United States comments on Biodiversity Program 8
Adler Miserendino, Rebecca A

to:
'castrup@worldbank.org', 'rramankutty@thegef.org', 'gfonseca1@thegef.org',
'ywatanabe@thegef.org', 'secretariat@thegef.org'
12/23/2013 09:32 AM
Cc:
"Klepp, Deborah E (OES)", "Nissen, Andrew H", "Thompson, John E",
"'bella.tonkonogy@treasury.gov'", "'Clarence.severens@treasury.gov'", "Garber, Judith G",
"'Matthew.Kotchen@treasury.gov'"
Hide Details
From: "Adler Miserendino, Rebecca A" <AdlerMiserendinoRA@state.gov> Sort List...

To: "'castrup@worldbank.org'" <castrup@worldbank.org>, "'rramankutty@thegef.org'" <rramankutty@thegef.org>, "'gfonseca1@thegef.org'" <gfonseca1@thegef.org>, "'ywatanabe@thegef.org'" <ywatanabe@thegef.org>, "'secretariat@thegef.org'" <secretariat@thegef.org>

Cc: "Klepp, Deborah E (OES)" <kleppde@state.gov>, "Nissen, Andrew H" <NissenAH@state.gov>, "Thompson, John E" <ThompsonJE2@state.gov>, "'bella.tonkonogy@treasury.gov'" <bella.tonkonogy@treasury.gov>, "'Clarence.severens@treasury.gov'" <Clarence.severens@treasury.gov>, "Garber, Judith G" <GarberJG@state.gov>, "'Matthew.Kotchen@treasury.gov'" <Matthew.Kotchen@treasury.gov>

2 Attachments

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Dear GEF Secretariat,

Understanding the GEF's interest in revising expediently the GEF-6 Programming Directions document, the United States will submit technical comments on sections of the document as they are completed. Therefore, please find attached our technical comments on Program 8: *Implement the Nagoya Protocol on Access and Benefit Sharing* and a marked up version of the Programming Directions Program 8 text. We hope these will

improve clarity and consistency with COP guidance. We will send additional comments in the coming weeks on other topic areas.

Sincerely,

Rebecca

Rebecca Adler Miserendino, Ph.D.
AAAS Science &Technology Policy Fellow
Office of Environmental Quality and Transboundary Issues
Bureau of Oceans and International Environmental and Scientific Affairs
Office Phone: +1-202-647-8772
Cell: +1-202-251-3444

United States Comments on GEF-6 Programming Directions:
Program 8: *Implement the Nagoya Protocol on Access and Benefit Sharing*
December 23, 2013

The GEF-6 Programming Directions should not go beyond the provisions found in the Nagoya Protocol, as some of the proposed language currently does. There are no agreed "core key elements" to the Nagoya Protocol and the references to this idea should be removed. We also do not agree that the "core key elements" currently identified in the GEF-6 Programming Directions document are an appropriate reflection of the Nagoya Protocol.

The Nagoya Protocol recognizes that there are many potential users of genetic resources such as academic institutions and non-commercial researchers as well as members of the private sector. This version of the GEF-6 Programming Directions focus too much on the commercialization aspect of access and benefit-sharing instead of how research can contribute to the conservation and the sustainable use of biological diversity.

We are concerned that the language currently in the programming document for Program 8t: *Implement the Nagoya Protocol on Access and Benefit Sharing* focuses too much on the "benefits sharing" part of the Nagoya Protocol. The GEF should clearly acknowledge the linkage between access to genetic resources and ensuing benefits and the programming document should encourage activities that facilitate access to genetic resources.

We have several suggestions for how our above concerns can be addressed in the latest version of the GEF-6 Programming Directions document.

Para. 72:

- Delete "…the fair and equitable sharing of benefits arising from the utilization of genetic resources." This is not the full text of the objective and inappropriate cherry-picks only part of it. We would recommend using the commonly-accepted shorthand of "access and benefit sharing".

- For clarity we recommend adding "CBD" before the word "parties." With this addition, the text should read "Ninety-two CBD parties have signed and 25 have ratified the Nagoya Protocol."

Para. 74b:

- We suggest that "eg" be used instead of "ie" – there are other useful activities that GEF could support that we would recommend the GEF include such as help with streamlining permits and internationally recognized certificates of compliance.

Para. 74c:

- The parenthetical phrase should have the word "people" deleted to say: "including indigenous and local communities, especially women". Nagoya uses "indigenous and local communities". The GEF should not use terminology not found in the Protocol.

- The phrase "including domestic protocols model contractual clauses, and minimum requirements to secure the fair and equitable sharing of benefits" should be removed. This part of the sentence conflates concepts found in Nagoya 12.3 which is limited to traditional knowledge associated with genetic resources. As originally written, the programming document makes it sound like the GEF will support national governments (as opposed to only indigenous and local communities as described in the Nagoya Protocol) in establishing potential protocols, model contractual clauses and potential minimum requirements to secure the fair and equitable sharing of benefits.

Para. 76:

- The phrase "that include the three core key elements of the Nagoya Protocol on ABS: PIC, MAT, and Benefit Sharing" should be deleted. There are not commonly agreed/negotiated "core key elements" of the Nagoya Protocol, and the GEF should not be promoting concepts not found in the Protocol in their documents. For example, facilitated access is a fundamental part of the Protocol but is not mentioned here, and benefit-sharing happens through MAT, rather than as a separate element.

- People from sectors beyond the commercial sector could be interested in genetic resources; this section should be broadened beyond just a commercial focus. We recommend expanding the list of genetic resource users to also include museums, academic institutions and research collections.

United States Text Mark-Ups for GEF-6 Programming Directions:
Program 8: *Implement the Nagoya Protocol on Access and Benefit Sharing*
December 23, 2013

72. The Nagoya Protocol on Access and Benefit Sharing (ABS) provides a legal framework for the effective implementation of the third objective of the Convention on Biodiversity (CBD): ~~"…the fair and equitable sharing of benefits arising from the utilization of genetic resources."~~access and benefit sharing Ninety-two parties have signed and 25 have ratified the Nagoya Protocol. The Protocol will enter into force on the 90th day after the date of deposit of the 50th instrument of ratification, acceptance, approval, or accession.

Comment ["1"]: This is not the full text of the objective and inappropriate cherry-picks only part of it. We would recommend using the commonly-accepted shorthand of "access and benefit sharing".

Comment ["2"]: Insert "CBD" before "parties" for clarity.

73. The GEF will support implementation of the Nagoya Protocol using resources from the GEF Trust Fund and, in parallel, from the Nagoya Protocol Implementation Fund (NPIF). The future of the NPIF will be deliberated upon at the next CBD COP to be held after the initiation of the GEF-6 cycle. The successful implementation of ABS at the national level has the potential to make considerable contributions to biodiversity conservation and sustainable use, and thus is relevant to all Aichi Targets and nearly all of the GEF programs presented in the GEF biodiversity strategy. However, given the incipient nature of the thematic area, and the importance that the COP has placed on ABS both in the way guidance is presented to the GEF and the strong emphasis that has been given on capacity building at this stage, this program is presented as a discrete and important element of the GEF biodiversity strategy and thus merits its own program of support.

GEF Trust Fund Support

74. Projects funded under the GEF Trust Fund will support national and regional implementation of the Nagoya Protocol and, if still required, targeted capacity building to facilitate ratification and entry into force of the Protocol. As such, the GEF will support the following core activities to comply with the provisions of the Nagoya Protocol:

(a) Stocktaking and assessment. GEF will support gap analysis of ABS provisions in existing policies, laws and regulations, stakeholder identification, user rights and intellectual property rights, and assess institutional capacity including research organizations.

(b) Development and implementation of a strategy and action plan for the implementation of ABS measures. (i.e. policy, legal, and regulatory frameworks governing ABS, National Focal Point, Competent National Authority, Institutional agreements , administrative procedures for Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT), monitoring of use of genetic resources, compliance with legislation and cooperation on trans-boundary issues); and

Comment ["3"]: Suggest that this should be "eg" instead of "ie" – there are other useful activities that GEF could support that we would recommend the GEF include such as help with streamlining permits and internationally recognized certificates of compliance.

(c) Building capacity among stakeholders (including indigenous ~~peoples~~ and local communities, especially women) to negotiate between providers and users of genetic resources~~, including domestic protocols model contractual clauses, and~~

Comment ["4"]: Nagoya uses "indigenous and local communities". The GEF should not use terminology not found in the Protocol.

~~minimum requirements to secure the fair and equitable sharing of benefits.~~ [
Countries may consider institutional capacity-building to carry out research and development to add value to their own genetic resources and traditional knowledge associated with genetic resources. The GEF will also support the participation in the ABS Clearing-House mechanism as soon as the Clearing-house is operational.

75. The GEF will also enhance national implementation of the Nagoya Protocol through regional collaboration. Regional collaboration would help countries promote research and development to add value to their own genetic resources and traditional knowledge associated with genetic resources within their regions to avoid duplication of regulatory mechanisms while encouraging intra-regional collaboration. Regional collaboration can also address the financial and human resource constraints faced by small or least developed countries through sharing regulatory and scientific resources.

Nagoya Protocol Implementation Fund (NPIF) Support

76. The primary objective of the NPIF is to facilitate early entry into force and create enabling conditions at national and regional levels for implementation of the Protocol. The NPIF will support opportunities leading to the development and implementation of ABS agreements between providers and users of genetic resources ~~that include the three core key elements of the Nagoya Protocol on ABS: PIC, MAT, and Benefit Sharing~~. Providers would include Parties to the CBD as well as those stakeholders providing access to resources on the ground, including indigenous peoples and local communities. Users can include Parties of the CBD as well as those interested in the resources including, for example, sectors like the pharmaceutical industry, biotechnology, ornamental horticulture, ~~and~~ natural personal care and cosmetics, museums, academic institutions and research collections.

Comment ["5]: Editing this sentence so it does not go beyond what is in the Nagoya Protocol. The rest of the sentence conflates concepts found in Nagoya 12.3 which is limited to traditional knowledge associated with genetic resources. As originally written, the programming document makes it sound like the GEF will support national governments (as opposed to only indigenous and local communities as described in the Nagoya Protocol) in establishing potential protocols, model contractual clauses and potential minimum requirements to secure the fair and equitable sharing of benefits.

