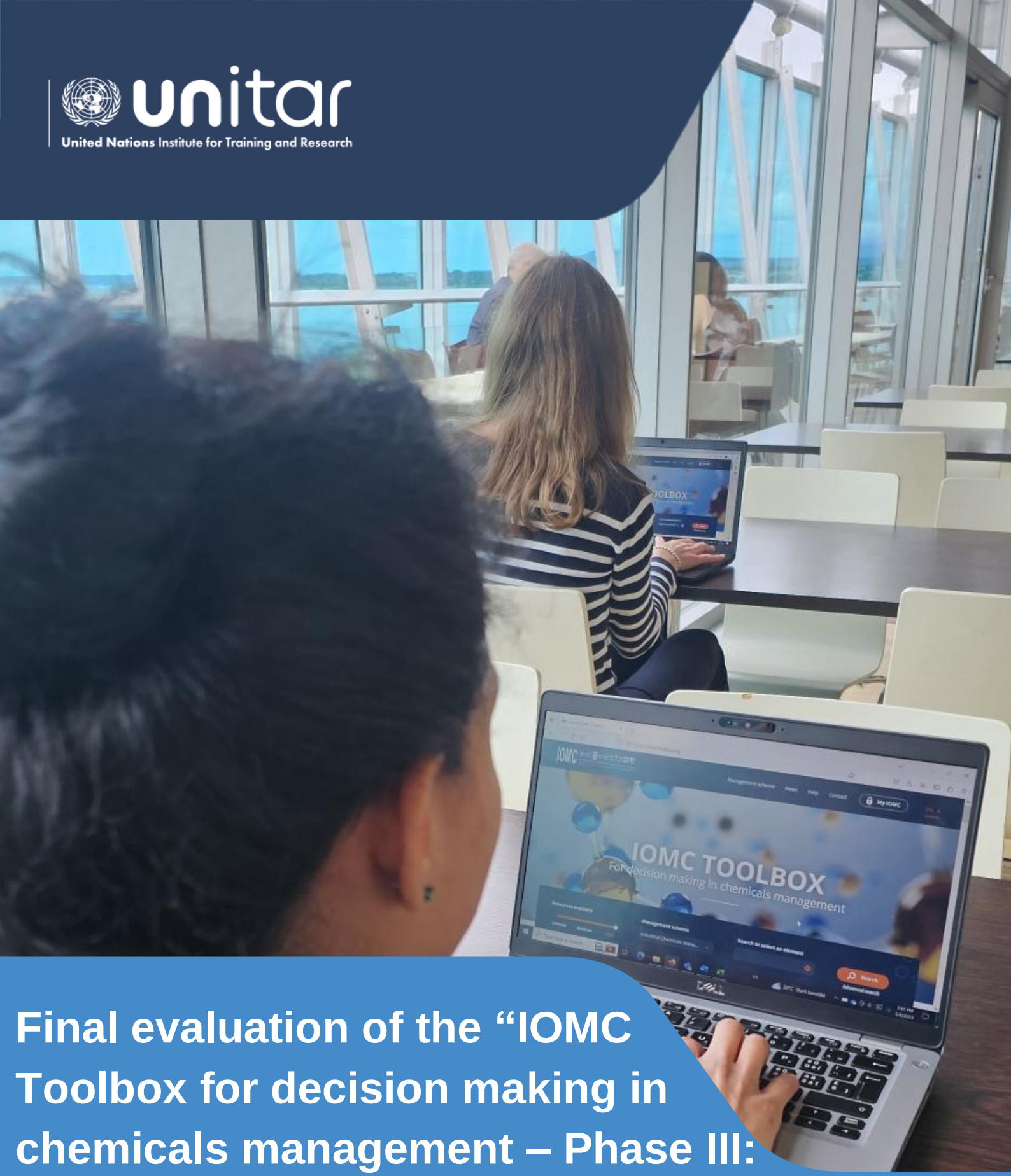
unitar
United Nations Institute for Training and Research



Final evaluation of the "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action" project

July 2023

Planning, Performance Monitoring and Evaluation Unit

IOMC
INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS
A cooperative agreement among FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank and OECD

Funded by the European Union

This report is a product of the Planning, Performance Monitoring and Evaluation Unit of UNITAR. The findings, conclusions and recommendations expressed therein do not necessarily reflect the opinion of the partner agencies and countries of the IOMC Toolbox for Decision Making in Chemicals Management Participating Organisations or the European Union. The evaluation was conducted by Dr. Boru Douthwaite, Director and Principal Consultant at Selkie Consulting Limited, Westport, Ireland and supported by Ms. Katinka Koke, Roxana Gómez-Valle and Jelinke Wijnen, Planning, Performance Monitoring and Evaluation Unit.

List of Tables

List of Figures

Foreword

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) Toolbox for Decision Making in Chemicals Management Project was created to set up an online 'one-stop-shop' Toolbox where national staff responsible for the sound management of chemicals could quickly and easily find the resources they needed.

This independent final evaluation of the project's third phase assessed performance against planned results in the project's results framework. The evaluation covered the OECD DAC criteria of relevance, coherence, effectiveness, efficiency, likelihood of impact and likelihood of sustainability. Overall, the evaluation found the project to continue to be relevant to global processes and institutions and is coherent with policies, programmes and projects at different scales. In terms of effectiveness, the project achieved and surpassed six of its output targets, and came close to achieving the seventh. It was timely and cost-effective insofar as largely achieving its targets, despite a number of setbacks including the COVID-19 pandemic and problems with subcontracting work for the development of the Toolbox site. The expected impact and sustainability of the project were assessed as moderate as the project needs to embed itself more deeply in national chemical management processes.

The evaluation issued a set of ten recommendations of which six were accepted, three were partially accepted and one was rejected.

The evaluation was managed by the UNITAR Planning, Performance Monitoring and Evaluation (PPME) Unit and was undertaken by Dr. Boru Douthwaite, consultant and independent evaluator, with support from Ms. Katinka Koke, Ms. Roxana Gómez-Valle, and Ms. Jelinke Wijnen, PPME. The PPME Unit further provided guidance, oversight and quality assurance, as well as logistical support for interviews, survey and after-action review exercises. The Project Management Group's response to the evaluation and its conclusions and recommendations are outlined in the Management Response.

The PPME Unit is grateful to the evaluator, WHO, the UNITAR Chemicals and Waste Management Unit (CWM), and all other organizations from the Project Management Group (PMG), and the other stakeholders for providing important input into this evaluation.

Brook Boyer

Director, Division for Strategic Planning and Performance
Manager, Planning, Performance Monitoring and Evaluation Unit

Contents

Executive Summary

The IOMC Toolbox for decision making in chemicals management – Phase III: From design to action project began in December 2017 and finished in October 2022 after three COVID-19-related no-cost extensions. Two objectives from the earlier two Phases guided Phase III:

- To support the implementation of SAICM[1] by enhancing the identification and implementation of guidance materials for chemicals management by developing countries and countries in transition using resources developed by IOMC partner organisations; by,
- To continue to improve the functionalities and broadening the scope and application of the Toolbox.

