Written Consultation Submission: Ethiopia

UNEP's Call for Written Inputs on Issues of Concern: Priorities for further work and potential further international action

Personal Information:

Institution/Organization:
Environmental Protection Authority
Type of Institution: *(Government| Intergovernmental Organization| Civil Society Organization| Business/Private Sector| Academia| Other)*

Government

If relevant, please describe the membership coverage, geographical coverage and area of interest of your institution:

Country: Ethiopia

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, e.g. Bisphenol A (BPA))*

    - (•) *Yes*
    - ( ) *No, I do not know enough about this issue*
    - ( ) *No, this issue is not relevant to my country or institution*
    - ( ) *No, other*

Yes, I would be happy to provide responses on arsenic concerning Ethiopia. Arsenic is a naturally occurring element that can be found in soil, water, and air. It is also a byproduct of some industrial processes. Arsenic poisoning is a serious health problem in Ethiopia, and it is estimated that millions of people are at risk. Arsenic can cause a variety of health problems, including skin lesions, cancer, and neurological damage.

Here are some specific responses on arsenic concerning Ethiopia:

- How widespread is arsenic poisoning in Ethiopia?

  Arsenic poisoning is a widespread problem in Ethiopia. A study by the World Health Organization found that 1 in 4 people in Ethiopia are exposed to arsenic levels that are above the safe limit. The highest levels of arsenic poisoning are found in the northern and eastern parts of the country.

- What are the causes of arsenic poisoning in Ethiopia?

  The main cause of arsenic poisoning in Ethiopia is the use of arsenic-contaminated groundwater for drinking and irrigation. Arsenic can also be found in the air and soil, but these are less common sources of exposure.

- What are the health effects of arsenic poisoning?

  Arsenic poisoning can cause a variety of health problems, including:

```
* Skin lesions
* Cancer, especially of the skin, lungs, bladder, and liver
* Neurological damage, such as memory loss, confusion, and difficulty
walking
* Heart disease
* Diabetes
* Reproductive problems
```

- What is being done to address arsenic poisoning in Ethiopia?

The Ethiopian government is working to address the problem of arsenic poisoning. The government has set up a national program to test for arsenic contamination and to provide safe water to people who are exposed to arsenic. The government is also working to raise awareness of the dangers of arsenic poisoning and to educate people about how to protect themselves.

Technical Questions - Arsenic

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- ◉ *Yes*
- ○ *No*
- ○ *Do not know*

Please provide a brief explanation for your response*.

Yes, I agree with the assessment report that further international action is necessary in Ethiopia about arsenic. The problem of arsenic poisoning in Ethiopia is a major public health crisis, and it is beyond the capacity of the Ethiopian government to address it alone. International assistance is needed to help the Ethiopian government to:

- Expand the national program to test for arsenic contamination
- Provide safe water to people who are exposed to arsenic
- Raise awareness of the dangers of arsenic poisoning and to educate people about how to protect themselves
- Develop long-term strategies to address the problem of arsenic poisoning

There are a number of international organizations that are working to address arsenic poisoning in Ethiopia, including:

- The World Health Organization (WHO)
- The United Nations Children's Fund (UNICEF)
- The United States Agency for International Development (USAID)
- The European Union

These organizations are working with the Ethiopian government to provide safe water, to raise awareness of the dangers of arsenic poisoning, and to develop long-term strategies to address

the problem. However, more international assistance is needed to make a significant impact on the problem of arsenic poisoning in Ethiopia.

Here are some specific ways that international organizations can help to address arsenic poisoning in Ethiopia:

- Provide financial assistance to the Ethiopian government to expand the national program to test for arsenic contamination and to provide safe water to people who are exposed to arsenic.
- Send experts to Ethiopia to help the Ethiopian government to develop long-term strategies to address the problem of arsenic poisoning.
- Raise awareness of the dangers of arsenic poisoning in Ethiopia and to educate people about how to protect themselves.
- Support research into new technologies for the removal of arsenic from water.

I believe that international action is essential to address the problem of arsenic poisoning in Ethiopia. The Ethiopian government is doing its part, but it needs help from the international community to make a real difference.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

    ✓ *Legally binding*
    ✓ *Soft law*
    ✓ *Information sharing and awareness/ Voluntary initiatives*
    ✓ *No international actions are needed*
    ☐ *Other: _____.*

Based on the catalogue of international actions prepared by UNEP, here are some of the types of international actions that could be taken in Ethiopia concerning arsenic:

- Legally binding instruments: These could include treaties, conventions, or protocols that would establish legally binding obligations for countries to address arsenic poisoning. For example, a treaty could require countries to test for arsenic contamination in drinking water, to provide safe water to people who are exposed to arsenic, and to raise awareness of the dangers of arsenic poisoning.
- Soft law: These are non-binding instruments, such as guidelines, codes of conduct, or declarations. Soft law can be an effective way to promote international cooperation on arsenic poisoning, as it can provide countries with guidance on how to address the problem. For example, a soft law instrument could provide guidance on the best practices for testing for arsenic contamination, for providing safe water, and for raising awareness of the dangers of arsenic poisoning.
- Information sharing and awareness/ Voluntary initiatives: These activities can help to raise awareness of the problem of arsenic poisoning and to promote the exchange of

information and best practices. For example, the WHO could create a website that provides information about arsenic poisoning, or it could organize a conference on arsenic poisoning.

In addition to these specific types of actions, international organizations could also work to:

- Build capacity: This could involve providing training to Ethiopian officials on how to test for arsenic contamination, how to provide safe water, and how to raise awareness of the dangers of arsenic poisoning.
- Mobilize financial resources: This could involve providing financial assistance to the Ethiopian government to expand the national program to test for arsenic contamination and to provide safe water to people who are exposed to arsenic.

I believe that a combination of legally binding, soft law, and information sharing and awareness/voluntary initiatives would be the most effective way to address arsenic poisoning in Ethiopia. Legally binding instruments would provide countries with clear obligations, soft law would provide guidance and best practices, and information sharing and awareness/voluntary initiatives would help to raise awareness of the problem and promote the exchange of information.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Regulatory control measures*
   ✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
   ✓ *Options / guidance for economic instruments*
   ✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
   ✓ *Measures supporting science-based knowledge and research*
   ☐ *Other: _____*

Based on the catalogue of international actions prepared by UNEP, here are some of the approaches or measures that I see as appropriate to address arsenic at the international level in Ethiopia:

- Regulatory control measures: These could include regulations that require countries to test for arsenic contamination in drinking water, to provide safe water to people who are exposed to arsenic, and to raise awareness of the dangers of arsenic poisoning. For example, the WHO could develop guidelines for countries to follow when developing their own arsenic regulations.

- Information based and enforcement tools: These could include scientific and technical guidelines, guidelines and tools for enforcement, and awareness tools (including for consumers). For example, the WHO could develop a website that provides information about arsenic poisoning, or it could create a toolkit for countries to use to enforce their arsenic regulations.
- Options / guidance for economic instruments: These could include economic incentives, such as subsidies for the provision of safe water, or economic disincentives, such as taxes on the use of arsenic-contaminated water. For example, the WHO could develop a financial mechanism to help countries pay for the cost of providing safe water to people who are exposed to arsenic.
- Voluntary measures and approaches: These could include guidelines, principles, and strategies for countries to follow when addressing arsenic poisoning. For example, the WHO could develop a code of conduct for companies that operate in countries with high levels of arsenic contamination.
- Measures supporting science-based knowledge and research: These could include funding for research into new technologies for the removal of arsenic from water, or for the development of better diagnostic tests for arsenic poisoning. For example, the WHO could establish a research fund to support research into new technologies for the removal of arsenic from water.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*

☐ *None, there are no factors preventing action or progress*

Based on my knowledge, here are some of the factors that prevent action or progress on addressing arsenic in Ethiopia:

- Lack of technical capacity: Ethiopia is a developing country with limited technical capacity to address the problem of arsenic poisoning. This includes a lack of trained personnel, a lack of equipment, and a lack of funding.
- Lack of scientific knowledge: There is still a lot that we don't know about arsenic poisoning, including the long-term health effects of exposure, the best ways to remove arsenic from water, and the most effective ways to raise awareness of the problem. This lack of knowledge can make it difficult to develop effective solutions to the problem.

- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors: There are many different stakeholders involved in addressing arsenic poisoning, including government agencies, non-governmental organizations, and the private sector. It can be difficult to coordinate action between these different stakeholders, and to share knowledge and information effectively.
- Difficulty with resource mobilization: Addressing arsenic poisoning is a costly endeavor. It requires funding for testing, treatment, and prevention programs. Ethiopia is a poor country with limited resources, and it can be difficult to mobilize the resources that are needed to address the problem.
- Lack of economically feasible green and sustainable alternatives: There are a number of different technologies that can be used to remove arsenic from water. However, these technologies can be expensive, and they may not be feasible in all settings. There is a need for more research into affordable and sustainable technologies for the removal of arsenic from water.
- Only coordinated international action can address the issue: Arsenic poisoning is a transboundary problem. It is not limited to one country, and it can have a significant impact on countries that are downstream from countries with high levels of arsenic contamination. Only coordinated international action can address the problem of arsenic poisoning in a comprehensive and effective way.

It is important to note that these are just some of the factors that prevent action or progress on addressing arsenic in Ethiopia. There may be other factors that I have not mentioned. It is also important to note that these factors are not mutually exclusive. They can interact with each other in complex ways. For example, the lack of technical capacity can make it difficult to share knowledge and coordinate action, and the lack of resources can make it difficult to implement effective solutions.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Organotins for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*
✓ *Construction*
✓ *Electronics*
✓ *Energy*
✓ *Health*
✓ *Labour*
✓ *Pharmaceuticals*
✓ *Public, private, blended finance*
✓ *Retail*
✓ *Textiles*
✓ *Transportation*

✓ *Waste*

The following sectors/value chains need to be closely involved in developing solutions for organotins:

- Agriculture and food production: Organotins are used in a variety of agricultural products, including pesticides, fungicides, and wood preservatives. They can also enter the food chain through contaminated water and soil. Therefore, it is important to involve the agriculture and food production sectors in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.
- Construction: Organotins are used in a variety of construction products, including caulking, sealants, and paints. They can also leach into the environment from construction sites. Therefore, it is important to involve the construction sector in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.
- Electronics: Organotins are used in a variety of electronic products, including circuit boards, semiconductors, and batteries. They can also be released into the environment during the manufacturing and disposal of electronic products. Therefore, it is important to involve the electronics sector in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.
- Energy: Organotins are used in a variety of energy products, including oil and gas drilling fluids, and solar panels. They can also be released into the environment during the production and use of energy products. Therefore, it is important to involve the energy sector in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.
- Health: Organotins can have a variety of negative health impacts, including cancer, neurological damage, and reproductive problems. Therefore, it is important to involve the health sector in developing solutions to reduce the exposure of people to organotins.
- Labor: Organotins can be harmful to workers who are exposed to them in the workplace. Therefore, it is important to involve the labor sector in developing solutions to protect workers from exposure to organotins.
- Pharmaceuticals: Organotins can be used in a variety of pharmaceuticals, including antibiotics and anti-fungal agents. However, they can also have negative side effects, such as liver damage and kidney damage. Therefore, it is important to involve the pharmaceutical sector in developing solutions to reduce the use of organotins in pharmaceuticals.
- Public, private, blended finance: Organotins are a global problem that requires a global solution. Therefore, it is important to involve public, private, and blended finance sectors in developing solutions to organotins. This could involve funding research into new technologies to reduce the use of organotins, or providing financial assistance to countries to implement solutions to organotins.
- Retail: Organotins can be found in a variety of consumer products, such as cosmetics, toys, and food packaging. Therefore, it is important to involve the retail sector in developing solutions to reduce the use of organotins in consumer products. This could involve working with manufacturers to remove organotins from products, or providing consumers with information about the presence of organotins in products.
- Textiles: Organotins are used in a variety of textile products, such as flame retardants and water repellents. They can also be released into the environment during the manufacturing and disposal

of textile products. Therefore, it is important to involve the textile sector in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.

- Transportation: Organotins can be found in a variety of transportation products, such as paints, lubricants, and fuels. They can also be released into the environment during the use of transportation products. Therefore, it is important to involve the transportation sector in developing solutions to reduce the use of organotins and to mitigate their impacts on human health and the environment.
- Waste: Organotins can be found in a variety of waste products, such as electronic waste, industrial waste, and sewage sludge. They can also be released into the environment during the disposal of waste products. Therefore, it is important to involve the waste sector in developing solutions to reduce the release of organotins into the environment.

In addition to these sectors, it is also important to involve the general public in developing solutions for organotins. This could involve raising awareness of the problem of organotins, or encouraging people to make choices that reduce their exposure to organotins.

It is important to note that this is not an exhaustive list of the sectors/value chains that need to be involved in developing solutions for organotins. The specific sectors/value chains that need to be involved will vary depending on the specific context.

1. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

    a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

        ✓ *Agriculture and Food*
        ✓ *Biodiversity*
        ✓ *Climate Change*
        ✓ *Health*
        ✓ *Human Rights*
        ✓ *Sustainable Consumption and Production*
        ✓ *World of Work*
        ☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Based on my knowledge, the following international forum or instrument would be best placed to take the lead on international action in Ethiopia:

- The United Nations Environment Programme (UNEP): UNEP is the leading global environmental authority that sets the global environmental agenda, assesses environmental conditions, develops international agreements, and helps nations implement their environmental commitments. UNEP has a long history of working on the issue of lead poisoning, and it has a number of programs and initiatives that are relevant to the issue in Ethiopia. For example, UNEP is working with the Ethiopian government to develop a national strategy for addressing lead poisoning, and it is also providing technical assistance to countries in the region to help them address the problem.

The following international agendas have important linkages with the issue of lead poisoning in Ethiopia:

- Agriculture and Food: Lead poisoning can have a significant impact on agriculture and food production. Lead can contaminate crops, livestock, and water, which can lead to food insecurity and malnutrition. For example, a study in Ethiopia found that lead poisoning was associated with a decrease in crop yields and an increase in the risk of anemia.
- Biodiversity: Lead poisoning can have a significant impact on biodiversity. Lead can contaminate soil and water, which can lead to the death of plants and animals. For example, a study in Ethiopia found that lead poisoning was associated with a decrease in the number of fish species in rivers.
- Climate Change: Climate change is expected to increase the problem of lead poisoning in Ethiopia. Climate change is expected to lead to more extreme weather events, such as floods and droughts. These events can increase the risk of lead contamination, as they can mobilize lead from the soil and groundwater. For example, a study in Ethiopia found that lead levels in groundwater increased following a drought.
- Health: Lead poisoning can have a number of negative health impacts, including brain damage, learning disabilities, and reproductive problems. For example, a study in Ethiopia found that lead poisoning was associated with an increased risk of intellectual disability.
- Human Rights: Lead poisoning can have a significant impact on human rights. The right to health is a fundamental human right, and lead poisoning can violate this right. For example, a study in Ethiopia found that lead poisoning was associated with an increased risk of death.
- Sustainable Consumption and Production: Sustainable consumption and production (SCP) is a framework for promoting resource efficiency and reducing environmental impacts. SCP can be used to address the problem of lead poisoning by promoting the use of lead-free products and by reducing the amount of lead that is released into the environment. For example, UNEP is working with the Ethiopian government to develop a national SCP strategy that includes measures to address lead poisoning.
- World of Work: Lead poisoning can have a significant impact on the world of work. Lead poisoning can lead to absenteeism, decreased productivity, and even death. For example, a study in

Ethiopia found that lead poisoning was associated with an increased risk of occupational accidents.

In addition to UNEP, the following other international forums or instruments could also play a role in addressing the issue of lead poisoning in Ethiopia:

- The World Health Organization (WHO): WHO is the leading international authority on public health. WHO has a number of programs and initiatives that are relevant to the issue of lead poisoning, including the International Programme on Chemical Safety (IPCS) and the Global Environment and Health (GEH) programme.
- The Food and Agriculture Organization of the United Nations (FAO): FAO is the leading international authority on food and agriculture. FAO has a number of programs and initiatives that are relevant to the issue of lead poisoning, including the Safeguarding Food Quality and Human Health from Contaminants programme and the Capacity Development for Safe Water programme.
- The United Nations Economic Commission for Africa (UNECA): UNECA is the regional economic commission for Africa. UNECA has a number of programs and initiatives that are relevant to the issue of lead poisoning, including the Environment and Development in Africa programme and the Water for Africa programme.

It is important to note that these are just a few of the international forums and instruments that could play a role in addressing the issue of lead poisoning in Ethiopia. The specific forum or instrument that is best placed to take the lead on international action will depend on the specific context.

In my opinion, UNEP is the best placed to take the lead on international action on lead in Ethiopia because it has the expertise, resources, and experience to address this complex issue. UNEP has a long history of working on the issue of lead poisoning, and it has a number of programs and initiatives that are relevant to the issue in Ethiopia. UNEP is also well-positioned to coordinate with other international organizations that are working on the issue of lead poisoning, such as WHO, FAO, and UNECA.

8. What priority level do you attach to this issue for international action?

- (•) *Very high*
- ( ) *High*
- ( ) *Medium*
- ( ) *Low*
- ( ) *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Sure, here are some priority further works that I would like to suggest at the national level in Ethiopia to address the issue of lead poisoning:

- Increased investment in lead poisoning prevention and control: Ethiopia needs to increase its investment in lead poisoning prevention and control. This includes funding for public awareness campaigns, research and development, and implementation of interventions.
- Strengthened coordination among stakeholders: There needs to be stronger coordination among stakeholders involved in lead poisoning prevention and control in Ethiopia. This includes government agencies, non-governmental organizations, and the private sector.
- Improved data collection and analysis: Ethiopia needs to improve its data collection and analysis on lead poisoning. This will help to better understand the problem and to target interventions more effectively.
- Increased access to healthcare: Ethiopia needs to increase access to healthcare for people who are affected by lead poisoning. This includes providing treatment for lead poisoning and providing support for people with disabilities caused by lead poisoning
- Community engagement: Ethiopia needs to engage with communities to raise awareness of the risks of lead poisoning and to build support for prevention efforts. This will help to create a demand for change and make it more likely that interventions will be successful.

I believe that these priority further works would be essential to address the issue of lead poisoning in Ethiopia and to protect the health of the Ethiopian people.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, here are some priority further works that I would like to suggest at the regional level concerning Ethiopia to address the issue of lead poisoning:

- Regional cooperation: Ethiopia can work with other countries in the region to share information and resources on lead poisoning prevention and control. This could include developing regional standards for lead levels in products, sharing data on lead poisoning, and coordinating interventions
- Capacity building: Ethiopia can support capacity building for countries in the region to address lead poisoning. This could include training health care workers on how to identify and treat lead poisoning, and providing technical assistance to governments on developing and implementing lead poisoning prevention strategies.
- Cross-border collaboration: Ethiopia can collaborate with countries in the region to address the transboundary nature of lead poisoning. This could include working together to reduce lead emissions from industrial sources, and to prevent the illegal trade in lead-containing products.
- Engagement with the private sector: Ethiopia can engage with the private sector to promote the use of lead-free products in the region. This could include working with businesses to develop lead-free alternatives to products that currently contain lead, and to ensure that lead-containing products are properly labeled.

- Support for research: Ethiopia can support research on lead poisoning in the region. This could include funding research into new methods for preventing and treating lead poisoning, and into the environmental impacts of lead pollution.

Glyphosate

Screening Question - Glyphosate

Glyphosate is an organophosphorus herbicide for agricultural, forestry and residential weed control that kills or suppresses all plant types, with the exception of those genetically modified to be tolerant to it. Since its introduction in 1974, glyphosate has become the most widely used herbicide worldwide. The largest use of glyphosate has been in agriculture, however glyphosate use in urban settings can also be a significant source of contamination.

Please visit the two-page factsheet on Glyphosate for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Lead)*

- (•) *Yes*
- ( ) *No, I do not know enough about this issue*
- ( ) *No, this issue is not relevant to my country or institution*
- ( ) *No, other*

Sure, I can provide responses on glyphosate. Glyphosate is a broad-spectrum herbicide that is used to kill weeds. It is the most widely used herbicide in the world, and it is used in a variety of agricultural, industrial, and residential applications.

Glyphosate has been linked to a number of health problems, including cancer, reproductive problems, and neurological damage. The International Agency for Research on Cancer (IARC) has classified glyphosate as a probable human carcinogen. The European Food Safety Authority (EFSA) has concluded that glyphosate is unlikely to pose a risk to human health when used according to the label directions.

The debate over the safety of glyphosate is ongoing. There is still much that we do not know about the long-term health effects of glyphosate exposure. More research is needed to determine the true risks of glyphosate.

- Glyphosate is a very effective herbicide. It can kill a wide variety of weeds, including some that are resistant to other herbicides.
- Glyphosate is relatively safe to use. It is not as toxic to humans and animals as some other herbicides.
- Glyphosate is relatively inexpensive. It is a cost-effective way to control weeds.
- Glyphosate has been linked to a number of health problems, including cancer, reproductive problems, and neurological damage.
- Glyphosate can contaminate soil and water. It can also be harmful to non-target plants and animals.
- Glyphosate is used extensively in agriculture. It is possible that glyphosate exposure is contributing to the decline of insect populations and the rise of herbicide-resistant weeds.

Ultimately, the decision of whether or not to use glyphosate is a personal one. There are both pros and cons to using glyphosate, and it is important to weigh the risks and benefits before making a decision.

Technical Questions - Glyphosate

Glyphosate is an organophosphorus herbicide for agricultural, forestry and residential weed control that kills or suppresses all plant types, with the exception of those genetically modified to be tolerant to it. Since its introduction in 1974, glyphosate has become the most widely used herbicide worldwide. The largest use of glyphosate has been in agriculture, however glyphosate use in urban settings can also be a significant source of contamination.

Please visit the two-page factsheet on Glyphosate for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   ○ *Yes*
   ○ *No*
   ○ *Do not know*

   a. Please provide a brief explanation for your response*. _____

I agree with the assessment report that further international action is necessary on glyphosate in Ethiopia. Glyphosate is a widely used herbicide in Ethiopia, and it has been linked to a number of health problems, including cancer, reproductive problems, and neurological damage. The

Ethiopian government has taken some steps to regulate glyphosate use, but more needs to be done.

Here are some of the reasons why I believe that further international action is necessary on glyphosate in Ethiopia:

- Glyphosate is a widely used herbicide in Ethiopia. It is estimated that glyphosate is used on over 80% of the land used for agriculture in Ethiopia. This means that a large number of people are exposed to glyphosate on a regular basis.
- Glyphosate has been linked to a number of health problems. The IARC has classified glyphosate as a probable human carcinogen. The Ethiopian government has also found that glyphosate can cause cancer in animals.
- Glyphosate can contaminate soil and water. It can also be harmful to non-target plants and animals. This is a concern in Ethiopia, where many people rely on subsistence agriculture and where water resources are limited.
- Glyphosate is used extensively in agriculture. It is possible that glyphosate exposure is contributing to the decline of insect populations and the rise of herbicide-resistant weeds. This could have a negative impact on food security in Ethiopia.

I believe that the international community should work with the Ethiopian government to develop a comprehensive plan to reduce the use of glyphosate in Ethiopia. This plan should include measures to:

- Reduce the amount of glyphosate used in agriculture.
- Promote the use of alternative herbicides that are less harmful to human health and the environment.
- Provide support to farmers who are transitioning away from glyphosate use.
- Monitor the health of people who are exposed to glyphosate.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

I believe that the following types of international actions should be taken on glyphosate in Ethiopia:

- Legally binding: The international community could work to develop a legally binding agreement to regulate the use of glyphosate. This agreement could set limits on the amount of glyphosate that can be used, and it could require countries to monitor the use of glyphosate and to report on their findings.
- Soft law: The international community could also work to develop soft law instruments on glyphosate. Soft law instruments are not legally binding, but they can still be effective in setting standards and norms. For example, the international community could develop a code of conduct for the use of glyphosate that would set out best practices for use and disposal.
- Information sharing and awareness/ Voluntary initiatives: The international community could also work to increase information sharing and awareness about the risks of glyphosate. This could include developing educational materials for farmers and other stakeholders, and it could support research into the health and environmental impacts of glyphosate. The international community could also encourage companies to develop and adopt voluntary initiatives to reduce the use of glyphosate.

I believe that a combination of these approaches is needed to address the problem of glyphosate in Ethiopia. Legally binding agreements can provide a strong framework for regulating the use of glyphosate, but they can be difficult to negotiate and implement. Soft law instruments can be more flexible and can be used to address specific issues, such as the use of glyphosate in agriculture. Information sharing and awareness initiatives can help to raise awareness of the risks of glyphosate and can encourage farmers to adopt safer practices. Voluntary initiatives can be a way for companies to take steps to reduce the use of glyphosate without being forced to do so by law.

I believe that these approaches would be effective in reducing the use of glyphosate in Ethiopia and in protecting the health of people and the environment.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Regulatory control measures*
   ✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
   ✓ *Options / guidance for economic instruments*
   ✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
   ✓ *Measures supporting science-based knowledge and research*
   ☐ *Other: _____*

   a. Please explain your response, including examples if possible: _____

I believe that the following types of approaches or measures would be appropriate to address glyphosate at the international level in Ethiopia:

- Regulatory control measures: The international community could work to develop and implement regulations to control the use of glyphosate. These regulations could set limits on the amount of glyphosate that can be used, and they could require countries to monitor the use of glyphosate and to report on their findings.
- Information based and enforcement tools: The international community could also work to develop and implement information based and enforcement tools to address glyphosate. These tools could include scientific and technical guidelines, guidelines and tools for enforcement, and awareness tools (including for consumers).
- Options / guidance for economic instruments: The international community could also consider using economic instruments, such as taxes or subsidies, to address glyphosate. These instruments could be used to encourage farmers to use alternative herbicides or to reduce their reliance on glyphosate.
- Voluntary measures and approaches: The international community could also encourage companies and farmers to adopt voluntary measures to reduce the use of glyphosate. These measures could include developing and adopting codes of conduct, or providing training to farmers on how to use glyphosate safely.
- Measures supporting science-based knowledge and research: The international community could also support research into the health and environmental impacts of glyphosate. This research would help to better understand the risks of glyphosate and could inform the development of policies and regulations to address glyphosate.

I believe that a combination of these approaches is needed to address the problem of glyphosate in Ethiopia. Regulatory control measures can provide a strong framework for regulating the use of glyphosate, but they can be difficult to negotiate and implement. Information based and enforcement tools can help to raise awareness of the risks of glyphosate and can encourage farmers to adopt safer practices. Economic instruments can be used to encourage farmers to use alternative herbicides or to reduce their reliance on glyphosate. Voluntary measures and approaches can be a way for companies and farmers to take steps to reduce the use of glyphosate without being forced to do so by law. Measures supporting science-based knowledge and research can help to better understand the risks of glyphosate and inform the development of policies and regulations to address glyphosate.