Comment ["6]: This should be deleted. There are not commonly agreed/negotiated "core key elements" of the Nagoya Protocol, and the GEF should not be promoting concepts not found in the Protocol in their documents. For example, facilitated access is a fundamental part of the Protocol but is not mentioned here, and benefit-sharing happens through MAT, rather than as a separate element.

Comment ["7]: People from sectors beyond the commercial sector could be interested in genetic resources; this section should be broadened beyond just a commercial focus.

U.S. Technical Comments Re: IW, Land Deg. and IAPs
Adler Miserendino, Rebecca A

to:
'castrup@worldbank.org', 'rramankutty@thegef.org', 'gfonseca1@thegef.org', 'secretariat@thegef.org'
01/07/2014 04:37 PM
Cc:
"Klepp, Deborah E (OES)", "Nissen, Andrew H", "Thompson, John E", "'bella.tonkonogy@treasury.gov'", "'Clarence.severens@treasury.gov'", "Garber, Judith G"
Hide Details
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To: "'castrup@worldbank.org'" <castrup@worldbank.org>, "'rramankutty@thegef.org'" <rramankutty@thegef.org>, "'gfonseca1@thegef.org'" <gfonseca1@thegef.org>, "'secretariat@thegef.org'" <secretariat@thegef.org>

Cc: "Klepp, Deborah E (OES)" <kleppde@state.gov>, "Nissen, Andrew H" <NissenAH@state.gov>, "Thompson, John E" <ThompsonJE2@state.gov>, "'bella.tonkonogy@treasury.gov'" <bella.tonkonogy@treasury.gov>, "'Clarence.severens@treasury.gov'" <Clarence.severens@treasury.gov>, "Garber, Judith G" <GarberJG@state.gov>

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1 Attachment

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Dear Gustavo,

Thank you for initiating dialogue last month with PDAS Garber regarding the relationship between the GEF and the Global Partnership for Oceans. As a follow-up to our conversation and in recognition that the Secretariat is interested in revising the GEF-6 Programming Directions document as soon as possible, please find U.S. technical comments on the International Waters and Land Degradation Focal Area Strategies and the Integrated

Approaches. If you think it will be helpful, we welcome a joint meeting with our technical experts later this week to answer any remaining questions you may have. Please contact me and Bella and we can work together to make the appropriate arrangements.

Sincerely,

Rebecca

Rebecca Adler Miserendino, Ph.D.
AAAS Science &Technology Policy Fellow
Office of Environmental Quality and Transboundary Issues
Bureau of Oceans and International Environmental and Scientific Affairs
Office Phone: +1-202-647-8772
Cell: +1-202-251-3444

United States Comments on GEF-6 Programming Directions:
January 7, 2013

Land Degradation Focal Area

The United States appreciates that our technical comments regarding the Land Degradation Focal Area Strategy were considered by the GEF Secretariat during the most recent revision of the GEF-6 Programming Directions document. In September, we expressed concern that the GEF included references to the concept of a "land-degradation-neutral-world" since this language has not been agreed to by the Parties to the United Nations Convention to Combat Desertification (UNCCD). We are satisfied that this language has been removed from the Land Degradation Focal Area Strategy; however, there is still a reference to this concept in the *Climate Smart, Innovative Agro-ecology Thematic Area Small Grant Program.*

To ensure the programming strategy outlined by the GEF-6 Programming Directions document fully reflects the concepts outlined by the UNCCD, we recommend deleting the second sentence of paragraph 13 on page 205 within the *Climate Smart, Innovative Agro-ecology Thematic Area Small Grant Program*. It currently states that the "SGP will support the strategic move towards *land degradation neutrality* by 2035 as stipulated in the Rio+20 outcome document." This statement is inaccurate and misleading: a move to a land degradation neutral world was not "stipulated" by the Rio +20 outcome.

Paragraph 206 of the Rio +20 outcome in the section on Desertification, land degradation, and drought states: "We recognize the need for urgent action to reverse land degradation. In view of this, we will strive to achieve a land-degradation neutral world in the context of sustainable development. This should act to catalyze financial resources from a range of public and private sources." The Rio +20 outcomes are aspirational and non-binding, and each nation should decide what goals to strive for and what methods to employ to reverse land degradation. The GEF is mischaracterizing the spirit of the Rio +20 text on desertification, land degradation, and drought and sustainable development, incorrectly creating a target (2035) where there is none, and also applying the Rio +20 text on land degradation in the context of sustainable development to a different thematic area: climate smart, innovative agro-ecology.

International Waters Focal Area and Related Topics

The United States commends the GEF Secretariat for significant improvements to the International Waters Focal Area Strategy in response to our September technical comments. Below, we provide additional comments on the Focal Area Strategy and input regarding inclusion of the *Rebuilding Global Fisheries Integrated Approach* under the International Waters Focal Area.

International Water Focal Area Strategy:

The United States attributes the success of the International Waters Programming during previous replenishment cycles to a holistic approach to addressing international waters topics –

and an emphasis on transboundary solutions. To ensure the programming under the International Waters Focal Area continues to be successful through GEF-6, the United States has suggestions for how the GEF-6 strategy can be improved.

Drivers:

- This section needs further development. At present, the drivers of degradation in international waters discussed in the section are limited to: (1) increasing and competing demands on freshwater resources and (2) lack of incentives for sustainable marine resource management. Given that the *GEF2020 Strategy* advocated placing a greater emphasis on the GEF addressing the primary drivers of global environmental degradation, we recommend including an expanded discussion of drivers which lead to the degradation of both fresh and marine aquatic ecosystems in the final version of the GEF-6 International Waters Focal Area Strategy. These drivers include, but are not limited to, a lack of alternatives for sustainable livelihoods; commercial and market drivers on a larger scale; and a global demand for limited global goods.

International Waters Goal 3: Enhance multi-state cooperation and catalyze investments to rebuild marine fisheries, restore and protect coastal habitats, and reduce pollution of coasts and Large Marine Ecosystems.

- Restoration and Protection of Coastal Habitats - As proposed, aspects of the International Waters Goal 3 are too limited. The discussion of coastal ecosystem preservation is primarily focused on nutrient management. Although excess nutrients are damaging to coastal ecosystems, pollution is not only a nutrient problem. Within the discussion in paragraph 61, there is a reference made to working in accordance with the Global Program of Action on Land-based Sources of Marine Pollution (GPA). This effort is broader than hypoxia and covers several sources and types of land-based pollution; however, there is not any discussion of addressing anything other than nutrient management. Readers unfamiliar with the GPA would not realize the scope is broader than nutrient management alone. We recommend expanding the discussion of this goal to include: land-based and ship-based marine debris, heavy metals, organic pollutants, sediments, and invasive species. These are all types of pollution that are highly damaging to aquatic ecosystems and for which global environmental benefits could be achieved with GEF support.

- *Program 3.2 and 3.3: Neglect of the Large Marine Ecosystem Approach* – Although the Large Marine Ecosystem (LME) approach is widely regarded as having been successful and almost all LME projects have included aspects focused on addressing or preventing coastal degradation and/or habitat or fisheries as key priority objectives, there is no mention of LMEs or the LME approach in either Program 3.2 or Program 3.3. Additionally, the Results Framework table for IW 3 does not include any LME-related indicators. It would be appropriate for the Integrated Coastal Management and Marine Protected Areas under Program to be implemented within the LME framework. Furthermore, the language used in 3.3 suggests that the projects under this part of the program will be coastal in nature. We request that this be changed to help encourage a

more transboundary approach in line with the core objectives of the International Waters Focal Area.

- *Program 3.3: Fostering Sustainable Fisheries Indicators*- The current Programming Directions draft states that the International Waters goals should align with the World Bank Fisheries Performance Indicators. We strongly recommend that this be removed from the document since these indicators are not widely known nor widely tested for their applicability or suitability.

GEF and the GPO:

While three United States Government agencies are GPO partners, we have concerns over the GEF aligning significant portions of the International Waters Focal Area Strategy with GPO objectives. We do not want the International Waters Focal Area to become limited inadvertently in its scope during GEF-6 as result of close alignment with a single partnership which the GEF does not manage directly. Additionally, since the Programming Directions is a long-term strategic document, the United States does not support aligning programming or Focal Area objectives to support any particular partnership, organization, initiative, or institution. The GPO is in its beginning stages and has not yet had sufficient opportunity to develop a track record or even refine operational procedures for how the organizations within the partnership will contribute to specific projects. These issues need to be resolved and successes need to be proven before the GPO can be in a position to be featured through the GEF.

Detailed Technical Comments-

- Paragraph 1: Paragraphs 2-4 related to competing uses and increasing demands. We request a more explicit discussion of this as part of this introductory paragraph.

- Paragraph 2: Pollution in the ocean is not just about hypoxia. Please include mention of other issues that lead to ocean pollution including land-use impacts such as siltation, and waste disposal (e.g. ballast water, ocean dumping, etc…).

- Paragraph 3: We request this paragraph be amended to include a discussion of requirements for protein, livelihoods, and artisanal and subsistence fishing needs.

- Paragraph 4: Although climate change and pollution are both important, they are not the only issue stressing both marine and freshwater ecosystems. Please include a discussion about other competing uses including but not limited to coastal development, offshore energy and shipping.

- Paragraph 5: We request that this paragraph be expanded to discuss the importance of aquatic ecosystem integrity to support community livelihoods since this is the major motivation for the work funded by the International Waters Focal Area is important.

- Paragraph 6: We appreciate the mention of large marine ecosystems (LMEs), though suggest that the discussion here be expanded to reflect the importance of these ecosystems beyond providing 85% of the world's fish. LMEs provide a vast number of other ecosystem services and there is a case to be made for considering the cumulative impacts of all stressors across multiple sectors.

- Paragraph 7: Importantly, the challenge to provide sufficient food resources should not be limited to a discussion of freshwater systems. Please mention the roles for marine ecosystems in this context as well.