Since Phase I began in September 2012, the IOMC Toolbox was envisaged to be a 'one-stop-shop' where its target groups can find guidance materials developed by IOMC partner organisations. The European Union (European Comission – EC) funded all three phases, and is funding an ongoing fourth phase.

The purpose of this final evaluation (FE) is to assess the achievement of the project's planned Phase III results with respect to the project's relevance, coherence, effectiveness, efficiency, likelihood of impact and likelihood of sustainability. It also identifies lessons from project implementation so as to inform decision-making in Phase IV. The FE used a participatory and mixed methods approach, including carrying out an after-action-review with participating organisations' (POs) focal persons, in depth interviews, construction of case studies, an on-line survey, desk review of project documents and using an artificial intelligence chatbot (ChatGPT) as in input into the answers to some of the more general evaluation questions. The evaluation confronted four main limitations:

- It was not possible to carry out the in-depth case studies relating to significant project outcomes at national or regional level because the FE could not find any.
- It proved very difficult to obtain information from POs, in particular the numbers and contact details of participants in workshops and webinars since January 2020. Also, several key staff, whose knowledge of the project was unsurpassed, had recently left their posts and were unavailable for interview.
- The timing of the evaluation was too late to inform the development of the Phase IV proposal. Instead, the evaluation makes recommendations for Phase IV, for consideration by its PMG.
- The final narrative and financial report of Phase III were unavailable at the time of the evaluation and could hence not be consulted.

KEY EVALUATION FINDINGS AND CONCLUSIONS

Relevance

The FE finds that **the project is broadly relevant to global processes and institutions**, including to five SDGs, to SAICM and IOMC's support to SAICM, to several Multilateral Environment Agreements (MEAs), and to the donor's own objectives relating to sustainable chemical management. A survey administered to Toolbox users found that it is more relevant to

[1] Strategic Approach to International Chemicals Management.

government and academia than the private sector.

The project can do better with respect to gender equality, women's empowerment and social inclusion. The Mid-Term Evaluation (MTE) of Phase III found the project to be gender blind and made a number of recommendations to improve the rating, only one of which was implemented. Nevertheless, **the Toolbox contains at least 16 tools that highlight the importance of promoting gender equality**, addressing social and gender inequalities, and addressing gender-related implications in policies and practices related to chemical and waste management.

The project's Theory of Change (ToC) developed by the MTE remains valid for Phase IV. The articulation and analysis of the project's ToC helped in reaching the finding that a big part of the project's activities – the holding of workshops and webinars – are too short and piecemeal to make visible contribution to better chemical management at the national scale.

Coherence

The project is coherent with policies, programmes and projects at different scales, but greater coherence is possible by: i) better linking to other reputable and specific sources of information on chemical management, in particular the SAICM Knowledge website, which could host the Toolbox portal; and ii) provide incentives and acknowledge and overcome the hurdles to POs working together on the project. OECD country accession provides an impetus for countries to improve their chemical management.

Effectiveness

The project achieved and surpassed six of its output targets, and came close to achieving the seventh. The project exceeded in particular the target number of visitors to the Toolbox portal per month. However, the baseline was set too low for this achievement to signify much.

The project should strengthen its capacity development component, building on good practices in Phase III. Good capacity development practice was in evidence in Phase III, for example, UNIDO's training of trainers' initiative. The project should have done more to improve its training design and follow up after workshops to reinforce learning and induce changes. A capacity development strategy that includes the Kirkpatrick framework for evaluating training and individual, organisational, and enabling environment dimensions of capacity development should be developed for Phase IV.

Most MTE recommendations were addressed at least to some extent. The best-addressed recommendations include successfully requesting a project extension and developing a plan to sustain the Toolbox after the project finishes. The project could have done better address the recommendation to develop a strategy to address women's empowerment as an entry point to the Toolbox, see above.

Efficiency

The project was timely and cost-effective insofar as largely achieving its targets, despite a number of setbacks including the COVID-19 pandemic and problems with subcontracting work for the development of the Toolbox site to a private sector company. Nevertheless, the rather low expected number of visits to the Toolbox portal – the project's main output – was set to be in the low hundreds rather than thousands of visits per month – which might affect levels of future funding. Phase IV of the project could usefully

explore expanding the relevance of the Toolbox and making it a site to which users return. The fact that the EC has funded the project from the start of Phase I and will continue into a fourth Phase is testimony to the importance the EC places on the work.

Likelihood of impact

The expected impact of the project is moderate. To have a better likelihood of impact, **the project needs to embed itself more deeply in national chemical management processes** by undertaking to contribute to carefully selected ones, such as contributing to build a cross-sectoral and integrated approach to ensure the sound management of chemicals. This finding is linked to the ToC finding above.

Likelihood of sustainability

The likelihood of sustainability of the project is moderate. The Toolbox will always require funding to keep it up to date and relevant to evolving needs. **The project has developed a plan to sustain the Toolbox after external funding finishes**, which relies on funding from IOMC members, which will not necessarily be forthcoming.

RECOMMENDATIONS

The following recommendations are proposed for consideration by the PMG of Phase IV of the Toolbox project.

On gender:

1. Develop and use an explicit GEEW strategy for the project that builds upon the work of Women and Gender @ SAICM. This should include developing a GEEW entry point for the Toolbox.

On the theory of change and targets:

2. Reflect on the ongoing validity of the Phase III project theory of change at the Phase IV MTE, by filling out a third column added to Table 4 in the main body of this report.
3. Review and adjust the baseline and percentage increase per year for targets in the project logical framework, to ensure they are set at a realistic level.

On capacity development:

4. Develop and implement a capacity development strategy that includes the Kirkpatrick framework and individual, organisational, and enabling environment dimensions of capacity development, as well as guidelines for when to hold in-person meetings and when cheaper virtual meetings will suffice. Build national networks of Toolbox trainers of trainers taking advantage of UNITAR's experience with capacity development and UNIDO's experience with ToT.
5. Informed by this strategy, Phase IV will be able to better follow up on how Toolbox users and workshop and webinar participants are using project outputs. Success cases should be developed for communication purposes. The success cases should show how the Toolbox has contributed to specific outcome trajectories relating to better chemical management at country level.

On the administrative and financial collaboration:

6. Allow for staff time and budget to deal with the administrative and bureaucratic impediments identified in Phase III that happen when running a multi-partner project, and which cannot be changed at project level.

On linkages:

7. Phase IV of the project should take the opportunity to set a good example of POs working together to establish inter- and intra-sectoral partnerships, networks and collaborative mechanisms to share information, experiences, and lessons learned. This could include organizing

capacity building workshops jointly, i.e., in a ToT format, where other organisations are invited as co-organisers.

On likelihood of impact

8. Embed the project more deeply in national chemical management processes by contributing to carefully selected ones, such as building a cross-sectoral and integrated approach to ensure the sound management of chemicals. In this context, identify and support a network of 'Toolbox' champions to increase the number of project beneficiaries at national level.