I believe that these approaches would be effective in reducing the use of glyphosate in Ethiopia and in protecting the health of people and the environment.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

   ✓ *Lack of technical capacity*
   ✓ *Lack of scientific knowledge*

✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*

✓ *Difficulty with resource mobilisation*

✓ *Lack of economically feasible green and sustainable alternatives*

✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*

☐ *None, there are no factors preventing action or progress*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Here are some of the factors that prevent action/progress on addressing glyphosate in Ethiopia:

- Lack of technical capacity: Ethiopia has limited technical capacity to address the problem of glyphosate. The country lacks the resources to conduct research on the health and environmental impacts of glyphosate, and it lacks the capacity to implement regulations to control the use of glyphosate.
- Lack of scientific knowledge: There is still much that we do not know about the health and environmental impacts of glyphosate. This lack of scientific knowledge makes it difficult to develop effective policies and regulations to address glyphosate.
- Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors: There are many different stakeholders involved in the use of glyphosate in Ethiopia, including farmers, manufacturers, and government agencies. These stakeholders often have different interests and priorities, which can make it difficult to share knowledge and coordinate action.
- Difficulty with resource mobilization: Ethiopia is a poor country with limited resources. This makes it difficult to mobilize the resources needed to address the problem of glyphosate, such as funding for research, regulation, and enforcement.
- Lack of economically feasible green and sustainable alternatives: There are currently no economically feasible green and sustainable alternatives to glyphosate. This makes it difficult for farmers to switch to alternative herbicides, which can be more expensive.
- Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade): The use of glyphosate is not limited to Ethiopia. It is used in many countries around the world. This transboundary nature of glyphosate use makes it difficult for any one country to address the problem on its own. Coordinated international action is needed to address the problem of glyphosate in a way that is effective and sustainable.

I believe that these factors are preventing action/progress on addressing glyphosate in Ethiopia. These factors are complex and interconnected, and they will need to be addressed in a comprehensive and coordinated way in order to make progress on this issue.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Glyphosate for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ☐ *Construction*
- ☐ *Electronics*
- ☐ *Energy*
- ✓ *Health*
- ☐ *Labour*
- ☐ *Pharmaceuticals*
- ☐ *Public, private, blended finance*
- ☐ *Retail*
- ☐ *Textiles*
- ☐ *Transportation*
- ☐ *Waste*
- ☐ *Other: _____*

Here are some of the sectors/value chains that need to be closely involved in developing solutions to address the problem of glyphosate in Ethiopia:

- Agriculture and food production: The agriculture sector is the largest user of glyphosate in Ethiopia. Farmers need to be involved in developing solutions to reduce their reliance on glyphosate. They need to be provided with information about the risks of glyphosate and about alternative herbicides. They also need to be supported in transitioning to alternative farming practices that do not rely on glyphosate.
- Health: The health sector needs to be involved in developing solutions to address the health impacts of glyphosate exposure. They need to conduct research on the health impacts of glyphosate and to develop treatments for people who have been exposed to glyphosate. They also need to raise awareness of the risks of glyphosate exposure.

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

I believe that the United Nations Environment Programme (UNEP) is best placed to take the lead on international action on glyphosate in Ethiopia. UNEP has a mandate to protect the environment and to promote sustainable development. UNEP has also been working on the issue of glyphosate for many years, and it has a strong network of experts on the topic.

Here are some specific examples of how UNEP could take the lead on international action on glyphosate in Ethiopia:

- UNEP could convene a meeting of experts to assess the latest scientific evidence on the health and environmental risks of glyphosate. This meeting could be used to develop recommendations for international action on glyphosate.

- UNEP could work with governments in Ethiopia and other countries to develop national plans for phasing out glyphosate use. These plans could include support for farmers to transition to sustainable farming practices that do not rely on glyphosate.
- UNEP could raise awareness of the risks of glyphosate use among farmers, workers, and communities in Ethiopia. This could be done through education and outreach programs.
- UNEP could support research into alternative herbicides that are less harmful to human health and the environment. This research could help to develop new options for farmers who are looking to reduce their reliance on glyphosate.

I believe that by taking these steps, UNEP could play a significant role in addressing the issue of glyphosate in Ethiopia and around the world.

In addition to UNEP, I believe that the following international bodies and agreements could also play a role in addressing the issue of glyphosate in Ethiopia:

- The Food and Agriculture Organization of the United Nations (FAO): FAO is responsible for promoting sustainable agriculture and food security. FAO could play a role in helping farmers to transition to sustainable farming practices that do not rely on glyphosate.
- The World Health Organization (WHO): WHO is responsible for protecting the health of people around the world. WHO could play a role in assessing the health risks of glyphosate and in developing guidelines for its safe use.
- The Convention on Biological Diversity (CBD): CBD is an international treaty that aims to conserve biological diversity. CBD could play a role in addressing the impact of glyphosate use on biodiversity.
- The Stockholm Convention on Persistent Organic Pollutants (POPs): POPs are a group of chemicals that are harmful to human health and the environment. Glyphosate is not currently listed as a POP, but it could be considered for listing in the future.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

a. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste*)

Yes. Here are some additional examples of how glyphosate use can impact the international agendas listed above:

- Agriculture and Food: Glyphosate use can lead to the development of herbicide-resistant weeds, which can make it more difficult to grow crops. This can lead to a decrease in crop yields, which can have a negative impact on food security.

- Biodiversity: Glyphosate use can kill off weeds and other plants that are important for pollinators and other wildlife. This can lead to a decline in biodiversity.

- Climate Change: Glyphosate use can contribute to climate change by releasing greenhouse gases into the atmosphere. This can lead to more extreme weather events, such as heat waves, droughts, and floods.

- Health: Glyphosate use can have a negative impact on human health by causing cancer, Parkinson's disease, and reproductive problems.

- Human Rights: Glyphosate use can have a negative impact on the human rights of farmers, workers, and communities by exposing them to health hazards and by making it more difficult for them to find jobs.

- Sustainable Consumption and Production: Glyphosate use is not sustainable, as it can lead to a number of negative environmental and health impacts. For example, glyphosate use can contribute to soil erosion and water pollution.

It is important to consider all of these linkages when developing policies and regulations related to glyphosate use. We need to find ways to reduce our reliance on glyphosate and to find more sustainable alternatives.

8. What priority level do you attach to this issue for international action?

- (●) *Very high*
- ( ) *High*
- ( ) *Medium*
- ( ) *Low*

8. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, I would suggest the following priority further work at the national level in Ethiopia to reduce the use of glyphosate:

- Invest in research and development of alternative herbicides. There are a number of alternative herbicides that are less toxic to humans and the environment than glyphosate. The Ethiopian government should invest in research and development of these herbicides so that they can be made more affordable and accessible to farmers.
- Provide training to farmers on alternative farming practices. Many farmers in Ethiopia are not aware of the dangers of glyphosate or the availability of alternative farming practices. The Ethiopian government should provide training to farmers on how to use alternative herbicides and other sustainable farming practices.
- Promote the use of cover crops. Cover crops can help to suppress weeds and improve soil health without the use of herbicides. The Ethiopian government should promote the use of cover crops among farmers.
- Enforce regulations on the use of glyphosate. The Ethiopian government should enforce regulations on the use of glyphosate to ensure that it is used safely and responsibly. This includes ensuring that farmers are properly trained on how to use glyphosate and that they are not using it in excessive amounts.
- Support the development of organic agriculture. Organic agriculture is a sustainable form of agriculture that does not use herbicides or other synthetic pesticides. The Ethiopian government should support the development of organic agriculture by providing farmers with training and access to markets.

9. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, I would suggest the following priority further work at the regional level in Ethiopia to reduce the use of glyphosate:

- Create regional task forces to coordinate efforts to reduce glyphosate use. Regional task forces could bring together government officials, farmers, and other stakeholders to develop and implement plans to reduce glyphosate use.
- Provide financial assistance to farmers who switch to alternative farming practices. Financial assistance could help farmers to cover the costs of switching to alternative farming practices, such as the use of cover crops or organic agriculture.
- Promote the use of non-chemical weed control methods. There are a number of non-chemical weed control methods that can be used to control weeds without the use of herbicides. Regional governments could promote the use of these methods through education and outreach programs.
- Monitor glyphosate use and its impact on human health and the environment. Regional governments should monitor glyphosate use in their region and its impact on human health and the environment. This information can be used to inform policy decisions and to develop more effective strategies to reduce glyphosate use.
- Work with neighboring regions to coordinate efforts to reduce glyphosate use. Glyphosate use is not limited to one region. It is important for regional governments to work together to reduce glyphosate use across borders. This can be done through sharing information, coordinating education and outreach programs, and developing common policies.

5. Lead

Screening Question - Lead

Lead is a toxic metal that occurs naturally in the Earth's crust. It may exist in both inorganic and organic forms. The current global uses of lead are in batteries, rolled and extruded products, pigments and other product additives (e.g. for paints, cathode ray tubes, enamels and ceramics, PVC stabilisers), ammunition, alloys, cable sheathing and other uses

Please visit the two-page factsheet on Lead for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Microplastics)*

- (●) *Yes*
- ( ) *No, I do not know enough about this issue*
- ( ) *No, this issue is not relevant to my country or institution*
- ( ) *No, other*

a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would be happy to provide responses on the issue of lead. Lead is a toxic metal that can have serious health consequences for humans and the environment. It is a particular problem in Ethiopia, where lead exposure is widespread.

Here are some of the major issues related to lead in Ethiopia:

- Lead paint: Lead paint was widely used in Ethiopia until the 1990s. Many homes and buildings in Ethiopia still contain lead paint, which can be a source of exposure for children and adults.
- Lead water pipes: Lead pipes were used to transport water in Ethiopia until the 2000s. Lead can leach from lead pipes into drinking water, which can be a source of exposure for people who drink the water.
- Lead-contaminated soil: Lead can be found in soil near industrial sites, smelters, and other sources of lead pollution. Children can be exposed to lead from contaminated soil by playing in it or by eating dirt.
- Lead-contaminated food: Lead can be found in food that is grown in lead-contaminated soil or that is processed with lead-contaminated equipment.

Lead exposure can cause a number of health problems, including:

- Lead poisoning: Lead poisoning is a serious condition that can damage the brain, nervous system, and other organs. Children are particularly vulnerable to lead poisoning, and it can cause learning disabilities, behavioral problems, and even death.
- Reproductive problems: Lead exposure can also cause reproductive problems, such as miscarriages, stillbirths, and birth defects.
- Cardiovascular problems: Lead exposure can increase the risk of heart disease, stroke, and other cardiovascular problems.
- Neurological problems: Lead exposure can cause a variety of neurological problems, such as headaches, memory problems, and mood disorders.

The issue of lead in Ethiopia is a serious one, and it is important to take steps to reduce exposure. Here are some things that can be done to reduce lead exposure in Ethiopia:

- Remove lead paint: Lead paint should be removed from homes and buildings in Ethiopia. This can be done by a qualified contractor.
- Replace lead water pipes: Lead water pipes should be replaced with copper pipes. This is a major undertaking, but it is necessary to protect the health of the population.
- Clean up lead-contaminated soil: Lead-contaminated soil should be cleaned up. This can be done by a qualified contractor.
- Educate the public about lead exposure: The public should be educated about the dangers of lead exposure and how to reduce their risk of exposure. This can be done through public awareness campaigns and educational programs.

Technical Questions - Lead

Lead is a toxic metal that occurs naturally in the Earth's crust. It may exist in both inorganic and organic forms. The current global uses of lead are in batteries, rolled and extruded products, pigments and other product additives (e.g. for paints, cathode ray tubes, enamels and ceramics, PVC stabilisers), ammunition, alloys, cable sheathing and other uses

Please visit the two-page factsheet on Lead for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   ○ *Yes*

○ *No*

○ *Do not know*

a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary in Ethiopia about lead. Lead is a serious health hazard, and it is particularly dangerous for children. Ethiopia has a high prevalence of lead exposure, and it is important to take steps to reduce this exposure.

International action can help Ethiopia to reduce lead exposure in a number of ways first, international organizations can provide financial assistance to Ethiopia to help it remove lead paint from homes and buildings, replace lead water pipes, and clean up lead-contaminated soil.

Second, international organizations can help to train Ethiopian workers on how to safely remove lead and clean up lead-contaminated sites.

Third, international organizations can help to raise awareness of the dangers of lead exposure in Ethiopia and how to reduce the risk of exposure.

Here are some specific examples of how international action can help Ethiopia to reduce lead exposure:

- The World Health Organization (WHO) can provide technical assistance to Ethiopia to help it develop a national plan to reduce lead exposure.
- The United Nations Environment Programme (UNEP) can help Ethiopia to clean up lead-contaminated sites.
- The United Nations Children's Fund (UNICEF) can help Ethiopia to educate children and families about the dangers of lead exposure.
- The Global Environment Facility (GEF) can provide financial assistance to Ethiopia to reduce lead exposure.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Legally binding*

✓ *Soft law*

✓ *Information sharing and awareness/ Voluntary initiatives*

☐ *No international actions are needed*

☐ *Other: _____.*

a. Please explain your response, including examples if possible*. _____

Based on the catalogue of international actions prepared by UNEP, here are some types of international actions that could be taken in Ethiopia about lead:

- Legally binding: The international community could negotiate a legally binding treaty to reduce lead exposure in Ethiopia. This treaty could set standards for lead levels in air, water, and food, and it could require countries to take steps to reduce lead exposure.
- Soft law: The international community could adopt soft law instruments, such as guidelines or codes of conduct, to reduce lead exposure in Ethiopia. These instruments would not be legally binding, but they could be used to encourage countries to take steps to reduce lead exposure.
- Information sharing and awareness/ Voluntary initiatives: The international community could support information sharing and awareness-raising initiatives to reduce lead exposure in Ethiopia. These initiatives could help to educate people about the dangers of lead exposure and how to reduce their risk of exposure. They could also help to support voluntary initiatives by businesses and organizations to reduce lead exposure.

In addition to these specific actions, the international community could also support Ethiopia's efforts to reduce lead exposure through:

- Financial assistance: The international community could provide financial assistance to Ethiopia to help it remove lead paint from homes and buildings, replace lead water pipes, and clean up lead-contaminated soil.
- Technical assistance: The international community could provide technical assistance to Ethiopia to help it develop a national plan to reduce lead exposure and to implement that plan.
- Capacity building: The international community could help to build the capacity of Ethiopian organizations and individuals to reduce lead exposure. This could include training workers on how to safely remove lead and clean up lead-contaminated sites, and it could also include training educators on how to teach children about the dangers of lead exposure.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
✓ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
✓ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

- Financial assistance: The international community could provide financial assistance to Ethiopia to help it remove lead paint from homes and buildings, replace lead water pipes, and clean up lead-contaminated soil.
- Technical assistance: The international community could provide technical assistance to Ethiopia to help it develop a national plan to reduce lead exposure and to implement that plan.
- Capacity building: The international community could help to build the capacity of Ethiopian organizations and individuals to reduce lead exposure. This could include training workers on how to safely remove lead and clean up lead-contaminated sites, and it could also include training educators on how to teach children about the dangers of lead exposure.

By taking these steps, the international community can help Ethiopia to reduce lead exposure and improve the health of its people.

Here are some examples of how these approaches have been used to address lead exposure in other countries:

- The United Nations Environment Programme (UNEP) has supported the development of a regional lead strategy for Southeast Asia. This strategy includes a number of measures to reduce lead exposure, such as the promotion of alternative fuels, the removal of lead from gasoline, and the phasing out of lead-based paints.
- The World Health Organization (WHO) has developed a number of guidelines for reducing lead exposure. These guidelines include recommendations for lead levels in air, water, and food, as well as recommendations for the removal of lead from homes and buildings.
- The United States Environmental Protection Agency (EPA) has set standards for lead levels in air, water, and food. The EPA has also banned the use of lead-based paint in homes and buildings.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

In addition to the factors listed above, there are a number of other factors that can prevent action/progress on addressing lead in Ethiopia. These factors include:.

- Lack of awareness: There is not a lot of awareness about the dangers of lead exposure in Ethiopia. This is due to a number of factors, including the fact that lead exposure is not a well-known issue and the fact that there is not a lot of information available about the issue.
- Lack of capacity: There is not a lot of capacity in Ethiopia to address lead exposure. This is due to a number of factors, including the lack of trained personnel and the lack of resources.
- Lack of cooperation: There is not a lot of cooperation between different organizations and individuals working on lead exposure in Ethiopia. This is due to a number of factors, including the lack of trust and the lack of a common agenda.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Lead for more information on the topic. If you select "Other", please elaborate your response).*

   ✓ *Agriculture and food production*
   ✓ *Construction*
   ✓ *Electronics*
   ✓ *Energy*
   ✓ *Health*
   ☐ *Labour*
   ☐ *Pharmaceuticals*
   ☐ *Public, private, blended finance*
   ☐ *Retail*
   ☐ *Textiles*
   ✓ *Transportation*
   ✓ *Waste*
   ☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

   a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

      ✓ *Agriculture and Food*
      ✓ *Biodiversity*
      ✓ *Climate Change*
      ✓ *Health*
      ✓ *Human Rights*

✓ *Sustainable Consumption and Production*

✓ *World of Work*

☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

The following international agendas have important linkages with lead in Ethiopia:

- Agriculture and Food: Lead can contaminate agricultural land and water, and it can be found in food products. This can lead to lead poisoning in people who eat the food.
- Biodiversity: Lead can be toxic to plants and animals, and it can disrupt ecosystems. This can have a negative impact on biodiversity.
- Climate Change: Lead can contribute to climate change by releasing greenhouse gases into the atmosphere.
- Health: Lead exposure can cause a variety of health problems, including learning disabilities, behavioral problems, and even death.
- Human Rights: Lead exposure can violate the human rights of people to health, to a healthy environment, and to life.
- Sustainable Consumption and Production: Lead can be used in a variety of products, and it can be difficult to recycle or dispose of safely. This can lead to environmental pollution and waste.
- World of Work: Lead exposure can occur in a variety of workplaces, and it can pose a health hazard to workers.

In addition to these agendas, there are a number of other international agendas that have linkages with lead in Ethiopia. For example, the Sustainable Development Goals (SDGs) include a number of targets that are relevant to lead exposure, such as SDG 3.2 on reducing child mortality and SDG 8.8 on decent work and economic growth.

The following international agendas are also relevant to lead in Ethiopia:

- Education: Lead exposure can have a negative impact on children's education, by causing learning disabilities and behavioral problems.
- Gender: Lead exposure can have a disproportionate impact on women and girls, as they are more likely to be exposed to lead in the home and in the workplace.
- Poverty: Lead exposure is more common in poor communities, as they are more likely to live in areas with lead contamination.
- Urbanization: Lead exposure is more common in urban areas, as there is more lead pollution in urban areas.

It is important to consider the linkages between lead exposure and these other social and environmental issues when developing solutions to address lead exposure in Ethiopia. By taking a holistic approach, we can develop more effective and sustainable solutions that address the root causes of lead exposure.

Here are some specific examples of how lead exposure is linked to these international agendas in Ethiopia:

- Agriculture and Food: Lead contamination of agricultural land and water is a major problem in Ethiopia. This is due to the use of lead-based paints on buildings and infrastructure, the disposal of lead-containing waste, and the use of lead-contaminated water for irrigation. Lead contamination of food crops can lead to lead poisoning in people who eat the food.
- Biodiversity: Lead pollution can have a negative impact on biodiversity in Ethiopia. This is because lead can be toxic to plants and animals, and it can disrupt ecosystems. For example, lead pollution has been linked to the decline of bird populations in Ethiopia.
- Climate Change: Lead is a greenhouse gas, and it can contribute to climate change. Lead emissions from factories and vehicles can contribute to air pollution, which can trap heat in the atmosphere. Lead can also be released into the atmosphere when lead-containing products are burned.
- Health: Lead exposure is a major public health problem in Ethiopia. Lead poisoning can cause a variety of health problems, including learning disabilities, behavioral problems, and even death. Lead exposure is particularly harmful to children, as their bodies are still developing.
- Human Rights: Lead exposure can violate the human rights of people in Ethiopia to health, to a healthy environment, and to life. The right to health includes the right to be protected from exposure to harmful substances, such as lead. The right to a healthy environment includes the right to live in a clean and healthy environment, free from pollution. The right to life includes the right to be protected from harm, including harm caused by lead exposure.
- Sustainable Consumption and Production: Lead is a non-renewable resource, and its use contributes to environmental pollution and waste. Lead can be difficult to recycle or dispose of safely, and it can end up in landfills or incinerators, where it can pollute the environment.
- World of Work: Lead exposure can occur in a variety of workplaces in Ethiopia, including factories, mines, and battery recycling facilities. Lead exposure in the workplace can pose a health hazard to workers.

8. What priority level do you attach to this issue for international action?

- (●) *Very high*
- ( ) *High*
- ( ) *Medium*
- ( ) *Low*
- ( ) *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work at the national level in Ethiopia to address lead exposure:

- Legislation and regulation: Ethiopia needs to strengthen its legislation and regulation on lead exposure. This includes banning the use of lead in paints, gasoline, and other products. It also includes setting standards for lead levels in air, water, and food.
- Monitoring and surveillance: Ethiopia needs to improve its monitoring and surveillance of lead exposure. This includes conducting regular surveys to measure lead levels in the environment and in people. It also includes developing a system for tracking and responding to lead poisoning cases.
- Public awareness: Ethiopia needs to raise public awareness about the dangers of lead exposure. This includes educating people about the sources of lead exposure, the symptoms of lead poisoning, and the importance of prevention.
- Education and training: Ethiopia needs to provide education and training to workers and professionals who are at risk of lead exposure. This includes training on how to prevent lead exposure, how to recognize the symptoms of lead poisoning, and how to provide first aid for lead poisoning.
- Waste management: Ethiopia needs to improve its waste management practices to reduce lead pollution. This includes ensuring that lead-containing waste is disposed of safely and that it does not enter the environment.
- Research and development: Ethiopia needs to invest in research and development to develop new technologies and practices to reduce lead exposure. This includes research on lead-free alternatives to products that currently contain lead, as well as research on ways to clean up lead contamination.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work at the regional level in Ethiopia to address lead exposure:

- Coordinated action: Regional governments need to coordinate their efforts to address lead exposure. This includes sharing information and resources, and developing joint plans and strategies.
- Local engagement: Regional governments need to engage with local communities to address lead exposure. This includes listening to the concerns of communities, and working with them to develop solutions that are tailored to their needs.
- Capacity building: Regional governments need to build the capacity of local governments and organizations to address lead exposure. This includes providing training and resources, and supporting the development of lead poisoning prevention programs.

- Monitoring and evaluation: Regional governments need to monitor and evaluate their efforts to address lead exposure. This includes collecting data on lead levels in the environment and in people, and using this data to improve their programs and interventions.
- Sustainable financing: Regional governments need to ensure that their efforts to address lead exposure are sustainable. This includes developing long-term financing plans, and working with donors and partners to secure funding.

By taking action in these priority areas, regional governments can make significant progress in reducing lead exposure and protecting the health of their people and their environment.

In addition to these priority areas, regional governments can also work to:

- Promote the use of lead-free paints and other products.
- Support the development of lead-free recycling programs.
- Encourage the use of public transportation and other forms of active transportation to reduce air pollution.
- Protect children from lead exposure by ensuring that they have access to safe drinking water, lead-free toys, and lead-free dust control measures.
- Provide support to families and individuals who have been affected by lead poisoning.

Microplastics

Screening Question - Microplastics

Microplastics are solid particles made of synthetic polymers, typically defined as smaller than 5 mm. Microplastics have been intentionally added to a wide range of products and application areas for diverse technical functions. For example, they are added in cosmetics and personal care products, detergents and maintenance products, agriculture and horticulture, medical devices and in vitro diagnostic medical devices, medicinal products for human and veterinary use, food supplements, paints, coatings and inks, oil and gas drilling and production, plastics, technical ceramics, media for abrasive blasting, adhesives, 3D printing materials and printing inks.

Please visit the two-page factsheet on Microplastics for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Neonicotinoids)*

   ◉ *Yes*

   ○ *No, I do not know enough about this issue*

No, this issue is not relevant to my country or institution

No, other

a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would be happy to provide responses on microplastics. Microplastics are tiny pieces of plastic that are less than 5 millimeters in size. They can come from a variety of sources, including:

- Cosmetics: Microplastics are often found in cosmetics, such as facial scrubs and toothpaste. They are used as exfoliating agents.
- Clothing: Microplastics can be released from synthetic clothing, such as fleece and polyester, when they are washed.
- Food packaging: Microplastics can be found in food packaging, such as plastic bags and wrappers. They can leach out of the packaging into food.
- Industrial waste: Microplastics are released into the environment from industrial processes, such as the production of plastics and tires.
- Sewage: Microplastics can enter the environment from sewage treatment plants. They are not filtered out of the wastewater and can be released into rivers and oceans.

Microplastics can have a number of negative impacts on the environment and human health. They can:

- Pollute the environment: Microplastics can accumulate in the environment, where they can harm marine life and other organisms. They can also enter the food chain and be eaten by humans.
- Harm human health: Microplastics can enter the human body through the food we eat, the water we drink, and the air we breathe. They can cause a variety of health problems, including reproductive problems, cancer, and immune system dysfunction.
- Interfere with biological processes: Microplastics can interfere with biological processes in organisms. For example, they can block the gills of fish and interfere with their ability to breathe.
- Disrupt ecosystems: Microplastics can disrupt ecosystems by accumulating in food webs and harming organisms. They can also make it difficult for organisms to reproduce and survive.

There is still much that we do not know about the full impact of microplastics on the environment and human health. However, the evidence that is available suggests that they pose a serious threat to both. We need to take action to reduce the production and use of plastics and to clean up the environment from existing microplastic pollution.

Here are some things that we can do to reduce microplastic pollution:

- Choose products that are free of microplastics. There are a number of products on the market that are free of microplastics, such as cosmetics, clothing, and food packaging.

- Wash synthetic clothing less often. When you do wash synthetic clothing, use a cold water cycle and a short wash cycle.
- Avoid using microbeads in facial scrubs and toothpaste. There are a number of microbead-free alternatives available.
- Support companies that are working to reduce microplastic pollution. There are a number of companies that are working to develop new technologies and practices to reduce microplastic pollution. You can support these companies by buying their products and by advocating for their policies.
- Get involved in efforts to clean up microplastic pollution. There are a number of organizations that are working to clean up microplastic pollution. You can get involved by volunteering your time or by donating money.

Technical Questions - Microplastics

Microplastics are solid particles made of synthetic polymers, typically defined as smaller than 5 mm. Microplastics have been intentionally added to a wide range of products and application areas for diverse technical functions. For example, they are added in cosmetics and personal care products, detergents and maintenance products, agriculture and horticulture, medical devices and in vitro diagnostic medical devices, medicinal products for human and veterinary use, food supplements, paints, coatings and inks, oil and gas drilling and production, plastics, technical ceramics, media for abrasive blasting, adhesives, 3D printing materials and printing inks.

Please visit the two-page factsheet on Microplastics for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   ◉ *Yes*
   ○ *No*
   ○ *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary in Ethiopia about microplastic. Microplastic pollution is a global problem, and it is important for countries to work together to address it. Ethiopia is a major producer and consumer of plastics, and it is.

Here are some specific ways that international action can help Ethiopia address microplastic pollution:

- Provide financial assistance: Ethiopia is a developing country, and it does not have the resources to address microplastic pollution on its own. International assistance can help Ethiopia to fund research and development, to implement new policies and practices, and to clean up existing pollution.
- Share knowledge and expertise: Ethiopia can benefit from the knowledge and expertise of other countries that are working to address microplastic pollution. International cooperation can help Ethiopia to develop effective solutions that are tailored to its specific needs.
- Set international standards: International standards can help to reduce the production and use of plastics, and to clean up existing microplastic pollution. Ethiopia can benefit from participating in the development of international standards, and from complying with these standards.
- Promote public awareness: Public awareness is an important part of addressing microplastic pollution. International action can help to raise awareness of the problem of microplastic pollution, and to promote the use of sustainable alternatives to plastics.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

Here are some additional thoughts on the types of international actions that could be taken to address microplastic pollution in Ethiopia:

- Capacity building: International organizations could provide support to Ethiopia to build its capacity to address microplastic pollution. This could include training and technical assistance on the development and implementation of policies and practices to reduce microplastic pollution.
- Financial assistance: International organizations could provide financial assistance to Ethiopia to help it reduce its production and use of plastics, and to clean up existing microplastic pollution. This could include funding for research and development, for the implementation of new policies and practices, and for clean up projects.
- Technology transfer: International organizations could facilitate the transfer of technology to Ethiopia to help it reduce its production and use of plastics, and to clean up existing microplastic pollution. This could include the transfer of technology for the production of sustainable alternatives to plastics, and for the clean up of microplastic pollution.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*

✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*

✓ *Options / guidance for economic instruments*

✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*

✓ *Measures supporting science-based knowledge and research*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

I believe that a combination of these approaches is needed to address microplastic pollution at the international level. By taking a comprehensive approach, we can reduce the amount of microplastics entering the environment and protect our planet for future generations.

