



February 2023

Mid-term Review Report

for

Project for Promoting Minamata Convention on Mercury by making the most of Japan's Knowledge and Experiences (PIMS-02029)

(Reporting Period: July 2019 – June 2022)

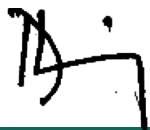



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	Cleared by Deputy Regional Director	 Silvia Giada	Date:	1 February 2023
	Reviewed by Regional Coordinator	 Mushtaq Memon	Date:	23 January 2023
	Prepared by Programme Management Officer	 Mitsugu Saito	Date:	20 January 2023

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Abbreviations table

AIT	Asian Institute of Technology
APMMN	Asia-Pacific Mercury Monitoring Network
ASGM	Artisanal and small-scale gold mining
COP	Conference of the Parties
COVID	Coronavirus disease
EEM	Environmental Engineering and Management
EPA	Environmental Protection Agency
GEF	Global Environment Facility
ICMGP	International Conference on Mercury as a Global Pollutant
IGES	Institute for Global Environmental Strategies
IP	Implementing partner
MEA	Multilateral environmental agreement
MIA	Minamata Initial Assessment
MOEJ	Ministry of the Environment, Japan
MTR	Mid-term review
MTS	Medium-term Strategy
NIMD	National Institute for Minamata Disease
OECC	Overseas Environmental Cooperation Center, Japan
PIMS	Project Information Management System
POW	Programme of Works
PMU	Project management unit
PSC	Project Steering Committee
PSC	Project support cost
PT	Proficiency testing
Q1-4	Quarter 1-4
QA	Quality assurance
QC	Quality control
ROAP	Regional Office for Asia and the Pacific
SDGs	Sustainable Development Goals
TOC	Theory of change
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNON	United Nations Office at Nairobi

USD	United States dollar
US EPA	United States Environmental Protection Agency

Project identification table

UNEP PIMS ID (Global):	PIMS-02029	522.3 Generating and sharing knowledge for influencing decision-making on sound management of chemicals and waste.	
Project title	Promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences		
Implementing Partners:	Supporting institutions, Minamata Secretariat, Minamata City, Joint implementing partners		
SDG(s) and indicator(s):	12.4, 17.6, 17.18		
Sub-Programme:	Chemicals, waste and air quality (under MTS 2018-2021)	Expected Accomplishment(s):	PoW EA(a): Policies and legal and institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).
Programme of Work Output(s):	Output 2: Thematic assessments of environmental transport and fate of chemicals, and monitoring of trends in chemicals production, handling, movement, use, release and disposal, catalyse coordinated action on chemicals management in the United Nations system		
Expected start date:	1 January 2019	Actual start date:	9 July 2019
Planned operational completion date:	30 June 2024	Actual operational completion date:	-
Planned total project budget at approval:	USD3,000,000 (Government of Japan)	Actual total expenditures reported as of June 2022:	USD1,119,648
First disbursement:	USD1,000,000	Planned date of financial closure:	30 June 2025
No. of project revisions:	None at Project level	Date of last approved project revision:	A revision of 522.3 global project was made in November 2022
No. of Steering Committee meetings:	4	Date of last/next Steering Committee meeting:	Last: 12 October 2022 Next: Q1 2023
Mid-term review (planned date):	December 2022	Mid-term review (actual date):	February 2023
Coverage - Countries:	Indonesia, Japan, Malaysia, Maldives, Mongolia, Myanmar ¹ , Nepal, Palau, Philippines, Sri Lanka, Thailand, and Vietnam	Coverage - Regions:	Asia and the Pacific

¹ The participation to the project activities has been suspended since February 2021.

Executive summary

Project overview

1. Mercury is a ubiquitous element that exists in various forms with different properties and toxicities. While mercury emission is decreasing in many developed countries, it is still increasing in many developing countries, especially emerging economies. The Minamata Convention on Mercury, which entered into force on 16 August 2017, is one of the global treaties aiming to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. For the effective implementation of the Convention, accurate information is of critical importance, however, many countries in the Asia-Pacific region do not have sufficient information on mercury levels in their own countries, which makes the policy development and implementation more challenging.
2. Japan has continuously supported the implementation of the Convention by developing countries particularly in Asia and the Pacific region. Ministry of the Environment, Japan and United Nations Environment Programme (UNEP) reached an agreement to implement a regional Project for 'Promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences' with the particular areas of information exchange, awareness and education, and research, development and monitoring of the Minamata Convention.
3. The Project was launched in July 2019 for 5 years with a total budget of USD3,000,000. As the overall fund management entity, a Project Management Unit was established in the Regional Office for Asia and the Pacific. The Project Steering Committee oversees the Project and provides strategic directions, which meets at least bi-annually. The Technical Advisory Group, which is a pool of individual experts, contributes technical inputs to the Project as needed.
4. Project has been implemented in following 12 countries, Indonesia, Japan, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Palau, Philippines, Sri Lanka, Thailand, and Vietnam. The activities in Myanmar have been suspended since February 2021. The Project has been collaborating with 2 local partners in Minamata Area to support the implementation. Minamata Convention Secretariat and UNEP Global Mercury Partnership are involved in the Project as the members of the Project Steering Committee.

Objective and scope

5. The main objective of the mid-term review is to assess the progress of the Project from its inception in July 2019 up to June 2022. The results of the review will be used to adjust the workplans for the second half of the Project period, including the improvement of the Project approach and the optimisation of the implementation arrangements.
6. The mid-term review followed UNEP guidance for project evaluation. The review criteria are A) Strategic Relevance, B) Quality of Project Design, C) Effectiveness, D) Financial Management, E) Efficiency, F) Monitoring and reporting, G) Sustainability, and H) Factors affecting performance and cross-cutting issues. Both quantitative and qualitative methods were used, such as document analysis, online questionnaires, and interviews. The variety of data sources, primary, secondary, qualitative, quantitative, etc., which were extracted from document analysis and desk review, online questionnaires and interviews supported information validity. The findings through the combination of methods, feedback between the various tools and validation between different levels and types of data was used to triangulate the validity of the information in this review.
7. Global COVID-19 restrictions have gradually been removed and domestic and international travels has become possible, however, no field visit was conducted as the Project has no 'project site' or 'hosting facility' because most of the activities have been implemented online.

Overall performance

8. The review was principally guided by a number of questions falling under each of the criteria. As this review is being undertaken at the mid-point of project implementation, particular attention was given to identifying implementation challenges and risks to achieving the expected project objectives and sustainability, which will support potential course correction.
 9. The overall rating of the Project is 4.23, which falls under 'Moderately satisfactory.' The review summary is found in Table 11. This is particularly due to the lower rating on alignment to cross cutting issues such as gender and human rights, adaptive management to COVID-19 impacts, communications and Project visibility, etc. On the other hand, following criteria are rated highly satisfactory: alignment to donor initiative, project finance, monitoring design and implementation.
 10. The Project underestimated the impact of the COVID-19. At initial stage, it resulted in the delay in start up the Project Management Unit and project plan, which resulted in the Project being standstill almost one year. After the reinstatement of the Project momentum and the development of the implementation plan to accelerate the Project activities, the rate of expenditures is lower than expected as of the mid-point of the Project. In the course of the implementation, the activities have not been modified drastically to new approach due to the nature of the Project that requires in person onsite activities such as environmental sampling and analytical operations.
 11. The Project has not yet developed a clear exit strategy but considers the sustainability of the activities in various ways. It focuses on the partnership and collaboration with other institutions and existing programmes to align the activities to their mandates. Another factor for ensuring the sustainability is the linkage to legally binding mechanisms, such as developing legislation, ratification of the Convention. The continuous and regular communication with the partner countries will be important for the Project to provide enabling supports.
- Main findings and conclusions*
12. The Theory of Change (TOC) of the Project was partially developed for the Project as a sub-project under a global project. The linkage to one Output to the global project was properly made. Further up to the Impact level of TOC should be considered at global level.
 13. The result framework developed in the implementation plan follows the UNEP rules and definitions. It is result-based statements and quantitatively verified. The Outputs are well defined, and the progress has been reported. The Outcome and indicators are vague, and the partner countries have difficulty to interpret them to their own context. The refinement of Outcome level statement will be needed.
 14. The Project aligns with the donor initiative that supports the implementation of the Minamata Convention. The initiative intends to make Japan's knowledge and experiences available to other parties, especially those in Asia and the Pacific, where about a half of global mercury consumption and emission occur. As part of its continued commitment, UNEP and Japan agreed a project in Asia and the Pacific.
 15. Participating countries have different priorities on mercury management. With its unique nature of each country, the alignment to the national priorities must be country specific, and support to the common backbone functions such as analytical/ data collection capacities are important.
 16. The Project is currently suspending the assistance to Myanmar due to the political situation. As it was one of the most active participating countries to the Project at the inception period, the absence of the results delivered from Myanmar overshadows the achievement of the Project targets, which should also be reconsidered in the mid-term review process.
 17. The Project monitoring plan is relatively simple but effectively taking management actions as well as fulfilling the accountability to the Project stakeholders. The Project finance is properly managed but financial delivery is lower than expected due to the initial delay of the Project implementation. the remaining activities and necessary timeframe to achieve the Project Outcome should be critically examined and discussed among stakeholders.

18. Communication should be enhanced for better Project visibility. The Project event that involved high-level people happened only once in the Inception Workshop. The Project is not directly involved in the awareness raising of general public, as the primary target audiences are government officials, experts, researchers on mercury management area. The communications to these group could have been done much better.

19. At the Project initiation, cross-cutting issues such as human right and gender considerations were not discussed. Based on the data analysis disaggregated by gender and other factors, at least unintentional gender-bias was not observed. Actually, more female was participated in the Project trainings, and laboratories participating in the Project activities provide relatively gender-neutral work environment.

Lessons learned and recommendations

20. The mid-term review has found 5 lessons learned and proposed 6 recommendations to rectify the weakness/shortfall or augment the strength of the Project. The recommendations are classified by the types, priority levels, timeframes, and responsible parties.

21. The result framework of the project should be revisited as the Project will be transferred to new UNEP MTS with new delivery model. Also, unambiguous means of verification in the result framework should be defined.

22. Online technologies have been rapidly developed, which provided more options for implementing Project activities. Such technologies helped the Project, to some extent, but the Project was adversely affected by the COVID-19 as the risk assessment underestimated the impact. The Project should examine the remaining Project activities and adjust the duration as appropriate.

23. An exit strategy beyond the Project period should be prepared to augment current arrangement of the sustainability. The identification of the relevant partners and alignment to their mandate should be explored. It is also important to identify and engage key local stakeholders which will mutually benefit both the Project and such institutions throughout the implementation.

24. Although the Project is not targeted to the general public, effective dissemination of information is important to improve the Project visibility. As more existing events are available after the lift of the COVID-19 restriction, such opportunities can be utilised to demonstrate the Project results.

25. The profile of the beneficiaries should be disaggregated in different population groups to examine the project not disadvantaging marginalised groups inadvertently. The Project may adjust the target population as appropriate.

1 Project overview

1.1 Background

26. The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment.

27. The Minamata Convention on Mercury, which entered into force on 16 August 2017, is one of the global treaties whose Secretariat is hosted by the UNEP. The Convention aims to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds and requires its parties to implement and report various aspects of the Convention.

28. Mercury is a ubiquitous element that exists in various forms with different properties and toxicities. There is a well-known historical record of Minamata disease that was caused by the exposure to methylmercury through the food chain. While mercury emission is decreasing in many developed countries, it is still increasing in many developing countries, especially emerging economies. For the reduction of human health and environmental risk of mercury globally, effective implementation of the Convention by developing countries based on accurate information is of critical importance. Many countries in the Asia-Pacific region, however, do not have sufficient information on mercury levels in their own countries, which makes the policy development and implementation more challenging.

29. Japan, with the first-hand experience of Minamata disease, plays a leading role in global mercury reduction. Japan has continuously supported activities in Global Mercury Partnership² since 2007 and activities under MOYAI Initiative³ since 2013. As a part of its continued commitment to protect the environment and human health from adverse impact of mercury, Japan has committed to enhance its support to further implement the Convention. It intends to make its knowledge and experiences available to other parties, especially those in Asia and the Pacific, where about a half of global mercury consumption and emission occur.

30. National mercury emission inventories are the outcome of the Global Environment Facility (GEF)-funded Minamata Initial Assessment (MIA) projects in many countries in the region. UNEP-developed mercury inventory Toolkit has provided guidance and database for rough estimation of national mercury emissions. Thereafter, more country specific data is required for more precise quantification and identification of emission sources, thus capacity strengthening of research and analytical institutions in those countries are critically important.

31. The research and analytical capacities are very different from country to country in the region. Ministry of the Environment of Japan (MOEJ) conducted a series of laboratory surveys to assess mercury monitoring capacity in national institutions from 2016 to 2018. It found out that many national institutions in the regions have already undertaking some monitoring activities and some of them are operating under ISO17025 compliant quality system. On the other hand, some other institutions still lack opportunities to acquire basic knowledge and skills. Networking of institutions will be able to address such national challenges and may fill the gaps by regional cooperation approach.

² Established by the decision of UNEP Governing Council, the Global Mercury Partnership is one of UNEP's mercury programmes that brings voluntary actions of multi-stakeholder partners. Japan served as an area lead of mercury waste management.

³ Japan has committed to support developing countries and to promote voices and messages from Minamata at the Diplomatic Conference in 2013. Japanese term 'moyai' literally means a bowline rope mooring boats together, which also refers to the cooperation in local communities.

1.2 Project details

32. MOEJ and UNEP reached an agreement on 20 February 2019 to implement a regional Project for 'Promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences' with the total budget of USD 3 million for 4 to 5 years (planned). The central idea of the project is to contribute to the implementation of the Minamata Convention by mobilizing knowledge and experiences that Japan has accumulated, especially in the area of information exchange (Article 17), awareness and education (Article 18), and research, development and monitoring (Article 19). The Project particularly focuses on the knowledge and experiences accumulated in and around the Minamata area, Kumamoto Prefecture. Additionally, the Project connects existing programmes and forums to establish a region-wide network of institutions in Asia and the Pacific to exchange internationally comparable scientific data and increase capacities on mercury monitoring and analysis.

33. The Project was launched in July 2019 for 5 years with a total project budget of USD3,000,000 (to date, USD2,999,990 has been received). This mid-term review (MTR) covers the initial three (3) years of implementation, i.e., July 2019 – June 2022. Overall delivery rate of the expenditures was approx. 37%. The financial status is summarised in Table 1⁴.

Table 1 Summary of income and expenditure

Expenditure Category	Income (USD)		Expenditure (USD)	Delivery Rate (%)
	Planned	Received	Total	
Project cost	2,980,198	2,980,188	1,099,856	36.9
Exchange loss/gain	0	0	124	-
UN Levy (1%)	19,802	19,802	19,802	100.0
TOTAL	3,000,000	2,999,990	1,119,782	37.3

34. The largest external challenge faced by the Project has been the onset of the COVID-19 pandemic, which directly affected the early stage of the implementation. The pandemic started just after the project launch and before the formation of the Project Management Unit (PMU), thus the Project was dormant until the recruitment process was resumed. Another important external challenge has been the political instability of Myanmar, which is one of the key partner countries to the Project. Planned activities in Myanmar had to be reprogrammed after the Government was toppled in February 2021.

35. Located under UNEP's global project PIMS-02029: 522.3 'Generating and sharing knowledge for influencing decision-making on sound management of chemicals and waste', this sub-project will further contribute to the global project's outcome "Countries address priority chemicals and waste issues using information, assessments, guidance and tools provided by UNEP." In other words, the Outcome of the Project: "Countries increasingly generate and apply information on how to monitor and reduce mercury emissions and releases in their legislations, policies or action plans" directly links to the outcome of the global project 522.3 described above. The Project's Outcome will be achieved via three (3) interconnecting outputs, namely Output 1: Comprehensive capacity building programme based in Minamata developed and implemented, Output 2: A regional monitoring institution network in Asia and the Pacific established, and Output 3: Outreach of qualified information in support of early implementation of the Convention implemented.

36. As the overall fund management entity, UNEP established a Project Management Unit (PMU) located in the Regional Office for Asia and the Pacific (ROAP), which manages the funds contributed by the donor.

37. The Project uses direct implementation modality supported by dedicated Project staff in the PMU, while partner agencies are also engaged to implement some activities. The Project Steering Committee (PSC), which is chaired by the Deputy Regional Director of UNEP ROAP oversees the Project and provides strategic directions. The PSC meets either physically or virtually at the frequency of at least bi-annually. The Global

⁴ Annual report 2021-2022.

Project Manager of the global project 522.3 is regularly updated on the Project's progress and integrates the results in UNEP's internal reporting system PIMS.

38. Two (2) local partners in the Minamata area, namely Minamata Environmental Academia and National Institute for Minamata Disease (NIMD), have agreed to a collaboration with UNEP, and support the project implementation. The Technical Advisory Group, which is a pool of individual experts, individually and/or collaboratively contributes technical inputs to the Project as needed.

The project implementation structure is described in Figure 1⁵.

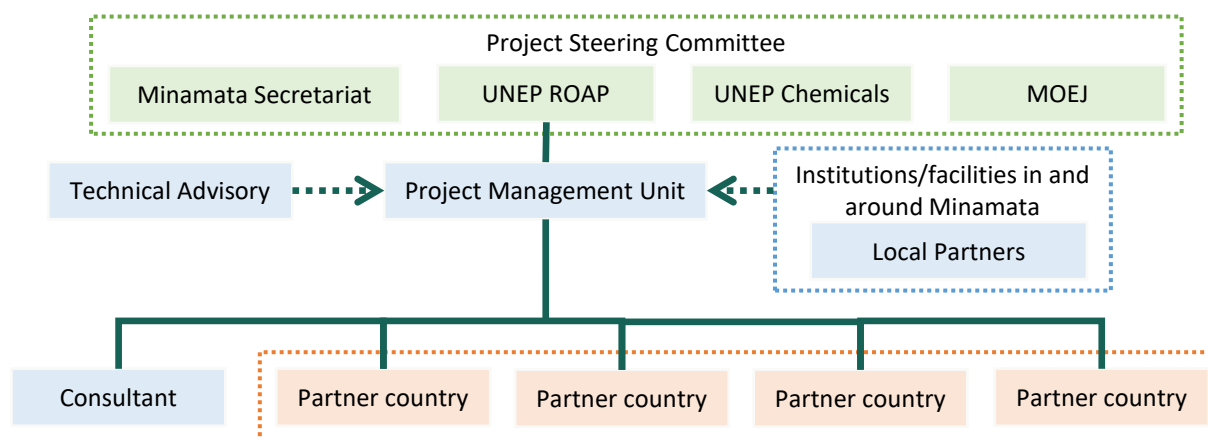


Figure 1 Project implementation structure

1.3 Stakeholders

39. Reference to the implementation structure of the Project and the participation records to the Project activities, e.g., trainings, surveys, seminars, etc., stakeholders are listed in Table 2. The stakeholders are further classified based on the influential power and level of interest to the topic. The stakeholders identified as both influential and high interest are the key players to drive the Project, namely National Focal Points of the Minamata Convention, the Convention Secretariat, and the Ministry of the Environment, Japan as a donor.