On likelihood of sustainability

9. Phase IV of the project should explore building complementarity between the Toolbox and SAICM's Knowledge portal to sustain the Toolbox after external funding finishes.

10. Phase IV should endeavour to make the Toolbox relevant to a broader audience, and find ways of making it useful on an on-going basis so users return to the site. Phase IV should set itself the target of increasing visits to the web site by an order of magnitude to make it more likely to sustain funding to keep it going.

LESSONS LEARNED

Most of the lessons learned led to the recommendations above. Three main lessons were identified during the evaluation process:

1. It is important for training of trainers to include at least one module on a trainer's skillset and training methods such as the ADDIE model and making trainer selection in a way that they are likely to train afterwards.

2. It is important to include finance officers in negotiations for new proposals to avoid accounting problems and training on budgeting for projects with multiple partners is key for the successful financial management of a project.

3. Budgetary incentives may be needed to induce partner organisations to work together.

Acronyms and Abbreviations

AAR	After-Action Review
ADDIE	Analyse, Design, Develop, Implement and Evaluate
EC	European Commission
ET	Evaluation Team
EU	European Union
FE	Final Evaluation
FAO	Food and Agriculture Organisation of the United Nations
GEEW	Gender Equality and the Empowerment of Women
GEF	Global Environmental Faclity
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IFCS	Intergovernmental Forum on Chemical Safety
ILO	International Labour Oganization
IOCC	Inter-Organisation Coordinating Committee
IOMC	Inter-Organizaion Programme for the Sound Management of Chemicals
MEAs	Multilateral Environment Agreements
MTE	Mid-term Evaluation
NCE	No-cost extension
NCPC	National Cleaner Production Centre
OECD	Organisation for Economic Co-operation and Development
PAGoDA	Pillar Assessed Grant or Delegation Agreements
PO	Participating Organisation
PMG	Project Management Group
PPME	Planning, Performance Monitoring, and Evaluation Unit (UNITAR)
PRTR	Pollutant Release and Transfer Register
SDGs	Sustainable Development Goals
SAICM	Strategic Approach to International Chemicals Management
TOC	Theory of Chnage
TOR	Terms of Reference
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organisation
UNITAR	United Nations Institute for Training and Research
WHO	World Health Organisation

Introduction

1. This report documents the final evaluation (FE) of the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC) Toolbox for Decision Making in Chemicals Management – Phase III Project. The report starts with a description of the IOMC and the Toolbox project, including the project objectives development context in which it is embedded. The FE's scope and methodology are then described, including its limitations. Evaluation findings are presented against key evaluation questions and criteria. Building on these findings, the evaluation's conclusions are presented, along with recommendations for the Project Management Group (PMG) and the IOMC's Participating Organisations (POs) and lessons learned, at the start of Phase IV of the project.

Project description, objectives and development context

2. The IOMC brings together nine[2] UN and multilateral organisations actively involved in chemical safety (Box 1). The IOMC was established in 1995, following recommendations made by the 1992 UN Conference on Environment and Development. The objective of the IOMC is to strengthen international cooperation in the field of chemicals and to increase the effectiveness of the organisations' international chemicals programmes. The IOMC promotes coordination of policies and activities, pursued jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

BOX 1. IOMC Participating Organisations

- Food and Agriculture Organisation of the United Nations (FAO)
- International Labour Organisation (ILO)
- United Nations Development Programme (UNDP)
- United Nations Environment Programme (UNEP)
- United Nations Industrial Development Organisation (UNIDO)
- United Nations Institute for Training and Research (UNITAR)
- World Health Organisation (WHO)
- World Bank
- Organisation for Economic Co-operation and Development (OECD)

3. The IOMC organisations coordinate activities on chemicals management through regular meetings held twice a year, as well as informally throughout the year. WHO is the administering organisation for the IOMC, providing secretariat services. The IOMC fosters information exchange and joint planning with the aim of ensuring effective implementation without duplication. It helps identify gaps or overlaps in international activities and makes recommendations on common policies. IOMC's value proposition

[2] A tenth organisation (the Secretariat of the Basel, Rotterdam and Stockholm conventions) was offered membership in April 2023.

is that the governments that fund the IOMC members will benefit from better coordination of their work. The IOMC also organizes regular inter-agency meetings involving additional organisations to foster broader collaboration in the sound management of chemicals.[3]

4. In 2006, the IOMC was a co-convenor, together with UNEP and the Intergovernmental Forum on Chemical Safety (IFCS), of the first International Conference on Chemical Safety (ICCM) held in Dubai, United Arab Emirates that finalized and endorsed the Strategic Approach to International Chemicals Management (SAICM). The Executive Heads of the nine IOMC agencies committed to jointly or separately implement the SAICM Global Programme of Action in a Joint Statement.[4]

5. The Toolbox project grew out of the observation, primarily on the part of OECD staff, that the nine IOMC members had developed hundreds of tools and guidance documents that are relevant to countries' attempts to implement SAICM, and that finding the right resource to address a specific issue could be difficult. Hence the idea of setting up a 'one-stop-shop' Toolbox was born, where national staff responsible for the sound management of chemicals could quickly and easily find the resources they needed. This evaluation is of the third phase of the IOMC Toolbox project (the Toolbox project). A proof-of-concept version of the IOMC Toolbox was launched at the 3rd ICCM in September 2012[5] based on three schemes:

   - A national management scheme for pesticides;
   - An occupational health and safety system;
   - A chemical accident prevention, preparedness and response system for major hazards.

6. The Toolbox was designed also as a problem identification and problem-solving tool to enable countries to identify the most appropriate and efficient actions to address specific national problems related to chemicals management. The European Commission (EC) agreed to fund the OECD to carry out the first phase of the Toolbox project.

7. Phase II of the Toolbox project was implemented between November 2013 and October 2017 to undertake in-depth pilot testing of the Toolbox with user groups and carried out promotion and Toolbox training for 4 years with EUR 2,000,000 grant from the EC. Funding was provided through a Contribution Agreement between the EC and WHO. Participating Organisations included FAO, ILO, UNEP, UNIDO, UNITAR, and OECD. While the World Bank and UNDP were not official partners in the project, they were regularly contacted to identify and put forward relevant tools to be included in the Toolbox. In addition, both organisations received bi-annual updates on the IOMC

[3] https://www.who.int/iomc/brochure/IOMCbrochure_june2018_en_new.pdf?ua=1
[4] https://www.who.int/iomc/IOMC_SAICM_Statement_FINAL_IOMC_website.pdf?ua=1
[5] https://www.who.int/iomc/toolbox_flyer.pdf

Toolbox project as part of the Inter-Organisation Coordinating Committee (IOCC) meetings.[6]

8. Four new management schemes were added during Phase II of the IOMC project:
   - Industrial chemicals management system;
   - Classification and labelling system (GHS - Globally Harmonized System of Classification and Labelling of Chemicals);
   - System to support health authorities which have a role in the public health management of chemicals;
   - Pollutant release and transfer registers (PRTRs).