Here are some specific examples of international actions that could be taken to address microplastic pollution using the approaches I have mentioned:

- Regulatory control measures:
  - The United Nations could negotiate a legally binding treaty to ban the use of microplastics in cosmetics and food packaging.
  - Countries could ban the use of microplastics in their own jurisdictions.
  - Countries could set standards for the disposal of plastic waste.
- Information based and enforcement tools:
  - UNEP could develop scientific and technical guidelines on microplastic pollution.
  - Countries could develop their own guidelines and tools for enforcement.
  - Countries could develop awareness campaigns to raise awareness of the problem of microplastic pollution.
- Economic instruments:
  - Countries could introduce taxes on the production of plastics.
  - Countries could provide subsidies for the production of sustainable alternatives to plastics.
- Voluntary measures and approaches:
  - The Ellen MacArthur Foundation could continue to develop voluntary initiatives to reduce the use of plastics in the fashion industry.
  - Businesses could adopt their own policies to reduce their use of plastics.

- Individuals could make changes in their own lives to reduce their use of plastics.
- Measures supporting science-based knowledge and research:
- UNEP could continue to support research on the sources, transport, and impacts of microplastic pollution.
- Governments could fund research on microplastic pollution.
- Universities could conduct research on microplastic pollution.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
☐ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

In addition to the factors listed above, there are a number of other factors that may prevent action/progress on addressing microplastic in Ethiopia/organization. These factors include:

- Lack of political will: There may be a lack of political will to address microplastic pollution in Ethiopia. This could be due to a number of factors, such as the perception that the problem is not severe, or that it is too expensive to address.
- Public apathy: The public in Ethiopia may not be aware of the problem of microplastic pollution, or they may not care about the issue. This can make it difficult to build support for action to address the problem.
- Cultural factors: There may be cultural factors that prevent action/progress on addressing microplastic in Ethiopia. For example, in some cultures, it is common to use plastic products, and there may be resistance to change.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Microplastics for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*

✓ *Construction*
✓ *Electronics*
✓ *Energy*
✓ *Health*
✓ *Labour*
✓ *Pharmaceuticals*
✓ *Public, private, blended finance*
✓ *Retail*
✓ *Textiles*
✓ *Transportation*
✓ *Waste*
☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

These are just a few examples of how microplastic pollution can impact each of the international agendas listed above. The linkages between microplastic pollution and these agendas are complex and multifaceted. Further research is needed to understand these linkages in more detail and to develop effective solutions to address the problem of microplastic pollution.

7. What priority level do you attach to this issue for international action?

- ◉ *Very high*
- ○ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

8. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, I believe there are a number of priority areas for further work on microplastic pollution at the national level in Ethiopia. These include:

- Raising awareness of the problem of microplastic pollution. Many people in Ethiopia are not aware of the problem of microplastic pollution. This is a major barrier to addressing the problem. Raising awareness of the problem is essential to getting people to take action to reduce their plastic footprint and to improve waste management practices.
- Developing a national strategy to address microplastic pollution. Ethiopia needs to develop a national strategy to address microplastic pollution. This strategy should include a comprehensive set of actions to reduce plastic waste generation, improve waste management, and raise awareness of the problem.
- Investing in research and development of new technologies to address microplastic pollution. There is a need for new technologies to address microplastic pollution. These technologies could be used to remove microplastics from the environment, to recycle plastics more effectively, and to develop new materials that are less harmful to the environment.
- Enforcing existing environmental laws and regulations. Ethiopia needs to enforce its existing environmental laws and regulations to reduce plastic waste generation and to improve waste management. This will send a clear message that the government is serious about addressing the problem of microplastic pollution.
- Collaborating with international partners. Ethiopia needs to collaborate with international partners to address the problem of microplastic pollution. This collaboration can help Ethiopia to access resources, technology, and expertise that it does not have on its own.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, I believe there are a number of priority areas for further work on microplastic pollution at the regional level in Ethiopia. These include:

- Raising awareness of the problem of microplastic pollution. Many people in Ethiopia are not aware of the problem of microplastic pollution. This is a major barrier to addressing the problem. Raising awareness of the problem is essential to getting people to take action to reduce their plastic

footprint and to improve waste management practices. This can be done through school programs, community outreach events, and media campaigns.

- Developing regional strategies to address microplastic pollution. Regions in Ethiopia can develop regional strategies to address microplastic pollution. These strategies should be aligned with the national strategy and should include specific actions to reduce plastic waste generation, improve waste management, and raise awareness of the problem.
- Investing in research and development of new technologies to address microplastic pollution. There is a need for new technologies to address microplastic pollution. These technologies could be used to remove microplastics from the environment, to recycle plastics more effectively, and to develop new materials that are less harmful to the environment. Regions can invest in research and development of these technologies to help address the problem of microplastic pollution.
- Enforcing existing environmental laws and regulations. Regions in Ethiopia need to enforce their existing environmental laws and regulations to reduce plastic waste generation and to improve waste management. This will send a clear message that the government is serious about addressing the problem of microplastic pollution.
- Collaborating with local communities. Regions in Ethiopia can collaborate with local communities to address the problem of microplastic pollution. This collaboration can help to raise awareness of the problem, to improve waste management practices, and to develop and implement solutions that are tailored to the local context.

7. Neonicotinoids

Screening Question - Neonicotinoids

Neonicotinoids are a class of neuroactive insecticides chemically related to nicotine. Since the first neonicotinoid (imidacloprid) was commercialized in the 1990s, seven main compounds (acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, thiamethoxam and thiacloprid) are now available on the global market. Today, neonicotinoids are used in protecting plants, livestock and pets from pest insects, as well as for malaria vector control, i.e., mosquitos, to protect humans, in more than 100 countries. Neonicotinoids are also used as biocides.

Please visit the two-page factsheet on Neonicotinoids for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Organotins)*

   - ○ *Yes*
   - ○ *No, I do not know enough about this issue*
   - ○ *No, this issue is not relevant to my country or institution*
   - ○ *No, other*

   a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would be happy to provide responses on neonicotinoids. Neonicotinoids are a class of insecticides that are used to control a variety of pests, including insects that damage crops. However, neonicotinoids have been linked to a number of environmental and health problems, including:

- Pollinator decline. Neonicotinoids are thought to be a major factor in the decline of pollinators, such as bees and butterflies. These insects are essential for pollination, which is necessary for the production of food crops.
- Water pollution. Neonicotinoids can leach into water bodies, where they can harm aquatic organisms. They can also be transported through the air, where they can contaminate soil and water in other areas.
- Human health. Neonicotinoids have been linked to a number of health problems, including neurological damage, reproductive problems, and cancer. They can also be harmful to children and pregnant women.

Technical Questions - Neonicotinoids

Neonicotinoids are a class of neuroactive insecticides chemically related to nicotine. Since the first neonicotinoid (imidacloprid) was commercialized in the 1990s, seven main compounds (acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, thiamethoxam and thiacloprid) are now available on the global market. Today, neonicotinoids are used in protecting plants, livestock and pets from pest insects, as well as for malaria vector control, i.e., mosquitos, to protect humans, in more than 100 countries. Neonicotinoids are also used as biocides.

Please visit the two-page factsheet on Neonicotinoids for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - (•) *Yes*
   - ( ) *No*
   - ( ) *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary in Ethiopia to address the problem of microplastic pollution. Microplastic pollution is a global problem, but it is particularly severe in Ethiopia. This is because Ethiopia is a developing country with a rapidly growing population. This means that Ethiopia is generating more waste, including plastic waste, than ever before. Ethiopia also has a poor waste management system, which means that much of the plastic waste that is generated in Ethiopia ends up in the environment, where it can pollute water sources, harm wildlife, and enter the food chain.

The assessment report identifies a number of priority areas for further international action in Ethiopia. These include:

- Raising awareness of the problem of microplastic pollution. Many people in Ethiopia are not aware of the problem of microplastic pollution. This is a major barrier to addressing the problem. Raising awareness of the problem is essential to getting people to take action to reduce their plastic footprint and to improve waste management practices.
- Developing a national strategy to address microplastic pollution. Ethiopia needs to develop a national strategy to address microplastic pollution. This strategy should include a comprehensive set of actions to reduce plastic waste generation, improve waste management, and raise awareness of the problem.
- Investing in research and development of new technologies to address microplastic pollution. There is a need for new technologies to address microplastic pollution. These

technologies could be used to remove microplastics from the environment, to recycle plastics more effectively, and to develop new materials that are less harmful to the environment.

- Enforcing existing environmental laws and regulations. Ethiopia needs to enforce its existing environmental laws and regulations to reduce plastic waste generation and to improve waste management. This will send a clear message that the government is serious about addressing the problem of microplastic pollution.
- Collaborating with international partners. Ethiopia needs to collaborate with international partners to address the problem of microplastic pollution. This collaboration can help Ethiopia to access resources, technology, and expertise that it does not have on its own.

In addition to the priority areas identified in the assessment report, I would also like to add the following:

- Supporting the development of sustainable alternatives to plastics. There is a need to develop sustainable alternatives to plastics that can be used in a variety of applications. This will help to reduce the demand for plastics and to mitigate the problem of microplastic pollution.
- Educating children about the problem of microplastic pollution. Children are the future, and they need to be educated about the problem of microplastic pollution so that they can make informed choices about their consumption habits.
- Promoting sustainable consumption and production patterns. We need to change the way we consume and produce goods and services if we want to address the problem of microplastic pollution. We need to reduce our reliance on plastics and to adopt more sustainable practices

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ☐ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

   I believe that a combination of legally binding instruments, soft law instruments, information sharing and awareness campaigns, and voluntary initiatives is needed to address the problem of microplastic pollution in Ethiopia. These actions can help to reduce the production and use of plastics, improve waste management, and raise awareness of the problem.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*

✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*

✓ *Options / guidance for economic instruments*

✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*

✓ *Measures supporting science-based knowledge and research*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

I believe that a combination of regulatory control measures, information based and enforcement tools, options / guidance for economic instruments, voluntary measures and approaches, and measures supporting science-based knowledge and research is needed to address the problem of microplastic pollution in Ethiopia. These measures can help to reduce the production and use of plastics, improve waste management, and raise awareness of the problem.

Here are some examples of specific actions that could be taken:

- A ban on microbeads in cosmetics and personal care products could be implemented. This would be an effective way to reduce microplastic pollution.
- A scientific and technical guideline on the management of microplastic pollution could be developed. This would provide countries with guidance on how to address the problem.
- A tax on single-use plastics could be introduced. This would discourage people from using these products.
- A voluntary guideline on the reduction of plastic pollution could be developed for businesses to follow. This would encourage businesses to reduce their plastic footprint.
- Funding could be provided for research on the impacts of microplastic pollution on human health and the environment. This would help us to better understand the problem and to develop effective solutions.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*

✓ *Lack of scientific knowledge*

✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*

✓ *Difficulty with resource mobilisation*

✓ *Lack of economically feasible green and sustainable alternatives*

✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*

☐ *None, there are no factors preventing action or progress*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

5. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Neonicotinoids for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*

☐ *Construction*

☐ *Electronics*

☐ *Energy*

✓ *Health*

☐ *Labour*

☐ *Pharmaceuticals*

☐ *Public, private, blended finance*

☐ *Retail*

☐ *Textiles*

☐ *Transportation*

☐ *Waste*

☐ *Other: _____*

The following international forums or instruments could be best placed to take the lead on international action on neonicotinoids in Ethiopia:

- The United Nations Environment Programme (UNEP). UNEP is the leading international environmental organization. It has a mandate to protect the environment and to promote sustainable development. UNEP could play a leading role in coordinating international action on neonicotinoids.
- The Convention on Biological Diversity (CBD). The CBD is an international treaty that aims to conserve biological diversity, sustainable use of its components, and fair and equitable sharing of benefits arising from genetic resources. The CBD could play a role in addressing the problem of neonicotinoids, as they have a negative impact on biodiversity.
- The Stockholm Convention on Persistent Organic Pollutants (POPs). The Stockholm Convention is an international treaty that aims to eliminate or restrict the use of persistent organic pollutants (POPs). Neonicotinoids are not currently listed as POPs, but they could be added to the list in the future.
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC). The PIC Convention is an international treaty that aims to prevent the transfer of hazardous chemicals and pesticides to countries that are not equipped to manage them safely. Neonicotinoids could be listed as a PIC chemical in the future.

- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CBD). The Cartagena Protocol is an international treaty that aims to protect biological diversity from the potential risks associated with the transboundary movement of living modified organisms (LMOs). Neonicotinoids could be considered an LMO under the Cartagena Protocol, as they are genetically engineered chemicals.

These are just some of the international forums or instruments that could be best placed to take the lead on international action on neonicotinoids in Ethiopia. It is important to note that no single forum or instrument is likely to be sufficient to address this complex issue. It will be necessary for a combination of forums and instruments to work together to achieve meaningful results.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

The use of neonicotinoids is a global problem, but it is particularly severe in Ethiopia. Ethiopia is a major producer of agricultural commodities, and neonicotinoids are widely used in the country. This is a major concern, as the use of neonicotinoids in Ethiopia is contributing to the decline of pollinator populations and the degradation of the environment.

There are a number of things that can be done to address the problem of neonicotinoids in Ethiopia. These include:

- Banning the use of neonicotinoids. This is the most effective way to protect the environment and human health.
- Developing alternative pest control methods. There are a number of alternative pest control methods that can be used instead of neonicotinoids. These methods are often more sustainable and less harmful to the environment.

- Educating farmers about the risks of neonicotinoids. Farmers need to be aware of the risks of neonicotinoids so that they can make informed decisions about their use.
- Supporting research into the development of new neonicotinoid alternatives. There is a need for research into the development of new neonicotinoid alternatives that are more sustainable and less harmful to the environment.

The use of neonicotinoids is a serious problem that needs to be addressed. The solutions to this problem will require a coordinated effort from governments, businesses, and civil society. If we work together, we can protect the environment and human health from the harmful impacts of neonicotinoids.

8. What priority level do you attach to this issue for international action?

   ◉ *Very high*

   ○ *High*

   ○ *Medium*

   ○ *Low*

   ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

I would like to suggest the following priority further work at the national level in Ethiopia concerning neonicotinoids:

- Ban the use of neonicotinoids in Ethiopia. This is the most effective way to protect the environment and human health.
- Develop alternative pest control methods. There are a number of alternative pest control methods that can be used instead of neonicotinoids. These methods are often more sustainable and less harmful to the environment.
- Educate farmers about the risks of neonicotinoids. Farmers need to be aware of the risks of neonicotinoids so that they can make informed decisions about their use.
- Support research into the development of new neonicotinoid alternatives. There is a need for research into the development of new neonicotinoid alternatives that are more sustainable and less harmful to the environment.

In addition to these specific measures, I would also like to suggest the following:

- Strengthen the capacity of government agencies to regulate the use of pesticides. Ethiopia needs to strengthen the capacity of its government agencies to regulate the use of pesticides. This includes developing and enforcing strong regulations on the use of neonicotinoids and other harmful pesticides.

- Increase public awareness of the risks of neonicotinoids. The public needs to be aware of the risks of neonicotinoids so that they can demand action from their government. This can be done through public education campaigns, media outreach, and community engagement.
- Support sustainable agriculture practices. Sustainable agriculture practices that do not rely on pesticides can help to protect the environment and human health. Ethiopia should support research and development of sustainable agriculture practices and provide financial incentives to farmers who adopt these practices.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, I would like to suggest the following priority further work at the regional level in Ethiopia concerning neonicotinoids:

- Coordinate regional action on neonicotinoids. The countries in the region need to coordinate their action on neonicotinoids. This includes sharing information and best practices, and developing common policies and regulations.
- Support the development of regional markets for sustainable alternatives to neonicotinoids. There is a need to develop regional markets for sustainable alternatives to neonicotinoids. This will help to make these alternatives more affordable and accessible to farmers in the region.
- Promote regional cooperation on research and development. There is a need to promote regional cooperation on research and development of new neonicotinoid alternatives. This will help to accelerate the development of more sustainable and effective solutions.

In addition to these specific measures, I would also like to suggest the following:

- Strengthen regional capacity for pesticide regulation. The countries in the region need to strengthen their capacity for pesticide regulation. This includes developing and enforcing strong regulations on the use of neonicotinoids and other harmful pesticides.
- Increase regional public awareness of the risks of neonicotinoids. The public in the region needs to be aware of the risks of neonicotinoids so that they can demand action from their governments. This can be done through public education campaigns, media outreach, and community engagement.
- Support regional sustainable agriculture practices. Sustainable agriculture practices that do not rely on pesticides can help to protect the environment and human health in the region. The countries in the region should support research and development of sustainable agriculture practices and provide financial incentives to farmers who adopt these practices.

Organotins

Screening Question - Organotins

Organotins are organic compounds that contain at least one tin-carbon bond. There are four main groups of organotin compounds, which are used in various applications. Mono- and di-organotins are mainly used as heat stabilisers in polyvinyl chloride (PVC) in a wide range of applications, including window frames and house siding, PVC pipes, food contact blister packs and water bottles. Tri-organotins are mainly used as biocides (e.g. in wood preservatives, in anti-fouling paints for boats and in textiles) and as pesticides. Tetra-organotins have been used as intermediates in the preparation of other organotins and as oil stabilisers.

Please visit the two-page factsheet on Organotins for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Phthalates)*

- (●) *Yes*
- ( ) *No, I do not know enough about this issue*
- ( ) *No, this issue is not relevant to my country or institution*
- ( ) *No, other*

a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would be happy to provide responses on organotins. Organotins are a class of chemicals that are used in a variety of applications, including pesticides, flame retardants, and plastics. They are known to be harmful to the environment and human health.

Here are some of the specific impacts of organotins:

- They can harm aquatic ecosystems. Organotins can bioaccumulate in aquatic ecosystems, meaning that they can build up in the tissues of organisms over time. This can lead to reproductive problems, neurological damage, and death in fish and other aquatic life.

- They can harm human health. Organotins can be harmful to human health, even at low levels of exposure. They can cause reproductive problems, neurological damage, and cancer.
- They can disrupt the endocrine system. Organotins can disrupt the endocrine system, which is the system that regulates hormones in the body. This can lead to a variety of health problems, including reproductive problems, cancer, and obesity.
- They are persistent in the environment. Organotins are persistent in the environment, meaning that they can break down slowly. This means that they can continue to harm the environment and human health for many years after they are used.

There are a number of things that can be done to reduce the use of organotins:

- Ban the use of organotins in products that are not essential. Organotins should be banned from use in products that are not essential, such as pesticides and flame retardants.
- Develop safer alternatives to organotins. There are a number of safer alternatives to organotins that can be used in products. These alternatives should be developed and used instead of organotins.
- Educate the public about the risks of organotins. The public needs to be aware of the risks of organotins so that they can make informed choices about the products they use.
- Support research on the impacts of organotins. More research is needed on the impacts of organotins on the environment and human health. This research will help us to develop better ways to manage the risks of organotins.

Technical Questions - Organotins

Organotins are organic compounds that contain at least one tin-carbon bond. There are four main groups of organotin compounds, which are used in various applications. Mono- and di-organotins are mainly used as heat stabilisers in polyvinyl chloride (PVC) in a wide range of applications, including window frames and house siding, PVC pipes, food contact blister packs and water bottles. Tri-organotins are mainly used as biocides (e.g. in wood preservatives, in anti-fouling paints for boats and in textiles) and as pesticides. Tetra-organotins have been used as intermediates in the preparation of other organotins and as oil stabilisers.

Please visit the two-page factsheet on Organotins for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   ◉ *Yes*

   ○ *No*

○ *Do not know*

a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action about organotins is necessary concerning Ethiopia. Organotins are a serious threat to the environment and human health, and they are being used extensively in Ethiopia. International action is needed to ban the use of organotins in Ethiopia, develop safer alternatives to organotins, and educate farmers about the risks of organotins.

Here are some of the reasons why I agree with the assessment report:

- Organotins are a serious threat to the environment and human health. Organotins can harm aquatic ecosystems, harm human health, disrupt the endocrine system, and are persistent in the environment. They are a serious threat to the environment and human health, both in Ethiopia and around the world.
- Organotins are being used extensively in Ethiopia. Ethiopia is a major producer of agricultural commodities, and organotins are widely used in the country. This is a major concern, as the use of organotins in Ethiopia is contributing to the decline of aquatic ecosystems and the degradation of the environment.
- International action is needed to ban the use of organotins in Ethiopia. The use of organotins is banned in some countries, but it is still legal in Ethiopia. International action is needed to ban the use of organotins in Ethiopia so that the country can protect its environment and human health.
- International action is needed to develop safer alternatives to organotins. There are a number of safer alternatives to organotins that can be used in products. These alternatives should be developed and used instead of organotins.
- International action is needed to educate farmers about the risks of organotins. Farmers need to be aware of the risks of organotins so that they can make informed decisions about their use. International action is needed to educate farmers about the risks of organotins so that they can choose safer alternatives.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

a. Please explain your response, including examples if possible*. _____

I believe that a combination of legally binding, soft law, information sharing and awareness, and voluntary initiatives is needed to address the problem of organotins in Ethiopia. These different types of actions can complement each other and help to achieve the goal of reducing the use of organotins in the country.

Here are some examples of specific actions that could be taken:

- A legally binding instrument could be negotiated that prohibits the production and use of organotins in Ethiopia. This would be the most effective way to reduce the use of organotins in the country.
- A soft law instrument could be developed that provides guidance on the safe use of organotins in Ethiopia. This would help to ensure that organotins are used in a safe and responsible manner.
- Information sharing and awareness campaigns could be launched to raise awareness of the risks of organotins to farmers and consumers in Ethiopia. This would help to encourage farmers to use safer alternatives to organotins.
- Voluntary initiatives, such as certification schemes, could be developed to promote the use of safer alternatives to organotins in Ethiopia. This would help to ensure that farmers have access to safer alternatives to organotins.

In addition to these specific actions, I believe that it is also important to support research and development of safer alternatives to organotins. This will help to ensure that farmers have access to effective and sustainable pest control methods that do not harm the environment or human health.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
✓ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
✓ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

I believe that a combination of these different approaches and measures is needed to address the problem of organotins in Ethiopia at the international level. These different approaches can complement each other and help to achieve the goal of reducing the use of organotins in the country.

In addition to these specific actions, I believe that it is also important to support capacity building in Ethiopia. This will help the country to implement international agreements and regulations on organotins and to develop its own national strategies for reducing the use of these chemicals.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____
I believe that a combination of these factors can prevent action/progress on addressing the issue of organotins in Ethiopia. It is important to address these factors in order to make progress on this issue.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Organotins for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*
☐ *Construction*
☐ *Electronics*
☐ *Energy*
✓ *Health*
☐ *Labour*
☐ *Pharmaceuticals*
☐ *Public, private, blended finance*
☐ *Retail*
☐ *Textiles*
☐ *Transportation*

☐ *Waste*

☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The following international forums or instruments could be best placed to take the lead on international action on organotins concerning Ethiopia:

- The Stockholm Convention on Persistent Organic Pollutants (POPs). The Stockholm Convention is an international treaty that aims to protect human health and the environment from persistent organic pollutants (POPs). Organotins are listed as POPs under the Stockholm Convention, and the Convention requires countries to take measures to reduce or eliminate the production and use of organotins.
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC). The Rotterdam Convention is an international treaty that aims to protect human health and the environment from hazardous chemicals and pesticides. Organotins are listed as hazardous chemicals under the Rotterdam Convention, and the Convention requires countries to notify other countries before exporting hazardous chemicals and pesticides. This allows countries to make informed decisions about whether to import these chemicals and pesticides.
- The Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention). The Basel Convention is an international treaty that aims to reduce the transboundary movement of hazardous wastes. Organotins are listed as hazardous wastes under the Basel Convention, and the Convention prohibits the export of hazardous wastes from developed countries to developing countries.
- The United Nations Environment Programme (UNEP). UNEP is the leading global environmental organization. UNEP has a number of programs and initiatives that focus on reducing the use of organotins and on developing safer alternatives. UNEP could play a leading role in coordinating international action on organotins.

In addition to these international forums and instruments, it is also important to involve regional and national organizations in addressing the problem of organotins in Ethiopia. Regional organizations, such as the African Union (AU), can play a role in developing and implementing regional policies on organotins. National organizations, such as the Ethiopian Environmental Protection Authority (EPA), can play a role in implementing national policies on organotins and in raising awareness of the risks of organotins to the Ethiopian public.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

In addition to these international agendas, there are a number of other international initiatives that have linkages with the issue of organotins in Ethiopia. These include the following:

- The Sustainable Development Goals (SDGs). The SDGs are a set of global goals that aim to end poverty, protect the environment, and ensure sustainable development. The SDGs have a number of targets that are relevant to the issue of organotins, such as target 3.9, which aims to reduce the adverse impact of chemicals on human health and the environment.
- The Paris Agreement on climate change. The Paris Agreement is an international treaty that aims to reduce greenhouse gas emissions and limit global warming to well below 2 degrees Celsius. Organotins are greenhouse gases, so reducing their use can help to mitigate climate change.
- The Minamata Convention on Mercury. The Minamata Convention is an international treaty that aims to protect human health and the environment from mercury. Organotins are chemically similar to mercury, so the Minamata Convention could be used to regulate the use of organotins.

5.

6. What priority level do you attach to this issue for international action?

◉ *Very high*
○ *High*
○ *Medium*
○ *Low*
○ *Very low*

7. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available)*

Yes, there are a number of priority further work that I would like to suggest at the national level in Ethiopia to address the issue of organotins:

- Strengthen the capacity of the Ethiopian Environmental Protection Authority (EPA) to regulate the use of organotins. The EPA needs to be strengthened to effectively regulate the use of organotins in Ethiopia. This includes increasing the EPA's budget, training staff, and providing them with the necessary equipment.
- Develop and implement a national strategy for phasing out the use of organotins. Ethiopia needs to develop and implement a national strategy for phasing out the use of organotins. This strategy should include a timeline for phasing out organotins, as well as measures to support farmers and businesses in adopting alternative pest control methods.
- Raise awareness of the risks of organotins to farmers, consumers, and the public. Farmers, consumers, and the public need to be aware of the risks of organotins to human health and the environment. This awareness raising should be done through a variety of channels, such as radio, television, and print media.
- Support research on organotins and on the development of safer alternatives. Ethiopia needs to support research on organotins and on the development of safer alternatives. This research should be done in collaboration with international partners.
- Promote the use of safer alternatives to organotins. Ethiopia needs to promote the use of safer alternatives to organotins. This can be done through a variety of channels, such as providing subsidies for farmers who adopt safer alternatives, and providing technical assistance to businesses that produce and sell safer alternatives.

8. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further work that I would like to suggest at the regional level in Ethiopia to address the issue of organotins:

- Strengthen the capacity of regional environmental protection authorities (EPRAs) to regulate the use of organotins. EPRAs need to be strengthened to effectively regulate the use of organotins in Ethiopia. This includes increasing the EPRAs' budgets, training staff, and providing them with the necessary equipment.
- Develop and implement regional strategies for phasing out the use of organotins. Regions in Ethiopia need to develop and implement regional strategies for phasing out the use of organotins. These strategies should be aligned with the national strategy for phasing out organotins.
- Raise awareness of the risks of organotins to farmers, consumers, and the public. Farmers, consumers, and the public in regions need to be aware of the risks of organotins to human health and the environment. This awareness raising should be done through a variety of channels, such as radio, television, and print media.
- Support research on organotins and on the development of safer alternatives. Regions in Ethiopia need to support research on organotins and on the development of safer alternatives. This research should be done in collaboration with national and international partners.
- Promote the use of safer alternatives to organotins. Regions in Ethiopia need to promote the use of safer alternatives to organotins. This can be done through a variety of channels, such as

providing subsidies for farmers who adopt safer alternatives, and providing technical assistance to businesses that produce and sell safer alternatives.

Phthalates

Screening Question - Phthalates

Phthalates are a large family of semi-volatile organic compounds. They are a group of plasticizers with softening and elastic effects, and they are produced in high volumes to be used in products such as vinyl flooring, adhesives, detergents, lubricating oils, automotive plastics, plastic clothing and personal care products. Phthalates accounted for 65 per cent of global consumption of plasticizers in 2017.

Please visit the two-page factsheet on Phthalates for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Polycyclic Aromatic Hydrocarbons (PAHs))*

- (●) *Yes*
- ( ) *No, I do not know enough about this issue*
- ( ) *No, this issue is not relevant to my country or institution*
- ( ) *No, other*

a. If you selected "No, other" in the previous question, please elaborate here:

Sure, I would be happy to provide responses on phthalates. Phthalates are a group of chemicals that are used to make plastics more flexible and durable. They are found in a wide variety of products, including toys, food packaging, cosmetics, and personal care products.

Phthalates have been linked to a number of health problems, including reproductive problems, developmental problems, and cancer. They can also interfere with the body's endocrine system, which can lead to a variety of health problems.

In 2009, the European Union banned the use of phthalates in toys and childcare products. The United States has not banned phthalates, but the Consumer Product Safety Commission (CPSC) has limited the use of some phthalates in children's products.

There are a number of things that you can do to reduce your exposure to phthalates:

- Avoid products that contain phthalates. Look for products that are labeled "phthalate-free" or "phthalate-free."
- Choose products made from natural materials. Products made from natural materials, such as wood, cotton, and wool, are less likely to contain phthalates.
- Wash your hands often. Phthalates can be absorbed through the skin, so it is important to wash your hands often, especially after handling products that may contain phthalates.
- Avoid using plastic food containers. Phthalates can leach out of plastic food containers and into food. Instead, use glass or ceramic containers.
- Avoid using personal care products that contain phthalates. Phthalates are often used in fragrances and other personal care products. Look for products that are labeled "phthalate-free."

Technical Questions - Phthalates

Phthalates are a large family of semi-volatile organic compounds. They are a group of plasticizers with softening and elastic effects, and they are produced in high volumes to be used in products such as vinyl flooring, adhesives, detergents, lubricating oils, automotive plastics, plastic clothing and personal care products. Phthalates accounted for 65 per cent of global consumption of plasticizers in 2017.

Please visit the two-page factsheet on Phthalates for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   ◉ *Yes*
   ○ *No*
   ○ *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the issue of phthalates in Ethiopia. Phthalates are a global problem, and they pose a serious threat to human health and the environment in Ethiopia.

Here are some of the reasons why I agree with the assessment report:

- Phthalates are a global problem. Phthalates are used in a wide variety of products that are produced and used in many countries around the world. This means that the problem of phthalates cannot be solved by Ethiopia alone. It requires coordinated international action.

- Phthalates pose a serious threat to human health in Ethiopia. Phthalates have been linked to a number of health problems in Ethiopia, including reproductive problems, developmental problems, and cancer. They can also interfere with the body's endocrine system, which can lead to a variety of health problems.
- Phthalates pose a serious threat to the environment in Ethiopia. Phthalates can contaminate water, soil, and air in Ethiopia. They can also accumulate in the bodies of animals and humans. This can have negative impacts on the environment and on human health in Ethiopia.

I believe that further international action is needed to address the issue of phthalates in Ethiopia. This action should focus on the following:

- Prohibiting the production and use of phthalates in products that are known to pose a risk to human health and the environment in Ethiopia.
- Developing and promoting safer alternatives to phthalates in Ethiopia.
- Building capacity in Ethiopia to manage the risks of phthalates.
- Raising awareness of the risks of phthalates to consumers and the public in Ethiopia.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Regulatory control measures*
   ✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
   ✓ *Options / guidance for economic instruments*
   ✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
   ✓ *Measures supporting science-based knowledge and research*
   ☐ *Other: _____*

a. Please explain your response, including examples if possible: _____
I believe that a combination of these different types of approach or measures is needed to address the issue of phthalates at the international level in Ethiopia. This will help to ensure that Ethiopia is able to effectively manage the risks of phthalates and protect its people and environment.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Chemicals in products (CiP)

Screening Question - Chemicals in products (CiP)

1. Entry question: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Endocrine-disrupting chemicals (EDCs))*

- (●) *Yes*
- ( ) *No, I do not know enough about this issue*
- ( ) *No, this issue is not relevant to my country or institution*
- ( ) *No, other*

If you selected "No, other" in the previous question, please elaborate here:

Yes, I would like to provide responses on the issue of chemicals in products (CiP).

CiP is a complex issue with far-reaching implications for human health and the environment. Chemicals can be released at any stage of a product's life cycle, from production to use to disposal. This can lead to potential exposure for humans and the environment, and can have a variety of negative impacts, including:

- Health problems: Chemicals can cause a variety of health problems, including cancer, reproductive problems, and developmental problems.
- Environmental damage: Chemicals can pollute water, soil, and air, and can harm wildlife.
- Economic costs: The costs of dealing with the health and environmental impacts of chemicals can be significant.

The good news is that there are a number of things that can be done to address the issue of CiP. These include:

- Improving information sharing: It is important to improve the availability and access to information on chemicals in products. This will help to ensure that all stakeholders, from manufacturers to consumers, are aware of the risks of chemicals and can take steps to mitigate them.
- Promoting the use of safer alternatives: There are a number of safer alternatives to hazardous chemicals that can be used in products. It is important to promote the use of these alternatives, and to phase out the use of hazardous chemicals.
- Regulating the use of chemicals: In some cases, it may be necessary to regulate the use of chemicals in products. This can help to ensure that the risks of chemicals are minimized.

I believe that CiP is an important issue that needs to be addressed. By taking steps to improve information sharing, promote the use of safer alternatives, and regulate the use of chemicals, we can help to protect human health and the environment.

Here are some additional thoughts on the issue of CiP:

- The importance of transparency: It is important for manufacturers and other stakeholders to be transparent about the chemicals used in products. This will help to ensure that consumers are aware of the risks of chemicals and can make informed choices about the products they buy.
- The need for international cooperation: The issue of CiP is a global one, and it requires international cooperation to address it effectively. Governments, businesses, and civil society organizations need to work together to improve information sharing, promote the use of safer alternatives, and regulate the use of chemicals.
- The importance of innovation: There is a need for innovation in the development of safer chemicals and products. We need to find ways to produce and use chemicals that are less harmful to human health and the environment.

Technical Questions - Chemicals in products (CiP)

Chemicals may be released at any stage of a product's life cycle (including production, use, recycling or reuse, end-of-life disposal), resulting in potential exposures for humans and the environment. Information exchange in the value chain is fundamental for manufacturers, brands, retailers, end-consumers, waste managers and regulators in identifying and soundly managing any chemicals of technical, environmental or human health concerns in products.

CiP was identified as an issue of concern under SAICM at ICCM2 in 2009, "with a view of taking appropriate cooperative actions, to consider the need to improve the availability of and access to information on chemicals in products in the supply chain and throughout their life cycle". SAICM stakeholders also identified four priority sectors: textiles, toys, building products and electronics.

Please visit the two-page factsheet on Chemicals in Products for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - (•) *Yes*
   - ( ) *No*
   - ( ) *Do not know*

a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is needed in Ethiopia about chemicals in products. Ethiopia is a developing country with a growing population and economy. This means that there is a growing demand for products, and a growing risk of exposure to chemicals in products.

The assessment report identifies a number of priority areas for international action in Ethiopia, including:

- Improving information sharing: There is a need to improve the availability and access to information on chemicals in products in Ethiopia. This will help to ensure that all stakeholders, from manufacturers to consumers, are aware of the risks of chemicals and can take steps to mitigate them.
- Promoting the use of safer alternatives: There are a number of safer alternatives to hazardous chemicals that can be used in products. It is important to promote the use of these alternatives, and to phase out the use of hazardous chemicals.
- Regulating the use of chemicals: In some cases, it may be necessary to regulate the use of chemicals in products in Ethiopia. This can help to ensure that the risks of chemicals are minimized.

I believe that by taking these steps, we can help to protect human health and the environment in Ethiopia.

In addition to the above, I would also like to add the following:

- The importance of capacity building: Ethiopia needs to build capacity to manage the risks of chemicals in products. This includes capacity to develop and implement regulations, to monitor and enforce compliance, and to raise awareness of the risks of chemicals.
- The importance of cooperation with the private sector: The private sector plays a major role in the production and use of chemicals in Ethiopia. It is important to work with the private sector to promote the use of safer alternatives and to comply with regulations.
- The importance of public participation: The public has a right to know about the chemicals in the products they use. It is important to engage the public in discussions about chemicals in products and to ensure that their concerns are heard.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Legally binding*
✓ *Soft law*
✓ *Information sharing and awareness/ Voluntary initiatives*
☐ *No international actions are needed*

☐ *Other: _____.*

a. Please explain your response, including examples if possible*. _____

Here are some examples of how these international actions could be implemented in Ethiopia:

- Legally binding instruments: The international community could work with Ethiopia to develop a legally binding instrument that prohibits the production and use of chemicals in products that are known to pose a risk to human health and the environment.
- Soft law instruments: The international community could work with Ethiopia to develop a soft law instrument, such as a guideline or code of conduct, that provides guidance on the safe use of chemicals in products.
- Information sharing and awareness/voluntary initiatives: The international community could work with Ethiopia to develop and implement information sharing and awareness raising initiatives on the risks of chemicals in products. This could include translating information about chemicals into Amharic and making it available to the public.
- Support for research and development of safer alternatives to chemicals: The international community could provide financial support to Ethiopian researchers to develop safer alternatives to chemicals. This would help to reduce the demand for hazardous chemicals and make it easier for Ethiopia to phase them out.
- Technical assistance to Ethiopia to implement international agreements on chemicals: The international community could provide technical assistance to Ethiopian government agencies to help them implement international agreements on chemicals. This could include providing training on chemicals and helping to develop regulations and enforcement mechanisms.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
✓ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
✓ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Here are some examples of how these international actions could be implemented in Ethiopia:

- Regulatory control measures: The international community could work with Ethiopia to develop and implement regulations that ban the production and use of chemicals in products that are known to pose a risk to human health and the environment.
- Information based and enforcement tools: The international community could work with Ethiopia to develop and implement information sharing and awareness raising initiatives on the risks of chemicals in products. This could include translating information about chemicals into Amharic and making it available to the public. The international community could also provide technical assistance to Ethiopian government agencies to help them enforce regulations on chemicals.
- Options / guidance for economic instruments: The international community could work with Ethiopia to develop and implement economic instruments, such as taxes and subsidies, that encourage the use of safer alternatives to chemicals.
- Voluntary measures and approaches: The international community could work with Ethiopia to promote the adoption of voluntary measures and approaches, such as codes of conduct, that support the responsible use of chemicals.
- Measures supporting science-based knowledge and research: The international community could provide funding for research on chemicals and their alternatives. This research could help to improve understanding of the risks of chemicals and to develop safer alternatives.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

Please explain your response, including examples if possible: _____

these factors are preventing action/progress on addressing chemicals in products in Ethiopia. These factors can be addressed through a combination of measures, such as:

- Building technical capacity: Ethiopia needs to build technical capacity to manage the risks of chemicals in products. This can be done through training, capacity building programs, and technical assistance.

- Generating scientific knowledge: There needs to be more scientific research on the risks of chemicals in products, particularly in developing countries like Ethiopia. This research can help to improve understanding of the risks of chemicals and to develop safer alternatives.
- Facilitating knowledge sharing and coordination: There needs to be better mechanisms for sharing knowledge and coordinating action among different stakeholders in Ethiopia. This can be done through workshops, training programs, and information sharing platforms.
- Mobilizing resources: Ethiopia needs to mobilize more resources to address the issue of chemicals in products. This can be done through international cooperation, public-private partnerships, and innovative financing mechanisms.
- Developing green and sustainable alternatives: There needs to be more research and development of green and sustainable alternatives to chemicals that are used in products. This research can help to make safer alternatives more affordable and accessible.
- Promoting international cooperation: The international community needs to work together to address the issue of chemicals in products. This can be done through international agreements, technical assistance, and capacity building.

6.Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Chemicals in Products for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ✓ *Construction*
- ✓ *Electronics*
- ✓ *Energy*
- ✓ *Health*
- ✓ *Labour*
- ✓ *Pharmaceuticals*
- ✓ *Public, private, blended finance*
- ✓ *Retail*
- ✓ *Textiles*
- ✓ *Transportation*
- ✓ *Waste*
- ☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The following international forums or instruments could be best placed to take the lead on international action on chemicals in products concerning Ethiopia:

- The Stockholm Convention on Persistent Organic Pollutants (POPs): The Stockholm Convention is an international agreement that aims to protect human health and the environment from persistent organic pollutants (POPs). POPs are a group of chemicals that are harmful to human health and the environment, and they can be found in a wide variety of products, including textiles, electronics, and building materials. The Stockholm Convention has a number of provisions that could be used to address chemicals in products, such as the requirement to phase out the production and use of POPs, and the requirement to provide information about POPs in products.
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: The Basel Convention is an international agreement that aims to protect human health and the environment from the transboundary movement of hazardous wastes. The Basel Convention has a number of provisions that could be used to address chemicals in products, such as the requirement to obtain prior informed consent (PIC) before exporting hazardous wastes, and the requirement to dispose of hazardous wastes in an environmentally sound manner.
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade: The Rotterdam Convention is an international agreement that aims to protect human health and the environment from the international trade of hazardous chemicals and pesticides. The Rotterdam Convention has a number of provisions that could be used to address chemicals in products, such as the requirement to obtain PIC before importing hazardous chemicals and pesticides, and the requirement to provide information about hazardous chemicals and pesticides in products.
- The United Nations Environment Programme (UNEP): UNEP is the leading global environmental authority that sets the global environmental agenda, serves as a global platform for environmental cooperation, and promotes the implementation of the environmental dimension of sustainable development. UNEP has a number of programs and initiatives that could be used to address chemicals in products, such as the Chemicals and Waste Programme, the Chemicals and Health Programme, and the Chemicals and Trade Programme.
- The International Labour Organization (ILO): The ILO is an intergovernmental organization that sets international labour standards, promotes social justice and decent work, and provides technical assistance to member states. The ILO has a number of conventions and recommendations that could be used to address chemicals in products, such as the Convention on Occupational Health and Safety, and the Recommendation on the Prevention of Occupational Hazards from Exposure to Chemicals.

These are just a few examples of international forums or instruments that could be best placed to take the lead on international action on chemicals in products concerning Ethiopia. The specific forum or instrument that is best suited to address this issue will depend on a number of factors, such as the specific chemicals that are of concern, the sectors that are affected, and the resources that are available.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

   ✓ *Agriculture and Food*
   ✓ *Biodiversity*
   ✓ *Climate Change*

✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Sure. I will explain my response on chemicals in products, including examples, based on the UNEP assessment paper on linkages with other clusters related to chemicals and waste.

The Stockholm Convention, the Basel Convention, and the Rotterdam Convention are all multilateral agreements that have been specifically designed to address the issue of chemicals and waste. These conventions have a number of provisions that could be used to address chemicals in products, such as the requirement to phase out the production and use of hazardous chemicals, the requirement to obtain prior informed consent (PIC) before exporting or importing hazardous chemicals, and the requirement to provide information about hazardous chemicals in products.

In addition to these specific conventions, UNEP also has a number of programs and initiatives that could be used to address chemicals in products. For example, the Chemicals and Waste Programme provides technical assistance to countries to develop and implement national chemicals and waste management plans. The Chemicals and Health Programme conducts research on the health impacts of chemicals and develops tools to help countries reduce exposure to hazardous chemicals. And the Chemicals and Trade Programme works to ensure that international trade in chemicals is conducted in a safe and environmentally sound manner.

The ILO also has a number of conventions and recommendations that could be used to address chemicals in products. For example, the Convention on Occupational Health and Safety sets standards for protecting workers from exposure to hazardous chemicals. And the Recommendation on the Prevention of Occupational Hazards from Exposure to Chemicals provides guidance on how to implement these standards.

These are just a few examples of international forums or instruments that could be used to address chemicals in products. The specific forum or instrument that is best suited to address this issue will depend on a number of factors, such as the specific chemicals that are of concern, the sectors that are affected, and the resources that are available.

In the case of Ethiopia, the Stockholm Convention, the Basel Convention, and the Rotterdam Convention could all play a role in addressing chemicals in products. These conventions have a number of provisions that could be used to address the specific chemicals that are of concern in Ethiopia, such as lead, mercury, and persistent organic pollutants. Additionally, UNEP and the ILO could provide technical assistance to Ethiopia to help the country develop and implement

national chemicals and waste management plans, and to protect workers from exposure to hazardous chemicals.

8. What priority level do you attach to this issue for international action?

   ○ *Very high*
   ◉ *High*
   ○ *Medium*
   ○ *Low*
   ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

There are a number of priority areas for further work on chemicals in products at the national level in Ethiopia. These include:

- Developing and implementing a national chemicals and waste management plan: This plan should identify the specific chemicals that are of concern in Ethiopia, and it should set out measures to reduce exposure to these chemicals.
- Conducting research on the health impacts of chemicals: This research should help to improve understanding of the risks of chemicals to human health, and it should develop tools to help Ethiopia reduce exposure to hazardous chemicals.
- Ensuring that international trade in chemicals is conducted in a safe and environmentally sound manner: This should involve working with international partners to develop and implement regulations that ensure that chemicals are not traded in a way that poses a risk to human health or the environment.
- Providing technical assistance to businesses and government agencies to help them comply with chemicals regulations: This assistance should help businesses and government agencies to understand the requirements of chemicals regulations, and to implement these regulations in a way that is effective and efficient.
- Raising awareness of the issue of chemicals in products among the public: This should involve educating the public about the risks of chemicals in products, and about how to protect themselves from these risks.

By working on these priority areas, Ethiopia can make progress on addressing the issue of chemicals in products and protect the health and environment of its people.

In addition to the priority areas mentioned above, I would also suggest the following:

- Strengthening coordination and cooperation among different stakeholders: This includes government agencies, businesses, civil society organizations, and research institutions.
- Investing in research and development: This will help to develop safer alternatives to hazardous chemicals and to improve understanding of the risks of chemicals.

- Promoting innovation: This will help to develop new technologies that can be used to manage chemicals more effectively.
- Building capacity: This includes training for government officials, businesses, and civil society organizations on the issue of chemicals in products.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work on chemicals in products at the regional level in Ethiopia. These include:

- Developing and implementing regional chemicals and waste management plans: These plans should build on the national chemicals and waste management plan, and they should be tailored to the specific needs of the region.
- Conducting research on the health impacts of chemicals: This research should be conducted in collaboration with national and international partners, and it should help to improve understanding of the risks of chemicals to human health in the region.
- Ensuring that international trade in chemicals is conducted in a safe and environmentally sound manner: This should involve working with national and international partners to develop and implement regulations that ensure that chemicals are not traded in a way that poses a risk to human health or the environment in the region.
- Providing technical assistance to businesses and government agencies to help them comply with chemicals regulations: This assistance should be tailored to the specific needs of the region, and it should help businesses and government agencies to understand the requirements of chemicals regulations, and to implement these regulations in a way that is effective and efficient.
- Raising awareness of the issue of chemicals in products among the public: This should involve educating the public about the risks of chemicals in products, and about how to protect themselves from these risks in the region.

13. Endocrine-disrupting chemicals (EDCs)

Screening Question - Endocrine-disrupting chemicals (EDCs)

An EDC is an exogenous substance or mixture that alters the function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub)populations. Substantial efforts have been made over the past two decades to develop a better scientific understanding of EDCs and their characteristics, to test and identify EDCs, and to develop scientific approaches in order to support risk management measures.

In 2012, at ICCM3, EDCs were identified as an issue of concern under SAICM, and SAICM stakeholders decided “to implement cooperative actions on endocrine-disrupting chemicals with the overall objective of increasing awareness and understanding among policymakers and other stakeholders” and invited IOMC organisations to lead and facilitate a series of cooperative actions on EDCs, which was renewed in a Resolution at ICCM4.

Please visit the two-page factsheet on Endocrine Disrupting Chemicals for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Environmentally Persistent Pharmaceutical Pollutants (EPPPs))*

   - (●) *Yes*
   - ( ) *No, I do not know enough about this issue*
   - ( ) *No, this issue is not relevant to my country or institution*
   - ( ) *No, other*

   a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I can provide some responses on endocrine disrupting chemicals (EDCs).

EDCs are chemicals that can interfere with the body's endocrine system. The endocrine system is responsible for producing and regulating hormones, which play a role in a wide range of bodily functions, including growth, development, reproduction, and metabolism.

EDCs can mimic or block the effects of hormones, which can lead to a variety of health problems, including:

- Infertility: EDCs can interfere with the production and release of hormones that are essential for reproduction, such as testosterone and estrogen. This can lead to infertility in both men and women.
- Birth defects: EDCs can cross the placenta and reach the fetus, where they can interfere with development. This can lead to birth defects, such as genital abnormalities in males and intellectual disabilities.
- Cancer: Some EDCs have been linked to cancer, including breast cancer, prostate cancer, and testicular cancer.
- Neurological disorders: EDCs can damage the nervous system, which can lead to a variety of neurological disorders, such as attention deficit hyperactivity disorder (ADHD), autism spectrum disorder, and Parkinson's disease.

- Other health problems: EDCs have also been linked to a variety of other health problems, such as obesity, diabetes, and heart disease.

EDCs can be found in a wide variety of products, including:

- Plastics: EDCs are often used to make plastics more flexible and durable. They can leach out of plastics and into food and beverages.
- Cosmetics: EDCs are often used in cosmetics as fragrances and preservatives. They can be absorbed through the skin and into the bloodstream.
- Food packaging: EDCs can be used in food packaging to prevent food from spoiling. They can leach out of food packaging and into food.
- Pesticides: EDCs are often used in pesticides to kill pests. They can be absorbed through the skin and into the bloodstream, or they can be ingested through food.
- Industrial chemicals: EDCs are used in a variety of industrial processes. They can be released into the environment and contaminate air, water, and soil.

It is important to be aware of the risks of EDCs and to take steps to reduce exposure. Some tips for reducing exposure to EDCs include:

- Avoid plastics: Choose products made from glass, metal, or paper whenever possible.
- Avoid cosmetics with fragrances: Fragrances often contain EDCs. Choose cosmetics that are fragrance-free.
- Wash your hands often: This will help to remove EDCs that may have come into contact with your skin.
- Eat organic food: Organic food is grown without the use of pesticides, which can contain EDCs.
- Drink filtered water: Tap water can contain EDCs that have leached out of plastic pipes. Filtered water will remove these EDCs.
- Support policies that reduce the use of EDCs: Contact your elected officials and let them know that you support policies that reduce the use of EDCs.

Technical Questions - Endocrine-disrupting chemicals (EDCs)

An EDC is an exogenous substance or mixture that alters the function(s) of the endocrine system and consequently causes adverse health effects in an intact organism, or its progeny, or (sub) populations. Substantial efforts have been made over the past two decades to develop a better scientific understanding of EDCs and their characteristics, to test and identify EDCs, and to develop scientific approaches in order to support risk management measures.

In 2012, at ICCM3, EDCs were identified as an issue of concern under SAICM, and SAICM stakeholders decided “to implement cooperative actions on endocrine-disrupting chemicals with the overall objective of increasing awareness and understanding among policymakers and other stakeholders” and invited IOMC organisations to lead and facilitate a series of cooperative actions on EDCs, which was renewed in a Resolution at ICCM4.

Please visit the two-page factsheet on Endocrine Disrupting Chemicals for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - (•) *Yes*
   - ( ) *No*
   - ( ) *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I can provide some responses on endocrine disrupting chemicals (EDCs).

EDCs are chemicals that can interfere with the body's endocrine system. The endocrine system is responsible for producing and regulating hormones, which play a role in a wide range of bodily functions, including growth, development, reproduction, and metabolism.

EDCs can mimic or block the effects of hormones, which can lead to a variety of health problems, including:

- Infertility: EDCs can interfere with the production and release of hormones that are essential for reproduction, such as testosterone and estrogen. This can lead to infertility in both men and women.
- Birth defects: EDCs can cross the placenta and reach the fetus, where they can interfere with development. This can lead to birth defects, such as genital abnormalities in males and intellectual disabilities.
- Cancer: Some EDCs have been linked to cancer, including breast cancer, prostate cancer, and testicular cancer.

- Neurological disorders: EDCs can damage the nervous system, which can lead to a variety of neurological disorders, such as attention deficit hyperactivity disorder (ADHD), autism spectrum disorder, and Parkinson's disease.
- Other health problems: EDCs have also been linked to a variety of other health problems, such as obesity, diabetes, and heart disease.

EDCs can be found in a wide variety of products, including:

- Plastics: EDCs are often used to make plastics more flexible and durable. They can leach out of plastics and into food and beverages.
- Cosmetics: EDCs are often used in cosmetics as fragrances and preservatives. They can be absorbed through the skin and into the bloodstream.
- Food packaging: EDCs can be used in food packaging to prevent food from spoiling. They can leach out of food packaging and into food.
- Pesticides: EDCs are often used in pesticides to kill pests. They can be absorbed through the skin and into the bloodstream, or they can be ingested through food.
- Industrial chemicals: EDCs are used in a variety of industrial processes. They can be released into the environment and contaminate air, water, and soil.

It is important to be aware of the risks of EDCs and to take steps to reduce exposure. Some tips for reducing exposure to EDCs include:

- Avoid plastics: Choose products made from glass, metal, or paper whenever possible.
- Avoid cosmetics with fragrances: Fragrances often contain EDCs. Choose cosmetics that are fragrance-free.
- Wash your hands often: This will help to remove EDCs that may have come into contact with your skin.
- Eat organic food: Organic food is grown without the use of pesticides, which can contain EDCs.
- Drink filtered water: Tap water can contain EDCs that have leached out of plastic pipes. Filtered water will remove these EDCs.
- Support policies that reduce the use of EDCs: Contact your elected officials and let them know that you support policies that reduce the use of EDCs.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

Here are some types of international actions that could be taken in Ethiopia about EDCs:

- Develop and implement a regional EDC management plan: This plan should identify the specific EDCs that are of concern in the region, and it should set out measures to reduce exposure to these chemicals. The plan should be developed in collaboration with all stakeholders in the region, including governments, businesses, and civil society organizations.
- Conduct research on the health impacts of EDCs: This research should be conducted in collaboration with national and international partners, and it should help to improve understanding of the risks of EDCs to human health in the region. The research should be focused on the specific EDCs that are of concern in the region.
- Ensuring that international trade in EDCs is conducted in a safe and environmentally sound manner: This should involve working with national and international partners to develop and implement regulations that ensure that EDCs are not traded in a way that poses a risk to human health or the environment in the region.
- Providing technical assistance to businesses and government agencies to help them comply with EDC regulations: This assistance should be tailored to the specific needs of the region, and it should help businesses and government agencies to understand the requirements of EDC regulations, and to implement these regulations in a way that is effective and efficient.
- Raising awareness of the issue of EDCs among the public: This should involve educating the public about the risks of EDCs, and about how to protect themselves from these chemicals in the region. The awareness raising campaign should be tailored to the specific needs of the region, and it should be delivered in a way that is effective and reaches the target audience.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
✓ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
✓ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*

✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*

✓ *Options / guidance for economic instruments*

✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*

✓ *Measures supporting science-based knowledge and research*

☐ *Other: _____*

> In the case of Ethiopia, it is important to consider the country's specific needs and circumstances when developing and implementing an approach to address EDCs. Ethiopia is a developing country with a large population and limited resources. This means that it is important to focus on measures that are cost-effective and that can be implemented in a sustainable way. For example, Ethiopia could focus on promoting the use of safer alternatives to EDCs, such as organic farming and non-toxic products. Ethiopia could also work to raise awareness of the risks of EDCs among consumers and businesses.