- Paragraph 8: While it is likely understood that that the first sentence in this paragraph refers to fresh water, we suggest clarifying.

- Paragraph 11: We suggest that the discussion of habitat loss be expanded here to include nursery areas for fish that support large fisheries and filtration of harmful toxins, and not only flood regulation and coastal protection.

- Paragraph 15: Please modify the language in this paragraph to more clearly indicate that climate change, population growth, and growing global food demand are not only freshwater issues.

- Paragraph 16: Please modify the language in the paragraph to indicate that a lack of incentives for sustainable resource use is not limited to marine resources. Additionally, this paragraph pointed towards commercial drivers rather than the need to sustain livelihoods. We request that this context of overuse be broadened to include livelihoods drivers.

- Paragraph 26c: We recommend changing the wording from "rebuild fisheries" to "foster sustainable fisheries." This comment also applies to changing the wording in the Box on page 103 both for Objective 3 and for Box 3.3.

- IW 1: page 104 – Program 1.1: We request that there be an explicit discussion of how this links to IW2 and IW3. The budget table has $100M for IW 1, but the program 1.1 is really a key element to IW2 and IW3 objectives.

- Paragraphs 37 and 38: We appreciate these examples. We would appreciate a discussion be added referencing the cross-cutting, multi-focal area approach employed as a part of the LME project architecture.

- Paragraph 39: We request that there be a specific mention of what these targeted research projects would be.

- Paragraphs 58, 63, 68: In each paragraph respectively there is a target of 60% reduction in hypoxia; 5% of coastline protected; and 20% fisheries with sustainable fishing practices. Please indicate where these targets came from, what criteria or methodology was used to define them to provide context. Without this information, the targets seem arbitrary.

- Paragraph 63: How will the "globally most significant areas" be determined? See above regarding "5%."

- Paragraph 64: How will areas be chosen (to fulfill this [now 10%] criterion)?

- Paragraph 66: There is still an emphasis on "scaling up of rights-based approaches." If retained, the "as appropriate" is very important to ensure that right-based approaches do not become a GEF requirement and the language needs to be redrafted to ensure that "as appropriate" modifies everything on the list and not just the reference to MPAs. Similarly, the sentence "Furthermore, the effective application of legal standards will ensure access to specific fisheries by right holders" needs to be deleted. Nothing else in their list has further elaboration, so fisheries rights should not either. Finally, there could be mention of better enforcement of existing efforts and science-based management decisions.

- Paragraph 70: We request that this paragraph be made more explicit. Please indicate specifically how the GEF International Waters Focal Area programming will improve Regional Fisheries Management. Additionally, please clarify references here to ABNJ and "science based decisions" to help the reader understand what is meant.

Inclusion of Rebuilding Global Fisheries in the International Waters Focal Area

With the decision to limit the number of Integrated Approaches (IAPs) to three at the 3rd GEF-6 replenishment meeting, participating countries suggested aspects of the Rebuilding Global Fisheries Program could be pursued under the International Waters Focal Area.

If there is demand from recipient countries to pursue projects under the proposed Rebuilding Global Fisheries Program, the United States could support an additional program be added within the International Waters Focal Area. We recommend that, should this be the way forward, there be modifications to the Rebuilding Global Fisheries Program to include a greater emphasis on an international and transboundary approach to enable the program to fit more comfortably within the core objectives of the International Waters Focal Area. This could be accomplished by emphasizing an ecosystem approach to resource management focused specifically on fisheries. We would also expect to see a greater emphasis on transboundary coordination and larger fish stocks that would help to expand the approach beyond an exclusive focus on coastal fisheries. Ultimately, it will also be important to make sure that projects supported under this program are not exclusively focused on improving practices within the

commercial fishing sector, which are likely to obtain funding by other lending institutions including the IFC and the World Bank without assistance from the GEF.

Integrated Approaches

The United States is pleased that the Integrated Approaches (IAs) are moving in the right direction in response to feedback.

The United States continues to have concerns with regard to a lack of specificity pertaining to how the IAs will be managed and evaluated. To address these concerns, we have two requests:

1. We request that the GEF Secretariat in the Programming Strategy put forward clear results management frameworks for the three IAs that will move forward in GEF-6: (1) Sustainable Cities – Harnessing Local Action for Global (2) Taking Deforestation out of Commodity Supply Chains (3) Sustainability and Resilience for Food Security in Sub-Saharan Africa. These frameworks should be consistent in level of detail with the frameworks for each focal area strategy. In fact, these frameworks could be developed by referencing specific targets and indicators that have already been identified as part of the focal area strategies and which the GEF already has experience monitoring.
2. We request that the Programming Strategy clearly specifies an evaluation of the pilots will be completed by the end of GEF-6, so that we may have evidence upon which to base our discussions of the pilot's future beyond GEF-6. When the detailed programs come to Council for approval, we will also seek confirmation that there will be consistent, measurable criteria by which to evaluate them.

CHEMICALS AND WASTE FOCAL AREA STRATEGY

Background

Status of Chemicals Contamination

1. Contamination by chemicals is a global issue. While toxic chemicals are found practically in all ecosystems on earth, thus affecting biodiversity, agricultural production or water resources, scientists estimate that everyone today carries within her or his body a large number of chemical contaminants, for which the health impact is not precisely known. Many chemicals, such as persistent organic pollutants (POPs) and mercury, have the ability to travel over large distances through air, migratory species or water currents and have been found in high concentrations areas, such as the Arctic, where these chemicals are not used. Some POPs can remain in the body for more than 50 years. Mercury, being an element is infinitely persistent.

2. Sources of chemicals and their releases vary highly. Some of the long-lasting/persistent chemicals residing in our bodies are pesticides and some are intentionally produced, such as pesticides or flame retardants and used in other forms of industrial processes and in many products used daily. Polychlorinated dibenzodioxins and dibenzofurans, are unintentionally generated, from the manufacturing processes in the chemical industry, combustion or high temperature processes in the presence of carbon, oxygen and chlorine Whatever their sources, harmful chemicals enter the food chain.

3. At the end of their life, chemicals are recycled or disposed as part of waste. For example, the amount of electrical and electronic waste (e-waste) containing harmful chemicals is growing rapidly in developing as well as in developed countries. The inappropriate management of such waste, for example through open burning, poses negative impacts on human health and the environment. It is critical to manage this waste in an environmentally sound manner so that harmful chemicals are not released into the environment.

4. The Global Chemicals Outlook (UNEP 2012) showed that the production, use and disposal of chemicals are rapidly increasing in developing countries and countries in economic transition. These rapid changes increase both economic opportunities, but also risks to human health and the environment, if is not matched by enhanced programmes and initiatives for sound chemicals and waste management. The cost to national economies of human and environmental exposure to harmful chemicals is often unrecognized, but can be substantial as shown in the UNEP's Cost of Inaction report (UNEP 2013). The Global Chemicals Outlook called for urgent and coordinated actions at national, regional, corporate and civil society level as well as international level so that the sound management of chemicals is perceived as essential throughout their life cycle to decouple sustainable development advances and to maximize societal benefits from the potential and growing risks of chemicals to human health and the environment.

~~Development of a Global Regime~~Global Efforts to Address Harmful Chemicals and Waste

5. Governments have established in the past decades a global regime to address harmful chemicals and waste through the negotiation of a number of Multilateral Environmental Agreements (MEAs) and non-binding instruments. The sixth replenishment period of the GEF

Trust Fund (July 2014 to June 2018; GEF-6) coincides with a period of a rapidly evolving chemical and waste management global agenda and changing needs of developing countries and countries with economies in transition (CEITs). Details of the major developments are described in Annex 3.

6. The last three Conferences of the Parties (COPs) to the Stockholm Convention added 11 new POPs. There are at least three candidate chemicals which could be added at COP 7 in 2015. Urgent global action is required to eliminate the production and consumption of all these chemicals. At its sixth session in May 2013, the COP requested the GEF, in the context of the guidance to the GEF, to consider increasing the overall amount of funding accorded to the chemicals focal area in GEF-6 (decision SC-6/20).

7. The Minamata Convention on Mercury, which designates the GEF as an entity comprising the financial mechanism, was adopted at the Diplomatic Conference in Kumamoto and Minamata, Japan, in October 2013. Ninety-two countries and the European Union have signed the Convention. The convention is expected to come into force before the end of the GEF-6 period. The Diplomatic Conference has invited donors to the GEF Trust Fund to contribute through the sixth and subsequent replenishments additional financial resources adequate to enable the GEF to support activities to facilitate the rapid entry into force and effective implementation of the Convention (Resolution 2 in the Final Act of the Conference of Plenipotentiaries).

8. The Montreal Protocol on Substances that Deplete the Ozone Layer controls about 100 anthropogenic chemicals used worldwide in industrial processes and consumer products. First signed in 1987, the treaty has now achieved universal ratification – all 197 UN Member States – making it the most widely ratified treaty in United Nations history. To date the Montreal Protocol and its financial mechanism, the Multilateral Fund, have enabled reductions of over 97% of all global consumption of controlled ODS.

9. The 27th UNEP Governing Council (decision 27/12) in February 2013 noted an integrated approach to address the financing of the sound management of chemicals and waste, underscoring that the three components of an integrated approach, mainstreaming, industry involvement and dedicated external finance, are mutually reinforcing and that they are all important for the financing of sound management of chemicals and wastes. The decision also invited the GEF in the context of the 6th replenishment process to revise its focal area structure and strategy in order to address the chemicals and wastes agenda, and consider ways of further strengthening its relations with the conventions it serves as a financial mechanism.

10. UNEP's Governing Council decision 27/12 further reiterated its request to the UNEP Executive Director to facilitate and support a country-led process on the challenges to and options for further enhancing cooperation and coordination in the chemicals and wastes cluster in the long term. This process, may as part of its efforts, also seek to explore avenues towards ensuring the best and most efficient use of increasingly scarce financial resources at the global, regional and national level.

Rationale and Approach

11. The GEF will continue to play a catalytic role in leveraging budgetary resources from national governments and incentivizing the private sector to contribute more to the achievement of elimination and reduction of harmful chemicals and waste.