9. Web-applications of five toolkits in support of chemicals management were prepared and linked to the Toolbox. Toolkits were conceptualized as resources suitable for broader audiences, i.e., beyond just policymakers, without the Toolbox's decision-making trees, more akin to standard, freely browsable web resources.[7] The Toolbox was promoted to over 3,000 policy makers worldwide, focusing on developing countries and countries with economies in transition.[8]

10. Phase II of the Toolbox project finished in October 2017 after a one-year no cost extension. The final phase II project evaluation[9] found that:

    The Toolbox concept was highly relevant to the chemicals management-related needs of policymakers working in transitional and developing economies. Moreover, the content that was developed and consolidated through the project was routinely assessed as high quality, with significant practical value for policymakers. Importantly, this content has demonstrably been applied: the evaluation found that Toolbox material has directly, explicitly informed national chemicals management legislation in at least three countries.

11. However, the evaluation also found that:

    Despite the project's solid concept and the highly-regarded material, the project's effectiveness and impact are being seriously undermined by the Toolbox's unpopular platform and interface. For the great majority of users, the Toolbox has categorically not been an effective mechanism for accessing and managing information.

12. The EC concluded that: "Feedback during these phases [phase I and II] indicated that countries would now like the [Toolbox] project to move towards implementation of the tools thereby strengthening the sound management of chemicals in developing countries and countries with economies in transition."[10]

---

[6] Final evaluation of the IOMC Toolbox for decision making in chemicals management – Phase II.
[7] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2
[8] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2
[9] Final evaluation of the IOMC Toolbox for decision making in chemicals management – Phase II.
[10] https://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/C-2016-8242-F1-EN-ANNEX-8-PART-1.PDF, p. 10

13. Phase III of the Toolbox project was signed into existence in December 2017 with another budget of EUR 2,000,000 for 3 years. The two objectives from the earlier phases continue to frame the project:

    - To support implementation of SAICM; and,
    - To enhance the identification and implementation of guidance materials for chemicals management by developing countries and countries in transition using resources developed by IOMC partner organisations.[11]

14. The project's target groups comprise: i) technical professionals with a role in the assessment and management of chemicals; and ii) policy and decision makers in environmental, health and safety domains from developing countries and countries with economies in transition.[12]

15. The project's expected results are:

    - Toolbox further developed and functionality improved. A large part of this has been upgrading the Toolbox's online platform as strongly recommended by the Phase II final evaluation;
    - Toolbox promoted to policy and decision-makers at key international chemical safety conferences and events organized by IOMC partner organisations; and
    - Technical professionals are trained on the key tools in webinars and workshops in 15 countries and five (sub) regional workshops that transfer knowledge and lessons learned from the country workshops.

16. WHO was responsible for operational coordination and management, meaning that it acted as the main liaison between the EC (the Contracting Authority for the Action) and the other participating organisations and coordinates decisions relating to changes in budget or work plan. WHO was responsible for overall coordination and project reporting.

17. Funding for Phase III was provided through two Pillar Assessed Grant or Delegation Agreements (PAGoDA), including an agreement between the EC and OECD and an agreement between the EC and WHO. Official project partners in the WHO agreement include FAO, ILO, UNEP, UNIDO, and UNITAR. Narrative reporting of the work under the two EC agreements is included in the joint progress reports while OECD makes separate financial reports to the EC.

18. A joint Project Management Group (PMG) was established for the two Delegation Agreements. Members are representatives of the Project Partner Organisations, i.e., WHO, FAO, ILO, UNEP, UNIDO and UNITAR (PAGoDA 2 agreement) and OECD (PAGoDA 1 agreement). The roles of the joint PMG are the oversight of the

[11] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2

[12] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2

implementation and coordination of work packages and activities under the two Delegation Agreements (PAGoDA 1 and 2) to agree on final outputs, to discuss any budgetary and administrative issues, and to review and agree on narrative reports, including those to be submitted to the EC under the two agreements. WHO convenes meetings of the joint PMG twice per year.

19. Technical (but not managerial) oversight is provided by the IOCC composed of representatives of the IOMC POs who have an oversight role concerning the technical aspects of implementation of the project, but not the project management aspects. The IOCC is informed of project progress at its regular bi-annual meetings through reports by the PMG.[13]

20. Phase IV of the Toolbox project was approved by the EC by the time that this FE took place. The phase will continue:

    "To regularly update the IOMC Toolbox by adding new and language versions of existing tools, and to upgrade and widen the applicability of the IOMC Toolbox by developing and adding new chemicals management schemes and toolkits. Furthermore, the project will provide the opportunity to develop new and updated guidance as requested by developing countries and countries with economies in translation in order to fill the guidance gap."[14]

Theory of Change

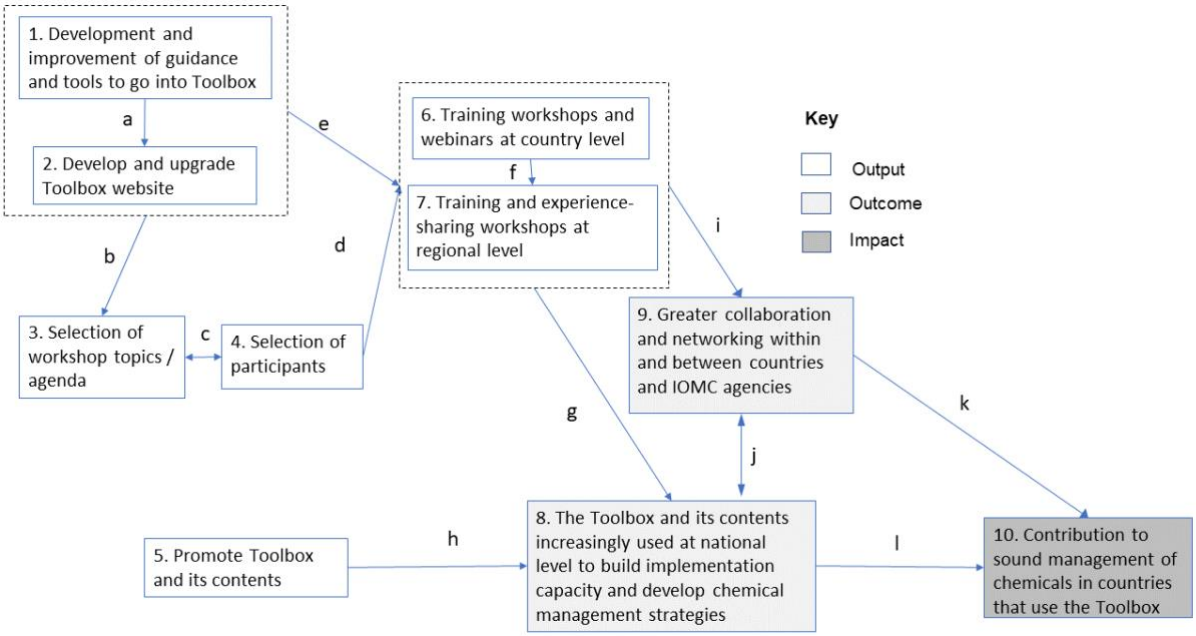
21. The mid-term evaluation (MTE) developed a 'reconstructed' theory of change (Figure 1) for the Toolbox project, based on the project logical framework and the intervention logic written in the project document. The MTE was required to do this as the project document did not provide one.[15] The MTE changed the expected project impact from "support implementation of SAICM, which was criticized in the Phase II final evaluation as an outcome, to "contribution to sound management of chemicals in countries that use the Toolbox," i.e., a contribution to SAICM's main objective.