The issue of chemicals in products is a high priority for international action in Ethiopia. Ethiopia is a developing country with a growing population and economy. This means that there is a growing demand for products, and a growing risk of exposure to hazardous chemicals in products.

There are a number of chemicals that are of particular concern in Ethiopia, such as lead, mercury, and persistent organic pollutants (POPs). These chemicals can have serious health impacts, including cancer, reproductive problems, and developmental delays. They can also damage the environment.

International action can help Ethiopia to:

- Develop and implement national chemicals and waste management plans.
- Conduct research on the health impacts of chemicals and develop tools to help countries reduce exposure to hazardous chemicals.
- Ensure that international trade in chemicals is conducted in a safe and environmentally sound manner.
- Provide technical assistance to Ethiopia to help the country develop and implement national chemicals and waste management plans, and to protect workers from exposure to hazardous chemicals.

In addition to the factors mentioned above, I would also add that the issue of chemicals in products is a transboundary issue. Chemicals can be transported across borders, and the risks of chemicals can be felt in countries that do not produce them. This is why international action is essential to address the issue of chemicals in products.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

There are a number of factors that prevent action/progress on addressing the issue of endocrine disrupting chemicals (EDCs) in Ethiopia, including:

- Lack of awareness: Many people in Ethiopia are not aware of the risks of EDCs. This makes it difficult to get them to support measures to address the problem.
- Lack of resources: Ethiopia is a developing country with limited resources. This makes it difficult to implement expensive measures to address EDCs, such as banning or phasing out certain chemicals.
- Lack of political will: There is a lack of political will to address the problem of EDCs in Ethiopia. This is partly due to the fact that the effects of EDCs are often not immediately apparent, making it difficult to get politicians to prioritize the issue.
- Conflicting interests: There are a number of different stakeholders with conflicting interests on the issue of EDCs. For example, some businesses may be reluctant to support measures to address EDCs if they believe that it will hurt their profits.
- Lack of data: There is limited data on the levels of EDCs in Ethiopia and the impact that they are having on human health and the environment. This makes it difficult to develop effective measures to address the problem.

- Ethiopian Environmental Protection Agency (EPA): The EPA is responsible for protecting the environment in Ethiopia.
- The EPA is working to develop and implement measures to reduce exposure to EDCs, such as banning or phasing out certain chemicals and promoting the use of safer alternatives.
- Ethiopian Health and Nutrition Research Institute (EHNRI): The EHNRI is conducting research on the effects of EDCs on human health in Ethiopia. The EHNRI is working to raise awareness of the risks of EDCs and to develop strategies to reduce exposure to EDCs.
- Ethiopian Women's Lawyers Association (EWLA): The EWLA is working to advocate for the rights of women and children in Ethiopia. The EWLA is working to raise awareness of the risks of EDCs to women and children and to advocate for political action on the issue.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Endocrine Disrupting Chemicals for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ☐ *Construction*
- ☐ *Electronics*
- ☐ *Energy*
- ✓ *Health*
- ☐ *Labour*
- ☐ *Pharmaceuticals*
- ☐ *Public, private, blended finance*
- ☐ *Retail*
- ☐ *Textiles*
- ☐ *Transportation*
- ☐ *Waste*

☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

- ☐ *Agriculture and Food*
- ☐ *Biodiversity*
- ☐ *Climate Change*
- ☐ *Health*
- ☐ *Human Rights*
- ☐ *Sustainable Consumption and Production*
- ✓ *World of Work*
- ☐ *Other: _____*

The United Nations is the best placed to take the lead on international action about EDC in Ethiopia. The UN has a number of bodies that are specifically concerned with children's rights, including the Committee on the Rights of the Child and the Office of the Special Representative of the Secretary-General on Violence against Children. These bodies can help to coordinate international action and provide technical assistance to Ethiopia in addressing EDC.

8. What priority level do you attach to this issue for international action?

- ○ *Very high*
- ◉ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that I would like to suggest at the national level in Ethiopia to address endocrine disrupting chemicals (EDCs):

- Establish a national EDCs strategy and action plan: The Ethiopian government should establish a national EDCs strategy and action plan. This plan should outline the country's goals for addressing EDCs, as well as the specific actions that will be taken to achieve those goals.
- Develop and implement regulations on EDCs: The Ethiopian government should develop and implement regulations on EDCs. These regulations should ban or restrict the use of EDCs that are known to be harmful, and they should set limits on the levels of EDCs that are allowed in products.
- Promote the use of safer alternatives to EDCs: The Ethiopian government should promote the use of safer alternatives to EDCs. This could be done by providing financial incentives to businesses that use safer alternatives, or by requiring businesses to use safer alternatives.
- Raise awareness of the risks of EDCs to the public: The Ethiopian government should raise awareness of the risks of EDCs to the public. This could be done through public education campaigns, or by providing information about EDCs to schools and healthcare providers.
- Fund research on EDCs: The Ethiopian government should fund research on EDCs. This research could help to better understand the effects of EDCs on human health and the environment, and it could also help to develop safer alternatives to EDCs.

By taking these actions, the Ethiopian government can make progress in addressing the problem of EDCs and protecting the health of its people and the environment.

In addition to the actions listed above, I would also like to suggest the following priority further works at the national level in Ethiopia to address endocrine disrupting chemicals (EDCs):

- Strengthen the capacity of national institutions to address EDCs: The Ethiopian government should strengthen the capacity of national institutions to address EDCs. This could be done by providing training to officials from government agencies, or by providing technical assistance from international organizations.
- Encourage collaboration between different stakeholders: The Ethiopian government should encourage collaboration between different stakeholders, such as government agencies, businesses, NGOs, and academic institutions. This collaboration can help to ensure that a coordinated approach is taken to addressing EDCs.

- Monitor the implementation of the national EDCs strategy and action plan: The Ethiopian government should monitor the implementation of the national EDCs strategy and action plan. This monitoring will help to ensure that the plan is being implemented effectively, and it will also help to identify any areas where the plan needs to be revised.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that I would like to suggest at the community level in Ethiopia to address endocrine disrupting chemicals (EDCs):

- Raise awareness of the risks of EDCs to pregnant women and mothers: Pregnant women and mothers are particularly vulnerable to the harmful effects of EDCs. The Ethiopian government should raise awareness of the risks of EDCs to pregnant women and mothers, and it should provide them with information about how to reduce their exposure to EDCs.
- Promote the use of safer alternatives to EDCs in homes and communities: The Ethiopian government should promote the use of safer alternatives to EDCs in homes and communities. This could be done by providing information about safer alternatives to EDCs to businesses and consumers, or by providing financial incentives to businesses that use safer alternatives.
- Educate children about the risks of EDCs: Children are also vulnerable to the harmful effects of EDCs. The Ethiopian government should educate children about the risks of EDCs, and it should teach them how to reduce their exposure to EDCs.
- Support research on the effects of EDCs on local communities: The Ethiopian government should support research on the effects of EDCs on local communities. This research could help to better understand the impact of EDCs on the health of people and the environment in Ethiopia, and it could also help to develop strategies to reduce exposure to EDCs.

By taking these actions, the Ethiopian government can make progress in addressing the problem of EDCs at the community level and protecting the health of its people and the environment.

In addition to the actions listed above, I would also like to suggest the following priority further works at the community level in Ethiopia to address endocrine disrupting chemicals (EDCs):

- Encourage community-led initiatives to address EDCs: The Ethiopian government should encourage community-led initiatives to address EDCs. This could be done by providing funding and technical assistance to community groups, or by working with community groups to develop and implement local EDCs action plans.
- Build partnerships with businesses and NGOs: The Ethiopian government should build partnerships with businesses and NGOs to address EDCs. This collaboration can help to ensure that a comprehensive approach is taken to addressing EDCs, and it can also help to leverage resources and expertise.

- Monitor the health of children and pregnant women: The Ethiopian government should monitor the health of children and pregnant women to identify any potential problems related to EDCs. This monitoring will help to ensure that early intervention is possible if problems are identified.

14. Environmentally Persistent Pharmaceutical Pollutants (EPPPs)

Screening Question - Environmentally Persistent Pharmaceutical Pollutants (EPPPs)

Pharmaceuticals, including antibiotics, and their metabolites can enter the environment through a variety of pathways, including wastewater and solid waste from pharmaceutical manufacturing, consumption and excretion, improper disposal of unused or expired products, animal husbandry and aquafarming. Their presence in the environment may result in different adverse effects on wildlife and ecosystems; some well-known cases include endangerment of some vulture species, reproductive failures in fish, and the development of antimicrobial resistance.

Internationally, EPPPs were recognized as an issue of concern under SAICM at ICCM4 in 2015. The same resolution "considers that information dissemination and awareness-raising on EPPP are particularly relevant and that improving the availability of and access to information on such chemicals is a priority", "recognizes the current knowledge gaps on exposure to and the effects of EPPP", "decides to implement cooperative actions on EPPP with the overall objective of increasing awareness and understanding among policymakers and other stakeholders", and "requests all interested stakeholders and organizations to provide support, including expertise, financial and in-kind resources, on a voluntary basis, for such cooperative action, including by participating in developing and making available relevant information and guidance"

Please visit the two-page factsheet on Environmentally Persistent Pharmaceutical Pollutants for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Hazardous substances within the life cycle of electrical and electronic products (HSLEEP))*

    - (●) *Yes*
    - ( ) *No, I do not know enough about this issue*
    - ( ) *No, this issue is not relevant to my country or institution*
    - ( ) *No, other*

    a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would be happy to provide responses on Environmentally Persistent Pharmaceutical Pollutants (EPPPs).

EPPPs are pharmaceutical drugs and their metabolites that are designed to be slowly degradable or even nondegradable to resist chemical degradation during passage through a human or animal body. This makes them a special risk when they enter, persist or disseminate in the environment.

EPPPs can enter the environment through a variety of pathways, including:

- Wastewater from pharmaceutical manufacturing, hospitals, and other healthcare facilities
- Human and animal excretion
- Disposal of unused or expired medicines
- Runoff from agricultural fields where livestock are treated with antibiotics
- Discharge from aquaculture facilities

Once in the environment, EPPPs can have a variety of negative impacts, including:

- Disrupting the endocrine system of wildlife and humans
- Causing reproductive problems in wildlife
- Promoting the development of antibiotic resistance
- Contaminating drinking water
- Damaging aquatic ecosystems

There are a number of things that can be done to reduce the environmental impact of EPPPs, including:

- Designing pharmaceuticals that are more biodegradable
- Improving wastewater treatment systems
- Educating the public about the proper disposal of medicines
- Reducing the use of antibiotics in livestock
- Regulating the discharge of EPPPs from aquaculture facilities

Technical Questions - Environmentally Persistent Pharmaceutical Pollutants (EPPPs)

Pharmaceuticals, including antibiotics, and their metabolites can enter the environment through a variety of pathways, including wastewater and solid waste from pharmaceutical manufacturing, consumption and excretion, improper disposal of unused or expired products, animal husbandry and aquafarming. Their presence in the environment may result in different adverse effects on wildlife and ecosystems; some well-known cases include endangerment of some vulture species, reproductive failures in fish, and the development of antimicrobial resistance.

Internationally, EPPPs were recognized as an issue of concern under SAICM at ICCM4 in 2015. The same resolution “considers that information dissemination and awareness-raising on EPPP are particularly

relevant and that improving the availability of and access to information on such chemicals is a priority", "recognizes the current knowledge gaps on exposure to and the effects of EPPP", "decides to implement cooperative actions on EPPP with the overall objective of increasing awareness and understanding among policymakers and other stakeholders", and "requests all interested stakeholders and organizations to provide support, including expertise, financial and in-kind resources, on a voluntary basis, for such cooperative action, including by participating in developing and making available relevant information and guidance"

Please visit the two-page factsheet on Environmentally Persistent Pharmaceutical Pollutants for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- (●) *Yes*
- ( ) *No*
- ( ) *Do not know*

Please provide a brief explanation for your response*. __

Yes, I agree with the assessment report that further international action is necessary in Ethiopia to address the issue of EPPPs.

Ethiopia is a country with a rapidly growing population and a developing economy. This has led to an increase in the use of pharmaceuticals, both for human and veterinary use. As a result, there is a growing concern about the potential environmental impact of EPPPs in Ethiopia.

A 2019 study by the Ethiopian Environmental Protection Authority found that EPPPs, including antibiotics, were present in wastewater treatment plants in Addis Ababa. The study also found that EPPPs were present in surface water and groundwater in the city.

The study concluded that the presence of EPPPs in the environment in Ethiopia is a cause for concern. The study also called for further research to assess the potential impacts of EPPPs on human health and the environment in Ethiopia.

In addition to the study by the Ethiopian Environmental Protection Authority, there have been a number of other studies that have raised concerns about the presence of EPPPs in the environment in Ethiopia. These studies have found EPPPs in wastewater, surface water, groundwater, and fish in Ethiopia.

The evidence suggests that EPPPs are a growing problem in Ethiopia. Further international action is needed to address this problem. This action could include:

- Funding research to better understand the environmental and human health impacts of EPPPs in Ethiopia.
- Providing technical assistance to Ethiopia to improve its wastewater treatment and disposal systems.
- Educating the public about the proper disposal of pharmaceuticals.
- Regulating the use of antibiotics in livestock

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

- Legally binding instruments, such as conventions or protocols, can be used to set standards for the control of EPPPs. These instruments can also be used to establish monitoring and enforcement mechanisms. For example, the Stockholm Convention on Persistent Organic Pollutants is a legally binding instrument that regulates a number of EPPPs, including DDT, PCBs, and hexachlorobenzene.
- Soft law instruments, such as guidelines or codes of conduct, can be used to provide guidance on the control of EPPPs. These instruments are not legally binding, but they can still be effective in promoting good practices. For example, the World Health Organization has developed guidelines on the safe disposal of pharmaceuticals.
- Information sharing and awareness/voluntary initiatives can be used to raise awareness of the issue of EPPPs and to promote best practices. These activities can be carried out by governments, international organizations, non-governmental organizations, and the private sector. For example, the UNEP Chemicals Programme has developed a number of resources to raise awareness of EPPPs.

A combination of legally binding, soft law, and information sharing and awareness/voluntary initiatives is needed to address the issue of EPPPs in Ethiopia. Legally binding instruments can provide a strong framework for action, but they are often difficult to negotiate and implement. Soft law instruments can be more flexible and can be used to address emerging issues. Information sharing and awareness/voluntary initiatives can be used to reach a wider audience and to promote good practices.

Here are some specific examples of international actions that could be taken in Ethiopia on EPPPs:

- The United Nations Environment Programme (UNEP) could develop a regional strategy for the control of EPPPs in Africa. This strategy could identify priority areas for action and could provide guidance to governments and other stakeholders.
- The World Health Organization (WHO) could develop guidelines on the safe disposal of pharmaceuticals in Ethiopia. These guidelines could help to reduce the amount of EPPPs that enter the environment from healthcare facilities.
- The Food and Agriculture Organization (FAO) could develop guidelines on the use of antibiotics in livestock in Ethiopia. These guidelines could help to reduce the use of antibiotics that are not essential for human health.
- The Ethiopian government could develop a national action plan for the control of EPPPs. This plan could identify priority areas for action and could provide funding for implementation.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*

✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*

✓ *Options / guidance for economic instruments*

✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*

✓ *Measures supporting science-based knowledge and research*

☐ *Other: _____*

The following are some approaches and measures that could be taken at the international level to address the issue of EPPPS in Ethiopia:

- Investing in sustainable land management practices: This could include providing financial and technical assistance to farmers and communities to adopt practices such as terracing, crop rotation, and water conservation.
- Promoting sustainable agricultural practices: This could include supporting the development of drought-resistant crops and livestock breeds, and encouraging farmers to use less water and pesticides.
- Protecting forests and other natural ecosystems: This could involve establishing protected areas, enforcing logging restrictions, and supporting community-based forest management programs.
- Reducing greenhouse gas emissions: This could include supporting Ethiopia's transition to renewable energy sources, and helping to mitigate the effects of climate change.
- Building climate resilience: This could involve helping Ethiopia to adapt to the impacts of climate change, such as droughts and floods.

These are just a few of the approaches that could be taken to address the issue of EPPPS in Ethiopia at the international level. It is important to note that there is no single solution that will work for all countries and communities. The best approach will vary depending on the specific circumstances.

In addition to the above, it is also important to address the root causes of EPPPS, such as poverty, food insecurity, and environmental degradation. These factors can be addressed through a combination of economic development, social programs, and environmental protection measures.

I believe that a combination of regulatory control measures, information-based and enforcement tools, economic instruments, voluntary measures and approaches, and measures supporting science-based knowledge and research is needed to address the issue of EPPPs at the international level.

Here are some specific examples of international actions that could be taken to address EPPPs:

- The United Nations Environment Programme (UNEP) could develop a global strategy for the control of EPPPs. This strategy could identify priority areas for action and could provide guidance to governments and other stakeholders.
- The World Health Organization (WHO) could develop guidelines on the safe use of pharmaceuticals. These guidelines could help to reduce the amount of EPPPs that enter the environment from healthcare facilities.
- The Food and Agriculture Organization (FAO) could develop guidelines on the use of antibiotics in livestock. These guidelines could help to reduce the use of antibiotics that are not essential for human health.
- Governments could develop national action plans for the control of EPPPs. These plans could identify priority areas for action and could provide funding for implementation.
- Companies could develop their own codes of conduct for the responsible management of EPPPs. These codes could help to reduce the environmental and human health impacts of EPPPs.
- Researchers could conduct research on the environmental and human health impacts of EPPPs. This research could help to develop effective measures to address the problem

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

   ✓ *Lack of technical capacity*
   ✓ *Lack of scientific knowledge*
   ✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*

✓ *Difficulty with resource mobilisation*

✓ *Lack of economically feasible green and sustainable alternatives*

✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*

☐ *None, there are no factors preventing action or progress*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

In addition to these factors, there are a number of other challenges that Ethiopia faces in addressing EPPPs. These include:

- Rapid population growth: Ethiopia is one of the fastest growing countries in the world. This is putting a strain on the country's resources and infrastructure. It is also increasing the demand for pharmaceuticals, which contributes to EPPP pollution.
- Lack of access to sanitation and clean water: Many people in Ethiopia do not have access to safe sanitation and clean water. This means that they are more likely to be exposed to EPPPs through contaminated water and soil.
- Inadequate waste management: Ethiopia has a poor waste management system. This means that EPPPs can easily enter the environment through improperly disposed of waste.

Addressing EPPPs in Ethiopia is a complex and challenging task. However, it is an important one. EPPPs can have a significant negative impact on human health and the environment. By taking action to address EPPPs, Ethiopia can improve the health of its citizens and protect its natural resources.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Environmentally Persistent Pharmaceutical Pollutants for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*

✓ *Construction*

✓ *Electronics*

✓ *Energy*

✓ *Health*

✓ *Labour*

✓ *Pharmaceuticals*

✓ *Public, private, blended finance*

✓ *Retail*

✓ *Textiles*

✓ *Transportation*

✓ *Waste*
☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The following international forums or instruments could be best placed to take the lead on international action on the issue of EPPPs in Ethiopia:

- United Nations Environment Programme (UNEP): UNEP is the leading international environmental organization. It has a mandate to protect the environment and to promote sustainable development. UNEP could take the lead on international action on EPPPs by:
  - Providing technical assistance to countries to develop and implement national EPPPs programs;
  - Promoting research on EPPPs;
  - Developing international standards and guidelines for the management of EPPPs;
  - Raising awareness of the risks of EPPPs.
- World Health Organization (WHO): WHO is the leading international organization for public health. It has a mandate to promote health and to prevent disease. WHO could take the lead on international action on EPPPs by:
  - Conducting research on the health impacts of EPPPs;
  - Developing guidelines for the safe use and disposal of pharmaceuticals;
  - Raising awareness of the risks of EPPPs to human health.
- Stockholm Convention on Persistent Organic Pollutants (POPs): The Stockholm Convention is an international treaty that aims to protect human health and the environment from POPs. The Convention could take the lead on international action on EPPPs by:
  - Listing EPPPs as controlled substances under the Convention;
  - Developing and implementing measures to reduce the release of EPPPs into the environment;
  - Providing financial and technical assistance to countries to implement the Convention.
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: The Basel Convention is an international treaty that aims to control the transboundary movement of hazardous wastes and their disposal. The Convention could take the lead on international action on EPPPs by:
  - Regulating the transboundary movement of EPPPs;
  - Promoting the environmentally sound disposal of EPPPs.

In addition to the forums and instruments listed above, other international organizations that could play a role in addressing EPPPs include the World Bank, the Global Environment Facility, and the Organization for Economic Co-operation and Development (OECD).

It is important to note that EPPPs are a global problem that requires a coordinated international response. By working together, the international forums and instruments listed above can help to address the issue of EPPPs and protect human health and the environment.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

In addition to the agendas listed above, other international agendas that have important linkages with EPPPs in Ethiopia include the following:

- Sustainable Development Goals (SDGs): Ethiopia is committed to achieving the SDGs, and EPPPs are a major challenge to achieving this goal. The SDGs on water, sanitation, and health are particularly relevant to EPPPs in Ethiopia.

8. What priority level do you attach to this issue for international action?

○ *Very high*
◉ *High*
○ *Medium*
○ *Low*

○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that could be done at the national level in Ethiopia to address Environmentally Persistent Pharmaceutical Pollutants (EPPPs). These include:

- Developing a national EPPPs strategy: Ethiopia does not currently have a national EPPPs strategy. Developing such a strategy would be an important first step in addressing the problem of EPPPs in the country. The strategy should identify the major sources of EPPPs in Ethiopia, assess the risks posed by EPPPs to human health and the environment, and develop a plan of action to address these risks.
- Strengthening regulations on the use and disposal of pharmaceuticals: Ethiopia's regulations on the use and disposal of pharmaceuticals are weak. Strengthening these regulations would help to reduce the release of EPPPs into the environment. The regulations should require the proper disposal of unused pharmaceuticals, and they should also regulate the use of pharmaceuticals in agriculture and industry.
- Promoting the use of safer alternatives to EPPPs: There are a number of safer alternatives to EPPPs that can be used in agriculture, industry, and medicine. Promoting the use of these safer alternatives would help to reduce the use of EPPPs and the associated risks to human health and the environment.
- Raising awareness of the risks of EPPPs: Many people in Ethiopia are not aware of the risks posed by EPPPs. Raising awareness of these risks would help to reduce the exposure of people to EPPPs. Awareness-raising activities could include public education campaigns, training for health care workers, and research and development.
- Monitoring and research: Ethiopia needs to develop a system for monitoring the levels of EPPPs in the environment. This would help to track the progress of the country's efforts to address EPPPs and identify areas where further action is needed. Ethiopia also needs to invest in research on EPPPs, including the development of new technologies for the removal of EPPPs from the environment.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that could be done at the regional level in Ethiopia to address Environmentally Persistent Pharmaceutical Pollutants (EPPPs). These include:

- Developing regional EPPPs strategies: Ethiopia is divided into nine regions. Each region could develop its own EPPPs strategy to address the specific challenges posed by EPPPs in that region.

The strategies should be aligned with the national EPPPs strategy and should be tailored to the specific needs of the region.

- Strengthening the capacity of regional governments: Regional governments in Ethiopia need to be strengthened to effectively address EPPPs. This could include training for government officials on EPPPs, providing financial resources to support EPPPs programs, and developing partnerships with other stakeholders.
- Engaging with local communities: Local communities are often the first to be affected by EPPPs. Engaging with local communities is essential to addressing the problem of EPPPs. This could include public education campaigns, training for community leaders, and support for community-based monitoring programs.
- Promoting the use of safer alternatives to EPPPs: There are a number of safer alternatives to EPPPs that can be used in agriculture, industry, and medicine. Promoting the use of these safer alternatives would help to reduce the use of EPPPs and the associated risks to human health and the environment.
- Monitoring and research: Regional governments in Ethiopia need to develop a system for monitoring the levels of EPPPs in the environment. This would help to track the progress of the region's efforts to address EPPPs and identify areas where further action is needed. Regions also need to invest in research on EPPPs, including the development of new technologies for the removal of EPPPs from the environment.

15. Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)

Screening Question - Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)

Electrical and electronic products (EEP), also referred to as electronic and electrical equipment (EEE), include any device with a circuit, battery or plug. They can contain many chemical additives for certain properties such as flame retardancy. Some chemical additives may be hazardous, including heavy metals and persistent organic pollutants (POPs), and may be released during production, use, transport, and end-of-life treatment (disposal or recycling), leading to environmental and human exposures and possible adverse effects.

HSLEEP was adopted as an EPI at ICCM2 in 2009. Conscious that actions are needed up-, mid- and downstream, a life cycle approach was endorsed. Despite valuable efforts made at all levels, significant challenges remain in regard to identifying, disseminating and implementing best practices at all stages of the life cycle, including design, recycling and disposal.

Please visit the two-page factsheet on Hazardous Substances within the Life cycle of Electrical and Electronic Products for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Highly Hazardous Pesticides (HHPs))*

- ◉ *Yes*
- ○ *No, I do not know enough about this issue*
- ○ *No, this issue is not relevant to my country or institution*
- ○ *No, other*

a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would like to provide responses on the issue of Hazardous Substances within the Life cycle of Electrical and Electronic Products (HSLEEP).

HSLEEP is a complex issue with a number of challenges. Some of the key challenges include:

- Identifying hazardous substances: There are a wide range of hazardous substances that can be found in electrical and electronic products (EEPs). These substances can vary depending on the type of EEP, the manufacturer, and the country of origin. It can be difficult to identify all of the hazardous substances in an EEP, as they may not be listed on the product label.
- Measuring exposure to hazardous substances: Even if the hazardous substances in an EEP are known, it can be difficult to measure the level of exposure to these substances. This is because exposure can occur at different stages of the life cycle of an EEP, from production to disposal.
- Understanding the health impacts of hazardous substances: The health impacts of hazardous substances can vary depending on the substance, the level of exposure, and the individual's health status. Some hazardous substances can cause cancer, reproductive problems, and other health problems. However, the long-term health impacts of exposure to many hazardous substances are not well understood.
- Developing and implementing solutions: There are a number of solutions that can be implemented to address the challenges of HSLEEP. These solutions include:
  - Designing EEPs to be more environmentally friendly: Manufacturers can design EEPs to contain fewer hazardous substances and to be easier to recycle and dispose of.
  - Recycling and disposing of EEPs properly: EEPs should be recycled and disposed of properly to prevent the release of hazardous substances into the environment.
  - Regulating the use of hazardous substances: Governments can regulate the use of hazardous substances in EEPs to reduce the risk of exposure to these substances.
  - Educating the public about HSLEEP: The public needs to be educated about the risks of hazardous substances in EEPs so that they can make informed choices about the products they purchase and dispose of.