40. Principal beneficiaries of the project are institutions/laboratories on mercury monitoring in participating countries for receiving capacity building assistance and participating in the region-wide network. Ministries of Environment in participating countries are also the beneficiaries for receiving technical advice and information relevant to mercury management. Institutions and individuals in and around Minamata which have particular knowledge and experiences are resource providers for implementing capacity building activities. Asia-Pacific Mercury Monitoring Network (APMMN⁶) is another key resource providers with its own communication platform. The duty bearer is the Minamata Convention itself as this Project contributes towards proper mercury management.

Table 2 Summary of stakeholders' analysis

Influential power		High	Moderate	Low
Level of interest	High	- National Focal Points of the Minamata Convention - Secretariat of the Minamata Convention	- Technical Advisory of the Project including NIMD and Minamata Academia - UNEP Global Mercury Partnership	- Public laboratories and laboratories in universities that undertake mercury analysis

⁵ UNEP (2020a) Implementation plan for the period from July 2019 to June 2024.

⁶ APMMN is a voluntary mercury monitoring programme, which provides a knowledge platform of scientists and researchers in the regions for sharing information and undertaking joint monitoring activities. It was initiated by The US Environmental Protection Agency (USEPA) in 2013.

		- Ministry of the Environment Japan as donor	- Asia Pacific Mercury Monitoring Network (APMMN)	
	Moderate	- Ministry/agency responsible for monitoring/management of mercury*	- Inter-governmental Organization (e.g., UNIDO, UNITAR) - Implementing partners via SSFA engagement (e.g., AIT, OECC)	- Academia (e.g., ICMGP)
	Low			- Women's group

*: High-Low depending on the country

2 Review methods

Approach

41. The main objective of the MTR is to assess the progress of the activities the 'Promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences' project from its inception in July 2019 up to June 2022. The results of the MTR will be used to adjust the work plans for the second half of the Project period, including the improvement of the Project approaches and the optimisation of the implementation arrangements.

42. The MTR followed UNEP guidance for project evaluation. The review criteria are A) Strategic Relevance, B) Quality of Project Design, C) Effectiveness, D) Financial Management, E) Efficiency, F) Monitoring and reporting, G) Sustainability, and H) Factors affecting performance and cross-cutting issues. The MTR has used a participatory approach whereby key stakeholders are kept informed and consulted. The approach and methods used were implemented in a manner as to promote reflection and learning through the process.

43. As the Project is to strengthen data collection and analytical skills of laboratories and institutions that lead to the ratification and implementation of the Minamata Convention, human rights and gender aspects are not at the centrepiece of the Project activities. At the MTR preparation stage, not many excluded, or socially marginalised groups are identified. Under these circumstances, gender- and age-sensitive data collection and analysis were employed for the MTR to examine if any gender bias or other latent discriminatory nature are inadvertently embedded in the Project activities and structure.

Data collection

44. Triangulation of the collected data, particularly from different sources, was employed for this MTR to ensure the objective analysis. Both quantitative and qualitative methods were used, such as document analysis, online questionnaires, and interviews. The variety of data sources, primary, secondary, qualitative, quantitative, etc., which were extracted from document analysis and desk review, online questionnaires and interviews supported information validity. The findings through the combination of methods, feedback between the various tools and validation between different levels and types of data was used to triangulate the validity of the information in this review.

45. Key documents for the desk review included both published and unpublished ones. 522.3 project documents and the Project implementation plan provided the logical structure of the project. Annual and semi-annual progress reports provided project performances in chronological orders. Other unpublished data included a series of questionnaires that the Project has collected but fully analysed yet in the course of the implementation. Documents reviewed is listed in Annex (6.5).

46. Questionnaire was a principal form of the participatory data collection to be applied for the MTR as it provides quantitative information with more people expressing their views on the Project in anonymous nature. Particularly, the effectiveness and efficiency of the Project implementation were assessed mainly by this approach. Online survey forms were strategically used to obtain representative information from target people. Three (3) stakeholder groups were surveyed by the questionnaire surveys, namely focal points of the Minamata Convention, participants in the training programmes, and participating laboratories in proficiency testing. The number of stakeholders invited and responded the questionnaires are summarised in Annex 6.8.

47. Interview was another form of the data collection mainly for qualitative information. The interviews were conducted for selected stakeholders from each stakeholder types, i.e., duty bearer, beneficiary, and resource provider. List of interviewees is found in Annex (6.6).

48. Global COVID-19 restrictions have gradually been removed at the time of this MTR and domestic and international travels has become possible. However, no field visit was conducted as part of the MTR because most of the activities so far have been implemented online, i.e., no 'project site' or 'hosting facility' existed.

Review criteria and rating scale

49. The review was principally guided by a number of questions falling under each of the criteria, which provided the anchor for the MTR's review framework (Table 3).

Table 3 Criteria of review framework⁷

Criteria	Weight
A. Strategic relevance	6
Alignment to MTS and POW	(0.5)
Alignment to Donor/GEF strategic priorities	(0.5)
Relevance to regional, sub-regional and national issues and needs	(2.5)
Complementarity with existing interventions	(2.5)
B. Quality of project design	4
C. Effectiveness	45
Availability of outputs	(5)
Achievement of Project Outcomes	(30)
Likelihood of impact	(10)
D. Financial management	5
E. Efficiency	10
F. Monitoring and reporting	5
G. Sustainability	20
H. Factors affecting project performance and cross-cutting issues	5
i. Preparation and readiness	-
ii. Quality of project implementation and execution	-
iii. Stakeholder participation and cooperation	-
iv. Responsiveness to human rights and gender equity	-
v. Environmental and social safeguards	-
vi. Country ownership and driven-ness	-
vii. Communication and public awareness	-

50. As this review is being undertaken at the mid-point of project implementation, particular attention was given to identifying implementation challenges and risks to achieving the expected project objectives and sustainability, which will support potential course correction.

51. Data collection considers gender and age disaggregation which has been taken into account as a cross-cutting issue. With the interview surveys, anonymity of responses as well as independence of the assessment were assured. Quantitative analysis was carried out by using the Project's result framework and related indicators as the benchmarks to tally project progress in implementation. Qualitative analysis was mainly applied to the information harnessed by using the interviews' responses. All of these analytical tools were triangulated and validated.

Data analysis and preparation of report

52. The review findings were integrated, and the conclusions were derived from following viewpoints:

- Does the TOC properly reflect the project's intended change process?
- Is the stakeholder analysis still appropriate and adequate to support the project's ambitions?
- Are results statements in keeping with UNEP definitions?
- Are roles and responsibilities commonly understood and playing out effectively?
- Is there an effective monitoring mechanism for the project's implementation?

⁷ The review framework is found in Annex (6.1) to this report.

- Is the rate of expenditure appropriate for the mid-point?
- Have plans for inclusivity (human rights, gender considerations, disability inclusion etc.) been implemented, or does more need to be done?
- Is there an exit strategy in place and are the elements needed for the project's benefits to be sustained after the project end, being incorporated in the project implementation?
- What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance?
- What corrective action is needed at this mid-point for the project to optimise its effectiveness?

53. The draft MTR report was prepared and cleared internally by sub-programme coordinator and then shared with key stakeholders for their review and comments. All comments are considered and reflected, as appropriate, to the final report. Based on the finding, lessons learned, and recommendations were prepared.

3 Reconstructed Theory of Change for MTR

54. Theory of Change (TOC) in the implementation plan shows a graphic of the chain of expected results of the intervention. The assumptions and the drivers that affect the success and/or failure of the Project are also included.

55. The Project subject to the MTR was formulated under UNEP MTS 2018-2021 where seven (7) priority area were identified. The Project was part of 'Chemicals, waste and air quality' sub-programme, also known as SP5, that was linked to the (then) newly established SDGs' targets 3.9, 6.3, 7.a, 11.6, 12.4, and 12.5. The MTS 2018-2021 sets the objective on this sub-programme as 'Sound management of chemicals and waste and improved air quality enables a healthier environment and better health for all'. The MTS 2018-2021 mapped out the outcome in 2018-2021 period and future direction towards 2030 impact targets. The 522.3 project (PIMS-02029) is aligned with the MTS 2018-2021 and then the sub-projects underneath address specific Outputs. The Project was initially linked to the 522.3 Output 2 'Data gathering for chemicals inventories and plans for informed decision making made available online'. The project revision of global project 522.3 in December 2021 has however assigned an independent Output 8 "Generation and use of information for science-based policy development on mercury management are enhanced at regional level" for the Project.

56. UNEP has moved to a new MTS 2022-2025 period and the implementation structure is under modification at corporate level for more centrally managed project implementation. Year 2022 is in the transitional period toward a new delivery model that covers entire organization. The Project is linked to 'Chemicals and Pollution Action' pillar where new Objective and Outcomes are determined. Also, UNEP Programme of Work (POW) and budget for 2022–2023 sets the result framework with outcome indicators. A global programme will be supposed to articulate the causal pathway from MTS to individual sub-project.

57. 522.3 Output 8 'Generation and use of information for science-based policy development on mercury management are enhanced at regional level' is equivalent to the current Project Outcome, thus the logical linkage will be maintained if the same Output is included in the new global programme/project where the Project will be transferred.

58. The intervention logic at Project level is clear and specific. Three (3) Outputs jointly address the 'generation' and 'usage' of information relevant to the topic. Output 2: 'A regional monitoring institution network in Asia and the Pacific established' focuses on the data generation particularly monitoring data, i.e., real situation, in each country. Lack of data, or availability of data only from developed countries, is an identified key challenge for many developing countries. The project supports the national monitoring activities to obtain relevant data for policy development and implementation. Output 3: 'Outreach of qualified information in support of early implementation of the Convention implemented' focuses on the usage of available information effectively for implementing the Minamata Convention. Activities to disseminate such information are embedded into this Output 3. For making these two Outputs possible, Output 1: 'Comprehensive capacity building programme based in Minamata developed and implemented' provides learning opportunities to partner countries and stakeholders.

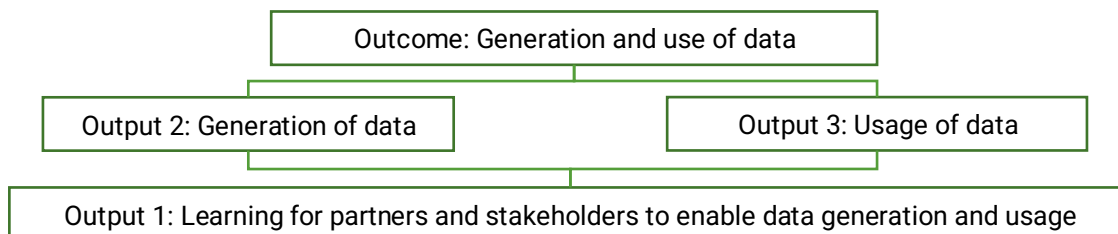


Figure 2 Intervention logic of the Project

59. Although the Project did not undertake typical problem-tree and objective-tree analysis, it captures countries' priorities and established logical linkage to the relevant global targets. The inception workshop held

in September 2019 identified the priority areas by the participants and the project workplan has incorporated these priority areas which is reflected in the implementation plan. Table 4 indicates that the Activities in all three Outputs are linked together to address the priority needs.

Table 4 Relation between priority needs and activities in the Project

Priority needs identified at the inception workshop	Activities and deliverables in Project workplan
Mercury level in products including traditional medical products.	(Activity 1.2) Sets of training materials, data books, and technical handbooks, etc. (Activity 3.3) Prepare national inventories and national report.
Import and export of mercury-added products.	(Activity 1.2) Sets of training materials, data books, and technical handbooks, etc. (Activity 3.3) Prepare national inventories and national report.
Environmental and emission monitoring, health monitoring (multiple media).	(Activity 2.2) Continuous data collection and analysis. (Activity 3.3) Technical advice to national mercury monitoring plan.
Capacity improvement for mercury laboratory including instrument calibration.	(Activity 1.2) Sets of training materials, data books, and technical handbooks, etc. (Activity 1.3) Skill up training and visit programme. (Activity 2.1) Capacity assessment of existing laboratories. (Activity 2.3) Inter-laboratory quality assessment.
Regional networking: harmonization vs custom made, capacity building vs data sharing.	(Activity 2.2) Continuous data collection and analysis. (Activity 2.4) Partnership activities/collaborations with other monitoring programmes.
Mercury levels in ASGM and open dumping sites.	(Activity 2.4) Research and environmental studies for enhancing science-policy interaction.
Outreach of mercury information	(Activity 3.2) A dedicated web page of the project serving as an information portal. (Activity 3.3) Country level technical workshops for scientists and practitioners.
Mercury data use for policy development.	(Activity 1.2) Sets of training materials, data books, and technical handbooks, etc. (Activity 1.3) Skill up training and visit programme. (Activity 3.3) Prepare national inventories and national report.

60. Human rights and gender aspect are not systematically addressed in the Project. There is very few explicit analysis and introduction of gender issues in relation to the Project topic. One Output indicator collect and analyse gender disaggregated data for the effectiveness of the training programme but no strategy to enhance female participation or gender focused training programme are proposed.

61. Drivers (external factors within the sphere of influence of the project) and assumptions (external factors largely outside the sphere of influence of the project) identified in the implementation plan are revisited. Three assumptions 'Information dissemination and sharing are smooth and effective among stakeholders', 'Institutions in and around Minamata are cooperative and willing to support', and 'Other regional initiatives and partnerships are collaborative' are somewhat controllable by the project and positive environments are observed among the stakeholders. They can suit to be under the 'drivers' for the success of the Project. 'Ratification of the Minamata Convention that brings obligations to the Parties' are a powerful driver and well recognised particularly by non-Parties countries. 'Political will on sound management of mercury throughout its lifecycle remains high' is an important assumption for the Project. Recent global discussions on chemicals and pollution topics are dominated with plastic pollution, so the heavy metal pollution might not obtain sufficient support. Some assumptions are also included in the risk analysis and the risk management strategies were prepared in advance. The Project proactively incorporates the partnership development to address these assumptions. The TOC does not include specific assumptions/drivers relating to human rights and gender equality. The drivers and assumptions are reclassified in Table 5.

Table 5 Reclassified project drivers and assumptions

Driver and assumption	Original	Reclassified	Remarks
Political will on sound management of mercury throughout its lifecycle remains high.	Assumption	Assumption	
Information dissemination and sharing are smooth and effective among stakeholders.	Assumption	Driver	A few global institutions offer the dissemination of project information.
Institutions in and around Minamata are cooperative and willing to support.	Assumption	Driver	Institutions are already engaged.
Other regional initiatives and partnerships are collaborative.	Assumption	Driver	Cooperation is ongoing.
Public concerns on hazardous chemicals in high-risk industries.	Driver	Assumption	Project does not directly engage general public.
Ratification of the Minamata Convention that brings obligations to the Parties.	Driver	Driver	
Global actions on 2030 agenda for sustainable development and SDGs.	Driver	Assumption	Project does not have much influence on SDGs.

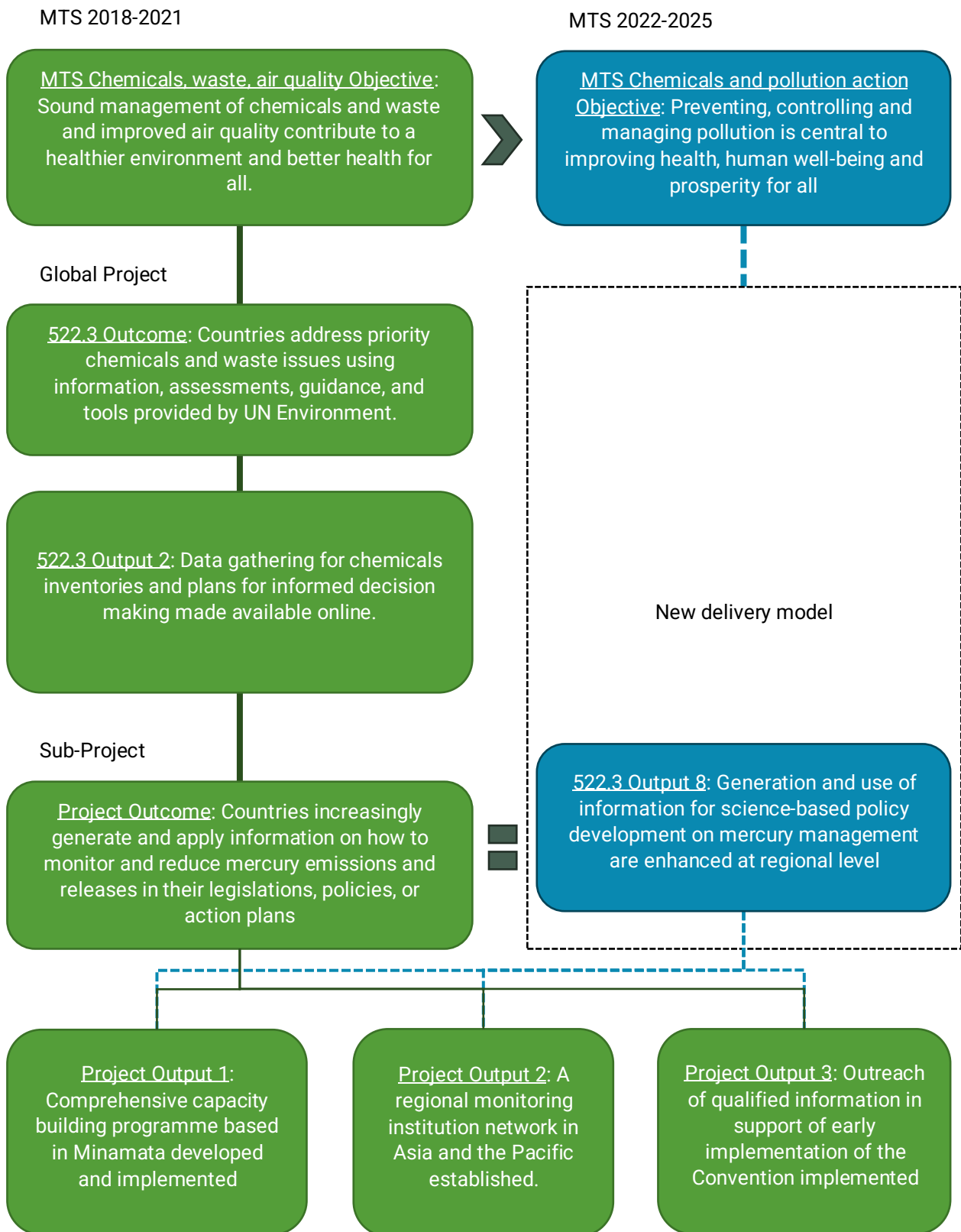


Figure 3 Theory of Change, Original (in green) and new arrangement (in blue)

4 Review finding

4.1 Strategic relevance

Alignment to MTS and POW

Satisfactory: The Project under review links to MTS Outcome of the implementation support to Multilateral environmental agreement (MEA) including the Minamata Convention. The Project is explicitly featured to support the particular Articles of the Minamata Convention.