22. As part of the FE, this theory of change was shared with PO representatives in an online after-action review held in November 2022. Participants were asked to reflect on the validity of the causal assumptions, i.e., the arrows and boxes, to help answer EQ1.5 of this evaluation: Are the causal links in the project's reconstructed theory of change valid? Does the theory of change require changes to better reflect the

[13] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2
[14] Action Document for IOMC Toolbox for decision making in chemicals management – Phase IV: Towards achieving the SDGs.
[15] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2

outcomes that are starting to emerge? The results of this reflection are presented in the section on the evaluation's findings.

Figure 1: Project ToC developed by the MTE at the end of 2019



Methodology and limitations

Purpose, scope and audience

23. According to the FE's terms of reference (Annex C. Terms of reference), the purpose of the evaluation is to assess the achievement of the project's planned results. The FE will assess the project's relevance, coherence, effectiveness, efficiency, likelihood of impact, and likelihood of sustainability, and identify lessons from project implementation with a view to contributing to learning and informed decision-making. In addition, the evaluation will also aim to include case studies that will provide in-depth analysis of the effectiveness of the project at the country and regional levels. Finally, the final evaluation will assess the implementation of recommendations from the mid-term evaluation and focus on progress since then.[16]

24. The FE will cover the period from the start of Phase III of the project, 01 January 2018 to 31 October 2022, with focus on progress made after the mid-term evaluation. Some findings also look at the initial design of Phase IV. The evaluation will cover both country and (sub) regional project outputs and progress towards the expected outcomes, as indicated in the project logical framework (Annex A. Case studies). Progress of actions will be assessed against the Indicative Action Plan (Annex B. Logical Framework).[17]

[16] Page 1 of the Evaluation ToR in Annex 3. Emphasis added
[17] Page 2 of the Evaluation ToR in Annex 3

25. The primary target audience for the evaluation is the PMG and the EC as the donor. The report is also likely to be of interest to staff in the IOMC participating organisations, and – considering the project's overall objective – institutions and individuals that are involved in the development and delivery of SAICM and safer chemical management practices in general.[18]

Methodological approach

26. The evaluation adheres to the UNITAR Evaluation Policy[19] and the United Nations norms and standards for evaluation, and the UNEG Ethical Guidelines.[20] It was undertaken in line with the United Nations principles of independence, impartiality, transparency, disclosure, ethical behaviour, partnership, competencies and capacities, credibility and utility, and adopted a consultative and transparent approach with the project's internal and external stakeholders throughout the evaluation process.

27. The evaluation approach is based on an evaluation matrix developed by the evaluator, reviewed by UNITAR's PPME, responsible for managing the evaluation on behalf of the PMG and presented to the PMG during an entry conference. As per the ToR, the matrix relates to all six OECD-DAC criteria. The questions and sub questions are shown in Table 1. The full matrix, showing the judgment criteria to be used in addressing the questions, the sources of information, analytical approaches and anticipated challenges, can be found in Annex G. Evaluation question matrix.

Table 1: Evaluation questions and sub questions

Relevance

EQ1	**Is the project reaching its intended individual and institutional users and are activities relevant to the beneficiaries' needs and priorities, and designed with quality?**
EQ1.1	To what extent is the project aligned with the Development community's efforts to help Member States implement the 2030 Agenda for Sustainable Development, and particularly SDG 12 and target 12.4. on the sound management of chemicals?
EQ1.2	To what extent is the project aligned with SAICM beyond 2020, major multilateral environmental and other international agreements as well as the EU's strategic objectives?
EQ1.3	How relevant are the objectives, content and the design of the Toolbox (and enhanced functionality), Toolkits and trainings (including workshops) to the identified and new capacity needs, priorities and the performance improvement of beneficiaries, including those arising from the COVID-19 pandemic, to resolve chemicals management issues?
EQ1.4.	How relevant is the project to supporting gender equality and women's empowerment and meeting the needs of other groups

[18] Adapted from the MTE evaluation report, page 9.
[19] https://unitar.org/sites/default/files/media/file/UNITAR%20Evaluation%20Policy.pdf
[20] http://www.unevaluation.org/document/detail/1914

	made vulnerable, including countries in special situations[21]? (GEEW)
EQ1.5	Are the causal links in the project's reconstructed theory of change valid? Does the theory of change require changes to better reflect the outcomes that are starting to emerge?
Coherence	
EQ2	**To what extent is the project coherent with relevant policies, complementing other programmes and projects and adhering to international norms and standards?**
EQ2.1	How well do the project components complement each other, e.g., toolkits and webinars content, scope and timing?
EQ2.2	How well does the project complement and foster synergies between IOMC partner and other capacity building programmes (e.g., other chemical-related portals and platforms) in the area of the sound management of chemicals funded by other donors?
EQ2.3	How well do the project training activities complement further national and international training?
Effectiveness	
EQ3	**How effective has the project been in delivering results and in strengthening the capacities of countries/sub-regions?**
EQ3.1	To what extent did the project achieve planned outputs and reached intended users in a timely manner?
EQ3.2	What outcomes did the project achieve, and how?
EQ3.3	Have the project's structure and partnerships been effective, including the performance of implementing partners?
EQ3.4	To what extent are a human rights-based approach and a gender mainstreaming and inclusiveness strategy incorporated in the design and implementation of the project's Toolbox and toolkits? To what extent is the project's gender strategy in line with Women and Gender @ SAICM group recommendations? (GEEW)
EQ3.5	Looking back, what lessons can be drawn to make future chemicals management guidance and training more effective?
EQ3.6	To what extent have midterm evaluation recommendations been implemented?
Efficiency	
EQ4	**To what extent has the project delivered its results in a cost-effective manner and optimized partnerships?**
EQ4.1	To what extent has the project been able to link to other initiatives and collaborate with other actors?
EQ4.2	To what extent has the project produced outputs in a timely and cost-efficient manner, including through partnership arrangements (e.g., in comparison with alternative approaches) or is likely to?
EQ4.3	To what extent has the project adjusted to the COVID-19 related context, particularly for the originally planned face-to-face training events, and how efficient have webinars and virtual meetings been?
Likelihood of impact and early indication of impact	
EQ5	**What are the potential cumulative and/or long-term effects expected from the project, including contribution towards the**

[21] Special situation countries refer to the UN definition of least developed countries, the landlocked developing countries and the small island developing States.

	intended impact, positive or negative impacts, or intended or unintended changes?
EQ5.1	To what extent has the project contributed to improvement of the sound management of chemicals in countries worldwide, especially in developing countries and countries with economies in transition?
EQ5.2	To what extent are Toolbox and the toolkits users sharing their experience with other stakeholders in their region and as such multiply impact beyond single users or countries?
Likelihood of sustainability and early indications of sustainability	
EQ6	**To what extent are the project's results likely to be sustained in the long term?**
EQ6.1	To what extent are the project's results likely to endure beyond the implementation of the activities in the mid- to long-term?
EQ6.2	What are the major factors which influence the achievement or non-achievement of sustainability of the project?
EQ6.3	What can we learn to inform the future design of similar programming?