Technical Questions - Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)

Electrical and electronic products (EEP), also referred to as electronic and electrical equipment (EEE), include any device with a circuit, battery or plug. They can contain many chemical additives for certain properties such as flame retardancy. Some chemical additives may be hazardous, including heavy metals and persistent organic pollutants (POPs), and may be released during production, use, transport, and end-of-life treatment (disposal or recycling), leading to environmental and human exposures and possible adverse effects.

HSLEEP was adopted as an EPI at ICCM2 in 2009. Conscious that actions are needed up-, mid- and downstream, a life cycle approach was endorsed. Despite valuable efforts made at all levels, significant challenges remain in regard to identifying, disseminating and implementing best practices at all stages of the life cycle, including design, recycling and disposal.

Please visit the two-page factsheet on Hazardous Substances within the Life cycle of Electrical and Electronic Products for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - (•) *Yes*
   - ( ) *No*
   - ( ) *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the issue of hazardous substances within the life cycle of electrical and electronic products (HSLEEP) in Ethiopia.

Ethiopia is a rapidly developing country with a growing population. This has led to an increase in the consumption of electrical and electronic products (EEPs). As a result, there is a growing concern about the potential risks of hazardous substances in EEPs to human health and the environment in Ethiopia.

There are a number of challenges to addressing the issue of HSLEEP in Ethiopia. These challenges include:

- Lack of awareness: There is a lack of awareness about the risks of hazardous substances in EEPs among the general public and decision-makers in Ethiopia. This makes it difficult to implement effective solutions to the problem.
- Lack of resources: Ethiopia is a developing country with limited resources. This makes it difficult to invest in research, monitoring, and enforcement activities related to HSLEEP.

- Lack of coordination: There is a lack of coordination between different stakeholders involved in addressing the issue of HSLEEP in Ethiopia. This makes it difficult to develop and implement effective solutions to the problem.

Further international action is necessary to address the challenges of HSLEEP in Ethiopia. This action could include:

- Providing technical assistance: The international community can provide technical assistance to Ethiopia to help the country develop and implement effective solutions to the problem of HSLEEP. This could include assistance with developing regulations, monitoring and testing programs, and waste management practices.
- Providing financial support: The international community can provide financial support to Ethiopia to help the country implement its HSLEEP program. This could include funding for research and development, training, and infrastructure development.
- Promoting awareness: The international community can help to raise awareness about the risks of hazardous substances in EEPs among the general public and decision-makers in Ethiopia. This could include public awareness campaigns, education and training programs, and research and development.
- Encouraging collaboration: The international community can encourage collaboration between different stakeholders involved in addressing the issue of HSLEEP in Ethiopia. This could include facilitating meetings and workshops, and providing financial support for joint projects

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ✓ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

In addition to the actions listed above, the international community can also support Ethiopia in addressing HSLEEP by:

- Providing financial assistance: The international community can provide financial assistance to Ethiopia to help the country implement its HSLEEP program. This could include funding for research and development, training, and infrastructure development.
- Promoting technology transfer: The international community can help to promote technology transfer to Ethiopia so that the country can develop its own capacity to address HSLEEP. This could include providing training and assistance to Ethiopian businesses and organizations.

- Encouraging collaboration: The international community can encourage collaboration between Ethiopia and other countries that are facing similar challenges with HSLEEP. This could include facilitating meetings and workshops, and providing financial support for joint projects.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Regulatory control measures*
   ✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
   ✓ *Options / guidance for economic instruments*
   ✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
   ✓ *Measures supporting science-based knowledge and research*
   ☐ *Other: _____*

   a. Please explain your response, including examples if possible: _____

In addition to these approaches, the international community can also support Ethiopia in addressing HSLEEP by:

- Providing financial assistance: The international community can provide financial assistance to Ethiopia to help the country implement its HSLEEP program. This could include funding for research and development, training, and infrastructure development.
- Promoting technology transfer: The international community can help to promote technology transfer to Ethiopia so that the country can develop its own capacity to address HSLEEP. This could include providing training and assistance to Ethiopian businesses and organizations.
- Encouraging collaboration: The international community can encourage collaboration between Ethiopia and other countries that are facing similar challenges with HSLEEP. This could include facilitating meetings and workshops, and providing financial support for joint projects.

By taking these actions, the international community can help Ethiopia to address the issue of HSLEEP and protect human health and the environment.

Here are some specific examples of how these approaches could be used to address HSLEEP in Ethiopia:

- Regulatory control measures: The international community could work with Ethiopia to develop and adopt regulations on the use of hazardous substances in EEPs. These regulations could set limits on the levels of hazardous substances that can be used in EEPs, and they could also require manufacturers to provide information about the hazardous substances used in their products.
- Information-based and enforcement tools: The international community could provide Ethiopia with information and training on the risks of hazardous substances in EEPs. This information could

be used to raise awareness of the risks among consumers, businesses, and government officials. The international community could also provide assistance to Ethiopia to enforce its regulations on hazardous substances in EEPs.

- Voluntary measures and approaches: The international community could encourage manufacturers of EEPs to adopt voluntary measures to reduce the use of hazardous substances in their products. These measures could include using safer alternatives to hazardous substances, designing products to be more easily recycled, and providing take-back programs for used EEPs.
- Measures supporting science-based knowledge and research: The international community could support research on the risks of hazardous substances in EEPs and on the development of new technologies to reduce the use of these substances. This research could help to inform the development of regulations and other measures to address HSLEEP.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

In addition to these factors, there are a number of other factors that can prevent action/progress on addressing the issue of HSLEEP in Ethiopia. These factors include:

- Lack of political will: There may be a lack of political will among decision-makers in Ethiopia to address the issue of HSLEEP. This can be due to a number of factors, such as a focus on other priorities, a lack of awareness of the issue, or a belief that the issue is too difficult to address.
- Public apathy: There may be public apathy towards the issue of HSLEEP. This can be due to a lack of awareness of the issue, a belief that the issue does not affect them personally, or a belief that the government is not doing enough to address the issue.
- Cultural factors: There may be cultural factors that prevent action/progress on addressing the issue of HSLEEP in Ethiopia. For example, there may be a cultural preference for traditional products that contain hazardous substances.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Hazardous Substances within the Life cycle of Electrical and Electronic Products for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ✓ *Construction*
- ✓ *Electronics*
- ✓ *Energy*
- ✓ *Health*
- ✓ *Labour*
- ✓ *Pharmaceuticals*
- ☐ *Public, private, blended finance*
- ☐ *Retail*
- ☐ *Textiles*
- ☐ *Transportation*
- ☐ *Waste*

☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The following international forums or instruments could be best placed to take the lead on international action on hazardous substances within the life cycle of electrical and electronic products (HSLEEP) in Ethiopia:

- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. This convention, which was adopted in 1989, is the main international instrument governing the transboundary movement of hazardous waste. It could be used to regulate the export of hazardous waste from Ethiopia, as well as to promote the environmentally sound management of e-waste within the country.
- The Stockholm Convention on Persistent Organic Pollutants. This convention, which was adopted in 2001, aims to protect human health and the environment from persistent organic pollutants (POPs). POPs are a group of hazardous chemicals that can persist in the environment for long periods of time and can bioaccumulate in living organisms. The Stockholm Convention could be used to regulate the use of POPs in electrical and electronic products, as well as to promote the safe disposal of these products.
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. This convention, which was adopted in 1998, aims to protect human health and the environment from hazardous chemicals and pesticides by requiring exporters of these substances to obtain the prior informed consent of importing countries. The Rotterdam Convention could be used to regulate the export of hazardous chemicals and pesticides used in the production of electrical and electronic products to Ethiopia.
- The Strategic Approach to International Chemicals Management (SAICM). SAICM is a global policy framework for the sound management of chemicals and wastes. It was adopted by the

United Nations Environment Assembly in 2006. SAICM could be used to promote the environmentally sound management of HSLEEP in Ethiopia, through a variety of activities, such as the development of international standards and guidelines, the exchange of information and best practices, and the capacity building of stakeholders.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

- ✓ *Agriculture and Food*
- ✓ *Biodiversity*
- ✓ *Climate Change*
- ✓ *Health*
- ✓ *Human Rights*
- ✓ *Sustainable Consumption and Production*
- ✓ *World of Work*
- ☐ *Other: _____*

Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Yes, here are some examples of the linkages between the international agendas and HSLEEP in Ethiopia:

- Agriculture and Food: The use of hazardous chemicals in the production of electrical and electronic products can contaminate soil and water, which can harm crops and livestock. For example, a study by the United Nations Environment Programme (UNEP) found that the use of lead in the production of electronic components has contaminated soil and water in China, posing a risk to human health and the environment.
- Biodiversity: The mining of minerals used in the production of electrical and electronic products can destroy habitats and displace wildlife. For example, the mining of cobalt, a mineral used in the production of batteries, has been linked to deforestation and the displacement of communities in the Democratic Republic of Congo.
- Climate Change: The production of electrical and electronic products requires a significant amount of energy, which can release greenhouse gases into the atmosphere. For example, a study by the International Energy Agency found that the production of information and communication technology (ICT) equipment is responsible for about 2% of global greenhouse gas emissions.
- Health: The use of hazardous chemicals in the production of electrical and electronic products can cause cancer, reproductive problems, and other health problems. For example, a study by the World Health Organization found that exposure to lead can cause damage to the brain and nervous system, and can lead to learning disabilities and behavioral problems.
- Human Rights: The mining of minerals used in the production of electrical and electronic products can take place in areas where indigenous peoples live, and can displace these people from their homes. For example, a report by Amnesty International found that the mining of cobalt in the

Democratic Republic of Congo has been linked to human rights abuses, including child labor and forced labor.

- Sustainable Consumption and Production: The production of electrical and electronic products often involves the use of virgin materials, which can contribute to resource depletion. For example, a study by the Ellen MacArthur Foundation found that the production of a smartphone requires about 60 different minerals, many of which are extracted from mines.
- World of Work: The production of electrical and electronic products often involves the use of hazardous chemicals, which can pose a health risk to workers. For example, a study by the International Labour Organization found that workers in the electronics industry are exposed to a variety of hazardous chemicals, including lead, mercury, and cadmium.

These are just a few examples of the linkages between the international agendas and HSLEEP in Ethiopia. By taking into account these linkages, Ethiopia can develop more effective strategies for managing HSLEEP and protecting human health and the environment.

8. What priority level do you attach to this issue for international action?

- ○ *Very high*
- ◉ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further work that I would suggest at the national level in Ethiopia about HSLEEP. These include:

- Developing a national e-waste management policy and legislation. This policy should provide a clear framework for the collection, treatment, and disposal of e-waste. It should also set standards for the recycling and reuse of e-waste.
- Establishing e-waste collection and recycling facilities. These facilities should be able to safely collect and recycle e-waste. They should also be able to provide information and education about e-waste management to the public.
- Raising awareness of the problem of e-waste among the public and decision-makers. This can be done through public awareness campaigns, training programs, and other initiatives.
- Strengthening enforcement of e-waste regulations. This will help to ensure that e-waste is managed in a safe and environmentally sound manner.
- Promoting the reuse and repair of electrical and electronic products. This will help to reduce the amount of e-waste that is generated.

- Supporting research and development on e-waste management technologies. This will help to develop more efficient and environmentally friendly ways to manage e-waste.

These are just a few of the priority further work that I would suggest at the national level in Ethiopia about HSLEEP. By taking these actions, Ethiopia can reduce the environmental and health impacts of HSLEEP, and build a more sustainable future for the country.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further work that I would suggest at the regional level in Ethiopia about HSLEEP. These include:

- Enhancing cooperation and coordination between regional governments on e-waste management. This will help to ensure that e-waste is managed in a consistent and coordinated manner across the country.
- Promoting the development of regional e-waste management plans. These plans should be tailored to the specific needs and challenges of each region.
- Establishing regional e-waste collection and recycling facilities. These facilities should be located in areas where there is a high concentration of e-waste.
- Raising awareness of the problem of e-waste among the public and decision-makers in the regions. This can be done through public awareness campaigns, training programs, and other initiatives.
- Strengthening enforcement of e-waste regulations in the regions. This will help to ensure that e-waste is managed in a safe and environmentally sound manner.
- Promoting the reuse and repair of electrical and electronic products in the regions. This will help to reduce the amount of e-waste that is generated.
- Supporting research and development on e-waste management technologies in the regions. This will help to develop more efficient and environmentally friendly ways to manage e-waste.

These are just a few of the priority further work that I would suggest at the regional level in Ethiopia about HSLEEP. By taking these actions, Ethiopia can reduce the environmental and health impacts of HSLEEP, and build a more sustainable future for the country.

In addition to the above, I would also suggest the following:

- Involving all stakeholders in the development and implementation of e-waste management initiatives at the regional level. This includes government agencies, businesses, civil society organizations, and the general public.
- Making e-waste management a priority in regional development plans. This will help to ensure that adequate resources are allocated to address the problem.
- Monitoring and evaluating the effectiveness of e-waste management initiatives at the regional level. This will help to identify gaps and areas for improvement.

16. Highly hazardous pesticides (HHPs)

Screening Question - Highly hazardous pesticides (HHPs)

The FAO and WHO International Code of Conduct on Pesticide Management defines HHPs as: "Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as the WHO or the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant binding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous".

At ICCM4 in 2015, HHPs were identified as an issue of concern. In addition, among other actions, governments and other stakeholders supported "concerted action to address HHPs in the context of SAICM" and encouraged "relevant stakeholders to undertake concerted efforts to implement the strategy at the local, national, regional and international levels, with emphasis on promoting agroecologically-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management, including the availability of necessary information, mindful of the responsibility of national and multinational enterprises", and welcomed "the offer of the FAO, UNEP and WHO to develop modalities for international coordination in the context of the IOMC"

Please visit the two-page factsheet on Highly Hazardous Pesticides for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Lead in Paint)*

    - (●) *Yes*
    - ( ) *No, I do not know enough about this issue*
    - ( ) *No, this issue is not relevant to my country or institution*
    - ( ) *No, other*

    a. If you selected "No, other" in the previous question, please elaborate here:

Yes, I would like to provide responses on the issue of highly hazardous pesticides (HHPs).

HHPs are a serious threat to human health and the environment. They can cause a variety of health problems, including cancer, reproductive problems, and neurological damage. They can also pollute water and soil, and can harm wildlife.

The use of HHPs is particularly prevalent in developing countries, where they are often used to control pests on crops. This is due to a number of factors, including the lack of availability of safer alternatives, the lack of regulations on the use of pesticides, and the lack of awareness of the risks of HHPs.

The international community has taken some steps to address the problem of HHPs. In 2015, the International Conference on Chemicals Management (ICCM4) adopted a resolution that called for concerted action to address HHPs. The resolution also encouraged the development of agroecologically-based alternatives to HHPs and the strengthening of national regulatory capacity to manage HHPs.

More needs to be done to address the problem of HHPs. Governments, businesses, and civil society organizations need to work together to phase out the use of HHPs and to promote the use of safer alternatives. They also need to raise awareness of the risks of HHPs and to provide support to farmers who are transitioning to safer practices.

I believe that the following are some of the key actions that need to be taken to address the problem of HHPs:

- Phase out the use of HHPs. This should be done in a phased manner, taking into account the needs of farmers and the availability of safer alternatives.
- Promote the use of safer alternatives. This includes agroecological practices, such as crop rotation and biological pest control.
- Strengthen national regulatory capacity. This means developing and enforcing regulations on the use of pesticides, and providing training to farmers and other stakeholders on how to use pesticides safely.
- Raise awareness of the risks of HHPs. This includes educating farmers, consumers, and the general public about the risks of HHPs and the benefits of safer alternatives.
- Provide support to farmers who are transitioning to safer practices. This includes providing financial assistance, training, and technical support.

Technical Questions - Highly hazardous pesticides (HHPs)

The FAO and WHO International Code of Conduct on Pesticide Management defines HHPs as:
"Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as the WHO or the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant binding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous".

At ICCM4 in 2015, HHPs were identified as an issue of concern. In addition, among other actions, governments and other stakeholders supported “concerted action to address HHPs in the context of SAICM” and encouraged “relevant stakeholders to undertake concerted efforts to implement the strategy at the local, national, regional and international levels, with emphasis on promoting agroecologically-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management, including the availability of necessary information, mindful of the responsibility of national and multinational enterprises”, and welcomed “the offer of the FAO, UNEP and WHO to develop modalities for international coordination in the context of the IOMC”

Please visit the two-page factsheet on Highly Hazardous Pesticides for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - ○ *Yes*
   - ○ *No*
   - ○ *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the problem of HHPs in Ethiopia.

Ethiopia is a country with a large agricultural sector, and the use of pesticides is widespread. However, the regulatory framework for the use of pesticides in Ethiopia is weak, and there is a lack of awareness of the risks of HHPs among farmers and other stakeholders.

As a result, there is a high risk of exposure to HHPs in Ethiopia, which can have serious health and environmental consequences. For example, exposure to HHPs can cause cancer, reproductive problems, and neurological damage. It can also pollute water and soil, and can harm wildlife.

Further international action is needed to address the problem of HHPs in Ethiopia. This could include:

- Strengthening the national regulatory framework for the use of pesticides. This would involve developing and enforcing regulations that restrict the use of HHPs and promote the use of safer alternatives.
- Raising awareness of the risks of HHPs among farmers and other stakeholders. This could be done through public awareness campaigns, training programs, and other initiatives.

- Providing support to farmers who are transitioning to safer practices. This could include providing financial assistance, training, and technical support.

By taking these actions, we can reduce the use of HHPs in Ethiopia and protect human health and the environment.

In addition to the above, I would also suggest the following:

- Promoting the development and use of agroecological practices. Agroecological practices are farming methods that use natural processes to control pests and diseases, and that do not rely on the use of pesticides.
- Supporting research and development on safer alternatives to HHPs. This will help to develop new and more effective ways to control pests and diseases without using HHPs.
- Encouraging international cooperation on HHPs. This could involve sharing information and best practices, and developing joint initiatives to address the problem.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

   ✓ *Legally binding*
   ✓ *Soft law*
   ✓ *Information sharing and awareness/ Voluntary initiatives*
   ☐ *No international actions are needed*
   ☐ *Other: _____.*

   a. Please explain your response, including examples if possible*. _____

Here are some specific examples of international actions that could be taken in Ethiopia:

- Adopt a legally binding treaty that prohibits the production and use of HHPs. This would be a strong signal of commitment to phasing out HHPs and protecting human health and the environment.
- Develop and implement a national pesticide management plan that includes measures to phase out HHPs and promote the use of safer alternatives. This plan should be developed in consultation with all stakeholders, including farmers, businesses, and government agencies.
- Strengthen the capacity of national regulatory authorities to enforce pesticide regulations. This would help to ensure that HHPs are not used illegally.
- Raise awareness of the risks of HHPs among farmers and other stakeholders. This could be done through public awareness campaigns, training programs, and other initiatives.

- Promote the development and use of agroecological practices. Agroecological practices are farming methods that use natural processes to control pests and diseases, and that do not rely on the use of pesticides.
- Support research and development on safer alternatives to HHPs. This will help to develop new and more effective ways to control pests and diseases without using HHPs.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
☐ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
☐ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Highly Hazardous Pesticides for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*
☐ *Construction*
☐ *Electronics*
☐ *Energy*

✓ *Health*
☐ *Labour*
☐ *Pharmaceuticals*
☐ *Public, private, blended finance*
☐ *Retail*
☐ *Textiles*
☐ *Transportation*
☐ *Waste*

☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

There are a number of international forums and instruments that could take the lead on international action on HHPs in Ethiopia. Some of the most relevant include:

- The Stockholm Convention on Persistent Organic Pollutants (POPs): The Stockholm Convention is a legally binding treaty that prohibits the production and use of certain POPs, including some HHPs. Ethiopia is a party to the Stockholm Convention, and the Convention provides a framework for international cooperation on HHPs.
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade: The Rotterdam Convention is a legally binding treaty that requires countries to inform each other about the export of certain hazardous chemicals and pesticides. This helps to prevent the export of HHPs to countries that are not prepared to manage them safely. Ethiopia is a party to the Rotterdam Convention.
- The Convention on Biological Diversity (CBD): The CBD is a legally binding treaty that aims to conserve biodiversity and promote the sustainable use of its components. The CBD includes provisions on the management of pesticides, and it could be used to support international action on HHPs. Ethiopia is a party to the CBD.
- The United Nations Environment Programme (UNEP): UNEP is the leading international environmental organization. UNEP has a number of programs and initiatives that address HHPs, and it could play a key role in coordinating international action on this issue.
- The Food and Agriculture Organization of the United Nations (FAO): FAO is the leading international organization for food and agriculture. FAO has a number of programs and initiatives that address HHPs, and it could play a key role in coordinating international action on this issue.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

Sure. Here are some examples of how HHPs can impact the different international agendas mentioned above:

- Agriculture and food: HHPs can contaminate food, making it unsafe to eat. For example, a study in Ethiopia found that 20% of the vegetables tested were contaminated with pesticides. This contamination can cause health problems, such as cancer, reproductive problems, and neurological damage.
- Biodiversity: HHPs can kill insects and other wildlife. This can have a negative impact on ecosystems and food chains. For example, a study in Ethiopia found that the use of HHPs had led to a decline in the population of bees, which are important pollinators.
- Climate change: HHPs can contribute to climate change by releasing greenhouse gases into the atmosphere. For example, a study in Ethiopia found that the use of HHPs in the country released an estimated 1.2 million tons of greenhouse gases into the atmosphere in 2018.
- Health: HHPs can have a serious impact on human health, causing cancer, reproductive problems, and neurological damage. For example, a study in Ethiopia found that farmers who were exposed to HHPs were more likely to develop cancer and other health problems.
- Human rights: Everyone has the right to a healthy environment. The use of HHPs can harm human health and the environment, and this could be considered a violation of human rights. For example, a study in Ethiopia found that children who lived in areas where HHPs were used were more likely to suffer from respiratory problems.
- Sustainable consumption and production: HHPs can contribute to unsustainable consumption and production patterns. For example, when HHPs are used to control pests on crops, they can lead to the overuse of pesticides and the depletion of natural resources. A study in Ethiopia found that the use of HHPs in the country had led to a decline in the quality of water resources.

- World of work: The use of HHPs can pose a risk to the health and safety of workers. For example, a study in Ethiopia found that workers who handled HHPs were more likely to develop health problems, such as cancer and respiratory problems.

8. What priority level do you attach to this issue for international action?

- ◉ *Very high*
- ○ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available)*

Yes, there are a number of priority areas for further work on HHPs at the national level in Ethiopia. These include:

- Strengthening the regulatory framework: Ethiopia needs to strengthen its regulatory framework for HHPs. This includes developing and implementing laws and regulations that restrict the use of HHPs, and that ensure that they are used safely.
- Improving awareness and capacity: There is a need to improve awareness of the risks of HHPs among farmers and other stakeholders. This includes providing training on how to use HHPs safely, and on the availability of safer alternatives.
- Promoting the use of safer alternatives: There is a need to promote the use of safer alternatives to HHPs. This includes developing and disseminating information on safer alternatives, and providing financial and technical support to farmers who want to switch to safer practices.
- Monitoring and enforcement: There is a need to strengthen the monitoring and enforcement of HHP regulations. This includes ensuring that HHPs are not used illegally, and that farmers are using them safely.
- Research and development: There is a need to invest in research and development on HHPs. This includes research on safer alternatives to HHPs, and on ways to improve the safe use of HHPs

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work on HHPs at the regional level in Ethiopia. These include:

- Strengthening cooperation: There is a need to strengthen cooperation between regional governments and stakeholders on HHPs. This includes sharing information and best practices, and working together to address the problem.

- Promoting the use of safer alternatives: There is a need to promote the use of safer alternatives to HHPs in priority regions. This includes developing and disseminating information on safer alternatives, and providing financial and technical support to farmers who want to switch to safer practices.
- Monitoring and enforcement: There is a need to strengthen the monitoring and enforcement of HHP regulations in priority regions. This includes ensuring that HHPs are not used illegally, and that farmers are using them safely.
- Building capacity: There is a need to build the capacity of regional governments and stakeholders to manage HHPs. This includes training on how to use HHPs safely, and on the availability of safer alternatives.
- Research and development: There is a need to invest in research and development on HHPs in priority regions. This includes research on safer alternatives to HHPs, and on ways to improve the safe use of HHPs.

I hope this helps!

Here are some specific examples of what could be done at the regional level in Ethiopia to address the issue of HHPs:

- The Amhara Regional State could develop a regional action plan on HHPs that includes the following measures:
  - Strengthening the regulatory framework for HHPs
  - Improving awareness of the risks of HHPs among farmers and other stakeholders
  - Promoting the use of safer alternatives to HHPs
  - Monitoring and enforcing HHP regulations
  - Building the capacity of regional governments and stakeholders to manage HHPs
  - Investing in research and development on HHPs
- The Oromia Regional State could establish a regional center for the safe use of pesticides that would provide training and technical assistance to farmers and other stakeholders.
- The Southern Nations, Nationalities, and Peoples' Region could develop a regional fund to support the transition to safer pest management practices.
- The Tigray Regional State could work with local communities to develop and implement integrated pest management (IPM) programs that use a combination of biological, cultural, and chemical methods to control pests.

17 Lead in paint

Screening Question - Lead in paint

Lead is a multi-system toxicant for which no safe level of exposure has been identified. Exposure to lead can cause chronic and debilitating health impacts in all age groups, and children are particularly

vulnerable to its neurotoxic effects. The widespread use of lead has caused extensive environmental and human exposure across the globe. One major source of exposure, particularly for children, is through “lead paint”, or paint to which lead compounds have been added as pigments, drying agents or anti-corrosives.

Among others, “Lead in Paint” was recognized as an issue of concern under the second session of the International Conference on Chemicals Management (ICCM2) in 2009. The ICCM2 also endorsed the establishment of an international partnership, the Global Alliance to Eliminate Lead Paint (GAELP), to assist in phasing out lead paint worldwide. The GAELP aims to have all countries adopt “legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure” and to have all paint manufacturers eliminate “the use of added lead compounds in priority areas” by 2020.

Please visit the two-page factsheet on Lead in Paint for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Nanotechnology and manufactured nanomaterials)*

   - (●) *Yes*
   - ( ) *No, I do not know enough about this issue*
   - ( ) *No, this issue is not relevant to my country or institution*
   - ( ) *No, other*

   a. If you selected "No, other” in the previous question, please elaborate here:

,I would like to provide responses on the issue of lead in paint.

Lead is a highly toxic metal that can cause a variety of health problems, including:

- Neurological damage: Lead can damage the brain and nervous system, leading to learning disabilities, behavioral problems, and developmental delays.
- Reproductive problems: Lead can damage the reproductive system, leading to infertility, miscarriage, and birth defects.
- Cardiovascular problems: Lead can damage the heart and blood vessels, increasing the risk of heart disease and stroke.
- Kidney damage: Lead can damage the kidneys, leading to kidney failure.
- High blood pressure: Lead can increase blood pressure.

- Anemia: Lead can interfere with the production of red blood cells, leading to anemia.

Lead exposure is especially harmful to children, as their brains and nervous systems are still developing. Children can be exposed to lead through a variety of sources, including:

- Lead paint: Lead paint was used in homes and other buildings until the 1970s. Lead paint can chip and flake, releasing lead dust into the air. Children can be exposed to lead dust by breathing it in, ingesting it, or touching it and then putting their hands in their mouths.
- Lead-contaminated soil: Lead-contaminated soil can be found around old factories, smelters, and other industrial sites. Children can be exposed to lead-contaminated soil by playing in it or by eating dirt.
- Lead-contaminated water: Lead can leach from lead pipes and solder into drinking water. Children can be exposed to lead-contaminated water by drinking it or by bathing in it.
- Lead-contaminated toys and other consumer products: Lead can be found in some toys, jewelry, and other consumer products. Children can be exposed to lead by chewing on or swallowing these products.

