing, please briefly outline the areas that you feel your organization (or you, in the case of individual membership) can bring value to, based on your organization's (or your individual) competencies:

Upon acceptance of membership to the partnership, a Declaration of Commitment will be signed by the GPNM Chair and by the authorized representative of the new partner. The logo of the organisation will be requested solely for purposes of partnership acknowledgement on the GPNM website and outreach material.

I certify that the information supplied is correct.

Member
Signature: _____ Date: _____

Please return the completed application to the GPNM Secretariat at: gpa@unep.org

[18] Current GPNM Task Teams: (i) Policy development, (ii) Partnership building, (iii) Nutrient Use Efficiency, (iv) Tools and technical support, (v) Communications, (vi) Phosphorous management.

Annex 9. Sample Declaration of Commitment statement

Declaration of Commitment

The _____ <name of organization> has been accepted as an Organisational Partner / Individual Partner of the Global Partnership on Nutrient Management (GPNM) from _____<month>_____ <year>. As a GPNM Partner the _____ <name of organization/ individual> agrees to contribute to the furthering of the mandate of the GPNM in promoting sustainable management of nutrients.

The partnership is voluntary and does not create any legally binding rights or obligations between or among its members or any other entities under domestic or international law. The partners are not obligated in any way to contribute financially to the GPNM nor do they receive regular funding from the GPNM Secretariat for their activities. To foster a community of interest, partners may be asked to provide access to relevant information, tools, cases of best management practices that they have at their disposal for wider dissemination and use in making policy and investment decisions for improved nutrient management. Partners may be invited to meetings and fora of the GPNM and accordingly, given access to meeting agendas and other relevant materials.

On receipt of information that a partner may be breaching the spirit of cooperation and causing due harm to the image and/or reputation of the GPNM, the GPNM via its Steering Committee, may consider and review such information, and upon conclusion by assessment, opt to exclude the Partner from being further associated with the GPNM, and withdraw partnership status.

This Declaration of Commitment shall remain in effect until such time either party provides written notification seeking request for termination of the partnership.

Signed on behalf of:

_____	_____
<Name of individual / organization>	Chair, Global Partnership on Nutrient Management
Dated: _____	Dated: _____

Annex 10. Other operational procedures

1. GPNM Publications Procedure

The GPNM recognises that different approaches to development of publications (printed or electronic) are needed per the type of publication:

a) Position papers: These are substantive technical outputs subject to peer review, negotiation and acceptance by the GPNM Steering Committee;
b) Briefing papers, briefing notes and information releases: prepared by GPNM members and others, including the GPNM newsletter prepared by the Secretariat;
c) Contributions: submissions from the GPNM to publications that are led by another body, organisation or partnership.

a) Position papers:

The following procedure shall apply for GPNM Position Papers developed either by specially appointed task teams, working groups, or the Secretariat on behalf of the GPNM. These procedures may be reviewed and amended as appropriate at any point, upon recommendation by GPNM Steering Committee members. Revisions will be made by either a special task team or working group with responsibility for communications of the GPNM or the Secretariat under overall guide of the GPNM Chair. Amended Procedures will be adopted by at meetings of the GPNM Steering Committee.

The following are the key steps in the process:

1. Lead author(s) develop a one-page concept note on the future publication, which will be shared with the relevant Task Team/Working Group and the Steering Committee to seek their comments before working on the First Draft;
2. Develop the First Draft text by the lead author(s);
3. Circulate the First Draft for input and comments to Task Team/Work Group members. Several rounds of inputs/comments may be needed;
4. Develop a revised 'Zero Draft' by the lead author(s). At this stage it will be desirous to include photos, infographics, diagrams, etc (accompanied with credits) within the draft to emulate the desired layout of the finished product;
5. Dispatch the Zero Draft to GPNM Secretariat by Task Team/Work Group leader;
6. Circulate the Zero Draft (by the GPNM Secretariat) to the GPNM Steering Committee with copy to the lead author(s) and Task Team/Work Group leader. The GPNM Steering Committee will be given a deadline for submission of inputs;
7. Prepare Revised Draft(s) versions and the Draft Final version by the lead author(s) based on inputs. The number of versions and process duration may depend the nature of comments from the GPNM Steering Committee and depth of consultations among collaborators (that may include external advisors);
8. Submit the Draft Final Version to the GPNM Secretariat by the Task Team Task Team/Work Group leader;
9. Prepare the Final 'layout' Version by the GPNM Secretariat. This may entail the outsourcing to UN Environment's publications support services;

10. Circulate the Final 'layout' Version by the GPNM Secretariat to the GPNM Steering Committee for sign-off within a set deadline;
11. Prepare the Final Version by the GPNM Secretariat (based on any final corrections and minor modifications) under direction of the lead author(s) and Task Team/Work Group.
12. Publish the Final Version by the GPNM Secretariat; options may be electronic and/or hardcopy.

NOTE: It must be considered that at any stage in the process there may be objections lodged by GPNM partners. It will be incumbent on the Task Team/Work Group leader and GPNM Chair as needed, to offer solutions to get to consensus in adopting the document as the first line of approach. Where there may be a challenge in getting to consensus, a voting process to arrive at majority consensus may be needed. A 2/3 majority in favour will be deemed an acceptable margin for acceptance. In this case, opposing partners will be invited to formally express reservations in writing for the record. These comments may be summarized and included in the publication as deemed appropriate.

GPNM position papers will contain a disclaimer stating that GPNM publications reflect the view of the majority of GPNM partners but not necessarily the views of all GPNM partners. In addition, GPNM publications may contain other disclaimers as needed, e.g. disclaimers of liability or disclaimers on geographical boundaries.

b) Briefing papers, briefing notes and information releases

These documents are generally oriented toward sharing information and providing updates. These may be prepared by the Secretariat and/or other members of GPNM, at the invitation of the Chair or Secretariat. They shall in all cases declare the authorship of the material and provide disclaimers where necessary. Material prepared by the Secretariat may be identified as "prepared by the GPNM Secretariat". Materials prepared by other contributors should note the names and affiliations of the authors.

The review process will not require consensus by the GPNM Steering Committee on account of the nature of the content. The extent and depth of review prior to release will be assessed at the discretion of the Secretariat and with further consultation with the GPNM Chair and Steering Committee as deemed necessary. In order to manage potentially diverging views efficiently, briefing documents and other information releases may include a statement after the names of the authors: "This document is a contribution to the work of GPNM. The views expressed are those of the authors."

c) Contributions

Contributions by the GPNM to publications led by other collaborators may be informative and/or technical in nature. Where contributions are of a more 'general', informative nature, acknowledgement as an input from the GPNM will be appropriate. These will not require review inputs by the GPNM Secretariat, or the Steering Committee per-se; the assumption being made that contributors will exercise discretion in making contributions so that they are in line with positions advanced by the GPNM in its existing resources and publications. The contribution of GPNM to other publication processes will be considered on a case-by-case basis as the need arises.

In all cases there should be author attribution of the contribution and acknowledgement of the contribution of GPNM as a partnership. These shall be subject to the publication procedures of the body publishing the information, and include disclaimers as necessary.