28. The evaluation adopted a participatory approach to maximize the utilization of the report. This included carrying out an After-Action Review (AAR) at the start of the evaluation, and a concerted attempt to interview key informants in which the evaluator asked them to suggest improvements for Phase IV.

29. Guided by the evaluation matrix, several tools were applied to gather and analyse qualitative and quantitative information. The primary tools were:

- **AAR**: Two AAR online workshops were carried out at the start of the evaluation, attended by eight of the PO representatives. The review was framed by asking participants to scrutinize the project's theory of change developed during the MTE, and to suggest alterations to make it a better fit to how the project had actually worked. Afterwards, participants were asked to reflect on three questions relating to the project:
  - What went well?
  - What didn't go so well?
  - What should change for Phase IV?
- **Interviews**: 22 key informants were interviewed online. The interviews were semi-structured, with interview questions agreed among the evaluation team (ET) beforehand. All the interviews were recorded and transcripts made to avoid missing important information.
- **Case studies:** The evaluation's original intention, expressed in the document "Evaluation Design and Question Matrix for the Final Evaluation of Phase III of the IOMC Toolbox Project," was to carry out an outcome trajectory evaluation[22] of three significant policy-related outcomes to which the project had contributed. This was not possible because the evaluation was unable to find any significant policy-related outcomes to which the project had contributed, see Finding 26. Instead, the

[22] Douthwaite, B., Proietti, C., Polar, V., & Thiele, G. (2023). Outcome Trajectory Evaluation (OTE): An Approach to Tackle Research-for-Development's Long-Causal-Chain Problem. *American Journal of Evaluation*, *0*(0). https://doi.org/10.1177/10982140221122771

evaluation looked at three areas of interest to the evaluation: what had become of the MTE case studies on conducting workshops (under Finding 25); the history of the Toolbox portal (Case Study 1); and UNIDO's work to train trainers on the IOMC Toolbox.

- **Developing and testing the project's theory of change**: The ET sought feedback and modified a theory of change for the project developed for the MTE, as described above (Figure 1). The team compared progress made against the arrows in the ToC (i.e., the causal links) before and after the end of 2019 explicitly (Table 3) as a way of evaluating the project's progress towards its envisaged outcomes and impact. Based on PO representatives' feedback, the team recommended modifications to the theory of change to better describe how Phase IV of the project can be expected to work.
- **Online survey of workshop participants:** A survey was deployed to obtain data and information on the relevance, usefulness and use of knowledge and skills by participants from workshops organised as part of the project from end of 2019 to October 2022. The survey consisted of 28 open and closed-ended questions. It can be found in Annex D. Invitations were sent to 1,640 participants from 22 workshops for whom email contacts were available. The survey was deployed in English, French and Spanish, but answers in other languages were also accepted. The survey was open from 31 January 2023 to 21 February 2023 and three reminders were sent. 173 responses were received by the time the survey was closed, yielding a response rate of 11 per cent, in line with similarly low response rates to previous surveys of project beneficiaries. Seven interviews of individual respondents were also held to better understand the factors contributing to or preventing application of knowledge and skills. During the analysis data was disaggregated by gender.
- **Comparison with a similar survey carried out for the MTE:** The MTE survey consisted of 21 open and closed-ended questions, nearly all of which were repeated in the final evaluation survey to allow for comparison. Invitations were sent to 274 participants from 11 workshops. 42 responses were received by the time the survey was closed, yielding a response rate of 16 per cent.
- **Desk review of project documents:** The ET made substantial use of project documents, such as the Phase II end-of-project evaluation, project progress reports, PMG meeting minutes and workshop reports. The list of documents reviewed can be found in Annex F. F. List of **documents reviewed**. The team also used Google Search to find and validate online documents pertinent to the evaluation.
- **Artificial Intelligence Chatbot:** The evaluation put some of the broader evaluation questions to **ChatGPT**, particularly the relevance questions, as a way of interrogating the web as to what has been written about the project. The evaluator fact-checked, modified and added to the Chat GPT answers based on his own web searches and findings derived from primary data collection. The evaluator also used ChatGPT to help identify categories from open answers to the FE online survey (also triangulated by his own analysis), and to help summarize text.

Limitations

The FE operated under a number of limitations:

- As with the MTE, and other evaluations of this nature, findings are sometimes based on individual, subjective perceptions and opinions. To mitigate any subjective bias, findings have been triangulated where possible across sources, and across data collection tools (interviews, different case study countries, document review, surveys, etc.).
- There was no travel to countries to attend workshops[23] or meetings. However, this was less to do with budgetary concerns and more to do with the fact that most of the work on the IOMC Toolbox took place online so it made sense to evaluate it online as well.
- It proved impossible to carry out outcome trajectory evaluation as envisaged in the evaluation design because it was not possible to identify significant outcomes to which the project had contributed at national or policy level.
- It proved very difficult to obtain information from POs, in particular the numbers and contact details of participants in workshops and webinars since January 2020.
- Several key staff, whose knowledge of the project was unsurpassed, had recently left their posts and were unavailable for interviews.
- The response rate of the online survey was low (11 per cent, compared to 16 per cent for the MTE online survey), despite three staged reminders and translations into French and Spanish. Consequently, findings associated with the survey should be treated with caution.
- The timing of the evaluation was too late to inform the development of the Phase IV. However, this has allowed the FE to consider the entire Phase III. Recommendations for Phase IV are made, for consideration by its PMG.
- The final narrative and financial report of Phase III were unavailable at the time of the evaluation and could hence not be consulted.

Evaluation findings

30. This section presents the main findings of the evaluation questions in Box 2 covering the evaluation criteria. The judgment criteria and analysis to arrive at these findings are described in the evaluation matrix (Appendix G. Evaluation question matrix) and the methodology section above.

Relevance

EQ1: Is the project reaching its intended individual and institutional users and are activities relevant to the beneficiaries' needs and priorities, and designed with quality?

[23] The evaluator partially observed the "Support for the ratification of the Minamata Convention in Serbia" workshop on 13-14 October 2022, but full participation was not possible due to language issues. The evaluator observed the IOMC Toolbox promotional event in the framework of the OECD Chemicals and Biotechnology Committee for its 50th anniversary on 10 February 2022.