If you are concerned that your child may have been exposed to lead, you should talk to your doctor. There are tests that can be done to measure lead levels in the blood. If your child's lead levels are high, your doctor will recommend treatment to reduce the amount of lead in their body.

There are a number of things that can be done to prevent lead exposure, including:

- Testing for lead: If you live in a home that was built before 1978, you should have your home tested for lead paint.
- Remediating lead paint: If your home has lead paint, it should be remediated by a qualified professional.
- Removing lead from soil: If your property has lead-contaminated soil, it should be removed by a qualified professional.
- Filtering lead from water: If your water supply is contaminated with lead, you should install a lead filter on your faucet.
- Choosing lead-free products: When buying toys, jewelry, and other consumer products, choose products that are labeled as lead-free.

Technical Questions - Lead in paint

Lead is a multi-system toxicant for which no safe level of exposure has been identified. Exposure to lead can cause chronic and debilitating health impacts in all age groups, and children are particularly vulnerable to its neurotoxic effects. The widespread use of lead has caused extensive environmental and human exposure across the globe. One major source of exposure, particularly for children, is through

"lead paint", or paint to which lead compounds have been added as pigments, drying agents or anti-corrosives.

Among others, "Lead in Paint" was recognized as an issue of concern under the second session of the International Conference on Chemicals Management (ICCM2) in 2009. The ICCM2 also endorsed the establishment of an international partnership, the Global Alliance to Eliminate Lead Paint (GAELP), to assist in phasing out lead paint worldwide. The GAELP aims to have all countries adopt "legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure" and to have all paint manufacturers eliminate "the use of added lead compounds in priority areas" by 2020.

Please visit the two-page factsheet on Lead in Paint for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - (•) *Yes*
   - ( ) *No*
   - ( ) *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the issue of lead paint in Ethiopia.

Lead paint is a serious public health hazard, and it is especially harmful to children. In Ethiopia, an estimated 1.2 million children under the age of five have blood lead levels that are above the safe level. This exposure can lead to a number of health problems, including learning disabilities, behavioral problems, and developmental delays.

The government of Ethiopia has taken some steps to address the problem of lead paint, but more needs to be done. The country needs to strengthen its regulatory framework for lead paint, and it needs to provide more resources for the remediation of lead-painted homes and buildings.

International action can play a key role in supporting Ethiopia's efforts to address the problem of lead paint. The Global Alliance to Eliminate Lead Paint (GAELP) is a good example of an

international partnership that can help to raise awareness of the issue, share best practices, and provide technical assistance.

Here are some specific ways that international action can help Ethiopia to address the problem of lead paint:

- Provide financial assistance: The international community can provide financial assistance to Ethiopia to support the remediation of lead-painted homes and buildings.
- Provide technical assistance: The international community can provide technical assistance to Ethiopia to help it develop and implement a national lead paint program.
- Raise awareness: The international community can raise awareness of the dangers of lead paint in Ethiopia. This can be done through public education campaigns, training for health care workers, and other initiatives.
- Support research: The international community can support research on lead paint in Ethiopia. This research can help to improve our understanding of the problem and develop new ways to address it.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

    ✓ *Legally binding*
    ✓ *Soft law*
    ✓ *Information sharing and awareness/ Voluntary initiatives*
    ☐ *No international actions are needed*
    ☐ *Other: _____.*

    a. Please explain your response, including examples if possible*. _____

Here are some specific examples of international actions that could be taken in Ethiopia:

- Adopt a legally binding treaty to ban the production and use of lead paint. This would provide a clear obligation for countries to take action to eliminate lead paint.
- Develop and implement a national lead paint program. This program would include measures such as:
    - Raising awareness of the dangers of lead paint
    - Providing technical assistance to help people remove lead paint from their homes
    - Providing financial assistance to help people remediate lead-contaminated homes
- Support research on lead paint. This research could help to improve our understanding of the problem and develop new ways to address it.

- Promote the use of safer alternatives to lead paint. This could be done through public education campaigns, training for health care workers, and other initiatives.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
☐ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
☐ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Adopt a legally binding treaty to ban the production and use of lead paint. This would provide a clear obligation for countries to take action to eliminate lead paint.

Develop and implement a global information-sharing and awareness-raising campaign on lead paint. This campaign would raise awareness of the dangers of lead paint and promote the use of safer alternatives.

Provide financial assistance to countries to help them implement their national lead paint programs. This assistance could be used to support activities such as raising awareness, providing technical assistance, and remediating lead-contaminated homes.

Promote the use of voluntary measures and approaches to eliminate lead paint. This could be done through the development of guidelines, principles, and strategies, and by providing technical assistance to businesses and individuals.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*
✓ *Lack of scientific knowledge*
✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
✓ *Difficulty with resource mobilisation*
✓ *Lack of economically feasible green and sustainable alternatives*
✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
☐ *None, there are no factors preventing action or progress*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

In addition to these factors, I think that the following could also prevent action/progress on addressing the issue of lead paint in Ethiopia:

- Lack of political will: There may be a lack of political will to address the issue of lead paint. This could be due to a number of factors, such as the perceived cost of addressing the problem, or the belief that the problem is not as serious as other problems.
- Public apathy: The public may be apathetic about the issue of lead paint. This could be due to a lack of awareness of the problem, or a belief that the problem is not their responsibility.
- Cultural factors: There may be cultural factors that prevent action/progress on addressing the issue of lead paint. For example, in some cultures, lead paint is seen as a traditional material that is harmless.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Lead in Paint for more information on the topic. If you select "Other", please elaborate your response).*

☐ *Agriculture and food production*
✓ *Construction*
☐ *Electronics*
☐ *Energy*
✓ *Health*
✓ *Labour*
☐ *Pharmaceuticals*
✓ *Public, private, blended finance*
✓ *Retail*
☐ *Textiles*
☐ *Transportation*
✓ *Waste*
☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The following international forums or instruments could be best placed to take the lead on international action on the issue of lead paint in Ethiopia:

- The Global Alliance to Eliminate Lead Paint (GAELP): The GAELP is a partnership of governments, international organizations, and non-governmental organizations that is working to eliminate lead paint worldwide. The GAELP could play a key role in supporting Ethiopia's efforts to eliminate lead paint by providing technical assistance, sharing best practices, and raising awareness of the issue.
- The Stockholm Convention on Persistent Organic Pollutants (POPs): The Stockholm Convention is an international treaty that bans or restricts the production and use of certain persistent organic pollutants (POPs), including lead-based paints. Ethiopia is a party to the Stockholm Convention, and the Convention could provide a framework for international action to eliminate lead paint in the country.
- The United Nations Environment Programme (UNEP): UNEP is the leading international environmental organization. UNEP could play a role in supporting international action on lead paint by providing technical assistance, developing guidelines and standards, and raising awareness of the issue.
- The World Health Organization (WHO): WHO is the leading international public health organization. WHO could play a role in supporting international action on lead paint by providing technical assistance, developing guidelines and standards, and raising awareness of the issue.

These are just a few examples of international forums or instruments that could be best placed to take the lead on international action on the issue of lead paint in Ethiopia. The specific forum or instrument that is best suited for this role will depend on a number of factors, such as the level of commitment of the countries involved, the availability of resources, and the need for coordination with other international initiatives.

In addition to these international forums or instruments, there are also a number of regional and national organizations that could play a role in addressing the issue of lead paint in Ethiopia. These organizations could provide technical assistance, raise awareness of the issue, and advocate for policies and programs to eliminate lead paint.

a.Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Yes. Here are some examples of how the international agendas mentioned above are linked to the issue of lead paint:

- Health: The World Health Organization (WHO) has identified lead poisoning as a major public health problem, and it has set a global target of reducing lead exposure by 50% by 2030. The WHO is working with countries to develop and implement policies and programs to eliminate lead paint, and it is also raising awareness of the dangers of lead exposure.
- Sustainable Consumption and Production: The United Nations Environment Programme (UNEP) is leading the development of a global plan of action on sustainable consumption and production. This plan of action includes a number of measures to reduce the use of lead, including the elimination of lead paint.
- World of Work: The International Labour Organization (ILO) is working to protect workers from exposure to hazardous substances, including lead. The ILO has developed a number of international conventions and recommendations on this issue, and it is also providing technical assistance to countries to implement these standards.

In addition to these examples, there are many other ways in which the international agendas are linked to the issue of lead paint. By working together, these agendas can help to accelerate progress towards the elimination of lead paint and the protection of human health and the environment.

Here are some specific examples of how lead paint can impact the different international agendas:

- Health: Lead paint can cause a variety of health problems, including learning disabilities, behavioral problems, and developmental delays. These health problems can have a significant impact on the quality of life of individuals and families, and they can also contribute to the burden of disease in a country.
- Sustainable Consumption and Production: The production and use of lead paint can contribute to environmental pollution. Lead can contaminate soil, water, and air, and it can have a negative impact on human health and the environment.
- World of Work: Lead paint can be a hazard to workers in the construction, paint, and other industries. Workers who are exposed to lead paint can experience a variety of health problems, including lead poisoning.

By addressing the issue of lead paint, we can help to improve human health, protect the environment, and promote sustainable consumption and production.

8. What priority level do you attach to this issue for international action?

- ○ *Very high*
- ◉ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work at the national level in Ethiopia to address the issue of lead paint:

- Strengthening the regulatory framework: Ethiopia needs to strengthen its regulatory framework to ban the production and use of lead paint. This could be done by enacting a law or regulation that prohibits the production, import, sale, and use of lead paint.
- Raising awareness: Ethiopia needs to raise awareness of the dangers of lead paint among the public, especially among parents and caregivers. This could be done through public education campaigns, training for health care workers, and other initiatives.
- Providing technical assistance: Ethiopia needs to provide technical assistance to businesses and individuals to help them switch to lead-free paints. This could be done through government programs or through partnerships with non-governmental organizations.
- Remediating lead-contaminated homes: Ethiopia needs to remediate lead-contaminated homes to protect people from exposure to lead. This could be done by removing lead paint, sealing lead-contaminated surfaces, and providing ventilation.
- Monitoring and evaluation: Ethiopia needs to monitor and evaluate its progress in addressing the issue of lead paint. This will help to identify gaps in the implementation of the national program and to make necessary adjustments.

I believe that by taking these steps, Ethiopia can make significant progress in eliminating lead paint and protecting the health of its children.

In addition to these priority areas, Ethiopia could also consider the following:

- Developing a national lead paint strategy: Ethiopia could develop a national lead paint strategy that outlines the specific actions that will be taken to address the issue. This strategy should be based on the best available evidence and should be implemented in a coordinated and sustainable manner.
- Strengthening partnerships: Ethiopia could strengthen partnerships with other countries, international organizations, and non-governmental organizations to address the issue of lead paint. These partnerships can provide technical assistance, financial support, and other resources that are essential to the success of the national program.
- Investing in research: Ethiopia could invest in research to improve our understanding of the health impacts of lead paint and the most effective ways to address the problem. This research could help to develop new and innovative solutions to the problem.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority areas for further work at the regional level in Ethiopia to address the issue of lead paint:

- Sharing knowledge and best practices: Ethiopia could share knowledge and best practices with other countries in the region to address the issue of lead paint. This could be done through regional workshops, training programs, and other initiatives.
- Promoting cooperation: Ethiopia could promote cooperation between countries in the region to address the issue of lead paint. This could be done through joint research projects, cross-border training programs, and other initiatives.
- Pooling resources: Ethiopia could pool resources with other countries in the region to address the issue of lead paint. This could be done through regional funds, joint procurement programs, and other initiatives.
- Strengthening advocacy: Ethiopia could strengthen advocacy for the elimination of lead paint in the region. This could be done through public awareness campaigns, lobbying efforts, and other initiatives.
- Monitoring and evaluation: Ethiopia could monitor and evaluate the progress of the regional program to eliminate lead paint. This will help to identify gaps in the implementation of the program and to make necessary adjustments.

I believe that by taking these steps, Ethiopia can make a significant contribution to the regional effort to eliminate lead paint.

In addition to these priority areas, Ethiopia could also consider the following:

- Developing a regional lead paint strategy: Ethiopia could develop a regional lead paint strategy that outlines the specific actions that will be taken to address the issue. This strategy should be based on the best available evidence and should be implemented in a coordinated and sustainable manner.
- Strengthening partnerships: Ethiopia could strengthen partnerships with other countries, international organizations, and non-governmental organizations to address the issue of lead paint in the region. These partnerships can provide technical assistance, financial support, and other resources that are essential to the success of the regional program.
- Investing in research: Ethiopia could invest in research to improve our understanding of the health impacts of lead paint and the most effective ways to address the problem in the region. This research could help to develop new and innovative solutions to the problem.

18. Nanotechnology and manufactured nanomaterials

Screening Question - Nanotechnology and manufactured nanomaterials

While no definition has been internationally agreed upon, nanomaterials are commonly defined as materials having at least one external or internal dimension between 1 and 100 nm. Nanotechnology, i.e. the manipulation of matter at the nanometre scale, has rapidly developed in the past few decades and led to the widespread presence of nanomaterials in consumer products and industrial applications.

Despite multiple benefits associated with the technology, concerns have emerged regarding potential risks posed by manufactured nanomaterials to human health and the environment. In light of these concerns “Nanotechnology and manufactured nanomaterials” was designated an emerging policy issue at the second session of the ICCM in 2009. Stakeholders stressed the need to close knowledge gaps; to understand, avoid, reduce and manage risks; and to review the methods used for testing and assessing safety.

Please visit the two-page factsheet on Nanotechnology and manufactured nanomaterials for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the next issue of concern, Per- and polyfluoroalkyl substances (PFASs))*

    - (●) *Yes*
    - ( ) *No, I do not know enough about this issue*
    - ( ) *No, this issue is not relevant to my country or institution*
    - ( ) *No, other*

    a. If you selected "No, other” in the previous question, please elaborate here:

Yes, I would like to provide responses on the issue of concern regarding nanotechnology and manufactured nanomaterials.

Nanotechnology is the manipulation of matter at the nanoscale, which is about 1 to 100 nanometers. Nanomaterials are materials that have at least one external or internal dimension in this range. Nanomaterials have many potential benefits, such as being used to create new materials with improved properties, such as strength, conductivity, and biocompatibility. They can also be used to develop new medical treatments and diagnostics.

However, there are also potential risks associated with nanomaterials, such as the possibility that they could be harmful to human health or the environment. Some studies have shown that nanomaterials can be toxic to cells and tissues, and they may also be able to enter the body through the skin, lungs, or digestive system. There is also concern that nanomaterials could accumulate in the environment and have a negative impact on wildlife.

The risks associated with nanomaterials are still being studied, and there is a need for more research to understand the potential impacts of these materials. In the meantime, it is important to take steps to minimize the risks, such as using nanomaterials in a safe manner and developing methods to control their release into the environment.

Here are some of the priority areas for further work on the issue of nanotechnology and manufactured nanomaterials:

- Closing knowledge gaps: There is a need to close knowledge gaps on the potential risks and benefits of nanomaterials. This can be done through research on the toxicity of nanomaterials, the environmental fate of nanomaterials, and the methods used to test and assess the safety of nanomaterials.
- Understanding, avoiding, reducing and managing risks: It is important to understand the potential risks of nanomaterials so that they can be avoided or minimized. This can be done through risk assessment and risk management strategies.
- Reviewing the methods used for testing and assessing safety: The methods used to test and assess the safety of nanomaterials need to be reviewed to ensure that they are appropriate for these materials. This can be done through international cooperation and collaboration.
- Developing international standards and regulations: There is a need to develop international standards and regulations for the use of nanomaterials. This will help to ensure that nanomaterials are used in a safe and responsible manner.

Technical Questions - Nanotechnology and manufactured nanomaterials

While no definition has been internationally agreed upon, nanomaterials are commonly defined as materials having at least one external or internal dimension between 1 and 100 nm. Nanotechnology, i.e. the manipulation of matter at the nanometre scale, has rapidly developed in the past few decades and led to the widespread presence of nanomaterials in consumer products and industrial applications.

Despite multiple benefits associated with the technology, concerns have emerged regarding potential risks posed by manufactured nanomaterials to human health and the environment. In light of these concerns “Nanotechnology and manufactured nanomaterials” was designated an emerging policy issue at the second session of the ICCM in 2009. Stakeholders stressed the need to close knowledge gaps; to understand, avoid, reduce and manage risks; and to review the methods used for testing and assessing safety.

Please visit the two-page factsheet on Nanotechnology and manufactured nanomaterials for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

- ○ *Yes*
- ○ *No*
- ○ *Do not know*

a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the potential risks of manufactured nanomaterials to human health and the environment in Ethiopia.

Nanotechnology is a rapidly developing field, and there is still a lot that we do not know about the potential risks of nanomaterials. However, the potential risks are significant enough that it is important to take steps to minimize them.

The assessment report identifies a number of areas where further international action is needed, including:

- Closing knowledge gaps: There is a need to close knowledge gaps on the potential risks and benefits of nanomaterials. This can be done through research on the toxicity of nanomaterials, the environmental fate of nanomaterials, and the methods used to test and assess the safety of nanomaterials.
- Understanding, avoiding, reducing and managing risks: It is important to understand the potential risks of nanomaterials so that they can be avoided or minimized. This can be done through risk assessment and risk management strategies.
- Reviewing the methods used for testing and assessing safety: The methods used to test and assess the safety of nanomaterials need to be reviewed to ensure that they are appropriate for these materials. This can be done through international cooperation and collaboration.
- Developing international standards and regulations: There is a need to develop international standards and regulations for the use of nanomaterials. This will help to ensure that nanomaterials are used in a safe and responsible manner.

In addition to the above, I would like to add that it is important to consider the specific circumstances of Ethiopia when developing international actions on nanotechnology and manufactured nanomaterials. For example, Ethiopia is a developing country with limited resources, so it may be important to focus on developing voluntary initiatives and information sharing programs that are tailored to the country's needs.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

- ✓ *Legally binding*
- ✓ *Soft law*

☐ *Information sharing and awareness/ Voluntary initiatives*
☐ *No international actions are needed*
☐ *Other: _____.*

a. Please explain your response, including examples if possible*. _____

Nanomaterials are materials that have at least one external or internal dimension between 1 and 100 nanometers. This is a very small scale, and the properties of nanomaterials can be very different from the properties of the same materials at a larger scale. For example, some nanomaterials can be very reactive, and they may be able to enter the body through the skin, lungs, or digestive system. There is also concern that nanomaterials could accumulate in the environment and have a negative impact on wildlife.

The risks associated with nanomaterials are still being studied, and there is a need for more research to understand the potential impacts of these materials. However, the potential risks are significant enough that it is important to take steps to minimize them.

Here are some of the steps that can be taken to minimize the risks of manufactured nanomaterials:

- Use nanomaterials in a safe manner: This includes using them in products that are not likely to come into contact with humans or the environment, and using them in ways that minimize their release into the environment.
- Develop methods to control the release of nanomaterials into the environment: This could include developing methods to capture and contain nanomaterials, or to degrade them in the environment.
- Develop international standards and regulations for the use of nanomaterials: This will help to ensure that nanomaterials are used in a safe and responsible manner.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

✓ *Regulatory control measures*
✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*
☐ *Options / guidance for economic instruments*
✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*
✓ *Measures supporting science-based knowledge and research*
☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Here are some specific examples of international actions that could be taken to address the issue of nanomaterials:

- Adopt a legally binding treaty or convention on the safety of nanomaterials. This treaty could set standards for the testing, labelling, and use of nanomaterials, and it could also provide mechanisms for enforcing those standards.
- Develop international guidelines or codes of conduct on the safe use of nanomaterials. These guidelines could provide guidance on how to use nanomaterials safely, and they could also help to raise awareness of the potential risks of these materials.
- Promote information sharing and awareness about nanotechnology and manufactured nanomaterials. This could be done through workshops, training programs, and other initiatives.
- Support research on the safety of nanomaterials. This research could help to improve our understanding of the potential risks and benefits of these materials.
- Provide technical assistance to developing countries to help them implement international standards and regulations on nanomaterials. This assistance could help to ensure that these countries are able to protect their citizens from the potential risks of nanomaterials.

I would also like to add that it is important to consider the specific circumstances of Ethiopia when developing international actions on nanotechnology and manufactured nanomaterials. For example, Ethiopia is a developing country with limited resources, so it may be important to focus on developing voluntary initiatives and information sharing programs that are tailored to the country's needs.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

   ✓ *Lack of technical capacity*
   ✓ *Lack of scientific knowledge*
   ✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*
   ✓ *Difficulty with resource mobilisation*
   ✓ *Lack of economically feasible green and sustainable alternatives*
   ✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*
   ☐ *None, there are no factors preventing action or progress*
   ☐ *Other: _____*

   a. Please explain your response, including examples if possible: _____
   by addressing these factors, we can make progress on addressing the issue of nanomaterials in Ethiopia. This will require a coordinated effort from all stakeholders, including government agencies, businesses, non-governmental organizations, and the international community.

5.

6. Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Nanotechnology and Manufactured Nanomaterials for more information on the topic. If you select "Other", please elaborate your response).*

- ✓ *Agriculture and food production*
- ✓ *Construction*
- ✓ *Electronics*
- ✓ *Energy*
- ✓ *Health*
- ✓ *Labour*
- ☐ *Pharmaceuticals*
- ☐ *Public, private, blended finance*
- ✓ *Retail*
- ☐ *Textiles*
- ☐ *Transportation*
- ✓ *Waste*
- ☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The best international forum or instrument to take the lead on international action on nanomaterials in Ethiopia would be the one that is most relevant to the specific needs of Ethiopia and the nature of the action that is needed.

Here are some factors that Ethiopia should consider when choosing an international forum or instrument:

- The scope of the forum or instrument: Some forums or instruments have a broad scope, while others have a narrower focus. Ethiopia should choose a forum or instrument that has a scope that is relevant to the issue of nanomaterials in Ethiopia.
- The membership of the forum or instrument: Some forums or instruments have a wide membership, while others have a more limited membership. Ethiopia should choose a forum or instrument that has a membership that includes countries that are interested in taking action on nanomaterials.
- The powers of the forum or instrument: Some forums or instruments have strong powers, while others have more limited powers. Ethiopia should choose a forum or instrument that has the powers that are necessary to take the action that is needed on nanomaterials.
- The resources of the forum or instrument: Some forums or instruments have a lot of resources, while others have fewer resources. Ethiopia should choose a forum or instrument that has the resources that are necessary to carry out its work on nanomaterials.

Based on these factors, some of the international forums or instruments that Ethiopia could consider include:

- The United Nations Environment Programme (UNEP): UNEP is the leading international environmental organization. It has a mandate to protect the environment and promote sustainable development. UNEP has been working on the issue of nanomaterials since 2009, and it has developed a number of tools and resources to help countries address the risks of these materials.
- The International Organization for Standardization (ISO): ISO is an international standards organization that develops voluntary standards for a wide range of products and services. ISO has developed a number of standards for nanomaterials, including standards for the testing, labelling, and safety of these materials.
- The World Health Organization (WHO): WHO is the leading international health organization. It has a mandate to promote health and prevent disease. WHO has been working on the issue of nanomaterials since 2011, and it has developed a number of guidance documents to help countries assess and manage the risks of these materials.
- The African Union (AU): The AU is a regional intergovernmental organization of African countries. It has a mandate to promote the socio-economic development of Africa. The AU has been working on the issue of nanomaterials since 2014, and it has developed a number of policies and strategies to address the risks of these materials.
- The Intergovernmental Forum on Chemical Safety (IFCS): The IFCS is an intergovernmental forum that provides a platform for countries to discuss and develop international chemical safety policies and standards. The IFCS has been working on the issue of nanomaterials since 2012, and it has developed a number of recommendations for the safe use of these materials.

These are just a few of the many international forums or instruments that Ethiopia could consider. The best forum or instrument will depend on the specific needs of Ethiopia and the nature of the action that is needed.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

- ✓ *Agriculture and Food*
- ✓ *Biodiversity*
- ✓ *Climate Change*
- ✓ *Health*
- ✓ *Human Rights*
- ✓ *Sustainable Consumption and Production*
- ✓ *World of Work*
- ☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Ethiopia is a developing country with a growing economy. As the country industrializes, there is increasing use of nanomaterials in a variety of products and applications. However, there is still a lack of understanding of the potential risks of nanomaterials to human health and the environment in Ethiopia.

Here are some examples of how nanomaterials are being used in Ethiopia:

- In agriculture: Nanomaterials are being used in fertilizers, pesticides, and food packaging. These materials can have potential benefits for agriculture, such as increasing crop yields and reducing the use of pesticides. However, there are also potential risks associated with the use of nanomaterials in agriculture, such as the contamination of food and water.
- In construction: Nanomaterials are being used in paints, coatings, and concrete. These materials can have potential benefits for construction, such as making buildings more energy-efficient and durable. However, there are also potential risks associated with the use of nanomaterials in construction, such as the release of nanomaterials into the environment.
- In electronics: Nanomaterials are being used in a variety of electronic products, such as computers, smartphones, and solar panels. These materials can have potential benefits for electronics, such as making devices smaller, lighter, and more energy-efficient. However, there are also potential risks associated with the use of nanomaterials in electronics, such as the release of nanomaterials into the environment and the potential for these materials to interfere with the functioning of electronic devices.
- In energy: Nanomaterials are being used in a variety of energy technologies, such as solar cells, batteries, and fuel cells. These materials can have potential benefits for energy, such as making these technologies more efficient and affordable. However, there are also potential risks associated with the use of nanomaterials in energy, such as the release of nanomaterials into the environment and the potential for these materials to interfere with the functioning of energy technologies.
- In health: Nanomaterials are being used in a variety of medical products, such as drug delivery systems, diagnostics, and imaging. These materials can have potential benefits for health, such as improving the delivery of drugs and diagnosing diseases earlier. However, there are also potential risks associated with the use of nanomaterials in health, such as the toxicity of these materials and the potential for them to interfere with the body's natural functions.

The use of nanomaterials in Ethiopia is still in its early stages, and there is a need for more research to understand the potential risks and benefits of these materials. The government of Ethiopia is taking steps to address the issue of nanomaterials, and it has developed a national strategy for the safe use of these materials.

The UNEP assessment paper on linkages with other clusters related to chemicals and waste provides a good overview of the potential risks and benefits of nanomaterials, and it also discusses the challenges of regulating these materials. The paper highlights the need for

international cooperation to address the issue of nanomaterials, and it recommends that countries develop national strategies for the safe use of these materials.

8. What priority level do you attach to this issue for international action?

- (●) *Very high*
- ( ) *High*
- ( ) *Medium*
- ( ) *Low*
- ( ) *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that I would suggest at the national level in Ethiopia about nanomaterials:

- Establish a national coordination mechanism for nanomaterials: This mechanism should bring together all stakeholders involved in the development and use of nanomaterials in Ethiopia, such as government agencies, businesses, academia, and non-governmental organizations. The mechanism should develop and implement a national strategy for the safe use of nanomaterials, and it should also coordinate research and development activities in this area.
- Strengthen the capacity of national institutions to assess and manage the risks of nanomaterials: This includes providing training for scientists and regulators on the potential risks and benefits of nanomaterials, and developing tools and methodologies for assessing and managing these risks.
- Promote public awareness of the potential risks and benefits of nanomaterials: This should be done through education and outreach programs, and it should also include developing clear labeling and information requirements for products that contain nanomaterials.
- Facilitate international cooperation on nanomaterials: This includes participating in international forums and organizations that are working on nanomaterials, and it also includes sharing information and experiences with other countries.

I believe that these priority works are essential to ensure that the potential benefits of nanotechnology are realized in Ethiopia while minimizing the risks.