62. The UNEP MTS mapped the chemical related outcome as 'Policies and legal, institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the frameworks of relevant MEAs and SAICM.' The alignment to UNEP MTS and POW was secured when the Project was integrated in the global project '522.3 Generating and sharing knowledge for influencing decision-making on sound management of chemicals and waste' where the TOC has been defined and reviewed.

63. The strategy of the Project highlights three (3) key features including strong linkage to the Convention text, that make the Project unique and impactful to the participating countries and beyond. The other two are: 'Connecting Minamata and Minamata' and 'Networking analytical institutions.' The former employs knowledge and experiences held by institutions in and around Minamata area where substantial historical lessons have been accumulated. The latter aims to establish a region-wide network of analytical institutions with mercury monitoring capacities. Enhancing the regional cooperation will bring the laboratories to create data which meets the international level.

64. The Project sets clear connection to the particular Articles of the Minamata Convention, i.e., Article 17 (Information exchange), Article 18 (Public information, awareness and education), and Article 19 (Research, development and monitoring). The Outputs and the activities are, thus, aligned to the requirement of these three Articles. The activities are also contributing, to some extent, to the other provisions of the Convention. As the project is run by UNEP and does not fall under COP's control, the perfect alignment is not necessary. The synergy or common goals toward the protection from mercury impact is shared with the Minamata Convention is secured through the PSC where the Convention secretariat members.

65. Project Steering Committee (PSC) includes a member belonging to the Minamata Convention secretariat. It also benefits the Convention itself for the collaboration and demarcation of the Project activities. Gaps in supporting the implementation of each provision of the Convention, which has not yet been analysed, may be strengthened by the Project. For example, such issues as supporting non-Party to the Convention, or implementing mercury management, which is not stipulated by the Convention, e.g., gold plating, may be carried out by the Project and will be advantageous to the Convention.

66. The Project will contribute several SDGs through the global project. SDG 12.4 aims to address environmental sound management of chemicals, which is indicated the sub-programme of the MTS 2018 where the Project is hooked on. The 522.3 project also added SDG 17.6 (enhance cooperation and knowledge sharing) and SDG 17.18 (capacity building support to developing countries), which are well aligned to Articles 17-19 of the Convention.

Alignment to donor strategic proprieties

67. **Highly satisfactory:** The Project aligns with the donor initiative.

68. The Project assesses the alignment to the ongoing initiative of the Government of Japan, i.e., MOYAI Initiative⁸, that supports the implementation of the Minamata Convention. Japan, with first-hand experience with Minamata disease, plays a leading role in global mercury reduction. The initiative intends to make Japan's knowledge and experiences available to other parties, especially those in Asia and the Pacific, where about a half of global mercury consumption and emission occur. As part of its continued commitment to protect the environment and human health from adverse impacts of mercury, the Minister of the Environment of Japan announced, at the COP 1 of the Minamata Convention in 2017, to enhance its support to further implement the Convention.

69. In February 2019, Regional Director of ROAP and Director General of MOEJ met and agreed to formulate a project on following 3 components: comprehensive capacity building programme based in Minamata, establishing a regional monitoring laboratory network in Asia and the Pacific, and outreach of qualified information in support of the implementation of the Convention⁹. The Project Outputs were developed in line with this agreement.

Relevance to regional, sub-regional and national issues and needs

70. **Satisfactory:** It aligns with the priority of the participating countries.

71. Asia and the Pacific is the key region for sound management of mercury where approx. a half of the global use and emission happen. The reduction, if not the elimination, in this region will contribute the global mercury management significantly. As of the time when this report is prepared, 138 countries and regions have been the Parties to the Convention. This figure is still lower than the other main MEAs such as UNFCCC, UNCBD where almost 200 countries and regions have become the Parties. The ratification status in Asia and the Pacific is 35, which is still far from the universal participation. The Project has been formulated with 12 participating countries including 4 non-Parties. Supporting these countries towards the ratification is important in the region.

72. Participating countries have different priorities on mercury management. For example, Nepal has the largest mercury emission in gold plating sector which is not regulated by the Convention. In Sri Lanka, traditional medicine and jewellery sectors is of concern although they are not well recognized at global level. Small island states such as Maldives have large fish consumption and export of fish products although they do not have mercury emitting industries. Some partner countries have large ASGM industry in their territories such as Indonesia. Emission from coal-fired powerplant is a significant source in Vietnam, and mercury from oil refinery is a major concern in Thailand. For non-Parties, such as Malaysia, mercury assessment and inventory development are needed.

73. With its unique nature of each country, the alignment to the national priorities must be country specific, and support to the common backbone functions such as analytical/ data collection capacities are important. The participating countries recognize the Project approach and consider that the Project is aligned sufficiently to their needs where the countries have the choice to take, or not take, the benefits, as appropriate.

Complementarity with existing interventions

74. **Moderately unsatisfactory:** The alignment to cross-cutting issue needs improvement.

75. The Project is standalone in ROAP with no other project on Mercury topic to collaborate with except a GEF project in Myanmar which was suspended after the Government was toppled in February 2021. Other

⁸ Japanese term 'moyai' literally means a bowline rope mooring boats together, which also refers to the cooperation in local communities. Japan has committed to support developing countries and to promote voices and messages from Minamata at the Diplomatic Conference in 2013.

⁹ MOEJ and UNEP (2019). The minutes of meeting between Ministry of the Environment, Japan and Regional Office for Asia and the Pacific, United Nations Environment Programme on the regional Project "Promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences."

projects chemicals and pollution area does not have particular focus on heavy metals where the complementarity could have sought. GEF funded mercury projects are normally managed globally by UNEP GEF unit where no regular communication channel existed.

76. Alignment to cross-cutting issues such as gender and human rights has not been incorporated sufficiently at initial stage. Practical implementation does not involve major gender and/or human right risks but the promotion and integration of the cross-cutting aspects should have mentioned in the Project documents.

77. COVID-19 related policies and interventions have been announced and implemented on an ad hoc basis. The Project has started before the onset of the pandemic and no measure was in place at the inception phase. The impacts of the COVID-19 were initially underestimated, and the Project has also responded COVID-19 policies on an ad hoc basis without integrated into the Project plan. At the time of the mid-term review, some Project activities are re-phased for later implementation period to cope with the restriction imposed by COVID-19 policies.

4.2 Quality of Project design

<p>78. Satisfactory: The initial Project design was assessed by participating countries at inception stage. Key implementing partners were identified and engaged. The result framework should be further refined.</p>

79. The Project preparation applied a phased approach where the initial few months of the implementation were regarded as the inception phase to further adjust the implementation plan based on the needs of partner countries. The project launch was announced in July 2019 and an inception workshop was held in September 2019. The quality of project design has been assessed at the workshop, which was attended by 12 countries in the region, namely Indonesia, Japan, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Palau, Philippines, Sri Lanka, Thailand, and Vietnam. The workshop discussed the project structure and implementation arrangement as well as the needs and priorities in the region that the Project should address.

80. The implementation plan with the inputs from the inception workshop was supposed to be completed by the end of 2019. However, due to the COVID-19 pandemic, several activities were delayed for many months as many functions in UNEP were suspended. The final implementation plan was eventually completed and approved in December 2020.

81. The Project implementation plan includes a detailed results framework. The Output and Outcome indicators identified are accompanied by baselines and targets. However, means of verification and milestones for progress monitoring were not included in the result framework. The risk matrix identifies most of the risks as 'less likely' except the risk of COVID-19, which was assumed to be the moderate risk when the initial risk assessment was conducted at project design stage. (It would have been underestimation given the slow recovery of the Project activities.)

82. The Project has established strategic partnerships with the institutions in and around Minamata area where a lot of knowledge and experiences have been accumulated due to long history of mercury impacts and rehabilitation. The Project connects two (2) institutions in Minamata to bring the indispensable information and to make available for partner countries and beyond. Minamata Environmental Academia is a municipal institution of Minamata City, which promotes environmental conservation and SDGs. It also undertakes overseas training programmes. The National Institute for Minamata Disease (NIMD) was established in 1978 and has central responsibility for obtaining and accumulating scientific knowledge of mercury and mercury compounds. It aims to enhance further understanding of Minamata Disease and to advance research activities. The partnership with both institutions will strengthen the cooperation on mercury monitoring and knowledge management within the region and enhance the effectiveness of the Project activities by providing scientific basis to the participating countries.

83. The Asia Pacific Mercury Monitoring Network (APMMN) is an existing forum of monitoring laboratories in the region working on the regular monitoring and capacity building. The network involves many

groups, including environmental ministries and federal government agencies, academic institutions, and scientific research and monitoring organisations. Several project partner countries are also participating in APMMN, thus the coordinated monitoring and capacity strengthening activities with APMMN will effectively enhance the mercury monitoring quality in the region.

84. A Project monitoring plan is developed and endorsed in the implementation plan. It identifies 10 monitoring items for different purposes. The initial monitoring plan was, streamlined and re-organized to seven types of project reports with unambiguous procedures and frequency.

85. Outreach efforts are important to demonstrate the visibility of the Project. The Project has developed a communications plan to produce and disseminate qualified information to target audiences. As the Project focuses on the acquisition of scientific evidence that helps policy makers to develop and monitor its own mercury management policies, primary data collection is encouraged to the participating countries to fill the information gaps. Fact checks and expert judgement for existing data, and quality assurance and accuracy of data newly generated by the Project are the important processes before bringing the information available for use. For Project visibility, Minamata COPs and other key global and regional conferences and events were initially expected as platforms to disseminate the results beyond project partner countries. (This strategy had to be revised due to the COVID-19 pandemic).

86. The Project was initiated with the pledge letter from Ministry of the Environment, Japan to UNEP with the initial contribution of USD1,000,000 for supporting the 'Project for promoting Minamata Convention on Mercury by making the most of Japan's knowledge and experiences' on 30 January 2019. Although the Project did not have resource mobilisation plan, Subsequent contribution pledges were made on 26 February 2020 (USD1,000,000) and 1 March 2021 (USD999,990), which made the Project budget (USD3,000,000) practically fulfilled.

87. The Complete assessment of the Project design quality is annexed as Annex 6.4 to this document. The overall score of the project design quality assessment is 4.44, which falls within the 'Satisfactory' category. Some weaknesses at the project design stage were identified such as the monitoring of Outcome and assessment of impact. These areas will be further reviewed for improving the overall effectiveness of the Project.

4.3 Effectiveness

Availability of Outputs

88. **Satisfactory:** The Project Outputs are in good status and likely to be achieved.

89. The Project passed through the midpoint and entered the latter half of the implementation period. Some output indicators have already been achieved, and some others are in good progress. It is still premature to judge the overall project level achievement. The mid-term review will provide good insights to the expected results of the Project and the recommended improvement of the Project result structure.

90. One concern is the situation of Myanmar that the Project is currently suspending the assistance due to the political situation. As it was one of the most active participating countries to the Project at the inception period, the absence of the results delivered from Myanmar overshadows the achievement of the Project targets, which should also be reconsidered in the mid-term review process.

91. The implementation plan sets out three Outputs that will contribute towards the direct project Outcome. Output 1 is to strengthen the capacity of the participating countries to monitor and reduce mercury emission and releases. It was initially planned to develop a comprehensive and unique programme in Minamata, but the COVID-19 pandemic forced the Project to take a more virtual and universal approach up to the time of the MTR. The Minamata-based programme may be resumed in the rest of the Project period as the travel restriction to Minamata, Japan has been lifted in late 2022. During the review period, the Project has developed two (2) capacity building programmes on mercury mass flow and monitoring, which are cross-

cutting and overarching topics to benefit most of the participating countries. Trainers' trainings are prepared to disseminate the deliverable at local level more efficiently by involving national counterpart agencies.

Indicator	Status	Note
Number of capacity building programme package for specific subjects developed and implemented.	Baseline: 0, Target: 2, Status: (2)	On target

92. The Project has established collaborative relationship with 2 agencies in Minamata, where a lot of knowledge and experiences on mercury management have been accumulated when responding the outbreak of Minamata disease. The Minamata Environmental Academia hosted the Project Inception workshop and led virtual lab assessment missions as a Team Leader. The National Institute for Minamata Disease (NIMD) provided overall design and evaluation of laboratory proficiency testing. Both are key deliverables of the Project.

Indicator	Status	Note
Local coordination structure in Minamata developed.	Baseline: 0, Target: 2, Status: 2	Achieved

93. The Project has conducted a series of online training programmes for technical and administrative staff of the partner countries. Some programmes were open to other participants to extend the benefit of the virtual platform. A questionnaire survey was conducted to ask the participants if they applied the information obtained in the training programmes to their own works. Some participants have already forgotten the participation, but approx. half of the respondents have used the information for themselves (Figure 4). The survey indicates that the use of the obtained information is proportional to the person's involvement to mercury issue. In terms of gender, female participants applied the obtained knowledge more than male participants. No systemic trend is observed in age distribution.

Indicator	Status	Note
% of trained participants who successfully apply the knowledge and skills on mercury management in their work disaggregated by gender and age range.	Baseline: 0, Target: 50%, Status: (Total 47%, Female 53%, Male 41%)	On target

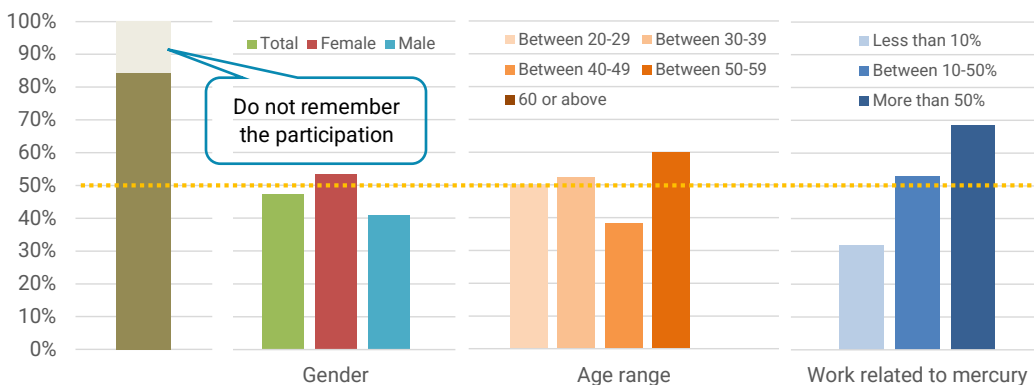


Figure 4 Percentage of participants who applied obtained information to its own work

94. The Output 2 supports national mercury monitoring activities. A few countries will be selected, and the monitoring capacity will be enhanced. The Project organized the laboratory proficiency testing (PT) to as a part of the laboratory's external quality QC/QA process. The first round PT (2021-22 period) result indicated that national laboratories from 4 partner countries demonstrated satisfactory performance. As QC/QA is a continuous process, it must ensure such proficiency should sustain for longer period, so the Project will call another PT in 2022-23 period to verify it.

Indicator	Status	Note
Number of countries with national institutions on the network that meet international standards on mercury analysis.	Baseline: 0, Target: 3, Status: (4 in 2022)	On target

95. The Project has established collaborative relation with Asia Pacific Mercury Monitoring Network (APMMN) led by US EPA. Since the start of the collaboration, both parties are participating the events organized by the other parties.

Indicator	Status	Note
Number of existing regional networks establishing partnership with this programme.	Baseline: 0, Target: 2, Status: 1	In progress

96. The Output 3 enhances generation and accumulation of monitoring data and other scientific information. Such information will be provided for science-based policy making and management. The information portal could be the Project website, other websites, or their own platform. So far, the Project has not yet generated information at national level, thus, no information available for uploading at this moment. The Project should encourage the partner countries to generate relevant information and make it publicly available for better used of such data.

Indicator	Status	Note
Number of countries submitting information to the information portal.	Baseline: 0, Target: 6, Status: 0	Preliminary

97. Dissemination of the information, increasing the visibility of the Project will be an important factor for the best use of resources. The dissemination events were announced through global platform such as the Minamata Convention Secretariat, Global Mercury Partnership, International Conference on Mercury as a Global Pollutant. It resulted in more participation from countries other than the Project partner countries.

Indicator	Status	Note
Number of countries outside of the project partners that received information through project activities.	Baseline: 0, Target: 30, Status: 25 in 2021, 35 in 2022	Achieved

Achievement of Project Outcome

98. **Moderately satisfactory:** The Outcome indicators are vague and should be refined in consultation with the stakeholders.

99. The Project Outcome is supported by 3 Project Outputs. For generating information, the Project has supported national institutions for enhancing their monitoring proficiency. For enhancing the availability of the information, the countries will be able to apply it for their science-based policy making. The Project has also introduced a policy tool to visualize the flow of mercury in the country. Thus, the logical linkage between the Outcome and Outputs within the context of the Theory of Change is sound and persuasive.

Project Outcome statement
Countries increasingly generate and apply information on how to monitor and reduce mercury emissions and releases in their legislations, policies, or action plans.

100. The achievement of the Project Outcome is evaluated against 3 indicators set in the result framework. The status and information are still limited and the external factors that might affect the result are not fully understood. Also, different interpretation is possible for the Outcome indicators, which makes the proper assessment challenging. Participating countries should be consulted and more specific information

should be collected. If necessary, redefining the indicators based on the consultation result should be explored, as appropriate.

Indicator	Status	Note
Number of countries that embed scientific data collection in their mercury management policies.	Baseline: 0, Target: 6, Status: Not available	Preliminary
Number of Countries that regularly put information on mercury monitoring available via the information portal.	Baseline: 0, Target: 6, Status: 0	In progress
Number of new, adequate policies and legislation in effect on mercury management.	Baseline: 0, Target: 3, Status: Not available	Preliminary

Likelihood of Impact

101. **Moderately likely:** The Impact statement is so broad that it should be assessed at global project level.