EQ1.1: To what extent is the project aligned with the development community's efforts to help Member States implement the 2030 Agenda for Sustainable Development, and particularly SDG 12 and target 12.4. on the sound management of chemicals?

Finding 1 on alignment of project purpose

The project's purpose is clearly aligned with at least five SDGs, in particular SDG 12 and target 12.4. The latter relates to the sound management of chemicals and waste, calling for international cooperation to implement and enforce environmentally sound management practices for chemicals and waste throughout their entire life cycle. The project contributed to this target by providing guidance and tools for governments and other stakeholders, through the IOMC Project Toolbox, to improve the management of chemicals and reduce the risks they pose to human health and the environment.

The project is the only platform that brings most of the IOMC POs to work together, and as such provides a unique opportunity to identify and understand the benefits of collaboration as well as the constraints to working together to improve chemicals management. SAICM emphasizes the need for international cooperation to address its goal.

31. The Sustainable Development Goals (SDGs) are at the center of a universal plan for all countries to end poverty, protect the planet and ensure prosperity for all. The plan is published in "Transforming our world: the 2030 Agenda for Sustainable Development"[24] which was agreed by Member States in 2015. The plan revolves around a set of 17 Goals which include 169 targets that set the global development agenda until 2030. The targets provide a focus for the international community's development efforts until 2030 and are the yardstick by which progress is being measured. They are intended to be tackled as a group rather than individually - the 17 Goals are interlinked.

32. The following SDGs are particularly relevant to the project's goal of supporting sound chemical management:

- SDG 3 - Good health and well-being: The safe use and handling of chemicals are critical for protecting human health. Exposure to hazardous chemicals can cause a wide range of health problems, from minor skin irritations to cancer and other chronic diseases.
- SDG 6 - Clean water and sanitation: Many chemicals can contaminate water sources, making them unsafe for human consumption. Proper management of chemicals is essential for ensuring access to clean and safe water.
- SDG 11 - Sustainable cities and communities: Chemicals can have a significant impact on urban environments, such as air pollution and waste management. Sustainable cities must manage chemicals properly to mitigate these risks.
- SDG 12 - Responsible consumption and production: Chemicals are used in many consumer products and production processes. Sustainable consumption and production require the safe and responsible management of chemicals throughout the product life cycle.

[24] https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981

- SDG 15 - Life on land: Chemicals can have significant impacts on terrestrial ecosystems, including soil, plants, and wildlife. The sound management of chemicals is essential for protecting these ecosystems and ensuring their long-term health.

33. SDG target 12.4 specifically focuses on the sound management of chemicals and waste, calling for international cooperation to implement and enforce environmentally sound management practices for chemicals and waste throughout their entire life cycle. The target states:

    "By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment."[25]

34. The project is aligned with SDG target 12.4 in terms of what it is trying to do, namely, to provide guidance and tools for governments and other stakeholders to improve the management of chemicals and reduce the risks they pose to human health and the environment.

35. The project is the only platform that brings most of the IOMC POs to work together, and as such provides a unique opportunity to identify and understand the benefits of collaboration as well as the constraints to working together to improve chemicals management. SAICM emphasizes the need for international cooperation to address its goal.[26]

EQ1.2 To what extent is the project aligned with SAICM beyond 2020, major multilateral environmental and other international agreements as well as the European Union's (EU) strategic objectives?

Finding 2: The IOMC-Toolbox project is closely aligned with SAICM

The IOMC Toolbox project is aligned with SAICM, but it had less influence than expected on SAICM's Quick Start Programme. SAICM Beyond 2020 identified five strategic objectives, and the IOMC Toolbox project can contribute to three of them, namely A, B & E. However, monitoring the contribution of the Toolbox project to one of the SAICM indicators stopped at the end of 2018 due in part to the indicators being set at output rather than outcome level. A task force was set up to suggest outcome indicators, which will be finalized at the ICCM in September 2023. The Toolbox project should maintain its continuing relevance to the SAICM beyond 2020 process by ensuring its outcomes are reflected in any new indicators and targets.

25 https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf p. 27

26 https://ipen.org/sites/default/files/documents/Beyond%202020%20Why%20SAICM%20is%20important%2024%20Jan%202017.pdf

36. SAICM was established in 2006 at the first International Conference for Chemicals Management (ICCM1) with IOMC as a co-convenor.[27] SAICM is a policy framework to promote chemical safety around the world that ran until 2020. As such the IOMC Toolbox project is very much aligned with SAICM. However, as the MTE found, the project has had less influence than expected on the Quick Start Programme – a mechanism to achieve SAICM's objectives - because most of these programmes began before the Toolbox project began.

37. As the goal of a sustainable chemicals management had not been achieved by 2020, the parties agreed on developing a follow up process – SAICM Beyond 2020 – which was supposed to be adopted in 2020 at ICCM5. ICCM5 was delayed to September 2023 because of COVID-19.

38. In December 2018, the co-chairs of the intersessional process developed recommendations on SAICM beyond 2020. This document identified five strategic objectives:
    a. Measures are taken to minimize or prevent harm from chemicals throughout their lifecycle and waste, including the development and implementation of national chemicals management systems in all countries.
    b. Knowledge, data, information and awareness generated, available and accessible to all to enable informed decisions.
    c. Issues of global concern are identified, prioritized and addressed.
    d. Benefits are maximized and risks prevented through innovative solutions and forward-thinking.
    e. The importance of sound management of chemicals and waste to achieve sustainable development is recognized by all, actions are accelerated and necessary partnerships established.[28]

39. According to its logical framework, the main target of the IOMC Toolbox project is a 10 to 15 per cent average increase of stakeholders using selected IOMC tools during 2017-2020, as measured by SAICM progress monitoring and reported in tri-annual progress reports. Respondents were asked questions relating to 20 indicators through an online survey. In the case of the IOMC Toolbox project, respondents were asked: "Which of the following tools or guidance materials for risk reduction published by the IOMC are used by your government or organisation?" Respondents were presented with a list of 13 tools of which the IOMC Toolbox was one.[29] Monitoring stopped at the end of 2018, for a number of reasons, including: indicators unable to measure progress because they were output rather than outcome-based; and methodological issues relating to small number of responses and interpretation of questions.[30]

40. Accordingly, an indicator task force was set up as part of the ICCM process, which has suggested a number of outcome indicators for which data already exists, for

[27] https://www.saicm.org/About/Overview/tabid/5522/language/en-US/Default.aspx
[28] http://www.saicm.org/Portals/12/Documents/meetings/Bureau/ICCM5B6/SAICM-ICCM-5-Bureau-6-3-Co-Chairs-paper.pdf
[29] MTE Finding 16
[30] http://www.saicm.org/Portals/12/Documents/meetings/TGW/Session1.pdf

example: the number of countries with a PRTR (UNITAR); and number of countries with Poisons Centres (WHO).[31] The final choice of indicators will be made at the ICCM in September 2023. It is important for the project's sustainability to engage in this process to help ensure that it contributes to one or more of the indicators.