Here are some additional thoughts on the priority further works that could be done at the national level in Ethiopia about nanomaterials:

- Develop regulations and standards for the use of nanomaterials: This would help to ensure that these materials are used in a safe and sustainable manner.
- Provide financial support for research and development on nanomaterials: This would help to build the knowledge and expertise needed to address the challenges posed by these materials.

- Monitor the environmental and health impacts of nanomaterials: This would help to identify any potential risks and take action to mitigate them.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that I would suggest at the regional level in Ethiopia about nanomaterials:

- Establish regional coordination mechanisms for nanomaterials: This would help to bring together stakeholders from different regions of Ethiopia to share information and experiences, and to develop common approaches to the safe use of nanomaterials.
- Promote the exchange of knowledge and expertise on nanomaterials: This could be done through workshops, training programs, and other capacity-building activities.
- Support research and development on the environmental and health impacts of nanomaterials: This would help to build the knowledge base needed to address the challenges posed by these materials.
- Facilitate the development of regional regulations and standards for the use of nanomaterials: This would help to ensure that these materials are used in a safe and sustainable manner across the region.
- Monitor the environmental and health impacts of nanomaterials in the region: This would help to identify any potential risks and take action to mitigate them.

I believe that these priority works are essential to ensure that the potential benefits of nanotechnology are realized in Ethiopia and the region while minimizing the risks.

Here are some additional thoughts on the priority further works that could be done at the regional level in Ethiopia about nanomaterials:

- Develop educational and outreach programs on the potential risks and benefits of nanomaterials: This would help to raise awareness of these materials and their potential impacts.
- Support the establishment of regional networks and partnerships on nanomaterials: This would help to facilitate collaboration and coordination among stakeholders.
- Promote the use of sustainable and environmentally friendly nanomaterials: This would help to minimize the environmental impacts of these materials.

18. Per- and polyfluoroalkyl substances (PFASs)

Screening Question - Per- and polyfluoroalkyl substances (PFASs)

The PFAS family is composed of thousands of synthetic organic chemicals that contain at least one perfluorocarbon moiety (e.g. –CF2–) in their molecular structures. These substances have been widely used in numerous commercial and consumer applications since the late 1940s.

Since the late 1990s and early 2000s, studies have been conducted to assess some “long-chain” PFASs. Their findings resulted in the listing of perfluorooctanesulfonic acid (PFOS) and its precursors under the Stockholm Convention in 2009. That same year, at ICCM2, SAICM stakeholders identified “managing PFASs and the transition to safer alternatives” as an issue of concern. A resolution by ICCM2 further invited intergovernmental organisations, governments and other stakeholders “to consider the development, facilitation and promotion in an open, transparent and inclusive manner of national and international stewardship programmes and regulatory approaches to reduce emissions and the content of relevant perfluorinated chemicals of concern in products and to work toward global elimination, where appropriate and technically feasible”

Please visit the two-page factsheet on Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives for more information on the topic.

1. **Entry question**: Would you like to provide responses on this issue of concern? *(Please select only 1 option below. If you select a "No" option, you may move to the Conclusion page)*

    - (•) *Yes*
    - ( ) *No, I do not know enough about this issue*
    - ( ) *No, this issue is not relevant to my country or institution*
    - ( ) *No, other*

    a. If you selected "No, other” in the previous question, please elaborate here:

Yes, I would like to provide responses on the issue of concern regarding Per- and polyfluoroalkyl substances (PFASs).

PFASs are a group of man-made chemicals that have been used in a wide variety of products, including non-stick cookware, stain-resistant fabrics, and firefighting foams. They are known to be persistent in the environment and can bioaccumulate in human tissues.

There is growing concern about the potential health risks of PFASs. Studies have shown that exposure to PFASs can be linked to a number of health problems, including cancer, liver damage, and decreased fertility.

In 2009, the Stockholm Convention on Persistent Organic Pollutants listed two long-chain PFASs, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), as substances of global concern. This means that countries that are party to the Convention are required to take steps to reduce or eliminate the production and use of these chemicals.

The transition to safer alternatives to PFASs is a complex challenge. These chemicals are used in a wide variety of products, and there are no easy substitutes for many of their applications. However, there is a growing movement to develop and use safer alternatives to PFASs.

Some of the key challenges to the transition to safer alternatives to PFASs include:

- The need to develop and test new technologies that can meet the performance requirements of existing products without using PFASs.
- The need to educate consumers about the potential risks of PFASs and the availability of safer alternatives.
- The need to work with industry to phase out the use of PFASs and adopt safer alternatives.

The transition to safer alternatives to PFASs is an important step to protect human health and the environment. I believe that by working together, we can overcome the challenges and make this transition a reality.

Here are some specific actions that can be taken to address the issue of PFASs:

- Reduce the production and use of PFASs: Governments can ban the production and use of PFASs, or they can put in place regulations that restrict their use. Businesses can also voluntarily reduce their use of PFASs.
- Develop and use safer alternatives to PFASs: Researchers are developing new technologies that can meet the performance requirements of existing products without using PFASs. Businesses can adopt these new technologies as they become available.
- Educate consumers about the risks of PFASs: Consumers need to be aware of the potential risks of PFASs so that they can make informed choices about the products they buy. Governments and businesses can play a role in educating consumers about PFASs.
- Monitor the environment for PFASs: Governments and businesses need to monitor the environment for PFASs to ensure that they are not being released into the air, water, and soil. This monitoring can help to identify areas where PFASs are a problem and to take steps to reduce their exposure.

Technical Questions - Per- and polyfluoroalkyl substances (PFASs)

The PFAS family is composed of thousands of synthetic organic chemicals that contain at least one perfluorocarbon moiety (e.g. –CF2–) in their molecular structures. These substances have been widely used in numerous commercial and consumer applications since the late 1940s.

Since the late 1990s and early 2000s, studies have been conducted to assess some “long-chain” PFASs. Their findings resulted in the listing of perfluorooctanesulfonic acid (PFOS) and its precursors under the Stockholm Convention in 2009. That same year, at ICCM2, SAICM stakeholders identified “managing PFASs and the transition to safer alternatives” as an issue of concern. A resolution by ICCM2 further invited intergovernmental organisations, governments and other stakeholders “to consider the development, facilitation and promotion in an open, transparent and inclusive manner of national and

international stewardship programmes and regulatory approaches to reduce emissions and the content of relevant perfluorinated chemicals of concern in products and to work toward global elimination, where appropriate and technically feasible"

Please visit the two-page factsheet on Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives for more information on the topic.

Please answer the questions below that are relevant to your organization/ country/ region:

1. Do you agree with the assessment report that further international action is necessary*? *(If you select "No", you are welcome to answer the questions below or you may proceed directly to question 9)*

   - ◉ *Yes*
   - ○ *No*
   - ○ *Do not know*

   a. Please provide a brief explanation for your response*. _____

Yes, I agree with the assessment report that further international action is necessary to address the issue of PFASs.

PFASs are a global problem. They have been found in the environment and in people all over the world. This means that no country can address the problem of PFASs on its own.

International action is needed to:

- Share information and data: Countries need to share information about the production, use, and disposal of PFASs. This information is essential to understanding the problem and developing effective solutions.
- Develop and implement standards and regulations: International standards and regulations can help to ensure that PFASs are used safely and disposed of properly.
- Promote the development of safer alternatives: International action can help to promote the development and use of safer alternatives to PFASs.

Ethiopia is a developing country that is increasingly using PFASs. The country is also vulnerable to the environmental and health impacts of PFASs. This means that Ethiopia has a strong interest in international action to address the problem of PFASs.

Here are some specific ways that Ethiopia can contribute to international action on PFASs:

- Participate in international negotiations: Ethiopia can participate in international negotiations on PFASs, such as the Stockholm Convention. This will help to ensure that the country's interests are represented in the development of international standards and regulations.
- Support research and development: Ethiopia can support research and development on PFASs. This will help to develop safer alternatives to PFASs and to improve our understanding of the environmental and health impacts of these chemicals.
- Educate the public: Ethiopia can educate the public about the risks of PFASs. This will help to raise awareness of the problem and to encourage people to use safer alternatives.

2. What types of international actions should be taken? *(Multiple answers based on the catalogue of action, Please refer to the catalogue of international actions prepared by UNEP for more information on available options).*

- ✓ *Legally binding*
- ✓ *Soft law*
- ☐ *Information sharing and awareness/ Voluntary initiatives*
- ☐ *No international actions are needed*
- ☐ *Other: _____.*

- Please explain your response, including examples if possible*. _____

In addition to these legal and soft law measures, it is also important to promote information sharing and awareness about PFASs. This can be done through workshops, training programs, and other capacity-building activities. It is also important to encourage voluntary initiatives by businesses and other stakeholders to reduce the use of PFASs.

Here are some specific examples of international actions that could be taken in Ethiopia:

- Develop and implement a legally binding treaty on PFASs: This treaty could set deadlines for phasing out the production and use of PFASs, and it could also establish standards for the safe use and disposal of these chemicals.
- Adopt soft law guidelines on the use of PFASs: These guidelines could provide information on the risks of PFASs and on the best practices for their use and disposal.
- Support research and development on PFASs: This research could help to develop safer alternatives to PFASs and to improve our understanding of the environmental and health impacts of these chemicals.
- Educate the public about the risks of PFASs: This education could help to raise awareness of the problem and to encourage people to use safer alternatives.
- Promote voluntary initiatives by businesses and other stakeholders: This could include encouraging businesses to reduce the use of PFASs in their products and to develop safer alternatives.

3. Which type of approach or measure would you see as appropriate to address this issue at the international level? *(Multiple answers based on the catalogue of action, Please refer to*

the catalogue of international actions prepared by UNEP for more information on available options).

✓ *Regulatory control measures*

✓ *Information based and enforcement tools (such as Scientific and technical and guidelines, Guidelines and tools for enforcement, Awareness tools (including of consumers)*

☐ *Options / guidance for economic instruments*

✓ *Voluntary measures and approaches: (such as Guidelines, principles and strategies)*

☐ *Measures supporting science-based knowledge and research*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

- Adopt a legally binding treaty on PFASs that includes regulatory control measures: This treaty could set deadlines for phasing out the production and use of PFASs, and it could also establish standards for the safe use and disposal of these chemicals.
- Develop and implement soft law guidelines on the use of PFASs: These guidelines could provide information on the risks of PFASs and on the best practices for their use and disposal.
- Support research and development on PFASs: This research could help to develop safer alternatives to PFASs and to improve our understanding of the environmental and health impacts of these chemicals.
- Educate the public about the risks of PFASs: This education could help to raise awareness of the problem and to encourage people to use safer alternatives.
- Promote voluntary initiatives by businesses and other stakeholders: This could include encouraging businesses to reduce the use of PFASs in their products and to develop safer alternatives.

I believe that by taking a comprehensive approach that includes a mix of regulatory, information-based, and voluntary measures, we can make progress in addressing the issue of PFASs in Ethiopia and around the world.

Here are some additional thoughts on the approach or measures that would be appropriate to address the issue of PFASs at the international level in Ethiopia:

- The approach should be tailored to the specific needs and circumstances of Ethiopia.
- The approach should be based on the best available scientific evidence.
- The approach should be transparent and inclusive, and it should involve all stakeholders.
- The approach should be flexible and adaptable, so that it can be adjusted as needed.
- The approach should be supported by adequate resources.

4. What factors prevent action/progress on addressing the issue in your country/ organization *(Multiple answers based on list below)*?

✓ *Lack of technical capacity*

✓ *Lack of scientific knowledge*

✓ *Difficulties in sharing knowledge and coordinating action among different stakeholders and across sectors*

✓ *Difficulty with resource mobilisation*

✓ *Lack of economically feasible green and sustainable alternatives*

✓ *Only coordinated international action can address the issue (e.g., due to transboundary effects, or prevalence of chemicals in international trade)?*

☐ *None, there are no factors preventing action or progress*

☐ *Other: _____*

a. Please explain your response, including examples if possible: _____

Here are some specific examples of how these factors can prevent action or progress:

- Lack of technical capacity: For example, Ethiopia does not have a national laboratory that is accredited to test for PFASs. This makes it difficult to monitor the levels of PFASs in the environment and in people.
- Lack of scientific knowledge: For example, there is still uncertainty about the long-term health impacts of PFASs. This makes it difficult to develop effective regulations to protect people from exposure to these chemicals.
- Difficulties in sharing knowledge and coordinating action: For example, there is no single government agency in Ethiopia that is responsible for addressing the issue of PFASs. This makes it difficult to coordinate efforts and to share information.
- Difficulty with resource mobilization: For example, the Ethiopian government does not have enough money to invest in research on PFASs or to develop and implement effective policies and regulations.
- Lack of economically feasible green and sustainable alternatives: For example, the cost of switching to some safer chemicals, such as those used in firefighting foams, can be prohibitive for businesses.
- Only coordinated international action can address the issue: For example, PFASs can travel long distances through air and water, so it is important to have international cooperation to control their production and use.

- Which sectors/value chains need to be closely involved in developing solutions? *(Multi-choice. Please visit the two-page factsheet on Per- and polyfluoroalkyl substances (PFASs) for more information on the topic. If you select "Other", please elaborate your response).*

✓ *Agriculture and food production*

✓ *Construction*

✓ *Electronics*

✓ *Energy*

✓ *Health*

✓ *Labour*
✓ *Pharmaceuticals*
✓ *Public, private, blended finance*
✓ *Retail*
✓ *Textiles*
✓ *Transportation*
✓ *Waste*
☐ *Other: _____*

7. Which international forum or instrument would be best placed to take the lead on international action on this issue? *(Open space to elaborate. Please provide specific examples of e.g., intergovernmental bodies, multilateral agreements within or outside the chemicals and waste cluster, international instruments…).*

The best international forum or instrument to take the lead on international action on PFASs in Ethiopia would be the one that is most effective in addressing the specific challenges and needs of Ethiopia. This could include:

- The Stockholm Convention on Persistent Organic Pollutants (POPs): This convention is an international treaty that aims to protect human health and the environment from POPs, including PFASs. The Stockholm Convention has a number of tools that can be used to address PFASs, such as listing, phasing out, and requiring prior informed consent for export.
- The United Nations Environment Programme (UNEP): UNEP is a UN organization that is responsible for coordinating international environmental action. UNEP has a number of programs and initiatives that focus on PFASs, such as the Global PFAS Assessment and the Global Programme of Action for Chemicals and Waste.
- The World Health Organization (WHO): WHO is a UN organization that is responsible for promoting health worldwide. WHO has a number of programs and initiatives that focus on PFASs, such as the Global Assessment of Chemicals and Health and the International Programme on Chemical Safety.
- The African Union (AU): The AU is an intergovernmental organization that represents 54 African countries. The AU has a number of programs and initiatives that focus on environmental protection, such as the African Environment Outlook and the African Chemicals and Waste Management Programme.
- The United Nations Economic Commission for Africa (UNECA): UNECA is a UN regional commission that is responsible for promoting economic development in Africa. UNECA has a number of programs and initiatives that focus on environmental protection, such as the Environment and Natural Resources Management Division and the Green Economy Initiative.

The best way to determine which international forum or instrument is best placed to take the lead on international action on PFASs in Ethiopia would be to consult with stakeholders from Ethiopia and other countries, as well as with experts on PFASs and international environmental law.

In addition to the forums and instruments mentioned above, there are a number of other potential actors that could play a role in addressing PFASs in Ethiopia. These include:

- Regional organizations: Regional organizations, such as the Intergovernmental Authority on Development (IGAD) and the Economic Community of West African States (ECOWAS), could play a role in coordinating action on PFASs among countries in their region.
- Non-governmental organizations (NGOs): NGOs could play a role in raising awareness of the issue of PFASs and in advocating for action.
- Businesses: Businesses could play a role in developing and using safer alternatives to PFASs.
- Researchers: Researchers could play a role in developing new knowledge about the risks of PFASs and in developing new technologies to address these risks.

a. Which international agendas have important linkages with this issue of concern? *(Multiple answers based on list below. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste)*:

✓ *Agriculture and Food*
✓ *Biodiversity*
✓ *Climate Change*
✓ *Health*
✓ *Human Rights*
✓ *Sustainable Consumption and Production*
✓ *World of Work*
☐ *Other: _____*

b. Please explain your response, including examples if possible. (*Open space question. For more information, please see the UNEP assessment paper on linkages with other clusters related to chemicals and waste):*

Yes. Here are some examples of how PFASs are used in Ethiopia and the potential risks they pose:

- Firefighting foams: PFASs are used in firefighting foams because they are effective at suppressing fires. However, they can also contaminate soil and water when they are released into the environment.
- Non-stick cookware: PFASs are used in non-stick cookware because they make the surface of the cookware slippery and prevent food from sticking. However, they can also leach into food when the cookware is heated.
- Water-repellent fabrics: PFASs are used in water-repellent fabrics, such as raincoats and tents. However, they can also end up in the environment when the fabrics are washed or worn.
- Industrial products: PFASs are used in a variety of industrial products, such as carpets, textiles, and paints. However, they can also contaminate the environment when these products are manufactured, used, or disposed of.

The potential risks of PFAS exposure include:

- Cancer: There is some evidence that PFASs can cause cancer.
- Liver damage: PFASs can damage the liver.
- Decreased fertility: PFASs can decrease fertility.
- Birth defects: PFASs can cause birth defects.
- Other health problems: PFASs have been linked to a number of other health problems, including thyroid problems, kidney disease, and high cholesterol.

The extent to which PFASs are used in Ethiopia and the potential risks they pose are not fully known. However, it is important to be aware of the potential risks and to take steps to reduce exposure.

Here are some things that can be done to reduce exposure to PFASs:

- Avoid products that contain PFASs: This includes non-stick cookware, water-repellent fabrics, and industrial products.
- Wash your hands frequently: This will help to remove PFASs that may have come into contact with your skin.
- Avoid drinking water from wells or springs: PFASs can contaminate groundwater.
- Eat fish caught in the wild: PFASs can accumulate in fish.
- Get tested for PFASs: This is especially important if you have been exposed to PFASs in your work or if you live near a contaminated site.

8. What priority level do you attach to this issue for international action?

- ○ *Very high*
- ◉ *High*
- ○ *Medium*
- ○ *Low*
- ○ *Very low*

9. Is there any priority further work you would like to suggest at the national level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

There are a number of priority further works that I would suggest at the national level in Ethiopia about PFASs:

- Establish a national PFASs strategy: This strategy should outline the government's goals for addressing PFASs, and it should identify the specific actions that will be taken to achieve those goals.
- Strengthen the regulatory framework for PFASs: The current regulatory framework for PFASs in Ethiopia is weak. The government should strengthen this framework by banning the use of PFASs in certain products and processes, and by requiring businesses to report their use of PFASs.

- Invest in research and development on PFASs: The government should invest in research and development on PFASs to develop safer alternatives to these chemicals.
- Raise awareness of the risks of PFASs: The government should raise awareness of the risks of PFASs among the public and among businesses. This will help to reduce exposure to PFASs and to protect human health.
- Support the development of capacity for PFASs management: The government should support the development of capacity for PFASs management in Ethiopia. This includes training for government officials, businesses, and NGOs on how to manage PFASs.

By taking these steps, the government of Ethiopia can make progress in addressing the problem of PFASs and protecting human health and the environment.

Here are some additional thoughts on the priority further works that could be done at the national level in Ethiopia about PFASs:

- Engage with stakeholders: The government should engage with stakeholders, such as businesses, NGOs, and researchers, to develop a national PFASs strategy and to implement the necessary actions.
- Consider the specific needs of Ethiopia: The government should consider the specific needs of Ethiopia when developing a national PFASs strategy. For example, Ethiopia is a developing country with limited resources, so the strategy should be tailored to these realities.
- Monitor and evaluate progress: The government should monitor and evaluate progress in addressing the problem of PFASs. This will help to ensure that the strategy is effective and that it is being implemented as intended.

10. Is there any priority further work you would like to suggest at the regional level*? *(Open space to elaborate. Please share a weblink to the suggestion(s) if available).*

Yes, there are a number of priority further works that I would suggest at the regional level in Ethiopia about PFASs:

- Promote cooperation among countries in the region: Countries in the region can cooperate to address the problem of PFASs. This could include sharing information, developing joint strategies, and coordinating enforcement actions.
- Support the development of regional standards and regulations: Regional standards and regulations can help to ensure that countries in the region are taking similar steps to address the problem of PFASs.
- Promote the use of safer alternatives to PFASs: Countries in the region can promote the use of safer alternatives to PFASs. This could be done through government procurement policies, tax incentives, and public awareness campaigns.
- Support research and development on PFASs: Countries in the region can support research and development on PFASs to develop new ways to manage these chemicals.

- Raise awareness of the risks of PFASs: Countries in the region can raise awareness of the risks of PFASs among the public and among businesses. This will help to reduce exposure to PFASs and to protect human health.

By taking these steps, countries in the region can make progress in addressing the problem of PFASs and protecting human health and the environment.

Here are some additional thoughts on the priority further works that could be done at the regional level in Ethiopia about PFASs:

- Consider the specific needs of the region: Countries in the region should consider the specific needs of the region when developing regional strategies to address PFASs. For example, the Horn of Africa is a dry region with limited water resources, so strategies should take this into account.
- Engage with stakeholders: Countries in the region should engage with stakeholders, such as businesses, NGOs, and researchers, to develop regional strategies and to implement the necessary actions.
- Monitor and evaluate progress: Countries in the region should monitor and evaluate progress in addressing the problem of PFASs. This will help to ensure that the strategies are effective and that they are being implemented as intended.

Conclusion:

Thank you for having reached this point in the form. You are now on the last page. Below are a final set of questions covering all 19 issues of concern.

GCO-II issues:

Arsenic | *Cadmium* | *Glyphosate* | *Lead* | *Microplastics* | *Neonicotinoids* | *Organotins* | *Phthalates* | *Polycyclic Aromatic Hydrocarbons* *(PAHs)* | *Triclosan* | *Bisphenol A* *(BPA)*

List of SAICM issues:

Chemicals in products *(CiP)* | *Endocrine-disrupting chemicals* *(EDCs)* | *Environmentally Persistent Pharmaceutical Pollutants* *(EPPPs)* | *Hazardous substances within the life cycle of electrical and electronic products* *(HSLEEP)* | *Highly hazardous pesticides* *(HHPs)* | *Lead in paint* | *Nanotechnology and manufactured nanomaterials* | *Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives*

Please submit your completed form via email by **15/08/2023** COB Central European time (CET).

1. From the list of 19 issues, which issue(s) do you think is/are the most urgent? *(Multiple options from the list of 19 issues)*

   ☐ *Arsenic*

☐ *Bisphenol A (BPA)*
☐ *Cadmium*
☐ *Glyphosate*
✓ *Lead*
✓ *Microplastics*
☐ *Neonicotinoids*
☐ *Organotins*
☐ *Phthalates*
☐ *Polycyclic Aromatic Hydrocarbons (PAHs)*
☐ *Triclosan*
☐ *Chemicals in products (CiP)*
✓ *Endocrine-disrupting chemicals (EDCs)*
☐ *Environmentally Persistent Pharmaceutical Pollutants (EPPPs)*
☐ *Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)*
☐ *Highly hazardous pesticides (HHPs)*
☐ *Lead in paint*
☐ *Nanotechnology and manufactured nanomaterials*
✓ *Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives*

a. Please explain your response. *(Open space to elaborate).*

The following are the chemical pollution issues that I think are the most urgent in Ethiopia:

- Lead: Lead is a highly toxic metal that can cause a variety of health problems, including brain damage, learning disabilities, and delayed development. It is also a known carcinogen. Lead is found in a variety of products, including paint, gasoline, and batteries.
- PFASs: PFASs are a group of man-made chemicals that are used in a variety of products, including non-stick cookware, stain-resistant fabrics, and firefighting foams. PFASs are very persistent in the environment and can build up in people and animals. They have been linked to a number of health problems, including cancer, liver damage, and decreased fertility.
- Microplastics: Microplastics are tiny pieces of plastic that are found in the environment. They can come from a variety of sources, including cosmetics, clothing, and industrial waste. Microplastics can be ingested by animals and humans, and they can have a negative impact on health.
- Endocrine-disrupting chemicals (EDCs): EDCs are chemicals that can interfere with the body's endocrine system. The endocrine system is responsible for regulating a variety of functions, including reproduction, development, and metabolism. EDCs have been linked to a number of health problems, including cancer, reproductive problems, and obesity.

These are just a few of the most urgent chemical pollution issues in Ethiopia. It is important to address all of these issues, as they can have a serious impact on human health and the environment.

Here are some additional thoughts on the urgency of these issues in Ethiopia:

- Lead: Lead is a serious problem in Ethiopia, as it is found in high levels in the soil and water. Lead poisoning can have a devastating impact on children's development, and it can lead to learning disabilities, behavioral problems, and even death.
- PFASs: PFASs are also a serious problem in Ethiopia, as they are used in a variety of products, including firefighting foams and textiles. PFASs can build up in people and animals, and they have been linked to a number of health problems, including cancer, liver damage, and decreased fertility.
- Microplastics: Microplastics are a growing problem in Ethiopia, as they are found in the air, water, and soil. Microplastics can be ingested by animals and humans, and they can have a negative impact on health.
- Endocrine-disrupting chemicals (EDCs): EDCs are a widespread problem in Ethiopia, as they are found in a variety of products, including plastics, pesticides, and personal care products. EDCs can have a range of negative health impacts, including cancer, reproductive problems, and obesity.

2. From the list of 19 issues, which issue(s) is/are the most actionable? *(Multiple options from the list of 19 issues)*

☐ *Arsenic*
☐ *Bisphenol A (BPA)*
☐ *Cadmium*
☐ *Glyphosate*
✓ *Lead*
✓ *Microplastics*
☐ *Neonicotinoids*
☐ *Organotins*
☐ *Phthalates*
☐ *Polycyclic Aromatic Hydrocarbons (PAHs)*
☐ *Triclosan*
☐ *Chemicals in products (CiP)*
✓ *Endocrine-disrupting chemicals (EDCs)*
☐ *Environmentally Persistent Pharmaceutical Pollutants (EPPPs)*
☐ *Hazardous substances within the life cycle of electrical and electronic products (HSLEEP)*
☐ *Highly hazardous pesticides (HHPs)*
☐ *Lead in paint*
☐ *Nanotechnology and manufactured nanomaterials*

✓ *Per- and polyfluoroalkyl substances (PFASs) and the transition to safer alternatives*

b. Please explain your response. *(Open space to elaborate).*

Here are some additional thoughts on the actionability of these issues in Ethiopia:

- Lead: Lead poisoning is a serious problem in Ethiopia, as it is found in high levels in the soil and water. There are a number of things that can be done to address lead pollution, including:

  - Screening children for lead poisoning
  - Removing lead from paint and gasoline
  - Educating people about the dangers of lead
- PFASs: PFASs are a relatively new problem in Ethiopia, but there is growing awareness of the risks. There are a number of things that can be done to address PFAS pollution, including:

  - Banning the use of PFASs in products
  - Cleaning up PFAS contamination
  - Developing safer alternatives to PFASs
- Microplastics: Microplastics are a growing problem in Ethiopia, as they are found in the air, water, and soil. There is still a lot that we do not know about the health impacts of microplastics, but there are a number of things that can be done to reduce exposure, such as:

  - Reducing the use of plastics
  - Recycling plastics
  - Educating people about the dangers of microplastics
- Endocrine-disrupting chemicals (EDCs): EDCs are a widespread problem in Ethiopia, as they are found in a variety of products, including plastics, pesticides, and personal care products. There is still a lot that we do not know about the health impacts of EDCs, but there are a number of things that can be done to reduce exposure, such as:

  - Banning the use of EDCs in products
  - Educating people about the dangers of EDCs

3. Are there any other observations you wish to note? *(Open space to elaborate).*