102. The Project has made numbers of positive contribution for sound mercury management in project partner countries in the course of implementation. The logical linkage of the project results to the chemicals, waste, air quality objective of UNEP MTS 2018-2022, which is regarded as the Impact statement, is still valid. However, the external factors beyond the project control are dominant to determine the achievement of the impact. The effect of the project intervention is too small to be seen at this level, therefore the assessment of the impact should be considered at global project (PIMS-02029) level where this sub-project is falling under.

MTS2018-2022 Objective for chemicals and waster and improved air quality
Sound management of chemicals and waste and improved air quality contribute to a healthier environment and better health for all.

4.4 Financial management

Adherence to UNEP's policies and procedures

103. **Highly satisfactory:** The Project finance is properly managed. The budget has been spent in line with the budget approved by donor.

104. The Project finance has been undertaken in adherence to UNEP's policies and procedures. The releases of budget were made within available cash received from donor. The budget was requested in annual basis except in 2020 when the Project was standstill due to COVID-19 restriction. The Project has operated within allocated budget and no over expenditure situation has occurred throughout the implementation period (Figure 5).

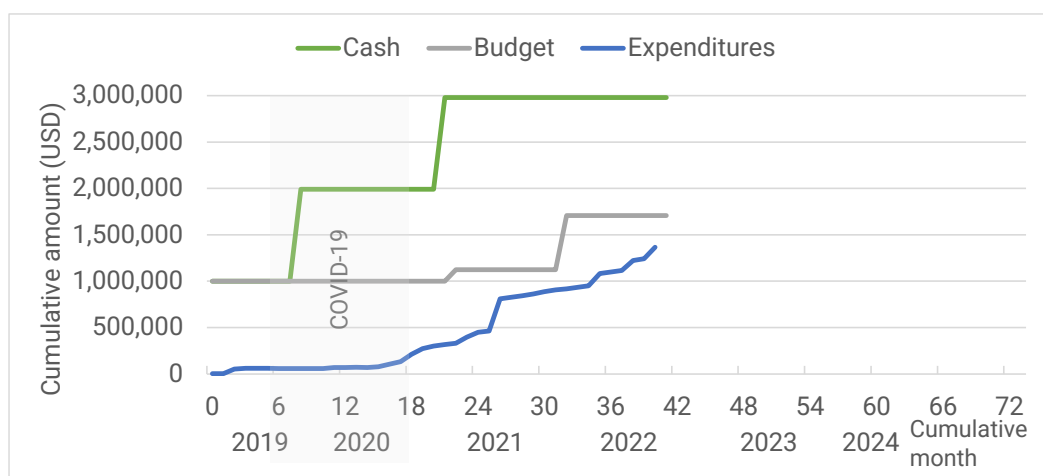


Figure 5 Project cash balance

Completeness of project financial information

105. **Highly Satisfactory:** Information is available and provided in sufficient frequency. The expenditure to date is lower than the benchmark amount.

106. The interim financial status reports were prepared and submitted to the donor on an annual basis by the end of September. Three reports have been prepared. The first report was 5-months delayed due to COVID-19 when the access to UNEP offices both in Nairobi and Bangkok was strictly controlled and UNEP staff faced difficulty to obtain a series of signatures from responsible officers. The second report was delivered on time, and the third report was a few weeks delay (Table 6). The preparation of a financial statement in 3-month lead time (i.e., June to September) is not administratively difficult, so the delay is mainly due to the delay for preparing the annual progress report, which is submitted together with the financial report.

Table 6 Time record for preparing financial report

Reporting period	Due date	Prepared	Submitted
Project start to June 2020	30 September 2020	15 February 2021	24 February 2021
Project start to June 2021	30 September 2021	13 August 2021	30 September 2021
Project start to June 2022	30 September 2022	4 October 2022	24 October 2022

107. The financial status was provided regularly and frequently to the Project for examine the financial status. Internally, expenditures statement and budget consumption status for the Project management was planned on a quarterly basis, but actually it was generated every month.

Table 7 Financial status as of June 2022

Expenditure Category	Budget (USD)		Expenditure (USD)	Delivery Rate (%)
	Original	Revised	Total	
Staff and other personnel cost	1,139,425	1,119,425	428,610	38.3
Supplies, commodities, and materials	52,302	52,302	462	0.9
Equipment, vehicles, and furniture	105,518	15,518	6,256	40.3
Contractual services	280,186	190,186	12,623	6.6
Travel	390,474	269,474	30,570	11.3
Transfers and grants	600,000	935,000	473,305	50.6
General operating and other direct costs	69,438	55,438	21,498	38.8
Total Direct Cost	2,637,343	2,637,343	973,324	36.9
Indirect support cost (United Nations)	342,855	342,855	123,915	36.1
Indirect support cost (Implementing partners)			2,617	-
Total Indirect Support Cost	342,855	342,855	126,532	36.9
Total Project Cost	2,980,198	2,980,198	1,099,856	36.9
Exchange loss/gain	-	-	124	-
UN Levy (1%)	19,802	19,802	19,802	100.0
Non-Project Cost	19,802	19,802	19,926	100.6
TOTAL	3,000,000	3,000,000	1,119,782	37.3

Note: Delivery rate is calculated against revised budget.

108. Benefitted by the sufficient financial information, the Project was able to examine and foresee the future delivery and financial status. One of the examples of the financial analysis is the forecast of the project implementation. The current delay is equivalent to one year if the delivery continues at the same level for the rest of the implementation period (see Forecast 1 in Figure 6) and the implementation should be accelerated by 50% (see Forecast 2) if completing the Project within the original Project period.

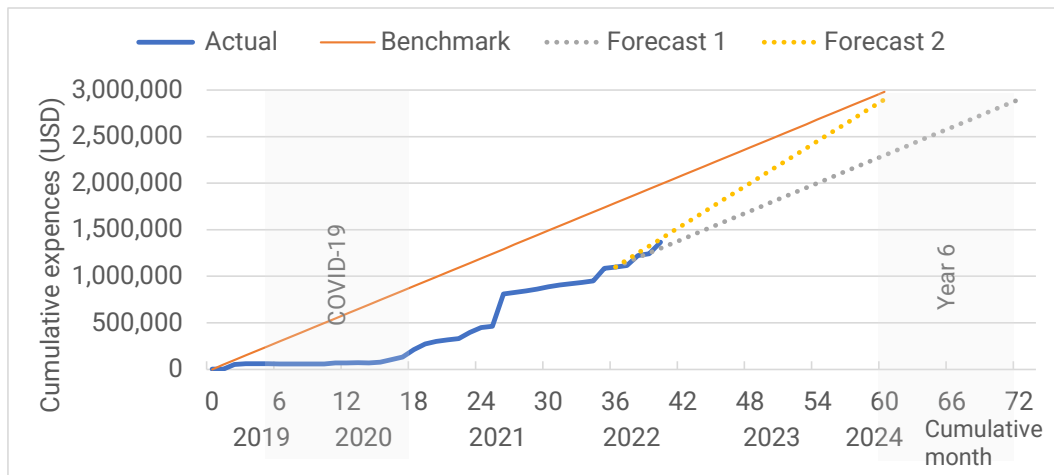


Figure 6 Project delivery progress

Communication between finance and project management staff

109. **Satisfactory:** Communication with financial staff in the regional office was smooth and prompt. Communication with Division and Headquarter required extra time and effort.

110. The Project subject to the MTR is a sub-project under a global project (PIMS-02029). For the day-to-day financial transactions are managed by the Regional Office where both finance and project staff are located in, thus the communication and consultation are done in prompt and cooperative manner. When issues are related to the global project level, the discussions must be done between ROAP and Economy Division in Geneva and Headquarter in Nairobi, which requires extra time and efforts to resolve the issues.

111. As for the communication with Division, the Project period (end date) became an issue for a couple of times because of the discrepancy in the Project implementation plan and UNEP accounting system, which are set differently. As for the communication with Headquarter, one implementing partner (IP) completed the activity by December 2021. The final payment transferred to the IP in February 2022 was mistakenly overpaid by Headquarter by USD3. The amount was finally recuperated in December 2022.

4.5 Efficiency

112. **Moderately satisfactory:** The Project was impacted by COVID-19, which resulted in approx. one year delay. The acceleration of the implementation is still a challenge. New implementation modality worked to some extent, but real quality of results needs to be verified.

113. The first Project implementation plan was developed in Q4 2020, which is more than one year after the project inception workshop was held in Q3 2019. At the initial intention, the implementation plan should have been developed immediately after the compilation of the outcome of the inception workshop. Due to the onset of the COVID-19, the Project momentum was lost for almost one year, i.e., Q4 2019 – Q3 2020.

114. Another factor that affected the Project implementation was the transitional arrangement from MTS 2018-2021 to MTS 2022-2025. As the Project implementation spans two MTS periods, the closure (wrap up) of the activities falling under the old MTS and commencement of the activities under the new MTS has been expected. Since the end of 2021 throughout 2022, seamless transition and continuity of the Project activities have been explored, but some administrative control systems have restricted certain types of operations.



115. When the Project implementation plan was formulated, the impact of COVID-19 has already taken into consideration, but the activities have not been progressed/completed as originally planned. Until late 2020,

almost all activities, both substantive and operational, were suspended, thus almost no financial transaction was incurred (Figure 6). It is also confirmed by the financial delivery progress which has moved below the benchmark levels. The delivery rate of the fund by June 2022 is approx. 37%, which is approx. two-thirds of the benchmark values for 5-year plan. The Project has conducted re-deployment of project budget structure to adapt the COVID-19 setting that has restricted travel and field activities (Table 7). Some activities were converted to virtual arrangement and the budget items for hard components such as travel, equipment, contractual services were re-deployed to soft components such as engagement of implementing partners and personal costs.

116. Since later 2020, project activities have been resumed and financial expenditures risen again. The implementation of the remaining activities and necessary timeframe to achieve the Project Outcome should be critically examined and discussed among stakeholders.

Table 8 Initial project workplan and actual progress

Output / Activity	Timeline																Deliverables		
	'19		'20				'21				'22				'23			'24	
	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2			
1																			
1.1																		A list of local partners in Minamata, Japan, providing support for the project.	
1.2																		Sets of training materials (agenda, presentations, reference materials), data books, and technical handbooks, etc.	
1.3																		Two face-to-face and series of online trainings implemented per year.	
1.4																		Annual reports published.	
1.5																		Agreement on local coordinating structure beyond the project implementation.	
2																			
2.1																		Laboratory assessment reports for all partner countries.	
2.2																		Mercury monitoring plans in participating partners that are harmonized.	
2.3																		A QC/QA guidebook published; inter-laboratory quality assessment conducted.	
2.4																		Collaborative activities with other monitoring networks.	
3																			
3.1																		Meeting reports; Increasing list of partners joining.	
3.2																		A dedicated web page of the project serving as an information portal.	
3.3																		List of services provided; web stories on impact.	

Note:  Workplan developed in Q4 2020  Actual implementation

117. The major adjustment of the Project implementation modality to cope with COVID-19 restriction particularly changing in-person activities to online worked and the Project has made progress, to some extent, in terms of the quantitative results such as number of trained personnel. On the other hand, the quality of the new modality has not been properly assessed. It is uncertain if an online training is as effective as an in-person training in terms of the degree of the improved skills.

118. Another challenge for online modality is the interpersonal relation between the Project staff and the participants. In-person interaction in the activities may improve the follow-up communication and the commitment level of the agencies to the Project activities. Such benefit has not been properly recognized and evaluated. It is not easy to see the attitude of the participants in online training programmes and even cannot ensure if the participants are actually sitting in front of the computer. Interpreting the online connection (log-in record) as the equivalent to the 'participation' may overestimate the achievement of the Project.

119. MOEJ (Donor) is a member of the PSC which meets on a semi-annual basis so that they are updated at least in this frequency. In addition, UNEP (PMU) frequently communicated with MOEJ to inform the Project plan and explore possible linkage to MOEJ's own initiatives. Several activities have been co-organized and implemented which enhanced the synergy of both activities. Communication with donor, such as budget request and annual progress reporting have been done regularly except in 2019 and 2020 when the Project was standstill due to Covid-19.

120. The Project has made collaboration with other agencies and programmes such as UNITAR, UNIDO, APMMN, NIMD, ICMGP, etc. Joint implementations have enhanced the project outreach benefitted by the network of the counterpart agencies. It has also contributed the alignment of each project/programme to avoid duplication and overlap as well as unaddressed gaps. The other collaboration with other projects/programmes such as Minamata SIP projects or UNEP Global Mercury Partnership may also be considered.

4.6 Monitoring and reporting

Monitoring design and budgeting

121. **Highly satisfactory:** The Project has developed a robust mechanism to implement the activities, monitor the progress, review, and report the results.

122. The Project has developed an effective monitoring and reporting process throughout the implementation period. Seven (7) types of monitoring reports were identified with unambiguous procedures and frequency (See Table 9). Quarterly expenditures statement/budget consumption status is an internal management report for PMU to monitor the project delivery status for budget control. Semi-annual progress report is the key output document of the project that will be presented to the PSC and the information will serve as the basis of PIMS and other periodical global/ROAP reporting. Annual progress report and annual financial expenditure report are prepared for donor submission, which is required by the pledge letters. In addition to the periodical report described above, the Project prepared an MTR report as a part of programme management in UNEP ROAP and Division. The MTR was prepared by the PMU in collaboration with project partners, stakeholders, etc. Based on the results and findings, the Project activities will be re-aligned/adjusted to improve Project impacts to overall objectives. Final project review report and final expenditure statement are the last report upon the completion of the Project. An independent terminal project review will be conducted by an external entity to assess and evaluate relevance, effectiveness, efficiency, impact and sustainability of the project. The reporting framework is simple but robust to fulfil the monitoring requirement for the purpose of project results management and accountability.

Table 9 Project reporting schedule and status

Report	Purpose	Frequency	Status
Quarterly expenditures statement / budget consumption status	UNEP internal Project management	Quarterly	Statement generated monthly.
Semi-annual progress report	Project Steering Committee meeting; PIMS reporting (limited circulation)	Semi-annually	4 submissions. No report in July 2019 – June 2020 period.

Annual financial expenditure statement	Donor submission	Annually	3 submissions
Annual progress report	Donor submission (publicly available)	Annually	3 submissions
Mid-term review report	UNEP Asia-Pacific Office management	Mid-point of the implementation	Undertaken
Final project review report	Donor submission and PSC	At the operational closure	NA
Final expenditure statement	Donor submission and return of any balance (by UNON)	At the financial closure	NA

Monitoring of project implementation

123. **Highly satisfactory:** The Project Steering Committee has provided strategic direction and promote the synergy among different parties.

124. The Project Steering Committee (PSC) has been formed in early 2021 and has provided strategic direction to the Project since then. It met four (4) times on a semi-annual basis and the meeting minutes were prepared. The PSC is composed of UNEP ROAP (as a chair), Minamata Secretariat (as a duty bearer and beneficiary), UNEP Chemicals and Health Branch (as a resource provider) and Ministry of the Environment, Japan (as a donor and resource provider).

Project reporting

125. **Satisfactory:** Periodical reports are prepared on a regular basis except at the initial stage when the PMU has not been established. The Project indicators are monitored and updated on a semi-annual basis.

126. The Project semi-annual progress report accommodates most of the project key monitoring data including updated result framework, risk and lessons learned log, etc. The report is prepared and submitted to PSC members prior to the PSC meetings. The risk log and lessons learned log are updated together with the preparation of semi-annual report. The initial risk log lists 5 risks which are extended to 9 at the fourth (latest) semi-annual report. 2 risks have been closed as the issues are resolved and the risks no longer exist.

127. The Project lessons are accumulated in the lessons learned log for addressing them to current or future projects. As of the fourth semi-annual report, 5 lessons are identified and listed.

128. The Project activities collected the participants and other demographic data in the implementation. The Project has systematically collected data together with the gender and age group so that the gender- or age-disaggregated analysis is possible. The gender identification also included the third choice 'prefer not to tell' to address sexual minority group.

129. The Output and Outcome indicators are visited on a semi-annual basis and included in the semi-annual reports, which are reviewed by the PSC members. The progress of implemented Activities was estimated as the cumulative percentages of the completed works against total work volumes. The Project results at Output level have both direct monitoring indicators and statistical indicators. The former indicators are verified in dichotomously with simple yes/no basis. The latter indicators are verified after the statistical surveys. There is no concrete means of verification indicated in the implementation plan.

4.7 Sustainability

Socio-political sustainability

130. **Likely:** Legally binding instrument ensures the sustainability at policy level. Ratification support should be enhanced. Alignment to the mandates of existing institution is explored.

131. The Project stresses the sustainability of the obtained results as the most important factor of the Project success. It considers various approaches to sustain the results after the completion. Systemic and institutional sustainability is currently explored.

132. The most effective measure to ensure socio-political sustainability is to develop and implement legally binding framework on mercury management. It will include the enforcement of relevant laws and regulations or ratification of the Convention. Some non-Party countries indicate their preparation for ratifying the Minamata Convention. Ratification will open the opportunity to access numbers of financial mechanisms. Supporting the ratification process is well aligned the direction. Some countries also have also indicated the preparation of relevant laws and regulations as a part of the mercury management. The linkage to and contribution by the Project activities should be properly assessed, but such move will contribute the sustainability of Project results.

133. The alignment to the mandates of existing institutions will also secure the sustainability of the results as long as such institutions maintains their mandates. Identification of the relevant partners are explored, and a few have a potential to take over the some of the Project results.

134. Social unrest in Myanmar since February 2021 required substantial reprogramming of the Project direction. The Project suspended the participation of Myanmar government, thus, the activities before the military coup are not sustained in Myanmar. This is an inevitable consequence beyond the Project control. The respective budget has been immediately suspended and reprogrammed to other activities by the end of 2021.

Financial sustainability

135. **Moderately likely:** Some initial indication observed to secure regular budget to take over Project activities.

136. The Project results backed by legal instruments will sustain after the completion of the Project. Once the legal obligation is imposed to relevant stakeholders' they will start internalising the cost incurred by such obligations. For the other results not connected to the legal instruments needs other mechanisms to ensure the sustainability. Institutionalizing the results, i.e., integrating into the missions of existing institutions/programmes is also considered in this Project.

137. The Project is jointly implementing laboratory proficiency testing (PT) with National Institute for Minamata Disease (NIMD). Laboratory PT is intended to be held in an annual basis. The role of the Project is gradually handing over to NIMD, which has obtained state budget to take over some role. It is expected that the full handing over will be done by the end of the Project.

Institutional sustainability

138. **Likely:** Institutionalising the Project results is progressing in some of the Project stakeholders.