12. Greater awareness of the impacts, including the health impacts, of harmful chemicals and waste needs to be communicated to policy makers at the national level so that sound management of chemicals and waste is fully integrated into national budgets and sector level plans. Such awareness raising also needs to be made to negotiators and policy makers in the broader field of sustainable development at the global level recognizing the cross cutting nature of sound management of chemicals and wastes in different sectors and its inherent impact of a sustainable future for all. Therefore, efforts are underway by governments to ensure that sound management of chemicals and wastes becomes an integral part of the discussions of the post-2015 sustainable development agenda, including the Sustainable Development Goals. The issue must be taken up not only by ministries of environment but by ministries of planning and finance, as well as ministries of industry, technology and innovation, ministries of health, ministries of women, ministries of children, and ministries of labour. This shift would systematically increase the visibility of these issues using assessments of the cost of inaction on chemicals and waste and the impact on the productivity and health of impacted communities. The allocation of resources from national budgets, and increased participation and contributions from the private sector will allow GEF interventions to be sustained after the projects and programs are completed. This way the GEF can become a true catalyst for sustainable and sustained behavioural change.

13. ~~Information on amount and type of chemicals in products is very critical to design and implement collection, storage, recycling and disposal systems. Information disclosure by the manufacturers and raw material suppliers should be institutionalized.~~

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Comment [USA1]: From where is this coming? Work on Chemicals in Products, including on the scope and necessity of such work, is highly controversial. As characterized here, this is unacceptable and should be deleted.

14. To achieve transformational change and be effective in a global market, the GEF interventions need to seek closer integration with global supply chains ensuring that products crossing national borders are free of global priority substances that otherwise enter into markets and recycling chains. These interventions will need to integrate the private sector more closely due to the primary role the sector has in the production and use of chemicals.

15. Another encouraging area of work is Green Chemistry, which is defined as the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. Green Chemistry and life cycle analysis of organic and inorganic chemicals are receiving more attention from producers and consumers of potentially toxic chemicals. With the advent of the Green Chemistry Council, greater emphasis, globally, is being placed on sustainable policies, technologies and best practices in the life cycle of toxic chemicals. This area of work can help to address products that contain the chemicals controlled by MEAs.

16. The GEF will also seek to encourage projects that combine multiple focal areas and trust funds to help deliver multiple benefits within the chemical and waste cluster and with other focal areas. For example, with the GEF as the financial mechanism of the Mercury and the Climate Change Conventions, there are opportunities to explore co-benefits of carbon and Mercury emissions reduction at coal-fired power plants. Other examples of eligible topics include:

Climate-Chemical Nexus (Clean Cities, Green Industry), and Chemical-Natural Resource Nexus (Healthy Ecosystems, Smart Agriculture, Clean Rivers, Lakes and Oceans, sustainable management of forests). Another example is the opportunity for the financial mechanisms of the GEF and Montreal Protocol Multilateral Fund to cooperate on mobilizing resources to maximize the climate benefits of the hydrochlorofluorocarbons (HCFC) phase-out and ODS destruction.

17. In order to incentivize countries and stakeholders to expedite and scale up action to eliminate and reduce chemicals and waste, the following innovative programming options may be used in implementing the strategy: private sector partnerships; performance-based financing and incentives; support for civil society initiatives; consultation with vulnerable and innovative constituencies such as women's groups and indigenous peoples, and encouraging the use of regional centers under the chemical and waste Conventions to execute projects and assist in the development of regional projects. The options complement the traditional GEF financing instruments, and can be applied as appropriate. Examples of how chemicals and waste will take advantage of the innovative programming options are listed in Annex 2.

18. Private sector cooperation and its involvement in projects and programs are important in the GEF chemicals and waste focal area. The chemical focal area has in the past demonstrated successful private sector engagement and has attracted significant private sector co-financing. This focal area will seek more projects that propose innovative engagement models with the private sector, and that complement public sector support rather than replace or minimize its importance. Further descriptions on private sector partnerships are included in Annex 2.

Gender

19. Gender refers to the social roles that men and women play and the power relations between them, which may have a profound effect on the use, management, and exposure to chemicals. Depending on values, norms customs and laws, men and women in different parts of the world may have different exposure to chemicals. Consistent with the GEF *Policy on Gender Mainstreaming* and the GEF-6 approach on gender mainstreaming, GEF projects funded under this strategy will not only acknowledge gender differences within their design but determine what actions are required to promote both women and men's roles in chemical management, disproportionate chemical exposure and vulnerability, as well as sustainable alternatives. This will involve the use of gender analysis as part of the socio-economic assessment during project preparation; and the use of gender disaggregated project-level indicators where relevant. Given that the knowledge base on gender and chemicals management is still evolving and being codified, the focal area will undertake periodic reviews of the portfolio and highlight best practices in mainstreaming gender in chemicals projects. The focal area will also monitor and track the GEF core gender indicators which will be aggregated at the corporate level.

20. Efforts to ensure the sound management of chemicals within a context of sustainable development have important gender dimensions. In daily life, men, women, and children are exposed to different kinds of chemicals in varying concentrations. Levels of exposure to toxic chemicals—and resulting impacts on human health—are determined by social as well as biological factors. Determined by social roles, women, men, and children are exposed differently to toxic chemicals in daily life. The differences include the kinds of chemicals encountered as well as the level and frequency of such exposures. In addition men, women, and children vary in their physiological susceptibility to the effects of exposure to toxic chemicals.

21. It is therefore critical to raise awareness about the linkages between chemical exposure, human health, environmental threats, and gender differences in risks and impacts. Integration of gender considerations throughout all stages of a country's process to strengthen its national chemical management regime will ensure that women's and men's, concerns and experiences are taken into account in the design, implementation, monitoring and evaluation of chemical management policies and programmes, so that they can benefit equally and gender inequality is not perpetuated. Women's participation in decision-making is seen as a requirement to assure full participation in decision making.

Goal and Objectives

Long-term goal

22. The GEF-6 chemical and waste strategy's long term goal is to prevent the exposure of humans and the environment to harmful chemicals and waste of global importance, including POPs, mercury and ozone depleting substances, through a significant reduction in the production, use, consumption and emissions/releases of those chemicals and waste.

Scope of the GEF-6 strategy on chemicals and waste

23. For the purpose of the GEF, "Chemicals" in the strategy refer to chemicals controlled under the Stockholm Convention, Minamata Convention and Montreal Protocol as well as covered by SAICM. "Waste" refers to waste generated from the production, use and consumption of the chemicals covered by the MEAs for which the GEF is the financial mechanism.

24. The GEF-6 chemicals and waste strategy targets harmful chemicals and waste regulated, or, in other ways covered under legally binding MEAs for which the GEF is the financial mechanism. The strategy is based on the guidance to the financial mechanism, as adopted by the conferences of the parties of the respective MEA[56], and takes into account activities regarding the environmentally sound management of chemicals and waste under non-binding instruments, with a view of supporting the implementation of legally binding instruments. For example, the GEF, on a voluntary basis, provides funding to assist CEITs to phase out ozone depleting substances under the Montreal Protocol and indirectly supports the implementation of the Basel Convention through addressing POPs waste under the Stockholm Convention and the Rotterdam Convention through addressing information exchange on trade and movement of POPs and POPs waste.

Strategic Objectives and Programs

25. The GEF-6 chemicals and waste strategy encompasses a broad range of opportunities. The strategy seeks to combine environmentally safe technologies and systems with financial and organizational mechanisms, policies, and practices that help countries move towards innovative, rapid, transformational change. The GEF-6 strategy is based on two strategic objectives that in

[56] The programming of activities under the Stockholm Convention in GEF-6 will be based on the consolidated guidance to the financial mechanism, as adopted by the Conference of the Parties at its sixth meeting pursuant to decision SC-6/20 (available at: http://chm.pops.int/Implementation/FinancialMechanism/GuidanceGuidelines/tabid/682/Default.aspx).

combination will build and sustain capacity, opportunity, and means to meet the goals of eliminating harmful chemicals and waste. These two strategic objectives contain six programs, which encompass activities to be supported by GEF funding (Figure 1). An integrated approach to cover multiple programs would be supported as well as being based on a single program.

26. Contents of each objective and program are described below. Outcomes, outputs and indicators of each program are described in the Results Framework.

CW - Figure 1: Strategic Objectives and Programs

CW 1: Develop the enabling conditions, tools and environment for the sound management of harmful chemicals and wastes	Program 1	Develop and demonstrate new tools and economic approaches for managing harmful chemicals and waste in a sound manner
	Program 2	Support enabling activities and promote their integration into national budgets and planning processes, national and sector policies and actions and global monitoring
CW 2: Reduce the prevalence of harmful chemicals and waste	Program 3	Reduction and elimination of POPs
	Program 4	Reduction or elimination of anthropogenic emissions and releases of mercury to the environment
	Program 5	Complete the phase out of ODS in CEITs and assist Article 5 countries under the Montreal Protocol to achieve climate mitigation benefits
	Program 6	Support regional approaches to eliminate and reduce harmful chemicals and waste in LDCs and SIDS
INNOVATIVE PROGRAMMING OPTIONS		

CW 1: Develop the enabling conditions, tools and environment for the sound management of harmful chemicals and wastes

27. This objective will help countries develop and strengthen the enabling conditions, tools, and environment to remove the barriers that prevent or slow the adequate management of harmful chemicals and wastes. This objective will develop policy, legislative, financial, economic, technical and technological tools that will remove barriers to scaling up interventions, including access to finance. The objective will contribute to helping countries develop effective systems for ensuring occupational safety and health. The respect for fundamental worker rights are given due consideration as well, with particular attention paid to the working conditions of women (as child-bearers) given the high rate of birth defects in many of these communities. This objective, through sound data, analysis, and policy frameworks, also seeks to address the need for enabling conditions to mainstream chemicals and waste management concerns into the national budgets, national planning and policies, and development agenda as well as sector policies.

Program 1: Develop and demonstrate new tools and economic approaches for managing harmful chemicals and waste in a sound manner

28. This program applies to all chemicals and waste included under this strategy. It will support the development, testing and demonstration of technologies, alternatives, techniques, best practices, legislative and policy tools, finance models, private sector engagement models and economic tools.

29. Demonstration and validation for new, environmentally-sound, and climate-resilient technologies will be encouraged. Examples of cutting-edge technologies include contaminated soil and sediment cleanup technologies, bio-remediation, Green Chemistry in particular in the context of SAICM, and non-combustion destruction technologies.

30. The GEF may support the following initiatives under this program:

(a) Demonstration and transfer of effective and where appropriate innovative environmentally safe chemical and waste reduction and elimination technologies, including emerging chemical and waste issues of global concern (e.g. e-waste, Mercury, lead in paints, endocrine disruptors, marine debris and chemicals in products)

(b) Development and demonstration of private sector partnerships, economics instruments and financing models that can achieve large scale and long-term investment in the reduction of production and use and emissions of harmful chemicals, including cleaning up contaminated sites, closure and/or repurposing of hazardous chemical manufacturing and waste management.

(c) Promotion of sustainable production and consumption practices to de-couple economic growth and resource use from the use of POPs and other chemicals of concern (e.g. heavy metals including mercury and lead, and e-waste generation)

(d) Action on new POPs particularly in the context of e-waste and chemicals in products

(e) Promotion of Green Chemistry particularly in the context of SAICM

(f) Development of frameworks for cost recovery from the private sector for environmental clean up

Program 2: Support enabling activities and promote their integration into national budgets, planning processes, national and sector policies and actions and global monitoring

31. This program will help countries report to the conventions and develop plans for meeting their obligations under the conventions. This program only applies to the Stockholm Convention and the Minamata Convention. The following enabling activities are eligible for funding under this program:

(a) Minamata Convention ~~Initial~~ initial a~~A~~ssessments activities ~~(MIAs)~~, including assessment of legislation and policies in regard to the implementation of the Convention, initial inventory of Mercury, identification of emission/release sources of Mercury, and assessment of the institutional and capacity needs

(b) Artisanal and Small Scale Gold Mining (ASGM) National Action Plans (NAPs)

(c) Stockholm Convention National Implementation Plans (NIPs) and NIP updates

32. This program will also promote integration of the findings of enabling activities and convention reporting into national and sector level development planning. Such integration will help inform countries on establishing reduction targets and leveraging resources from all sectors for the sound management of harmful chemicals and waste. It is envisaged that the embedding of the findings and processes of the enabling activities will rely on and be complementary to the foreseen institutional structures of the special program component of the integrated approach in UNEP Governing Council decision 27/12[57].

33. This program will also support global monitoring which help to measure the effectiveness of the Conventions and identify priority chemicals on a global scale. This program will also integrate gender analysis where appropriate.

CW 2: Reduce the prevalence of harmful chemicals and waste

34. While CW 1 focuses on the development of enabling conditions, this objective will help countries reduce and eliminate harmful chemicals and waste, i.e. POPs, Mercury, and their waste, along with other chemicals of global concern, thereby reducing the exposure of humans and the environment to harmful substances. Specifically, this objective will support the implementation of environmentally-safe and proven technologies, techniques, and practices that will be necessary for chemicals and waste elimination and management. The integration of sound management of chemicals and waste into other focal areas would be supported under this objective.

[57] In February 2013, The UNEP Governing Council decided to invite governments to consider establishing, through an existing institution, a special programme, funded by voluntary contributions, to support institutional strengthening at the national level for implementation of the Basel, Rotterdam and Stockholm conventions, the future Minamata Convention and the SAICM, noting that each respective governing body would have to determine the participation of its entity in the special programme (GC 27/12).

Program 3: Reduction and elimination of POPs

35. This program will assist eligible parties to reduce and eliminate POPs listed in the Stockholm Convention. Projects in this program must propose activities that bring about measurable reduction of POPs. The program will support the application of technologies, techniques and approaches for eliminating stockpiles of POPs, POPs in products, and POPs containing waste, including e-waste. In addition, the impacts of climate change on the effectiveness of these technologies, techniques, practices, and approaches will need to be considered as appropriate, as well as any adverse impacts on vulnerable populations such as the poor, women, and children, the disabled and indigenous communities.

36. In accordance with Convention Guidance, the programme will take into account the specific deadlines set forth in the Convention, including the following priority areas[58]:

(a) Elimination of the use of polychlorinated biphenyls in equipment by 2025;

(b) Environmentally sound waste management of liquids containing polychlorinated biphenyls and equipment contaminated with polychlorinated biphenyls, having a polychlorinated biphenyls content above 0.005 per cent, in accordance with paragraph 1 of Article 6 and part II of Annex A of the Convention, as soon as possible and no later than 2028;

(c) Elimination or restriction of the production and use of newly listed persistent organic pollutants;

(d) Elimination of the production and use of DDT, except for parties that have notified the Secretariat of their intention to produce and/or use it;

(e) For parties that produce and/or use DDT, restriction of such production and/or use for disease vector control in accordance with World Health Organization recommendations and guidelines on the use of DDT and when locally safe, effective and affordable alternatives are not available to the party in question;

(f) Use of best available techniques for new sources in the categories listed in part II of Annex C of the Convention as soon as practicable but no later than four years after the entry into force of the Convention for a party.

37. In addition to priority project that respond to Convention Guidance the GEF may support the following initiatives under this program:

(a) Elimination of stockpiles, and were applicable production of DDT, obsolete pesticides and new POPs (Article 6)

(b) Management and phase out POPs.

(c) Environmentally sound management of POPs-containing wastes in accordance with the Basel Convention and its relevant technical guidelines

(d) Reduction of emissions of unintentional POPs (UPOPs) (Article 5)

(e) Introduction of alternatives to DDT for vector control including approaches to improve their safe and rational use for public health

[58] See paragraph 4 of decision SC-6/20

(f) Introduction of non-chemical alternatives

(g) Integrated pesticide management including in the context of food security

(h) Application of green industry, or sound chemicals management along the supply chain

(i) Design of products and processes that minimize the use and generation of hazardous substances and waste

38. Projects with significant investment, for example, treatment technologies such as alternatives to large-scale incineration, implementation of supply chain management and Green Chemistry, may be considered when there are both large-scale leveraging of national and bilateral resources and strong long-term national commitments.

Program 4: Reduction or elimination of anthropogenic emissions and releases of mercury to the environment[59]

39. The GEF has supported a number of projects intended to inform the intergovernmental negotiation process that led to the adoption of the new Mercury treaty. This program will extend the work done in GEF-5 to demonstrate the reduction of Mercury in key sectors where urgent actions are required.

40. In GEF-6, this program will address the following issues in a manner consistent with the Convention. The INC and the COP may accord priority actions of these through guidance to the GEF.

(a) Phase out and elimination of the use of mercury in ASGM in interaction and collaboration with relevant NGOs, CBOs, ministries of labor and others

(b) Reduction and elimination of mercury from emissive sources, including coal fired power plants~~, primary metal processing and health care waste~~, non-ferrous smelting, cement production, coal-fired industrial boilers, and waste incineration

(c) Phase out and elimination of mercury in the global supply chain where appropriate, including mercury in products

(d) Reduction, phase out or elimination of mercury used in certain industrial processes

(e) Assessment and sound management of mercury storage

(f) Framework for the environmentally sound management of mercury-containing wastes ~~in accordance with~~taking into account any relevant guidelines developed under the Basel Convention ~~and its relevant technical guidelines~~

(g) Development of detailed inventories on mercury.

(h) Development of material flows of mercury and introduction of life cycle management of mercury

Comment [USA2]: This intended to frame the letter items below. As drafted, some could be seen as expansive or inconsistent with the Convention.

Comment [USA3]: From where do these come? Delete, inconsistent with Annex D of the Convention

Comment [USA4]: Recognizing the Convention has exceptions

Comment [USA5]: Consistent with article 10

Comment [USA6]: This isn't entirely clear to us. Don't convention obligations as a whole already do this?

[59] Guidelines on the use of GEF 6 funding will be further defined once the CoP defines further guidance as per

Article 13 of the Minamata Convention and Resolution 2 of the Final Act of the Conference of Plenipotentiaries.

Program 5: Complete the phase out of ODS in CEITs and assist Article 5 countries under the Montreal Protocol to achieve climate mitigation benefits

41. The GEF currently provides assistance under this program to the completion of the phase-out of HCFCs in countries with economies in transition (CEITs). This program will support HCFC phase-out management plans (HPMPs) and production sector plans.

42. Under GEF-5, consideration of the nexus and potential synergies between ozone protection, climate mitigation, and chemicals programme was initiated (e.g. GEF/C.42/09), and in 2013 the Secretariats of the GEF and Multilateral Fund have made substantial progress in discussions on cooperation between the two financial mechanisms to mobilize future resources to maximize the climate benefits of the HCFC phase-out and ODS destruction. Such cooperation could extend to other developing country Parties operating under Article 5 of the Montreal Protocol ("Article 5 countries"), with possible GEF assistance forming complementary financing to that being provided under the Multilateral Fund.

43. There are significant climate benefits from replacing HCFCs with climate friendly alternatives and replacement of HCFC dependent technology with more energy efficient technologies. Work is underway to phase out HCFCs in countries considered Article 5 ~~countries~~ Parties in the Montreal Protocol. The Multilateral Fund provides financial assistance to these countries, as per the guidelines of the Executive Committee, the most cost-effective alternative that may or may not fully address the most climate benefits that could potentially be achieved from this process. As a result, Article 5 ~~countries~~ Parties have approached the GEF to co-finance additional activities in HCFC phase-out program which could cover climate co-benefits that are not eligible for funding under the Multilateral Fund, and would introduce those elements that would maximize climate and ozone benefits.

44. For this purpose, special programs will be established to promote linkages in Article 5 countries to assist in the phase-out of HCFCs. This will only apply to manufacturing of appliances and foams, and the refrigeration servicing sector and will cover only energy efficiency gains, i.e. climate mitigation benefits, associated with action being taken using other funding sources by the Article 5 countries, only when these elements are clearly not eligible for funding under the Multilateral Fund.