139. The Project developed training materials for mercury mass flow development and monitoring. The materials intend translation into local languages so that they will be used continually in different occasions. The Project conducts trainers' trainings to familiarize the materials and encourage the partner countries to develop and undertake local trainings. The development of the learning system at national and subnational levels by national experts will increase the likelihood of the sustained institutional capacity.

140. The Project is discussing with the Environmental Engineering and Management (EEM) Laboratory of Asian Institute of Technology (AIT) to establish a mercury laboratory, which serves as the mercury research

hub in the region. The EEM Lab will be used for supporting researchers in the region and providing hands on training opportunities to the students and technicians. It will ensure self-sustained operation by receiving appropriate fees for its services.

4.8 Factors affecting performance and cross-cutting issues

Preparation and readiness

141. **Moderately unsatisfactory:** The Project has been adversely affected by the COVID-19 and underestimated the level of its impact. The initial delay is almost one year, and it has not yet been fully recovered.

142. At the Project inception, the first instalment (\$1,000,000) has already been received, so the start-up arrangement was done smoothly. The Project was commenced in July 2019 together with the recruitment of the Project staff. The inception workshop was organized in September 2019 to invite project partner countries and the views. The comments and views from the participants have been compiled for developing the Project plan. However, the onset of the COVID-19 in late 2019 invoked the suspension of the recruitment process, and in early 2020, the office was shut out to prevent the spread of the virus. The preparation process was suspended until the recruitment process has been resumed in September 2020.

143. In October 2020, Programme Management Officer took office remotely and started the development of the Project implementation plan, which was endorsed in December 2020. It was the weakest period for the Project when COVID-19 hit the entire globe. There was no workplan completed, no dedicated staff to respond the pandemic, either. The time has elapsed without emergency response to sustain Project preparation.

144. The Project risks are regularly monitored and updated in the Project semi-annual report, which is prepared and submitted to PSC members prior to the PSC meetings. The initial risk log lists 5 risks including 'Covid-19 pandemic persist for many years' with the rating of impact 4 (major) and likelihood 3 (moderate) at the time of December 2020. This assessment actually underestimated the risk so that the project had to adjust the implementation arrangement. The Project revisited the COVID-19 risk and reclassified as the impact 4 (major) and likelihood 4 (likely) in August 2022, which is too late and too optimistic particularly the likelihood should have been classified as 5 (almost certain) at earlier stage.

Likelihood and Impact Model

		Likelihood				
		Rare	Unlikely	Moderate	Likely	Almost Certain
		1	2	3	4	5
Impact	Severe	5	10	15	20	25
	Major	4	8	12	16	20
	Moderate	3	6	9	12	15
	Minor	2	4	6	8	10
	Negligible	1	2	3	4	5

Figure 7 Likelihood and impact model

Quality of Project Management and Supervision

145. **Moderately satisfactory:** The Project adapted the external changes and strategic factors to the implementation arrangements, both substantively and operationally.

146. The Project is directly implemented by UNEP. A dedicated PMU has been set up in ROAP with a Programme Management Officer and two assistants. PMU has sourced particular expertise from other agencies by engaging as the implementation partners. The engagement is linked to the Project workplan and strategically arranged to adapt the progress made and the needs identified.

147. The major substantive change was made for the status of Myanmar. Responding the political turmoil in February 2021, the activities in Myanmar were postponed (respective budget revision was done in April 2021). The Project eventually abandoned the activities in Myanmar and re-deployed the respective budget to other activities (respective budget revision was done in February 2022).

148. The Project has been operated fully virtually since 2020 up to October 2022 when the security phase in ROAP was lifted. During the period, new approaches were arranged including the field missions using online communication tools such as Webex supported by local coordinators. The virtual missions have created the reports with equivalent quality to the expected reports by in-person missions.

Stakeholder participation and cooperation

149. **Moderately satisfactory:** The Project engages wide range of stakeholders who continue to work with the Project. The beneficiaries regard the Project activities relevant for their works.

150. The Project partner countries has been consulted at the Inception Workshop. The Project plan has reflected their needs and priorities. At the time of the MTR, degree of the participation varies between countries, but in general, the participants consider the Project activities are relevant to them and their co-workers.

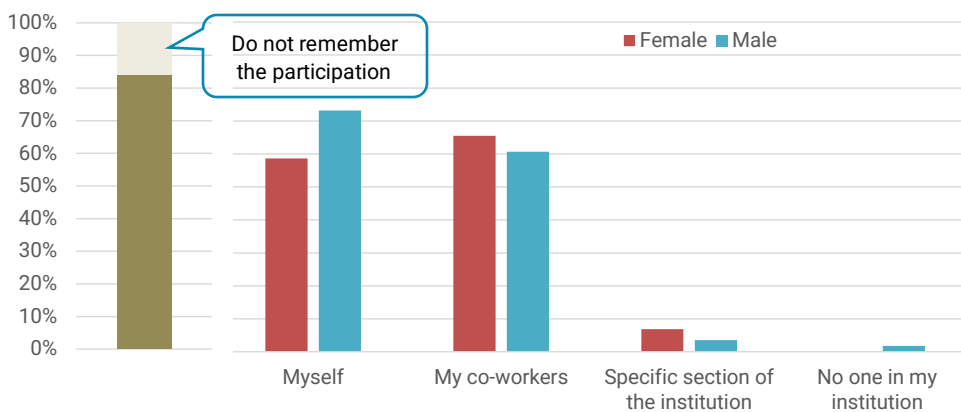


Figure 8 Persons benefitted the most from participating in the training programmes

151. Implementing partners are engaged through Small-scale Funding Agreement (SSFA) modality in UNEP system. The partners have undertaken significant portions of the Project activities including trainings, field missions, dissemination events, quality assessments, etc. Numbers of the partners in the region including Asian Institute of Technology (AIT) and Overseas Environmental Cooperation Center (OECC) continue to work with UNEP under this Project after the successful completion of their engagement. Only exception was Institute for Global Environmental Strategies (IGES) who discontinued the mercury activity at corporate level due to its internal shift of the priority sectors.

152. Agencies collaborating with the Project are cooperative to the Project and numbers of the Project activities are co-organized and/or mutually participated. The networks of the collaborating agencies have been used to call for participating the Project activities that invite global participants.

153. Technical advisors individually support the Project activities. They have presented lectures, led field missions, assessed the quality of Project deliverables, liaised with other stakeholders, etc. Currently, 6 technical advisors in the region are registered to the Project and can be added to address new topics.

Responsiveness to human rights and gender equality

154. **Unsatisfactory:** The Project was 'gender-blind' when formulated. Although some activities are unintentionally contributed the promotion of gender equality, they have not been programmed with clear direction.

155. The human rights and gender equality is a cross-cutting issue to be considered in various way in implementing Project activities. The Project has no evidence to be 'gender-biased' in its formulation as most of planned activities are on scientific data generation. However, gender dimension should have been assessed and explicitly included in the relevant documents to ensure the 'gender-neutral' implementation. Gender and age disaggregated data collection for capacity building activities is the only items addressed on this issue.

156. The questionnaire survey and participant data analysis identified that the Project training programmes have been attended by more female than male participants. Female participants are relatively young and less involved in the mercury issues; thus, the Project should consider more focus on fundamental and basic knowledge and skill training that will suit the needs of female participants. Dissemination events such as seminars and workshops were attended by more male participants than female participants. They are more experienced and regularly involved in the mercury related topics. This proportion should be improved by enhancing the experiences and competency of female officers/technical staff through Project activities.

157. Gender profile of the laboratories participating in the Project activities are assessed by a questionnaire survey. Although the corporate policies on gender are not fully developed and enforced in many institutions, they are relatively neutral in engaging male or female staff. In practice, slightly more female are engaged in this field. This finding will derive that the engagement of the analytical laboratories will not cause the gender risk that the Project may contribute gender-biased institutions.

158. Detailed gender assessment is annexed (6.3) to this report.

Environmental and social safeguards

159. **Moderately satisfactory:** The Project carbon footprint should be minimised by the proper selection of implementation modality in each activity.

160. Different from large infrastructure development, the main Project activities is capacity building and data collection; thus, major environmental and social deterioration is not expected. Nevertheless, it is still crucial that the Project will not adversely impact the environment and vulnerable populations. Social risks identified in the risk log is on COVID-19 impact. Project has suspended in-person activities to avoid creating clusters of infection. The policy continued until October 2022 when the UN security phase was lifted. Environmental risk has not been recorded in the latest risk logs.

161. The Project has extensively examined the pros and cons of virtual activities during the COVID-19 period and prepared how in-person activities should be resumed. Some planned activities such as field monitoring cannot be implemented virtually, but the virtual arrangement fits well for laboratory survey. Implementation modality should be properly selected to reduce the Project carbon footprint.

Table 10 Pros and cons of virtual activities

Activity	Description (pros, cons)
Common	<ul style="list-style-type: none"> ▪ Travel cost and time are saved. ▪ More people can participate in. ▪ Internet connectivity is challenge for some countries. ▪ Time zone difference limits the available time in a day.
Technical lecture	<ul style="list-style-type: none"> ▪ Many online tools can support learning. ▪ Scheduling the availability of resource persons/experts is easier. ▪ Easy to formulate a series of programme with certain intervals. ▪ Level of participation is unknown.

Group exercise	<ul style="list-style-type: none"> ▪ Intersessional group discussion can provide additional preparation time. ▪ Establishing intimate atmosphere is not easy. ▪ Interactive communication (and backstage discussion) is sometime more difficult. ▪ Hands-on training such as machine operation cannot be done virtually.
Field monitoring	<ul style="list-style-type: none"> ▪ Must be on site to collect environmental samples.
Laboratory survey	<ul style="list-style-type: none"> ▪ Scheduling laboratory visit by the expert team is more flexible. ▪ Iterative process for information collection enables more comprehensive survey.
Visiting programme	<ul style="list-style-type: none"> ▪ Visiting historical sites and information centres strengthening knowledge base. ▪ Meeting Minamata disease victims influencing participants emotionally.

Country ownership and driven-ness

162. **Moderately satisfactory:** The participating countries considers the relevance of the Project. The Project is aligned with national priorities and strategies but mostly driven by UNEP.

163. Some non-Party countries are in the process for ratifying the Minamata Convention, which is driven by countries. The UNEP's support to the ratification process is generally anticipated but not clearly defined. For the Party to the Convention, implementing the obligation is key challenges. As the Project provides custom-made approach to each country, their specific needs should be identified. On the other hand, UNEP's activities implemented so far are generally appreciated by the participating countries as it programmes the needs and priorities identified in the Inception Workshop. More consultations should be done with the participating countries to draw clearer roadmap of the Project activities to the national policies and institutional sustainability.

Communication and public awareness

164. **Unsatisfactory:** Communications should be enhanced. In addition to the communications to the direct beneficiaries, high-level decision makers should be informed for better visibility.

165. The Project is not directly involved in the awareness raising of general public, as the primary target audiences are government officials, experts, researchers on mercury management area. The communications to these group have been done through the training programmes, webinars, and dedicated website. These communication tool has been utilised, to some extent, but it could have been done much better.

166. Most of the online training programmes were provided in closed format for those who were nominated by the government. Only one online training programme was called for open participation. Webinars have been organized in collaboration with other organizations such as the Minamata Secretariat, which were successfully implemented, but such opportunity was infrequent, only once per year. For the communication to enhance the Project visibility, more frequent events/activities should be organized. As for the Project website, it was established in March 2022, which is almost 3 years after the inception of the Project. It was too late for disseminating project information in timely manner and promote the Project visibility.

167. The Project event that involved high-level people happened only once in the Inception Workshop attended by Mayor of Minamata City and Executive Secretary of the Minamata Convention in 2019. The Project should consider more efforts to get attention at higher level. Organizing side-events in the margin of major conferences/campaigns could be a possible option.

5 Conclusions and recommendations

5.1 Conclusions

168. The review results are summarised in Table 11 and overall project rating (4.23) is obtained, which falls under 'Moderately satisfactory'. This is particularly due to the lower rating on alignment to cross cutting issues such and gender and human rights, adaptive management to COVID-19 impacts, communications and Project visibility, etc. On the other hand, following criteria are rated highly satisfactory: alignment to donor initiative, project finance, monitoring design and implementation.

Table 11 Review summary

Criterion	Rating ¹⁰
A. Strategic Relevance	4
1. Alignment to UNEP's MTS, POW and strategic priorities	5: Satisfactory
2. Alignment to Donor/Partner strategic priorities	6: Highly satisfactory
3. Relevance to regional, sub-regional and national environmental priorities	5: Satisfactory
4. Complementarity with relevant existing interventions	3: Moderately unsatisfactory
B. Quality of Project Design	5: Satisfactory
C. Effectiveness	4: Moderately satisfactory
1. Availability of outputs	5: Satisfactory
2. Achievement of project outcomes	4: Moderately satisfactory
3. Likelihood of impact	4: Moderately likely
D. Financial Management	5: Satisfactory
1. Adherence to UNEP's policies and procedures	6: Highly satisfactory
2. Completeness of project financial information	6: Highly Satisfactory
3. Communication between finance and project management staff	5: Satisfactory
E. Efficiency	4: Moderately satisfactory
F. Monitoring and Reporting	6: Highly satisfactory
1. Monitoring design and budgeting	6: Highly satisfactory
2. Monitoring of project implementation	6: Highly satisfactory
3. Project reporting	5: Satisfactory
G. Sustainability (the overall rating for Sustainability will be the lowest rating among the three sub-categories)	4: Moderately likely
1. Socio-political sustainability	5: Likely
2. Financial sustainability	4: Moderately likely
3. Institutional sustainability	5: Likely
H. Factors Affecting Performance and Cross-Cutting Issues	3
1. Preparation and readiness	3: Moderately unsatisfactory
2. Quality of project management and supervision	4: Moderately satisfactory
3. Stakeholders participation and cooperation	4: Moderately satisfactory
4. Responsiveness to human rights and gender equality	2: Unsatisfactory
5. Environmental and social safeguards	4: Moderately satisfactory
6. Country ownership and driven-ness	4: Moderately satisfactory
7. Communication and public awareness	2: Unsatisfactory
Overall Project Rating¹¹	4.23: Moderately satisfactory

¹⁰ A number rating 1-6 is used for each section: Highly satisfactory/likely = 6, Satisfactory/Likely = 5, Moderately satisfactory/likely = 4, Moderately unsatisfactory/unlikely = 3, Unsatisfactory/unlikely = 2, Highly unsatisfactory/unlikely = 1.

¹¹ Highly satisfactory: >5.16, Satisfactory: =<5.16 >4.33, Moderately satisfactory: =<4.33 >=3.5, Moderately unsatisfactory: <3.5 >=2.66. Unsatisfactory: <2.66 >=1.83, Highly unsatisfactory: <1.83

169. The Theory of Change (TOC) of the Project was partially developed for the Project (as a sub-project under a global project). The linkage to one Output to the global project was properly made. Further up to the Impact level of TOC should be considered at global level. The TOC needs the realignment to new UNEP MTS 2022-25 under new delivery model.
170. The stakeholder analysis was not done at the Project formulation stage. It was supplemented in this MTR and the key stakeholders are identified. Due to the nature of the Project, general public is not a primary audience/stakeholder to the Project, therefore, communications and outreach activities should be aligned with the identified stakeholders.
171. The result framework developed in the implementation plan follows the UNEP rules and definitions. It is result-based statements and quantitatively verified. The Outputs are well defined, and the progress has been reported. The Outcome and indicators are vague, and the partner countries have difficulty to interpret them to their own context. The refinement of Outcome level statement will be needed.
172. The Project monitoring plan is relatively simple but effectively taking management actions as well as fulfilling the accountability to the Project stakeholders. Engagement of the Project stakeholders could be gradually enhanced once COVID-19 restriction is lifted.
173. At the Project initiation, crosscutting issues such as human right and gender considerations were not discussed. Based on the data analysis disaggregated by gender and other factors, at least (unintentional) gender-bias was not observed. Actually, more female was participated in the Project trainings, and laboratories participating in the Project activities provide relatively gender-neutral work environment. Therefore, at this moment, the major modification of the Project activities may not be necessary as long as the Project keeps monitoring the crosscutting aspects and assesses it regularly.
174. The Project has not yet developed a clear exit strategy but considers the sustainability of the activities in various ways. It focuses on the partnership and collaboration with other institutions and existing programmes to align the activities to their mandates. The Project explores 'mutual benefits' with the partners to enhance the buy-in to the Project activities. Initial indication to integrate the activities are observed in some organizations, which need to be ensured by more formal ways.
175. Another factor for ensuring the sustainability is the linkage to legally binding mechanisms, such as developing legislation, ratifying the Convention. This arrangement usually takes time and not fully controllable by the Project. The continuous and regular communication with the partner countries will be important for the Project to provide enabling supports.
176. The Project was severely affected the onset of the COVID-19 pandemic, which resulted in the Project being standstill almost one year. After the reinstatement of the Project momentum and the development of the implementation plan to accelerate the Project activities, the rate of expenditures is lower than expected as of the mid-point of the Project. If the current delivery rate continues, the Project completion might also be delayed by one year. In order to meet the original Project period, the delivery rate should be increased approx. 1.5 times.
177. The Project underestimated the impact of the COVID-19. At initial stage, it resulted in the delay in start up the PMU and project plan. In the course of the implementation, the activities have not been modified drastically to new approach due to the nature of the Project that requires in person onsite activities such as environmental sampling and analytical operations. The important development made to adapt to the effects of COVID-19 would be the elaboration of the pros and cons of the online and in person settings that the Project can broaden the implementation options.
178. The items with relatively low rating in the review results should be revisited and the corrective actions, as appropriate, should be implemented to optimise the effectiveness of the Project, which includes followings: The expected Outcome should be more clearly defined in consultation with the Project stakeholders including the timeframe that will be feasible to achieve such Outcome. Communication and visibility of the Project needs to be strengthened to ensure the results will benefit not only the partner countries but also other countries implementing the Minamata Convention. The exit strategy, or sustainability

of the project results, should be discussed more clearly with relevant partners and put into the formal process.

5.2 Lessons learned

179. The MTR found the following lessons generated from the review of the documents and consultations with the project stakeholders.

180. Lesson 1 Applying new emerging technologies: Recent development of online technologies have provided more options for implementing Project activities. Online vs in-person should be more comprehensively examined when deciding implementing modality.

181. Lesson 2 Risk assessment and management particularly COVID-19 risk and county risks: The Project was adversely affected by COVID-19 and political overturn in Myanmar as the risk was underestimated at the beginning. It is very important to examine Project risks to avoid or minimise impacts of external factors. Precautionary and adaptive means of Project management should be embedded in the management process.