45. "Banks" of ODS are the total amount of these substances contained in existing equipment (e.g. refrigeration, air conditioning), chemical stockpiles, insulating foams and other products not yet released to the atmosphere. Emissions of ODS banks by leakage or at their end of use damage the ozone layer and contribute significantly to global warming since the ODS concerned, mainly chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), have high global warming potentials (GWPs). Emissions due to releases of ODS from banks are not covered by either the Montreal Protocol or the United Nations Framework Convention on Climate Change (UNFCCC).

46. The Multilateral Fund has financed a limited number of ODS destruction projects in Article 5 countries, mainly pilot projects. That financial mechanism does not have the mandate to fund projects to address ODS destruction in a comprehensive manner, therefore it is evident that tackling the bulk of ODS banks will require additional sources of funding. The opportunity to

benefit from the most cost effective approach to this problem is before 2020-2025, therefore other contributions and forms of non-MLF co-funding ~~are required~~will help catalyze ODS bank destruction activities in Article 5 Parties. The GEF may support the destruction of ODS banks in GEF-6 to leverage ozone and climate benefits which are not funded by the Multilateral Fund. ~~When addressing this issue synergies with other conventions should be taken into account, for instance the Stockholm Convention.~~

Program 6: Support regional approaches to eliminate and reduce harmful chemicals and waste in LDCs and SIDS

47. The least developed countries (LDCs) and small island developing states (SIDS) typically have limited capacity to deal with harmful chemicals and waste. In many instances, they are also geographically isolated and remote. These countries have historically had difficulty leveraging sufficient resources from their own budgets, the private sector, and other bi-lateral donors to deal with harmful chemicals and waste. They also have difficulties in accessing GEF funds in comparison to other countries. Given these facts, different approaches for solutions are required for these types of countries.

48. This objective will allow programming for resources to LDCs and SIDS to help them create the enabling environment, and to take action to eliminate and reduce harmful chemicals and waste. The objective will encourage regional and sub-regional cooperative action and south-south cooperation for developing regional approaches. This objective will also encourage civil society participation in enabling activities to ensure broad recognition of public needs and requirements.

49. The program will raise awareness of the linkages between chemical exposures, the effects on human health and the environment, and gender differences in risks and impacts. In most communities, people are unaware of their routine, even daily, exposure to toxic chemicals in the workplace, at home, and in the general environment. Thus, raising awareness of the immediate health risks of toxic chemicals used in agriculture, mining, health services, manufacturing, and household activities in least developing countries is a necessary, overarching intervention that informs work at all subsequent stages of the policy process.

50. It is intended that a programmatic approach be used in utilizing resources in this objective so that economies of scale can be achieved which would otherwise make programming in these countries difficult and in some cases prohibitive.

51. The regional and sub-regional approaches will cover:

(a) Enhanced capacity to manage harmful chemicals and waste at a regional/sub-regional level

(b) Regional-level plans for the management of harmful chemicals and waste

(c) Technologies and techniques suitable to LDCs and SIDS

(d) Innovative management practices suitable to LDCs and SIDS

Results Framework

Focal Area Objectives	Programs	Expected Outcomes and Indicators
CW 1 *Develop the enabling conditions, tools and environment to manage harmful chemicals and wastes* Indicative allocation: Status quo scenario: $88 million Enhanced scenario: $119 million	**Program 1:** Develop and demonstrate new tools and economic approaches for managing harmful chemicals and waste in a sound manner	Outcome 1.1: Countries have appropriate decision-making tools and economic approaches to promote the removal of barriers preventing the sound management of harmful chemicals and waste *Indicator 1.1.1: Number of demonstrated tools for Mercury, new POPs and emerging chemicals and waste issues* *Indicator 1.1.2: Prioritized list of actions for reducing/eliminating chemicals and waste* Outcome 1.2: Innovative technologies are successfully demonstrated, deployed and transferred *Indicator 1.2: Number of technologies demonstrated, deployed and transferred*
	Program 2: Support enabling activities and promote their integration into national budgets, planning processes, national and sectoral policies and actions, and global monitoring	Outcome 2.1: Countries have ~~developed their~~undertaken Minamata Convention i~~I~~nitial a~~A~~ssessments activities ~~(MIAs)~~ and ratified the Minamata Convention *Indicator 2.1.1: Number and quality of ~~MIAs~~ initial assessment activities completed* *Indicator 2.1.2: Number of ratifications of the Minamata Convention* Outcome 2.2: Countries have assessed their ASGM sector and developed a National Action Plan (NAP) to address the Mercury use in the ASGM sector. *Indicator 2.2: Number of NAPs completed* Outcome 2.3: All countries have completed their NIP updates under the Stockholm Convention and have established a sustainable mechanism to update them in the future *Indicator 2.3.1: Number of NIP updates completed* *Indicator 2.3.2: Number of countries that have integrated the NIP updated process into their own budget.* Outcome 2.4: Global monitoring for POPs strengthened and established for Mercury *Indicator 2.4: Number of baseline monitoring stations established and number of laboratories*
CW 2 Reduce the prevalence of harmful chemicals and waste Indicative allocation:	**Program 3:** Reduction and elimination of POPs	Outcome 3.1: Quantifiable and verifiable tonnes of POPs eliminated or reduced *Indicator 3.1: Amount and type of POPs eliminated or reduced*
	Program 4: Reduction or elimination of anthropogenic emissions and	Outcome 4.1: Mercury is reduced or eliminated *Indicator 4.1: Amount of Mercury reduced or eliminated*

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Focal Area Objectives	Programs	Expected Outcomes and Indicators
Status quo scenario: $437 million Enhanced scenario: $481 million	releases of mercury to the environment	
	Program 5: Complete the phase out of ODS in CEITs and assist Article 5 countries under the Montreal Protocol to achieve climate mitigation benefits	Outcome 5.1: Countries have phased out Ozone Depleting Substances and replace them with zero ODP, low GWP alternatives *Indicator 5.1.1: Tonnes of ODS phased out* *Indicator 5.1.2: Tonnes of CO_2 equivalent phased out*
	Program 6: **S**upport regional approaches to eliminate and reduce harmful chemicals and waste in LDCs and SIDS	Outcome 6.1: Capacity of LDCs and SIDS to manage harmful chemicals and waste is enhanced *Indicator 6.1: The extent to which countries have successfully mainstreamed chemical priorities into national budgets.* Outcome 6.2: LDCs and SIDS regional/sub-regional plans include and account for the management of harmful chemicals and waste. *Indicator 6.2: Number of regional/sub-regional level plans developed that account for chemicals and waste issues*

Gender Indicators:

(a) Focal Area projects will use and incorporate GEF Gender Indicators, which will be monitored and aggregated at the Focal Area portfolio and Corporate levels. [60]

[60] Refer to the core GEF Gender Indicators identified under the gender section of the Strategic Positioning Paper for GEF-6 replenishment. The five Gender Indicators are:
1. Percentage of projects that have conducted gender analysis during project preparation.
2. Percentage of projects that have incorporated gender sensitive project results framework, including gender sensitive actions, indicators, targets, and/or budget.
3. Share of women and men as direct beneficiaries of project.
4. Number of national/regional/global policies, legislations, plan, and strategies that incorporates gender dimensions (e.g. NBSAP, NAPA, NAP, TDA/SAP, etc).
5. Percentage of Project Implementation Reports (PIR), Mid-term Evaluation (MTE) and Terminal Evaluation Reports (TER) that incorporate gender equality and women's empowerment and assess results/progress.
Projects will use gender-sensitive indicators and sex-disaggregated data, and it will be systematically recorded, reported and integrated into adaptive management responses at the project level. GEF will undertake periodic reviews of the portfolio and highlight best practices in mainstreaming gender in projects, including through Annual Monitoring Review and Learning Missions.

Annex I. Financial Resource Allocations by Topic

Unit: $ million

Comment [USA7]: Assume these will be updated in future draft

Allocation by Program

			Status Quo Scenario	Enhanced Scenario
CW 1	Program 1	POPs	20	22
		Mercury	10	20
		SAICM etc	8	15
		sub-total	38	57
	Program 2	POPs	20	22
		Mercury	30	40
		sub-total	50	62
	Total		88	119
CW 2	Program 3	POPs	300	310
	Program 4	Mercury	70	90
	Program 5	ODS	25	25
	Program 6	POPs	25	26
		Mercury	15	25
		SAICM etc	2	5
		sub-total	42	56
	Total		437	481
Grand Total			525	600

Allocation by Convention

	Status Quo Scenario	Enhanced Scenario	(cf) GEF-5
POPs	365	380	375
Mercury	125	175	15
SAICM etc	10	20	10
ODS	25	25	25
Total	525	600	425

* In addition to $15 million, 10 million was added at the June Council.

Annex II. Innovative Programming Options in the GEF-6 Chemicals and Waste Strategy

Private sector partnerships

1. In GEF-6, all focal area strategies will be identifying and establishing stronger partnerships with the private sector to attract and retain private sector investment. For chemicals and waste this has been an area that has not been fully explored but it will be a robust area of activity in GEF-6. In some cases, for example in PCB management projects where private utilities are involved the utilities sustain the reduction and management of PCB while in others where disposal equipment or facilities are provided the sustainability ends when resources for disposal ends with the project. Another example is Green Chemistry, which may benefit from private sector partnership as leading multi-national corporations are expanding research and development into green chemistry and pursuing greater partnerships for management of chemicals.

2. A major aim in GEF-6 for this focal area will be to explore and develop and demonstrate models that integrate the private sector in chemical and waste projects thereby achieving the scale of engagement and investment that is needed to scale up action on chemicals and waste.

3. Consistent with the GEF-6 private sector strategy, partnerships may take several forms, including assessment and fortification of enabling environments; certification and standards programs; engagement across global supply chains; application of risk-mitigation tools; and engagement of institutional investors. Each of these forms will provide options for GEF agencies and countries to apply the best tools to the situation at hand when designing a project. As identified in the private sector strategy, each model may be used in different ways across several categories of private sector players, including capital providers, financial intermediaries, and industry partners (large corporations, SME, and innovators).

4. Recent GEF intervention in hospitals and the way they manage waste is one example. Another innovative approach will invite private sector project ideas that can be submitted and cleared through agency processes. Countries will be encouraged to hold competitive bidding for innovative projects as appropriate. In some cases, countries will be encouraged to provide endorsement letters to agencies in advance to allow rapid approval and project launch. This approach enables the GEF network to engage with potential private sector partners with innovative ideas that need demonstration and validation. Examples of projects that would be amenable to this approach include:

(a) Innovative environmentally sound waste reduction projects

(b) Technology demonstrations

(c) Recycling and waste-management through micro, small and medium enterprises

(d) Green development – industries and cities

(e) Innovative approaches to cleaning up and remediation of contaminated sites

(f) Economic instruments and business models to facilitate income generation for chemicals and waste management including waste recycling and extraction of valuable constituents of waste

(g) Life cycle and green chemistry investments

5. For risk-mitigation and structured financing tools, the GEF Chemicals Network will explore the development of non-grant instruments. For example, innovative e-waste technologies do not have a proven track record and may be perceived as too risky for commercial investors. The GEF and its agency partners will explore what types of risk-mitigation tools could help catalyze investment in e-waste technologies.

6. Furthermore, chemicals and waste projects will need to ensure that small and medium-sized enterprises (SMEs) are prepared to properly manage POPs and ODS, and to take up new technologies for reduction and disposal. SMEs could use small grants or loans to promote for example, to improve waste management practices, encourage recycling and reuse of plastics, e-waste, adopt integrated pest and vector management, improvements in preventing contamination from ASGM through provision of low cost technological solutions. Chemicals and waste projects will certainly be considered for the SME Small Grant/Loan Program.

Performance-based financing and incentives

7. The GEF may introduce performance-based financing and incentives, where countries/agencies receive GEF resources based on successful project implementation and demonstration of results. For chemicals and waste, this option may be applied in cases including the following:

(a) *Project-based:* Performance-based financing could be utilized on individual projects. Projects that require strong measurement and verification to ensure global environmental benefits, such as phase out of chemicals, may be suitable. This would be at the invitation of the country and would be subject to a performance based agreement between the GEF and the country which may specify phase out targets.

(b) *Sector or economy-wide:* Countries or cities that commit to national or sector-based emission reduction targets (in toxic equivalents (TEQ/g) for UPOPs, ODP for Ozone, and Tons for Mercury and POPs) may utilize performance-based financing. Countries commit to the measurement and verification of meeting the targets, and are paid if the targets are achieved. Countries will have flexibility in project design, implementation modalities and selection and implementation of emission/release reduction options. This approach offers flexibility for countries and agencies to develop programs and reduces the review process in the GEF since the details of project design will be left to the country and agency.

Support for civil society initiatives

8. In GEF-6, nongovernmental organizations can submit, through one of the GEF implementing agencies, and receive approval for projects focused on elimination of hazardous chemicals and waste. Partnership with this sector will be supported through GEF Small Grant Program (SGP) where a proportion of funding given to initiatives on chemicals and waste will be shared equally with other GEF SGP national priorities such as climate change and biodiversity.

Projects where CSO's and NGO's are included as executing partners may be given priority for funding in GEF-6.

Support for Convention Regional Centers

9. The GEF has received guidance from the COP of the Stockholm Convention to provide the opportunity for Regional Centers set up under the Stockholm Convention and Basel Convention to execute projects. The GEF is cognizant of the country driven approach for project identification and development and recognizes that the regional centers can only be involved on the invitation of countries. The GEF encourages countries to use the regional centers either as executing agencies or providers of technical assistance in the development and implementation of their projects particularly in regional projects where these centers would have a comparative advantage.

Annex III: Development of Multilateral Environmental Agreements in the Harmful Chemicals and Waste Area

1. Governments recognize that concerted action at the international level is required to address certain substances or practices of global concern. Over the past 30 years, governments have agreed a number of multilateral environmental agreements (MEAs) that regulate harmful chemicals and waste. Most governments have ratified these conventions. The GEF-6 (2014 to 2018) coincides with a period of a rapidly evolving chemical and waste management global architecture and changing needs of developing countries and CEITs. The following are the conventions relevant to the GEF and their major developments.

2. **Legally-binding instruments where the GEF serves as the financial mechanism**

(a) **The Stockholm Convention on Persistent Organic Pollutants (POPs)** This convention controls the production and use of POPs. The convention originally had 12 controlled POPs substances including DDT, PCB and Dioxins and Furans. The convention also has a process for adding new substances when there is scientific evidence that the substances exhibit persistent organic pollutant characteristics. As the financial mechanism for this convention the GEF finances programs and projects to assist developing country parties and CEITs to meet their convention obligations.

During the last three Conferences of the Parties to the Stockholm Convention, 11 new POPs have been added to the Stockholm Convention (nine at COP 4 and one each at COP 5 and COP 6). There are candidate chemicals, which are expected to be added at COP 7. Urgent global action is required to eliminate the production and consumption of all these chemicals. At its sixth session in May 2013, the COP requested the GEF to consider increasing the overall amount of funding accorded to the chemicals focal area in GEF-6 (Decision SC-6/20).

(b) **The Minamata Convention on Mercury**
The Minamata Convention on Mercury was adopted and opened for signature at the Diplomatic Conference in Kumamoto and Minamata, Japan, in October 2013. Ninety-two countries and the European Union have signed the Convention so far of which more than 50 are developing countries and CEITs. The Convention is expected to come into force before the end of GEF-6 period. The Convention identifies the GEF as an element comprising the financial mechanism of the Convention.

The Diplomatic Conference adopted resolutions on arrangements in the period prior to the coming into force of the convention (the 'interim' period). In the resolutions on financial arrangements, the Conference invites donors to the GEF Trust Fund to contribute through the sixth and subsequent replenishments of the GEF Trust Fund additional financial resources adequate to enable the GEF to support activities to facilitate the rapid entry into force and effective implementation of the Convention.

3. **Legally binding instruments where the GEF does not serve as the financial mechanism but has provided support up to today**

(a) **The Montreal Protocol on Substances that Deplete the Ozone Layer**

The Montreal Protocol controls ozone depleting substances (ODS) which are the substances that created the hole in the Earth's protective ozone layer. This Protocol has its own financial mechanism, the Multilateral Fund, which aids developing countries (Article 5 Parties) with Protocol compliance. The GEF, since its pilot phase, provides support to parties with economies in transition to meet their obligations under the Montreal Protocol.

4. **Legally binding instruments where the GEF provides indirect support through its programming in POPs**

(a) **The Basel Convention on Controlling Transboundary Movements of Hazardous Wastes and their Disposal**

This Convention pre-dates the Stockholm Convention and deals with the international movement of hazardous waste and its disposal. All POPs waste are treated as Basel Wastes so that in providing support to the parties to the Stockholm Convention for disposal of obsolete POPs and POPs waste, the GEF has indirectly supported the implementation of the Basel Convention.

(b) **The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade**

This convention deals with the control in trade of hazardous and harmful chemicals. All POPs for the purposes of trade are controlled under this convention so the GEF in providing support to parties to control the trade of POPs through import and export bans has indirectly supported the implementation of this convention.

5. **Non-legally binding instruments: Strategic Approach to International Chemicals Management (SAICM)**

(a) The development of multiple chemical conventions was recognised as creating fragmentation in the global management of harmful chemicals and waste particularly since the conventions are not uniformly ratified. In 2006 governments adopted the SAICM in an attempt to harmonise global management of harmful chemicals and waste through a cradle to grave approach. The SAICM process identifies emerging chemical issues of global concern and provides a framework to operationalize the implementation of an integrated approach to managing harmful chemicals and waste. The GEF has been invited at each of the International Conference on Chemicals Management to support the priorities identified by the SAICM. The GEF has provided support to the management of e-waste, lead in paints and chemicals in products.

(b) In September, 2012, the 3rd International Conference on Chemicals Management (ICCM 3) invited the GEF in the process of the 6th replenishment to consider the priorities and activities identified in the SAICM in support of the achievement of

its objectives. This invitation was without prejudice to the on-going process on the UNEP Executive Director's draft proposal on an integrated approach to the financing of the sound management of chemicals and wastes.

6. **Integrated Approach for Financing Chemicals and Waste**

(a) Given the increased need for sustainable, predictable, adequate and accessible financing for the chemicals and wastes agenda, the consultative process on financing options for chemicals and waste was launched by the UNEP Executive Director at COP 4 of the Stockholm Convention. After the consultation, the Executive Director presented an integrated approach that was noted by the 27th UNEP Governing Council (decision 27/12) in February 2013. The decision underscores that the three components of an integrated approach, mainstreaming, industry involvement and dedicated external finance, are mutually reinforcing and are all important for the financing of sound management of chemicals and wastes. The decision also invites the GEF in the context of the 6th replenishment process to revise its focal area structure and strategy in order to address the chemicals and wastes agenda, and consider ways of further strengthening its relations with the conventions if serves as a financial mechanism.

(b) Furthermore, Decision 27/12 of the UNEP Governing Council invites the conference of the parties to the Basel, Rotterdam and Stockholm conventions to take steps to implement, and the Conference of Plenipotentiaries of the Minamata Convention to consider, an integrated approach for the purposes of the respective conventions, as appropriate. In May 2013, the COPs to the Basel, Rotterdam and Stockholm conventions noted with appreciation the invitation made by the UNEP Governing Council to the GEF and invites donors to increase their financial contributions during the sixth replenishment, taking into account the increasing needs for the sound management of chemicals and wastes.

(c) In addition to the above global architecture, other emerging chemicals and waste issues will require interventions geared towards the priority needs of countries. The Scientific and Technical Advisory Panel (STAP) of the GEF has identified a number of priority emerging chemical issues of global concern not yet covered or adequately addressed by MEAs. These include heavy metals (other than Mercury), polycyclic aromatic hydrocarbons (PAHs), mixture effects, open burning, endocrine disruption and marine debris, followed by a range of other issues. Interactions between issues (such as PAHs and open burning) allows for multiple possibilities of interventions at various levels.