182. Lesson 3 Crosscutting aspects such as human right and gender: The Project is not in gender-focused nature, but the application of gender lens to the Project activities will provide better insights for the alignment of the future activities that will not inadvertently disadvantage marginalised groups.

183. Lesson 4 Communications and visibility: The public awareness is not at centre point of the Project as the target beneficiaries are ministries and agencies responsible for monitoring/management of mercury and public laboratories and laboratories in universities that undertake mercury analysis. Nevertheless, dissemination of information and improving the Project visibility are critical for meaningful impact of the Project.

184. Lesson 5 Collaboration and joint implementation: Joint implementations have enhanced the Project outreach benefitted by the network of the counterpart agencies. It has also contributed the alignment of each project/programme to avoid duplication and overlap as well as unaddressed gaps.

5.3 Recommendations

185. A series of recommendations are presented based on the findings and the analytical works during this MTR. The identification of weaknesses or shortfalls occurring during implementation leads to the recommendations for the improvement. The actions where the project has performed strongly will also be recommended for broadening the strengths. As the recommendations come at project mid-term, this information provides an opportunity of an adaptive management of "feedback loop," to guide mid-course adjustments, which can ultimately strengthen the Project, resulting in a higher probability that the Project goal and objective will be achieved.

Table 12 List of recommendations

No.	Recommendation and challenge/problem to be addressed by the recommendation	Type and priority level	Timeframe	Responsible
1	Revisit the TOC and result framework to ensure the alignment to new UNEP MTS, delivery model, and evaluation framework. Outcome statement and indicators are ambitious enough but should be more realistic and achievable. Unambiguous means of verification and evidence should be defined in consultation with responsible parties.	Corrective, High priority	Short term	Project, Partner countries
2	Examine the remaining Project activities and adjust the duration, as appropriate, to achieve intended results.	Corrective, High priority	Short term	Project, Donor, Partner countries

	Due to delay caused by the COVID-19 pandemic, the Project delivery including financial delivery has progressed below the intended workplan. The implementation of the remaining activities and necessary timeframe to achieve the Project Outcome should be critically examined and discussed among stakeholders. The extension of the Project period within one year could be a practical option.			
3	<p>Prepare an exit strategy with relevant stakeholders to sustain the Project results beyond the Project period.</p> <p>The arrangements such as medium to long term agreements with the Project partner agencies will ensure the sustainability of the results. The identification of the relevant partners and alignment to their mandate should be explored.</p>	Augmentative, High priority	Medium term	Project, Stakeholders
4	<p>Strengthen Project communications and improve the visibility to demonstrate the Project results.</p> <p>As the COVID-19 restriction is gradually lifted, more opportunities will be found to disseminate the information through existing events, which may involve high-level participants. Organizing local outreach events become possible as well. The collaboration with other projects and institutions may also bring better impact. It could be added as an additional activity.</p>	Augmentative, Medium priority	Short term	Project
5	<p>Identify key local stakeholders and explore the collaboration and joint implementation with them.</p> <p>Stakeholder involvement is essential for the Project success particularly in developing countries where the local resource and skills are limited. The own networks of local institutions will benefit the Project outreach to right beneficiaries when organizing a part of the Project activities in collaboration with such institutions.</p>	Augmentative, Medium priority	Medium term	Project, Stakeholders
6	<p>Examine the Project beneficiaries in different population groups, e.g., gender, age, occupation, etc. to support marginalized groups.</p> <p>Although the Project is not intended to address crosscutting aspects such as gender and human rights, it should not disadvantage marginalised groups inadvertently. If such distortion is identified, the participant profiles should be carefully adjusted.</p>	Augmentative, Opportunity of improvement	Medium to long term	Project

6 Annexes

6.1 Review framework

Criteria	Guiding questions and sub questions	Means of assessment
A. Strategic Relevance		
<i>1. Alignment to UNEP's MTS, POW and strategic priorities</i>	Is the Project aligned with UNEP's MTS, POW and strategic priorities? Is the Project aligned with the objective of the Minamata Convention and other relevant Multilateral Environmental Agreements (MEAs)? Did the Project consider gender mainstreaming at design? Do the products, processes and outcomes incorporate human rights and gender equality issues?	Desk review, interview
<i>2. Alignment to Donor/Partner strategic priorities</i>	Is the Project aligned with the strategic priorities of the Government of Japan (as the Project donor)?	Desk review, interview
<i>3. Relevance to regional, sub-regional and national environmental priorities</i>	Is the Project aligned with national priorities and strategies of each of the participating countries? To which extent are the Project priorities still valid in today's context for all the beneficiary countries?	Questionnaire
<i>4. Complementarity with relevant existing interventions</i>	Did the Project incorporate the COVID-19 related policies and interventions into the Project design and products?	Desk review
B. Quality of Project Design	Was the Project formulated with the Participation of national counterparts / was it demand driven? Was the project formulated based on the results framework approach? Did the Project's result framework adequately incorporate the priority needs of the participating countries? Has the Project established strategic partnerships with the stakeholders to produce quality of results effectively? Has the Project developed an effective monitoring and reporting process throughout the implementation period? Has the Project developed a communications plan to produce and disseminate qualified information to target audiences? Did the Project have feasible resource mobilisation plan to ensure the implementation of planned activities?	Desk review
C. Effectiveness		
<i>1. Availability of outputs</i>	Are the Outputs of the project consistent with the overall goal and objectives' attainment? Is the identified progress result of the project attributable to the intervention rather than to external factors? What can be done to make the project more effective? Have there been any unplanned effects (positive /negative)?	Questionnaire, desk review, interview
<i>2. Achievement of project outcomes</i>	To what extent has the Project achieved its objectives (Outputs and Outcome) against the original targets? What were the major factors influencing the achievement or non-achievement of the objectives? Were the Project faced challenges in implementation, explaining how the project has overcome the challenges?	Desk review, interview
<i>3. Likelihood of impact</i>	What difference did the intervention make? Are impacts or effects beginning to take place?	Desk review, interview

Criteria	Guiding questions and sub questions	Means of assessment
	To what extent has the Project intervention generated or expected to generate significant positive or negative, intended or unintended, higher-level effects? Describe any catalytic or replication actions that the Project carried out and if any, catalytic or replication effect both within and outside the Project?	
D. Financial Management		
<i>1. Adherence to UNEP's policies and procedures</i>	Have the disbursements and project expenditures been in line with the budgets? Was there transaction process undertaken and completed in prompt and consistent manner?	Desk review
<i>2. Completeness of project financial information</i>	Has the financial documentation been accurate and complete? Was the information available in timely manner?	Desk review, interview
<i>3. Communication between finance and project management staff</i>	Were there issues arisen on financial management which are resolved/unresolved by the communication between finance and project management staff?	Desk review
E. Efficiency	Were the results produced within the expected time frame defined by the workplans? Were there any quality concerns to the products and services delivered by the Project? (If project implementation was delayed), did that affect cost effectiveness or results? Have the reasons for delay been identified? To what extent, does the UNEP's transition to MTS 2022-2025 affected the project implementation, both positively and negatively? Were the coordination and cooperation between UNEP (PMU) and MOEJ (Donor) adequate? Were the coordination and synergies with other programmes and initiatives with similar objectives smooth and consistent?	Desk review, interview
F. Monitoring and Reporting		
<i>1. Monitoring design and budgeting</i>	Were there any adjustments made for the initial monitoring design?	Desk review
<i>2. Monitoring of project implementation</i>	Did the Project Steering Committee (PSC) provide strategic direction to the Project? Are the risk log and lessons learned log updated regularly? Did the Project monitoring collect gender disaggregated data as appropriate?	Desk review, interview
<i>3. Project reporting</i>	Have the project monitoring reports prepared and submitted in timely manner?	Desk review
G. Sustainability		
<i>1. Socio-political sustainability</i>	Is there sufficient public/stakeholder awareness in support of the Project's long-term objectives? Are there any social or political risks that may jeopardize sustainability of the Project outcomes?	Questionnaire, interview
<i>2. Financial sustainability</i>	Are there any financial risks that may jeopardize sustainability of Project Outcome? To what extent will the benefits of the Project continue after the Project ends?	Desk review
<i>3. Institutional sustainability</i>	Are any positive results likely to be sustained? In what circumstances?	Interview, desk review

Criteria	Guiding questions and sub questions	Means of assessment
	Are there examples of innovation from the Project in design, in addressing issues, or engaging countries and partners?	
H. Factors Affecting Performance and Cross-Cutting Issues		
<i>1. Preparation and readiness</i>	Did the Project pay sufficient precaution and countermeasures in addressing COVID-19 response?	Desk review
<i>2. Quality of project management and supervision</i>	How did the Project Evidence adapt the change in external and strategic contexts into the project management?	Desk review
<i>3. Stakeholders' participation and cooperation</i>	Did the stakeholders take any measures to ensure the continuation of the benefits after the end of the assistance?	Questionnaire
<i>4. Responsiveness to human rights and gender equality</i>	To what extent does the Project align the activities through human rights and gender viewpoints?	Desk review
<i>5. Environmental and social safeguards</i>	Are there any environmental factors that the Project may influence positively or negatively?	Desk review
<i>6. Country ownership and drivenness</i>	What was the level of ownership in each country?	Questionnaire
<i>7. Communication and public awareness</i>	What is the visibility of the Project? Are messages visible to the stakeholders and decision makers? Does the Project have a visibility / communications strategy which works as intended?	Questionnaire, desk review, interview

6.2 Initial monitoring plan

Monitoring item	Purpose	Frequency	Means
Financial status	Capture financial status and procurement management.	Quarterly	Expenditure statement
Track implementation/ results progress	Progress data against the results indicators in the results framework will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Semi-annually or in the frequency required for each indicator	Semi-annual report
Indicator/ results specific data/ evidence collection	Collect and analyse results indicators in the Results and Resources Framework.	Semi-annually or in the frequency required for each indicator	Semi-annual report
Monitor and manage risk	Review external environment and identify specific risks that may threaten the achievement of intended results.	Semi-annually	Semi-annual report
Lessons-learned	Knowledge, good practices and lessons will be captured regularly in project reporting, as well as actively sourced from other projects and partners for integration into the project.	Semi-annually	Semi-annual report
Project Steering Group meeting	The project's Steering Group will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. The Project Steering Group will annually, based on committed pooled funds, meet to verify the allocations for the following year's work planning exercises. In the project's final year, the Project Steering Group shall hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to advocacy of project results and lessons learned for relevant audiences.	Semi-annually	Semi-annual report
Project report	Semi-Annual report and Annual Reports will be presented to the Project Steering Group and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period. Inform partner countries and other stakeholders on project status and planning.	Semi-annually and annually	Semi-annual and annual report
Donor report	Inform financial status (respective to the contribution) and project progress to the donor(s).	Periodically as agreed with donor	Annual financial expenditure statement
Project review (and revision)	Analyse feedback from partner countries and other stakeholders against initial expectation to the project. Identify improvement of project activities.	At the midpoint of the project	Mid-term review report
Final project review	Assess the relevance and appropriateness of the project.	At the end of the project	Final project review report

	Evaluate the effectiveness and efficiency of the project. Assess the impact and sustainability of the project.		
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6.3 Gender Assessment

186. The gender profile of the Project beneficiaries is assessed to recognize how the Project unintentionally influences the gender equality.

Assessment of individual participants

187. During the MTR period, the Project implemented 5 online trainings to the individuals who are implementing (or will implement in future) mercury related activities. 60 % of the participants were female, which outnumbered the male participants (Figure 9). In the same period, the Project also organized the dissemination events annually such as online seminars and workshops in 2021 and 2022. Different gender profile is observed in the participants of the dissemination events as only 45 % of them were female (Figure 10). It is a general trend that female participants are relatively younger than male participants. Both female and male participants have similar profile on the proportion of routine works related to mercury, but the distribution patterns are different between trainings and dissemination events. The number of training participants decreases as the involvement to mercury increases. On the other hand, the number of the participants to the dissemination events increases as the involvement to mercury increases.

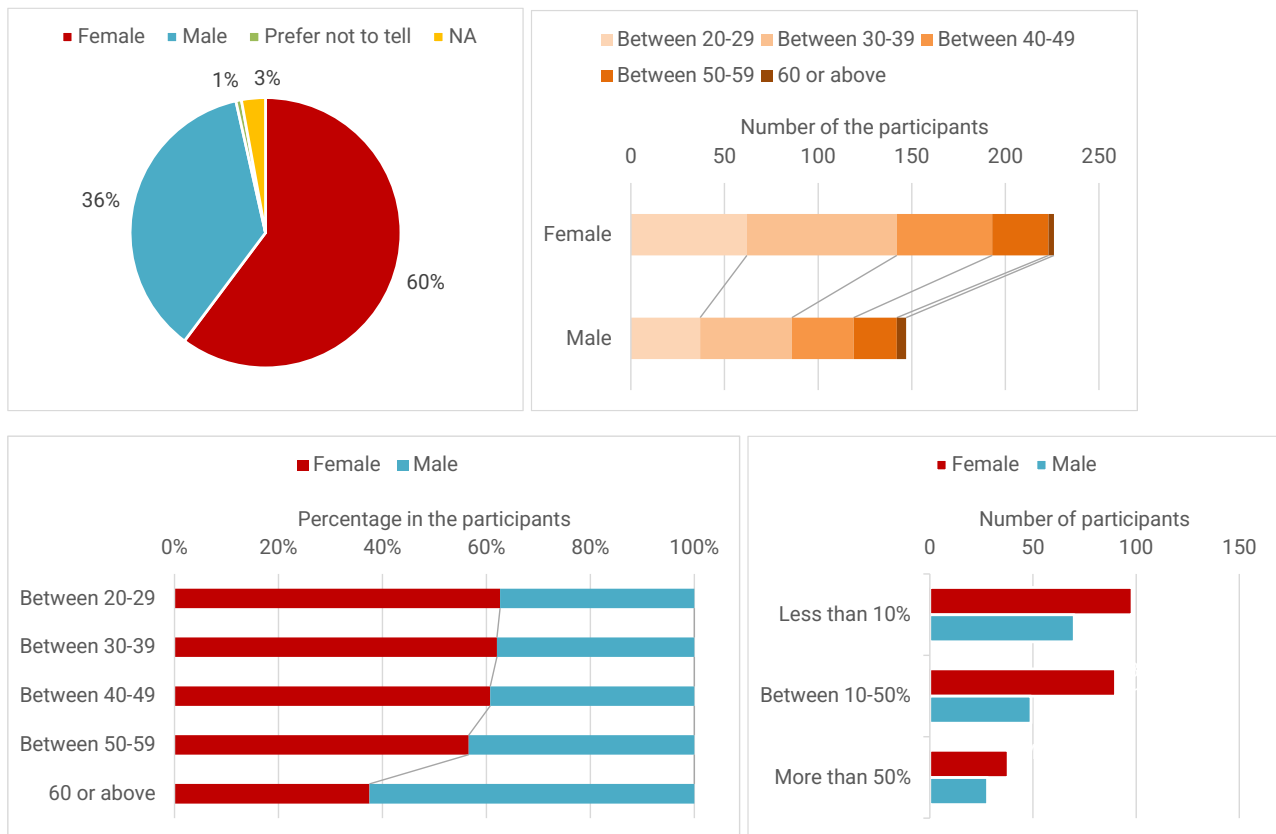


Figure 9 Gender profile for training (total, age group, routine work related to mercury)

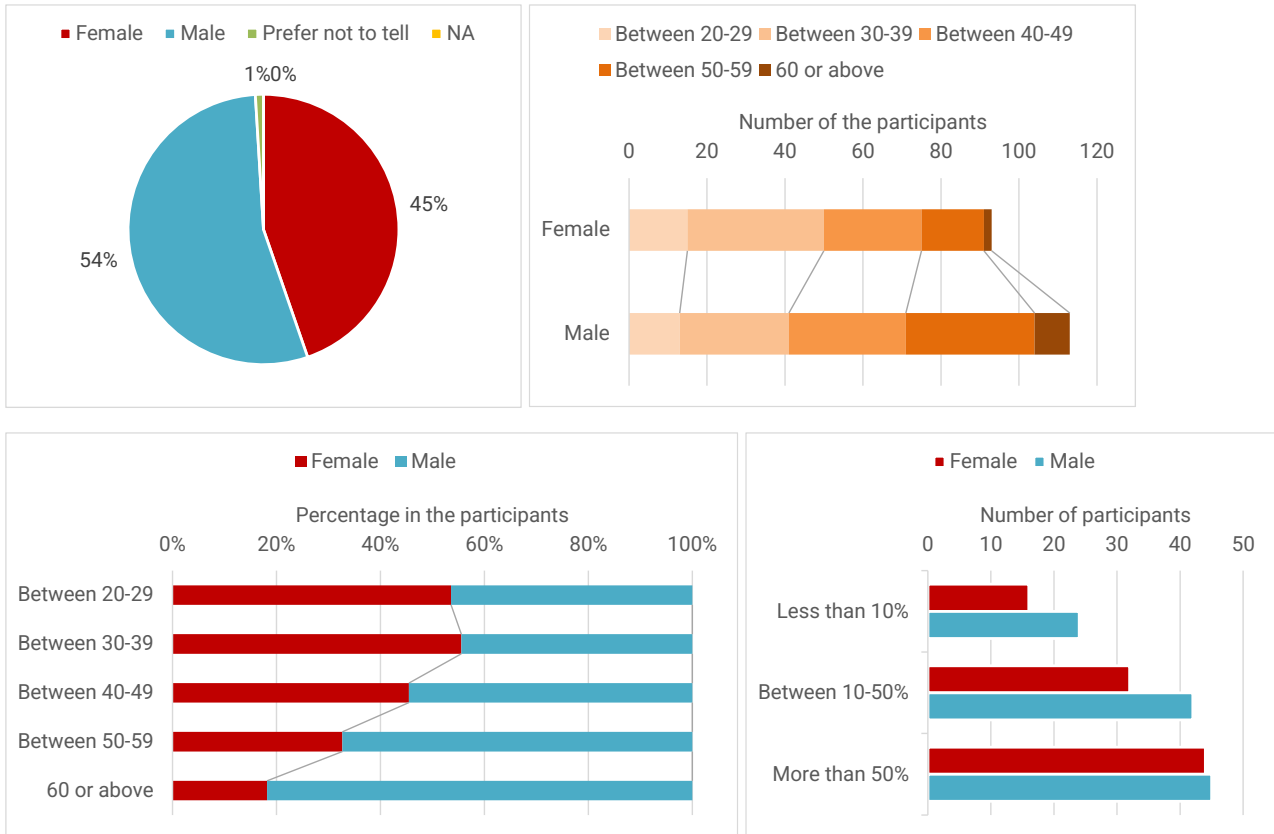


Figure 10 Gender profile for dissemination events (total, age group, routine work related to mercury)

188. The self-evaluation was done by the participants if they felt the programme fits their levels. In general, more than half of the participants felt that the programme just fit to them. The rate was higher for male and elder participants than female and younger participants. In content wise, the programme was actually aligned better to elder male. The percentage of the works related to mercury did not make difference to the self-evaluation

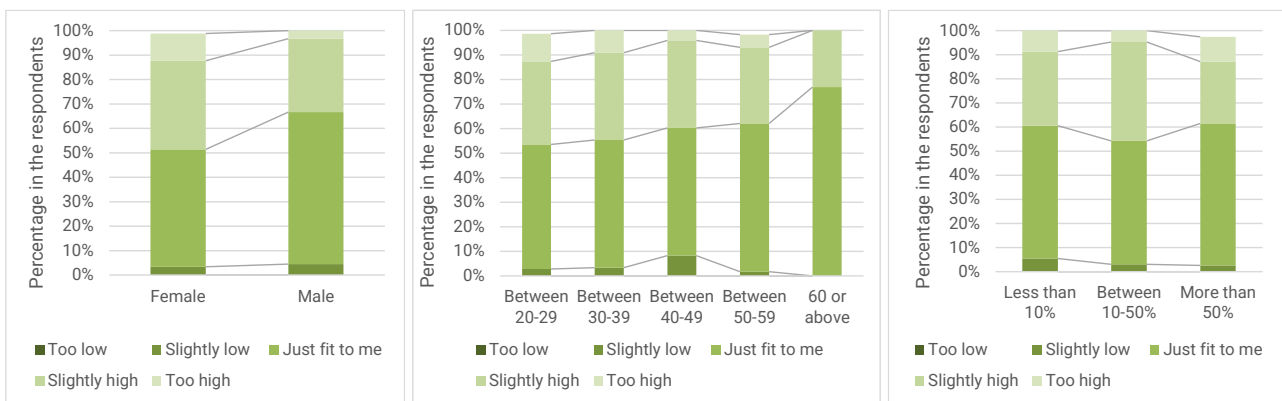


Figure 11 Overall level of the programmes in comparison with the personal competency

189. Based on the analytical results, the target audiences of the Project are more female oriented who are relatively younger and less involved in the mercury issue. The self-evaluation of the participants is also consistent with the analysis. The Project should consider more focus on fundamental and basic knowledge and skill training that will suit the needs of female participants who have already occupied the majority.

Assessment of participating laboratories

190. The Project invited the analytical laboratories to assess the proficiency of their analytical laboratories. The information of the detailed staff profile is asked to examine the gender policies at the institutional level. In general, analytical institutions hire more female than male (Figure 12), which is not necessarily driven by corporate policies. The institutions properly implement the gender policy is less than 40 % (Figure 13).

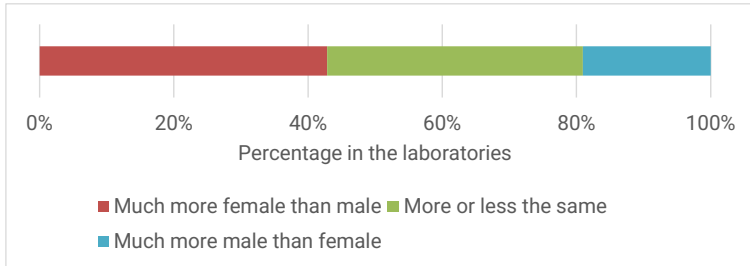


Figure 12 Proportion of male and female staff in the institution

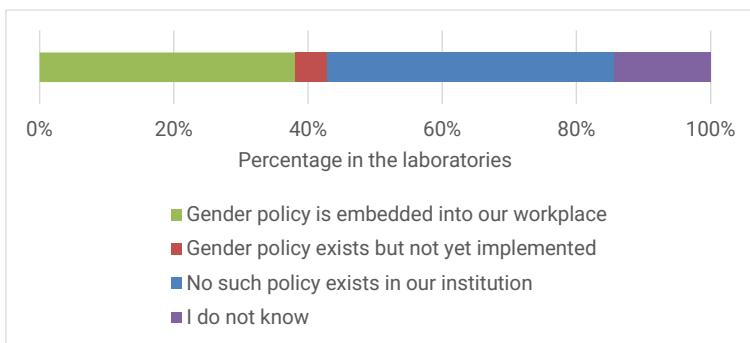


Figure 13 Internal policies on gender balancing

191. Besides the gender policy, the actual practices in the institutions are assessed. Some roles such as administrative works and public relation and communications are taken by female staff while machine operation and maintenance are done by male staff. These gender roles are, however, not very distinct in the analytical institutions. The majority of the institutions responded that most of the roles are equally taken by both female and male participants.

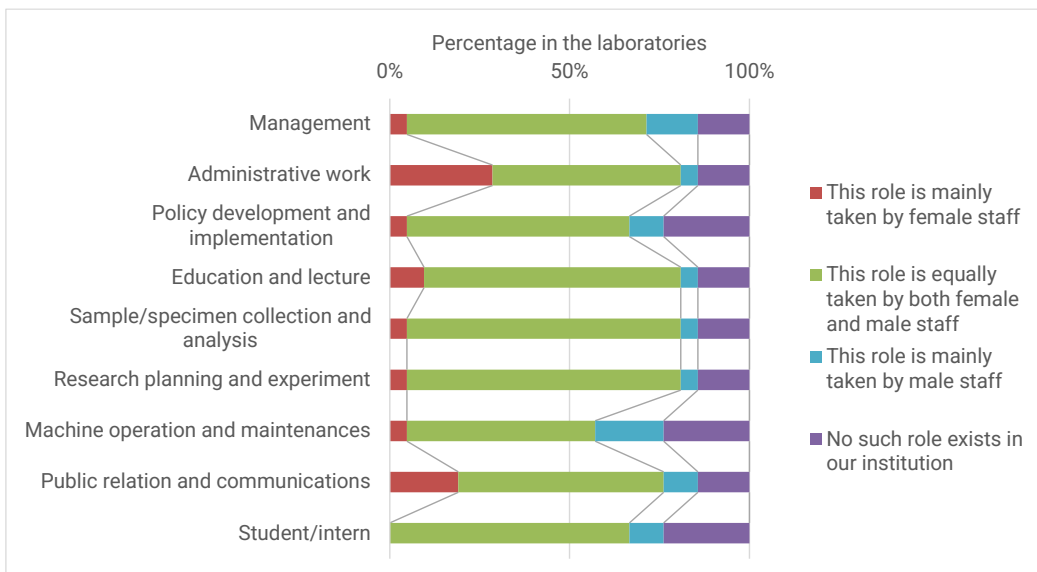


Figure 14 Difference of roles in male and female staff

192. Based on the information obtained, it can be concluded that the engagement of the analytical laboratories will not cause the gender risk that the Project may contribute gender-biased institutions.

6.4 Completed assessment of the project design quality

193. The Project preparation applied phased approach where the initial few months of the implementation was regarded as the inception phase to detail out the complete implementation plan based on the needs of partner countries. In normal settings, the implementation plan could have been completed by the end of 2019, however, COVID-19 pandemic impacted the entire globe for all kind of activities interrupted for many months. Finally, the project preparation was completed by the approval of the implementation plan in December 2020. The assessment is based on the approved implementation plan. No official revision was made.

A.	Operating Context		YES/NO	Comments/Implications for the review design	Section Rating ¹² :
1	Does the project document identify any unusually challenging operational factors that are likely to negatively affect project performance?	i) Ongoing/high likelihood of conflict?	No	Project was not initially expected the social unrest and pro-democracy demonstration in Thailand although the impact to the Project was minimal	3: Moderately unsatisfactory
		ii) Ongoing/high likelihood of natural disaster?	Yes	The onset of COVID-19 was identified but the level of impact was underestimated.	
		iii) Ongoing/high likelihood of change in national government?	No	It was not initially expected the political instability in Myanmar which significantly affected the initial implementation plan	
B.	Project Preparation		YES/NO	Comments/Implications for the review design	Section Rating:
2	Does the project document entail clear and adequate problem and situation analyses?		Yes	Although the Project did not undertake typical problem-tree and objective-tree analysis, it captures countries' priorities and established logical linkage to the relevant global targets. The quality of project design has been assessed at the inception workshop attended by 12 partner countries.	3: Moderately unsatisfactory
3	Does the project document include a clear and adequate stakeholder analysis, including by gender/minority groupings or indigenous peoples?		No	Stakeholders and beneficiaries are mentioned in the implementation plan but no analytical description.	
4	If yes to Q3: Does the project document provide a description of stakeholder consultation/participation during project design process?		NA	NA	

¹² A number rating 1-6 is used for each section: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1.

5	Does the project document identify concerns with respect to human rights, including in relation to sustainable development? (e.g., integrated approach to human/natural systems; gender perspectives, rights of indigenous people).	No	Due to the nature of the project, human rights and gender perspective was not considered at design stage except the needs of gender and age disaggregated data collection during the project implementation.		
C	Strategic Relevance	YES/NO	Comments/Implications for the review design	Section Rating:	
6	Is the project document clear in terms of its alignment and relevance to:	i) UNEP MTS, PoW and Strategic Priorities (including Bali Strategic Plan and South-South Cooperation)	Yes	Linkage to POW 2020-2021 was clearly described in the implementation plan.	6: Highly satisfactory
		ii) GEF/Donor strategic priorities	Yes	Government of Japan (donor) has its cooperation programme called 'MOYAI Initiative' where the Project is well aligned. The initiative intends to make Japan's knowledge and experiences available to other parties	
		iii) Regional, sub-regional and national environmental priorities?	Yes	Especially in Asia and the Pacific mercury is a major concern as about a half of global mercury consumption and emission occur.	
		iv) Complementarity with other interventions	Yes	The Project sets clear connection to the particular article of the Minamata Convention, i.e., Article 17 (Information exchange), Article 18 (Public information, awareness and education), and Article 19 (Research, development and monitoring).	
D	Intended Results and Causality	YES/NO	Comments/Implications for the review design	Section Rating:	
7	Are the causal pathways from project outputs (Availability of goods and services to intended beneficiaries) through outcomes (changes in stakeholder behaviour) towards impacts (long lasting, collective change of state) clearly and convincingly described in either the logframe or the TOC?	Yes	A TOC was developed and briefly described in the implementation plan.	4: Moderately satisfactory	
8	Are impact drivers and assumptions clearly described for each key causal pathway?	Yes	Assumptions and drivers are included in the TOC.		
9	Are the roles of key actors and stakeholders, including gendered/minority groups, clearly described for each key causal pathway?	Yes	Stakeholders and beneficiaries are mentioned in the implementation plan and their roles are briefly described.		
10	Are the outcomes realistic with respect to the timeframe and scale of the intervention?	No	The outcome statement is vague, and the feasibility of the project delivering it is not convincing.		
E	Logical Framework and Monitoring	YES/NO	Comments/Implications for the review design)	Section Rating:	

11	Does the logical framework ...	i) Capture the key elements of the Theory of Change/ intervention logic for the project?	Yes	The Output and Outcome indicators are defined accompanied by the baselines and targets, however, the means of verification and milestones for progress monitoring are not included in the result framework.	5: Satisfactory
		ii) Have appropriate and 'SMART' results at output level?	Yes	The indicators are developed as specific and quantitative. Timeframe is not explicitly expressed in the result framework, but the general expectation can be obtained from workplan.	
		iii) Have appropriate and 'SMART' results at outcome level?	Yes	The indicators are quantitative and relevant. The adequacy should be further assessed through the MTR process.	
		iv) Reflect the project's scope of work and ambitions?	Yes	The project highlights 3 key features including strong linkage to the Convention texts. 'Connecting Minamata and Minamata' and 'Networking analytical institutions' are the other features, which are properly reflected to the result framework. The level of ambition should be further assessed through the MTR process.	
12	Is there baseline information in relation to key performance indicators?	Yes	The baselines are set for the project outputs and outcome.		
13	Has the desired level of achievement (targets) been specified for indicators of outputs and outcomes?	Yes	Output and outcome targets are set in the result framework.		
14	Are the milestones in the monitoring plan appropriate and sufficient to track progress and foster management towards outputs and outcomes?	No	Progress monitoring is relying on the periodical reports prepared by PMU without guiding document.		
15	Have responsibilities for monitoring activities been made clear?	Yes	The Project has developed a monitoring and reporting process throughout its implementation period. Seven (7) types of monitoring reports were identified with unambiguous procedures and frequency.		
16	Has a budget been allocated for monitoring project progress?	Yes	Expenses for project review and PSC supervision is budgeted for in the implementation plan.		
17	Is the workplan clear, adequate and realistic?	Yes	Logical sequences and necessary durations to develop and nurture the capacity on the ground are considered in the workplan at design stage. (The timeframe is now distorted due to the rearrangement of workplan caused by COVID-19.)		
F	Governance and Supervision Arrangements	YES/NO	Comments/Implications for the review design	Section Rating:	

18	Is the project governance and supervision model comprehensive, clear and appropriate? (<i>Steering Committee, partner consultations etc.</i>)	Yes	A dedicated Project Management Unit (PMU) are established with Programme Management Officer, Programme Assistant, and Administrative Assistant. The PMU is technically backed up with a Technical Advisory Group which is a pool of individual experts who will contribute technical input for quality assurance. A Project Steering Committee (PSC) is formed to provide strategic direction to the Project towards expected Project Outcome. PSC members include Minamata Secretariat, UNEP Chemicals and Health Branch and MOE Japan, and chaired by UNEP ROAP. PSC meets at least bi-annually and reviews project progress and confirms that the project is delivering expected results. With this arrangement, the PMU receives appropriate advice both strategically and technically.	6: Highly satisfactory
19	Are roles and responsibilities within UNEP clearly defined?	Yes	The role of UNEP ROAP is defined as the overall fund management entity, it establishes the PMU with necessary personnel, and manages funds contributed by the donor.	
G	Partnerships	YES/NO	Comments/Implications for the review design	Section Rating:
20	Have the capacities of partners been adequately assessed?	Yes	An inception workshop was held in September 2019 and priority needs were identifies prior to the development of the implementation plan. The identified priority areas by the participants were incorporated in the workplan.	6: Highly satisfactory
21	Are the roles and responsibilities of external partners properly specified and appropriate to their capacities?	Yes	Local partners in and around Minamata area is particularly important external partners as the resource providers. The assessment was conducted, and competent institutions are identified and addressed. Globally, the Minamata Secretariat and UNEP Global Mercury Partnership (Chemicals and Health Branch) are identified in the implementation plan.	
H	Learning, Communication and Outreach	YES/NO	Comments/Implications for the review design	Section Rating:
22	Does the project have a clear and adequate knowledge management approach?	Yes	Information and communications are the important part to demonstrate the visibility of the Project. As the Project focuses on the acquisition of scientific evidence that helps policy makers to develop and monitor its own	4: Moderately satisfactory

			mercury management policies. Primary data collection is encouraged to the participating countries to fill the information gaps.	
23	Has the project identified appropriate methods for communication with key stakeholders, including gendered/minority groups, during the project life?	Yes	Existing networks especially networks of monitoring laboratories are identified as the means of communications.	
24	Are plans in place for dissemination of results and lesson sharing at the end of the project?	Yes	Annual stakeholders' meeting is included in the workplan. For the Project visibility, Minamata COPs and other key global and regional conferences and events were expected as the platforms to disseminate the results beyond project partner countries. (This strategy must be revised due to COVID-19 pandemic).	
I	Financial Planning / Budgeting	YES/NO	Comments/Implications for the review design	Section Rating:
25	Are the budgets / financial planning adequate at design stage?	Yes	A full budget table at sub-activity level was attached to the implementation plan.	5: Satisfactory
26	Is the resource mobilization strategy reasonable/realistic?	Yes	The Project was initiated with the pledge letter from Ministry of the Environment, Japan to UNEP with the initial contribution of USD1,000,000 on 30 January 2019. At the time of approval of the implementation plan, the second contribution pledge (USD1,000,000) were made. The remaining fund was soon pledged in March 2021.	
J	Efficiency	YES/NO	Comments/Implications for the review design	Section Rating:
27	Has the project been appropriately designed/adapted in relation to the duration and/or levels of secured funding?	Yes	The scale of funding and duration of the project is well balanced in original concept, but the impact of COVID-19 was underestimated.	4: Moderately satisfactory
28	Does the project design make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?	Yes	The project maximizes the existing structures and aiming at establishing partnership and integrating the results into their mandates/programmes. For example, the project falls under the ongoing initiative of the Government of Japan, i.e., MOYAI Initiative, that supports the implementation of the Minamata Convention.	
29	Does the project document refer to any value for money strategies (i.e., increasing economy, efficiency and/or cost-effectiveness)?	No	No monetary strategy is mentioned in the implementation plan.	
30	Has the project been extended beyond its original end date?	No	Project is still within the original implementation period.	