INTERNATIONAL WATERS FOCAL AREA STRATEGY

Background

Status of International Waters

1. International waters, including freshwater and marine waters, are an increasing priority worldwide as these valuable resources face growing pressures. Freshwater scarcity and stress is increasing in most regions. Approximately 80% of the world's population is already exposed to high levels of threat to water security, and approximately 1.2 billion people live in river basins where human water use has surpassed sustainable limits.[61] Communities and ecosystems associated with 65% of global river discharge are already under moderate to high threat.[62] Climate change and increasing climatic variability will create additional pressure on water resources that will disproportionally affect the world's poor, particularly women who are often responsible for the health and welfare of children, the elderly and the infirm.

2. Pollution further reduces the water available for human use, which is accelerating the water crisis. Globally, more than 80% of collected and discharged wastewater is not treated. Non-point pollution sources, such as from fertilizer application and animal farming, are another major contributor to pollution.[63] Ocean hypoxic zones driven by nutrient loads and pollution have increased dramatically over the last 30 years, and there are now nearly 500 known hypoxic areas worldwide.

3. Global fisheries are under threat. One of the key issues affecting the oceans is unsustainable fishing practices with almost 30% of assessed global fish stocks considered collapsed or overexploited in 2009, while a further 57% are fully exploited and need to be carefully monitored and managed to prevent overexploitation.[64] About 25% of stocks from Areas Beyond National Jurisdiction (ABNJ) are considered overexploited or collapsed. Overall, the annual global economic loss from unsustainable fishing is estimated to be $50 billion, with an estimated net present value of $2.2 trillion.[65] Yet at the same time, with sustained growth in fish production and better distribution channels, world fish food supply from freshwater and marine fisheries has increased substantially during the last five decades, showing an average growth rate of 3.2% per year in the period 1961–2009 outpacing the increase of 1.7% per year in the world's population. [66]

4. These threats to freshwater and marine ecosystems are further compounded by a range of natural and anthropogenic stressors, including ocean acidification, sea-level rise, and other impacts of climate change. Coastal ecosystems, including wetlands, deltas, reefs, and mangroves, are particularly threatened by habitat destruction and land based sources of pollution.

[61] Molden, 2007.
[62] C.V. Vorosmarty, et al., 2010
[63] J. Rockström et al, 2009.
[64] FAO Review of the state of world marine fishery resources. FAO Fisheries and Aquaculture Technical Paper No. 569. Rome, FAO. 2011. 334 pp.
[65] Arnason et al., 2008 ; Sunken Billions, World Bank and FAO, 2008
[66] FAO, 2012. State of the World Fisheries and Aquaculture.

5. The cumulative effects of these multiple stressors lead to serious degradation of freshwater and marine ecosystems and their services, causing significant harm to local economies, unless government and industry adopt integrated, cross-sector, ecosystem-wide approaches to addressing these challenges.

The Challenge

6. More often than not, water knows no political boundaries. Globally, more than 260 watersheds cross the political boundaries of two or more countries. These watersheds cover about one-half of the earth's land surface, home to about 40% of the global population[67]. The majority of the world's Large Marine Ecosystems (LMEs), from which over 85% of the world's fish catch are derived, also are shared by two or more countries.

7. Needs for food and water are rising, yet water needs associated with expansion of agricultural land for greater food production are rarely addressed in basin management plans. Agriculture accounts for 70% of global freshwater use and for over 85% in many of the least developed countries that are eligible for GEF support. Driven by population growth and by the rise in dietary standards, food production will have to increase by 70% within the next 40 years to meet this growing demand[68]. Collaboration with government agencies and a range of private sector players – from large investors to groups of farmers – in linking land and water rights will be key to assuring sustainable use and transparency.

8. While the demand for water is increasing, about 40% of the water used in irrigated agriculture – the main consumer of water globally – is lost as runoff.[69] At the same time about one-third of the food produced globally for human consumption is wasted every year (approximately 1.3 billion tons)[70]. Using water more efficiently by increasing "crop per drop" outputs and reducing pre- and post-harvest food waste will be essential to feeding a growing global population. In addition, influencing consumer awareness and behavior – mainly of the growing middle class – in terms of the local and global impact of dietary preferences, food wastage, and wise water use needs to be part of the effort. Considering how entrenched gender roles are, women and girls' involvement is essential given their key role in family health, nutrition, food consumption choices, in addition to their role in agriculture.

9. Groundwater governance frameworks remain weak. While heavily-used surface water resources are already regulated in many regions, the same is not the case for groundwater. Groundwater provides a buffer to climate variability, and acts as storage to be used during droughts. More frequent droughts combined with expanded food production make groundwater an increasingly important source of water for agriculture, accentuating the pressure on aquifer resources. Yet, groundwater levels in many areas are rapidly declining as water abstractions continue to increase. Groundwater also contributes significantly to global river flows and important ecosystems. There is therefore an urgent need for more systematically linking surface

[67] UNDP, International Waters – Delivering Results, 2012. (http://web.undp.org/gef/document/IW_DeliveringResults%202012.pdf)
[68] Water for food - Water for life – A Comprehensive Assessment of Water Management in Agriculture, International Water Management Institute, 2007.
[69] FAO, 1993; and N. S. Halim, John Hopkins University, 2010.
[70] FAO, Food waste footprint – Impacts on natural resources, 2013

and groundwater governance systems and management, while also understanding that the geographical extent of river basins and underlying aquifers rarely coincide. The technical and governance needs are challenging and need to be more comprehensively addressed in the GEF International Waters (IW) portfolio.

10. The global socioeconomic impacts of hypoxia and eutrophication are estimated between $200 to $800 billion per year. Nutrient burdens transported from land to the ocean have roughly tripled since pre-industrial times, and are projected to at least double by 2050 under a business as usual scenario, with the majority of stresses affecting the developing world. Nitrogen deposition is one of three 'planetary boundaries' that have already been transgressed, and an estimated 70% reduction in the release of reactive nitrogen will be needed to reverse these trends. Hence, there is an urgent need to integrate nutrient management needs into water and coastal resource management strategies.

11. Massive loss of wetlands and coastal habitats requires global action. The loss of riparian and coastal habitats, including "blue forests" — mangroves, salt marshes, sea grasses and seaweed — has negatively impacted community livelihoods, food security, and the capacity of these habitats to sequester carbon. These habitats represent only 1% of coastal and marine areas globally, yet they store carbon at estimated rates several times higher than the more widely recognized terrestrial carbon sinks, such as tropical forests. The loss of riparian and coastal habitats also means the loss of ecosystem services, such as flood regulation and coastal protection from increasing storms. Urgent global action is, therefore, needed to preserve the vital functions provided by these high priority ecosystems. The Ramsar Convention on Wetlands is of critical importance for securing the conservation and wise-use of wetlands and water resources, including freshwater, saline inland waters, and shallow marine waters.[71]

12. Commitments to improve ocean health are rising, but actions remain slow. The challenges and consequences of inaction were reiterated by the world leaders at the recent UN Conference on Sustainable Development (Rio+20) recognizing that "oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustaining it." They stressed "... the importance of the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change." The Outcomes Document[72] has identified oceans and the ecosystem services they provide as a critical part of all three dimensions of sustainable development. The world leaders committed themselves to "protect, and restore the health, productivity and resilience of oceans and marine ecosystems, to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities having an impact on the marine environment to deliver on all three dimensions of sustainable development."

[71] The Ramsar Convention defines wetlands fairly broadly, to include "areas of marine water the depth of which at low tide does not exceed six meters.".
[72] http://www.uncsd2012.org/thefuturewewant.html and http://sustainabledevelopment.un.org/index.php?menu=1624

13. Gender considerations and especially strengthening the role of women is essential not only to achieving MDGs but also sustaining development outcomes of investments in shared water bodies. The number of female headed households is increasing worldwide, yet women and girls have less access to land, irrigation, education, and other rights and resources than men, while women often are the primary income earners and caretakers of children, the elderly and the sick. Inclusion of women in local, national, and regional governance structures, access to credit, and secured access rights to water, land, fisheries, and other resources are essential for reaching long term sustainable development outcomes.

14. To ensure that a gender perspective is successfully incorporated into international waters management, policies, and activities at regional, national and local levels, it is vital to advocate for the active involvement of both women and men. The development and reform of supportive policy and legislative frameworks and institutional capacity building is at the heart of the GEF's international waters portfolio approach for the improved management of transboundary waters. GEF support within this strategy will assure that gender aspects are part of the social analysis during project preparation and investments are designed to take differentiated gender roles into account and implementation and results are tracked accordingly.

Drivers

15. Increasing and competing demands on freshwater resources. Climate change, population growth, and growing global food demand put increasing pressures on aquatic resources and connected ecosystems and their management. Rising demand for irrigation water combined with higher variability in rainfall, for example, will lead to ever greater demands on groundwater, thus decreasing its buffer capacity in times of drought and leading to increased salt water intrusion in coastal areas. In addition, most of the global freshwater resources are shared by more than one country, and uncoordinated development and exploitation of water resources as well as increasing pollution all contribute to global water stress.

16. Lack of incentives for sustainable marine resource management. The nature of traditionally common pool resources in which resource use benefits individuals at the cost of the public has contributed to the lack of sustainability in several sectors, including fisheries and coastal development. Consequently, a common driver behind the accelerating degradation of the marine environment is the inability of markets to sustainably develop and manage open-access resources such as those found in the ocean. A recent study from the Stockholm Environment Institute stated that "…the ocean is the victim of a massive market failure. The true worth of its ecosystems, services, and functions is persistently ignored by policy makers and largely excluded from wider economic and development strategies…" The cumulative, annual economic impact of poor ocean management is estimated to exceed $200 billion dollars. Mismanagement is compounded by $15–$30 billion a year in subsidies to an inefficient fishing industry. Not only will the WSSD target of "maintaining or restoring stocks to levels that can produce the maximum sustainable yield where possible and not later than 2015" not be met, but also the relevant CBD Aichi targets will be in jeopardy without concentrated and timely intervention.