K	Risk identification and Social Safeguards	YES/NO	Comments/Implications for the review design	Section Rating:
31	Are risks appropriately identified in both the TOC/logic framework and the risk table?	Yes	The assumptions in TOC and risk table in the implementation plan are interrelated.	4: Moderately satisfactory
32	Are potentially negative environmental, economic and social impacts of the project identified and is the mitigation strategy adequate?	No	The risk matrix identifies most of the risks as 'less likely' except the risk of COVID-19, which was assumed to be the moderate risk when the initial risk assessment was conducted at project design stage. (It would have been underestimation given the slow recovery of the Project activities.)	
33	Does the project have adequate mechanisms to reduce its negative environmental footprint?	Yes	The use of online technologies is considered to cope with COVID-19 travel restriction. It unintentionally reduces the travel carbon footprint.	
L	Sustainability / Replication and Catalytic Effects	YES/NO	Comments/Implications for the review design	Section Rating:
34	Did the design address any/all of the following: socio-political, financial, institutional and environmental sustainability issues?	Yes	Networking of existing institutions is particularly addressed at design stage. It will ensure the continuity of the project deliverable if properly implemented in line with the network's priorities and objectives.	6: Highly likely
35	Was there a credible sustainability strategy and/or appropriate exit strategy at design stage?	Yes	Developing a long-term coordination structure with local institutions (in Minamata area) is embedded in the workplan, which will be effective beyond the project implementation period.	
36	Does the project design present strategies to promote/support scaling up, replication and/or catalytic action?	Yes	The workplan includes the development of a 'start-up assistance menu' for late comers to the network, which will provide the opportunity to expand even after the project duration.	
M	Identified Project Design Weaknesses/Gaps	YES/NO	Comments/Implications for the review design	
37	Were recommendations made by the PRC adopted in the final project design? If no, what were the critical issues raised by PRC that were not addressed.	NA	This is a sub-project in PIMS-02029 project and did not go through PRC process.	No rating applicable
38	Were there any critical issues not flagged by PRC?	NA	NA	
N	Gender Marker Score	SCORE	Comments/Implications for the review design	Section Rating:
39	What is the Gender Marker Score applied by UNEP during project approval? UNEP Gender Scoring: 0 = gender blind: Gender relevance is evident but not at all reflected in the project document. 1 = gender partially mainstreamed: Gender is reflected in the context, implementation, logframe, or the budget.	NA	The Project does not specifically address to human rights and gender aspects. There are some attempts to include gender issues such as gender disaggregated data collection for an Output indicator. Yet, there is very little explicit analysis and introduction of gender issues in relation to the Project scope.	No rating applicable

<p>2a = gender well mainstreamed throughout: Gender is reflected in the context, implementation, logframe, and the budget. 2b = targeted action on gender: (to advance gender equity): the principal purpose of the project is to advance gender equality. n/a = gender is not considered applicable: A gender analysis reveals that the project does not have direct interactions with, and/or impacts on, people. Therefore, gender is considered not applicable.</p>			
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Calculation table for overall project design quality score

	SECTION	RATING (1-6)	WEIGHTING	TOTAL (Rating x Weighting)
A	Operating Context	3	0.4	1.2
B	Project Preparation	3	1.2	3.6
C	Strategic Relevance	6	0.8	4.8
D	Intended Results and Causality	4	1.6	6.4
E	Logical Framework and Monitoring	5	0.8	4.0
F	Governance and Supervision Arrangements	6	0.4	2.4
G	Partnerships	6	0.8	4.8
H	Learning, Communication and Outreach	4	0.4	1.6
I	Financial Planning / Budgeting	5	0.4	2.0
J	Efficiency	4	0.8	3.2
K	Risk identification and Social Safeguards	4	0.8	3.2
L	Sustainability / Replication and Catalytic Effects	6	1.2	7.2
M	Identified Project Design Weaknesses/Gaps	-	0.4	-
			TOTAL SCORE¹³:	4.44: Satisfactory

194. Total score of the project design quality assessment is 4.44, which falls within 'Satisfactory' category in lower end. The information in this assessment will be used to deepen the analytical thinking during MTR. Where substantive and/or significant weaknesses are apparent at the project design stage, these areas will be further reviewed for improving the overall effectiveness of the Project.

¹³ Highly satisfactory: >5.16, Satisfactory: =<5.16 >4.33, Moderately satisfactory: =<4.33 >=3.5, Moderately unsatisfactory: <3.5 >=2.66, Unsatisfactory: <2.66 >=1.83, Highly unsatisfactory: <1.83

6.5 List of documents and individuals consulted during the main review phase

Project document: 522.3. Generating and sharing knowledge for influencing decision-making on sound management of chemicals and waste.

Implementation plan for the period from July 2019 to June 2024, Project for promoting the Minamata Convention on Mercury by making the most of Japan's knowledge and experiences.

Annual progress report for Project for promoting the Minamata Convention on Mercury by making the most of Japan's knowledge and experiences (Reporting period: July 2019 – June 2020).

Annual progress report for Project for promoting the Minamata Convention on Mercury by making the most of Japan's knowledge and experiences (Reporting period: July 2020 – June 2021).

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6.6 List of Individuals interviewed

Mr. Eisaku Toda, Secretariat of the Minamata Convention

Ms. Itsuki Kuroda, Ministry of the Environment Japan

Dr. Minoru Koga, and Dr. Koichi Haraguchi, Technical Advisory of the Project

Ms. Stéphanie Laruelle, UNEP Global Mercury Partnership

Mr. David Schemeltz, Dr. David Gay, Dr. Sheu Guey-Rong, Asia Pacific Mercury Monitoring Network (APMMN)

6.7 Guiding questions

Stakeholder type	Criteria	Guiding questions and sub questions
Duty bearer: Secretariat of the Minamata Convention	<i>A1. Alignment to UNEP's MTS, POW and strategic priorities</i>	Is the Project aligned with the objective of the Minamata Convention and other relevant Multilateral Environmental Agreements (MEAs)?
	<i>F2. Monitoring of project implementation</i>	Did the Project Steering Committee (PSC) provide strategic direction to the Project?
	<i>H7. Communication and public awareness</i>	What is the visibility of the Project? Are messages visible to the stakeholders and decision makers? Does the Project have a visibility / communications strategy which works as intended?
Resource provider: Ministry of the Environment Japan	<i>A2. Alignment to Donor/Partner strategic priorities</i>	Is the Project aligned with the strategic priorities of the Government of Japan (as the Project donor)?
	<i>C1. Availability of outputs</i>	What can be done to make the project more effective? Have there been any unplanned effects (positive /negative)?
	<i>C2. Achievement of project outcomes</i>	What were the major factors influencing the achievement or non-achievement of the objectives?
	<i>D2. Completeness of project financial information</i>	Has the financial documentation been accurate and complete? Was the information available in timely manner?
Resource provider: Technical Advisory of the Project including NIMD and Minamata Academia	<i>E. Efficiency</i>	Were the coordination and cooperation between UNEP (PMU) and MOEJ (Donor) adequate?
	<i>C3. Likelihood of impact</i>	What difference did the intervention make? Are impacts or effects beginning to take place? To what extent has the Project intervention generated or expected to generate significant positive or negative, intended or unintended, higher-level effects? Describe any catalytic or replication actions that the Project carried out and if any, catalytic or replication effect both within and outside the Project?
	<i>G3. Institutional sustainability</i>	Are any positive results likely to be sustained? In what circumstances?
Resource Provider: UNEP Global Mercury Partnership	<i>F2. Monitoring of project implementation</i>	Did the Project Steering Committee (PSC) provide strategic direction to the Project?
	<i>G1. Socio-political sustainability</i>	Is there sufficient public/stakeholder awareness in support of the Project's long-term objectives? Are there any social or political risks that may jeopardize sustainability of the Project outcomes?
	<i>G3. Institutional sustainability</i>	Are there examples of innovation from the Project in design, in addressing issues, or engaging countries and partners?
	<i>H7. Communication and public awareness</i>	What is the visibility of the Project? Are messages visible to the stakeholders and decision makers? Does the Project have a visibility / communications strategy which works as intended?
Resource provider: Asia Pacific Mercury Monitoring Network (APMMN)	<i>E. Efficiency</i>	Were the coordination and synergies with other programmes and initiatives with similar objectives, i.e., Japan Mercury Project, smooth and consistent?
Duty bearer: National Focal	<i>3. Relevance to regional, sub-</i>	Is the Project aligned with national priorities and strategies of each of the participating countries?

Stakeholder type	Criteria	Guiding questions and sub questions
Points of the Minamata Convention	<i>regional and national environmental priorities</i>	To which extent are the Project priorities still valid in today's context for all the beneficiary countries?
Beneficiary: Ministry/agency responsible for monitoring/management of mercury	<i>A1. Availability of outputs</i>	What can be done to make the project more effective? Have there been any unplanned effects (positive /negative)?
	<i>H3. Stakeholders participation and cooperation</i>	Did the stakeholders take any measures to ensure the continuation of the benefits after the end of the assistance?
	<i>H6. Country ownership and drivenness</i>	What was the level of ownership in each country?
	<i>H7. Communication and public awareness</i>	What is the visibility of the Project? Are messages visible to the stakeholders and decision makers? Does the Project have a visibility / communications strategy which works as intended?
Beneficiary: Public laboratories and laboratories in universities that undertake mercury analysis	<i>C1. Availability of outputs</i>	What can be done to make the project more effective? Have there been any unplanned effects (positive /negative)?
	<i>G1. Socio-political sustainability</i>	Is there sufficient public/stakeholder awareness in support of the Project's long-term objectives? Are there any social or political risks that may jeopardize sustainability of the Project outcomes?

6.8 Questionnaire surveys

195. Three (3) stakeholder groups were surveyed by the questionnaire surveys, namely focal points of the Minamata Convention, participants in the training programmes, and participating laboratories in proficiency testing. The number of stakeholders invited and responded the questionnaires are summarised in the Table 13.

Table 13 Summary of questionnaire surveys

Stakeholder	Invited	Responded	Response rate
Focal points of the Minamata Convention	21	6	29%
Participants in the training programmes	352	115	33%
Participating laboratories in proficiency testing	32	21	66%

Focal points of the Minamata Convention

<Information on policies and legislation> (all mandatory)

Q1: What is your ratification status of the Minamata Convention on Mercury? (single choice)

A Party, Preparing to become a Party as soonest, No plan to become a Party in near future.

Q2: Who is the national focal point to the Minamata Convention (in compliance with Article 17)? (single choice)

Myself, Another person in my Division, Another person outside of my Division, No national focal point is designated.

Q3: Has your country developed new policy(ies) and/or legislation on mercury management since 2019? (single choice)

Yes, developed and implemented, Yes, developed but not yet implemented, Under development, Not yet developed but the process will start soon, No plan to develop in near future.

Q4: In relation to Q3, for those who has developed, please indicate the name of the policy(ies) and/or legislation and year. For those who has not developed, please describe reasons and/or challenges in not doing so. (text box)

Q5: In relation to the Outcome indicator 3: 'Number of new, adequate policies and legislation in effect on mercury management', do you think the policy(ies) and/or legislation mentioned in Q3 meet the category? (single choice)

Yes, it meets this category, No, it is different from what the indicator 3 says, The indicator 3 is unclear to judge it, No policy(ies) or legislation mentioned in Q3.

Q6: Is there scientific data collection mechanism(s), e.g., environmental monitoring, market survey, etc., in your mercury management policies in your country? (Select all that apply to your country), (multiple choice)

Ambient mercury monitoring, Mercury inventory development, Mercury trade survey, Reporting obligation to mercury-emitting industries, Other mechanism(s), No at this moment.

Q7: In relation to Q6, for those who has scientific data collection mechanism(s), please indicate the name of the policies and/or legislation that determines it. For those who does not have the mechanism, please describe reasons and/or challenges in doing so. (text box)

Q8: In relation to the Outcome indicator 1: 'Number of countries that embed scientific data collection in their mercury management policies', do you think the scientific data collection mechanism(s) mentioned in Q6 meets the category? (single choice)

Yes, it meets this category, No, it is different from what the indicator 1 says, The indicator 1 is unclear to judge it, No scientific data collection mechanism(s) mentioned in Q6 .

<Information on data sharing> (all mandatory)

Q9: Is there any government institution in your country participating in the global or regional network and/or forum on mercury? (Select all that apply to your country), (multiple choice)

UNEP Global Mercury Partnership, Asia Pacific Mercury Monitoring Network, International Conference on Mercury as a Global Pollutant, Japan Mercury Project, Other network/forum, No at this moment, I do not know.

Q10: Does any government institution in your country submit information to the existing network and/or forum? (single choice)

Yes, put information regularly, Yes, but not on a regular basis, No, at this moment, Our national policy does not allow data submission, I do not know.

Q11: In relation to Q9-10, for those who has submitted information to existing network and/or forum, please indicate the type of the information submitted and to where. For those who has not submitted information, please describe reasons and/or challenges in not doing so. (text box)

Q12: Does any government institution in your country disseminate information via its own platform, e.g., website? (single choice)

Yes, my institution, Yes, but not my institution, No, at this moment, I do not know.

Q13: In relation to Q12, for those who has own information dissemination platform, please indicate the type of the information disseminated and from where. For those who does not disseminate or does not know, please describe reasons and/or challenges. (text box)

Q14: In relation to the Outcome indicator 2: 'Number of Countries that regularly put information on mercury monitoring available via the information portal', do you think the disseminated information mentioned in Q10 or Q12 meets the category? (single choice)

Yes, it meets this category, No, it is different from what the indicator 1 says, The indicator 2 is unclear to judge it, No disseminated information mentioned in Q10 or 12.

<Information on Japan Mercury Project> (all mandatory)

Q15: How well do you know about the Japan Mercury Project? Do you think the Project have enough visibility to the relevant stakeholders in your countries? (text box)

Q16: Could you provide your view on how far the Project is aligned with national priorities and/or strategies of your country? (single choice)

Project is well aligned with national proprieties and/or strategies, Project well considers the national priorities and/or strategies to address as appropriate, Project considers national priorities and/or strategies and somehow (but not fully) tries to align with them, Project understands national priorities and/or strategies somehow but the alignment is limited, Project does not consider national priorities and/or strategies at all.

Q17: The Project particularly focusing on scientific data collection by mercury flow analysis and monitoring. Could you provide your view on to which extent the Project priorities are valid in the context of your country? (single choice)

Project focus is valid and fully aligned with your national context, Project focus is valid and takes your national context into account, Project focus is valid and takes your national context

somehow (but not fully) into account , Some (but not all) project focus is valid for your national context, Project focus does not consider you national context at all

Q18: Could you advise if the Project can be more effective to address the needs of your country? (text box)

Q19: Have you identified any Project results that will be integrated into the mercury management measures in your country? (text box)

Q20: Could you rate the level of country drivenness of the Project? (single choice)

- Project is well owned and driven by your country, Project is well aligned with countries needs and priorities although it is mainly driven by UNEP, Project is driven by UNEP and provides options that your country can choose, Project is driven by UNEP who puts its own agenda to your country, Project does not provide any information at all

<Open question> (not mandatory)

Q21: If you have any comments and suggestions on the Project, please write down here. (text box)

Participants in the training programmes

<Visibility of the Project> (all mandatory)

Q1: Is the Project well known in your institution? (single choice)

- Objective (what the Project is aiming at): Well known in your entire institution, Most of the institutions are somehow informed on it, Colleagues around you know it but not at senior/decision maker level, It is only you who knows about it, No one in your institution knows about it.
- Activities (what the Project has organized): Well known in your entire institution, Most of the institutions are somehow informed on it, Colleagues around you know it but not at senior/decision maker level, It is only you who knows about it, No one in your institution knows about it.
- Achievement (what positive changes the Project has made): Well known in your entire institution, Most of the institutions are somehow informed on it, Colleagues around you know it but not at senior/decision maker level, It is only you who knows about it, No one in your institution knows about it.

<Basic knowledge: Please respond these questions based on your own personal knowledge.>

Q2: Do you think the training programme helped improving your understanding on the difference between elemental mercury and methylmercury in following areas? (Select all that apply to you). (multiple choice)

- Physical property,
- Biological property,
- Toxicity,
- Environmental behaviour,
- Source of generation.

Q3: Do you think the training programme helped your understanding why mercury is used in following products and processes? (single choice)

- Battery: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Lamp: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

- Vaccine: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Switch: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Dental restoration: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Thermometer: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Sphygmomanometer (manometer): Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Vacuum pump: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Tire balancer: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Photographic film and paper: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Propellant for satellites: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Chlor-alkali production: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Vinyl-chloride production: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q4: Do you think the programme helped your understanding on the anthropogenic mercury emissions results in the elevated mercury levels in fish? (single choice)

- Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q5: Do you think the programme helped your understanding on the mercury detection theory in cold vapour atomic absorption spectrometry? (single choice)

- Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q6: Do you think the programme helped your ability to properly design and undertake the mercury surveys for following sectors? (single choice)

- Mercury trade: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Emissions and releases: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Mercury waste particularly end-of-life products: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q7: Do you think the programme helped your ability to properly select and design the monitoring methodology for following surveys? (single choice)

- Mining site: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Waste dumping site: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.
- Vulnerable population: Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q8: Do you think the programme helped differentiating the environmental and health risks of cupellation, amalgamation and cyanidation processes for gold and silver extraction? (single choice)

- Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

Q9: Do you think the programme helped differentiating the blood, urine and hair testing for assessing human health risk due to mercury exposure? (single choice)

- Helped a lot, Helped to some extent, No difference, More confusing me, The item is not relevant to me.

<Use of information obtained from the training programme> (all mandatory)

Q10: Who in your institution do you think was the most benefitted from participating in this training programmes? (Select all that apply to you). (multiple choice)

- Myself, My co-workers, Specific section of the institution (please specify), No one in my institution.

Q11: What have you done yourself after obtaining the information in the training programmes? (Select all that apply to you). (multiple choice)

- Applied it to my daily work, Shared it to my colleagues and others, Asked UNEP for more/specific information, Other (please specify), None at this moment.

Participating laboratories in proficiency testing

<Information on Japan Mercury Project> (all mandatory)

Q1: Has your institution participated in 'Laboratory Proficiency Testing for Mercury' implemented by the Project in 2021-2022 period? (single choice)

- Yes, sample was analysed, and result was submitted, Yes, sample was received but result was not submitted, Yes, but sample was not delivered, No, we enrolled but then declined, No, We are not aware of this lab PT.

Q2: Could you rate your satisfaction on the UNEP service for laboratory PT programme in Q1 above? (single choice)

- Very satisfactory, beyond our expectation, Satisfactory, as expected, Fair, Not bad but could have been done better, Not satisfactory, We did not participate it.

Q3: What can be done to make the laboratory PT more effective? (text box)

Q4: Has your institution participated in the other Project activities? (Select all that apply to you) (multiple choice)

- Online Training Programme #3 on 7 – 9 December 2021, Virtual laboratory assessment, Minamata Online webinar on 30 June 2022, Other activities (please specify).

Q5: How well do you know about the Japan Mercury Project? Do you know the Project objective and target areas? (single choice)

- Sufficient knowledge about the objective and target areas, Limited knowledge about the objective and target areas, No knowledge about the objective and target areas.

Q6: Do you think the Project results will remain in your institution even after the Project period? (single choice)

- Yes, the Project results will become long-term asset to our institution, Maybe, the Project results benefit our institution but may not sustain without continuous support, No, it will disappear after the Project period, We are not aware of any Project results to our institution, I have no idea.

Q7: Do you expect any external social and/or political factors that may risk the sustainability of the Project results? (text box)

<Gender analysis> (all mandatory)

Q8: How is the proportion of male and female staff in your institution? (single choice)

- Much more male than female, More or less the same, Much more female than male.

Q9: Are you differentiating the role of male and female staff in your institution in following roles? (single choice)

- Management: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Administrative work: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Policy development and implementation: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Education and lecture: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Sample/specimen collection and analysis: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Research planning and experiment: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Machine operation and maintenances: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Public relation and communications: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.
- Student/intern: This role is mainly taken by male staff, This role is equally taken by both female and male staff, This role is mainly taken by female staff, No such role exists in our institution.

Q10: Does your institution have any internal policies on gender balancing in place? (single choice)

- Gender policy is embedded into our workplace, Gender policy exists but not yet implemented, No such policy exists in our institution, I do not know.