Finding 3 on alignment with MEAs

The IOMC Toolbox project is aligned with several multilateral environmental agreements (MEAs) such as the Stockholm Convention, the Basel Convention, the Rotterdam Convention, and the Minamata Convention. The project provides guidance and tools for the implementation of these agreements at the national level, including training modules and e-learning tools. These resources are accessible through the IOMC Toolbox website and through workshops, webinars, and other means of communication.

41. The IOMC Toolbox project is also closely aligned with a number of MEAs, in particular: 1) the Stockholm Convention on Persistent Organic Pollutants; 2) the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; 3) the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and 4) the Minamata Convention on Mercury. The project provides guidance and tools to support the implementation of these agreements at the national level, for example: the training modules on the Stockholm Convention's Persistent Organic Pollutants (POPs);[32] UNITAR - Plastic Waste and the Basel Convention online course;[33] and an e-learning tool on the operation of the Rotterdam Convention.[34] The project provides access to the guidance and tools through making them available through the IOMC Toolbox website and providing workshops and webinars, face-to-face, hybrid or virtual.

Finding 4 on alignment with the European Commission's chemicals strategy for sustainability

The EC has published a chemicals strategy for sustainability to better protect citizens and the environment and boost innovation for safe and sustainable chemicals. The IOMC Toolbox is consistent with achieving the EC's objectives, particularly in boosting investment and innovative capacity for safe and sustainable chemicals. The Toolbox project is unique in being available to anyone and can assist decision-making at national and regional levels. The EC has funded four project phases and is contemplating funding the maintenance of the Toolbox after Phase IV. The Toolbox's tools and approaches may also be useful to EU businesses. Providing clear examples of the project's direct benefits to people on the ground can make it more relevant to the EC. Sharing the EU's knowledge base is important to support developing countries and for the mutual acceptance of data among OECD and other relevant countries.

[31] https://partnership.who.int/iomc/iomc-indicators-of-progress-in-implementing-saicm
[32] https://iomctoolbox.org/unepstockholm-convention-stockholm-convention-training-tool-technical-guidelines-environmentally
[33] https://iomctoolbox.org/unitar-plastic-waste-and-basel-convention-online-course-accessed-2022
[34] https://iomctoolbox.org/rotterdam-convention-e-learning-tool-operation-rotterdam-convention-accessed-2022-0

42. The EC published its chemicals strategy for sustainability on 14 October 2020. It is part of the EU's zero pollution ambition, which is a key commitment of the European Green Deal. The objectives of the strategy are to:

    - Better protect citizens and the environment;
    - Boost innovation for safe and sustainable chemicals.

43. The IOMC Toolbox and its contents are consistent with achieving both objectives. For example, one of the EU's action points is to "boost investment and innovative capacity for the production and use of chemicals that are safe and sustainable by design throughout their lifecycle."[35] This is consistent with UNIDO's work on Green Chemistry and Chemical Leasing, both of which feature in the Toolbox.

44. An EC representative reported that the project is well aligned with the EC's commitment to improve chemical management globally, with an emphasis on those who need most help in developing countries, to offer the highest levels of protection of human and environmental health possible. The EC also emphasizes the need for international cooperation and partnerships, in bilateral, regional and multilateral fora to support their capacity to assess and manage chemicals in a sound manner.

45. While the EC funds many projects that deal with aspects of chemical management, the Toolbox project is unique in being available to anyone; ability to assist decision-making at national and regional levels based on circumstances; providing the tools to carry out need assessments and providing the first steps to implementing solutions. A clear indication of the importance of the Toolbox project to the EC is the latter's funding of four project phases and the stated intent to continue to fund the maintenance of the Toolbox thereafter.[36]

46. Many of the tools and approaches in the Toolbox may be useful to EU projects.[37] One way that the Toolbox project can be more relevant to the EC is to provide clear examples of how the project has been of direct benefit to people on the ground.

EQ1.3: How relevant are the objectives, content, and design of the IOMC Toolbox, Toolkits, and training events to the capacity needs, priorities, and performance improvement of beneficiaries in resolving chemical management issues, especially in light of the COVID-19 pandemic?

[35] https://echa.europa.eu/hot-topics/chemicals-strategy-for-sustainability
[36] Ibid
[37] ChatGPT

Finding 5 on relevance of the Toolbox and its contents

The main objective of Phase I of the project was to develop a one-stop-shop Toolbox portal for chemical management resources. The objective has remained relevant since the project started in 2012, as evidenced by the funding of a fourth phase by the European Commission.

The FE online survey asked workshop participants what they found most useful and how they used the workshop resources after attending. Their answers suggest that the Toolbox and its contents are relevant to their needs.

Due to the COVID-19 pandemic, project-led workshops had to be conducted online, but there has been a partial return to face-to-face meetings as travel restrictions have eased. Survey respondents expressed a preference for face-to-face meetings for networking opportunities and other reasons. Webinars also remain relevant, in particular because of the much lower costs of running them and the higher number of people reached.

The FE online survey showed that the majority of respondents would likely benefit from the project workshops they attended, and there was good representation from developing countries and countries in transition. However, the private sector appeared to be under-represented compared to government and academia.

47. From Phase I of the project, the main objective has been to develop a one-stop-shop Toolbox portal. The rationale for doing so was that the IOMC members were all developing a range of tools, toolkits, guidance and other types of resources, making it difficult for potential users to find out the scope of what was available, current and institutionally supported. The proponents of the project saw the need for a 'one-stop-shop' to serve as a centralized source of current and reliable information on chemical management, which could be easily accessed by stakeholders in various sectors and regions of the world, in particular policy makers. This objective has remained valid since 2012 when the project started. The fact that the EC is funding a fourth phase is testament to the objective remaining relevant.

48. The FE online survey asked workshop participants what they had found most useful to them. The full answer is given under Finding 22. In summary, their answers fell into five categories:
    - Knowledge of chemical management;
    - Knowledge regarding health and safety;
    - Networking opportunities in the workshops;
    - Technical content and updates presented in the workshops;
    - Introduction to the Toolbox and its contents.

49. Participants were also asked what they had used from the workshops and to what effect. Again, the full answer is given under Finding 22. In summary, their answers fell into five categories:
    - Application to job/industry;
    - Career/job performance;
    - Knowledge acquisition/extension;
    - Teaching/training;

- Legislation/regulation development.

50. The COVID-19 pandemic meant that project-led face-to-face workshops all had to be carried out online, see Finding 18. Since most travel restrictions have been dropped, there has been only a partial return to face-to-face meetings. POs have become better at organizing and running virtual meetings. Nevertheless, the majority of participants of workshops held since 2020 want to see more face-to-face meetings, citing, among other reasons, that opportunities to connect and network with fellow professionals are much lower online. Finding provides the other reasons survey respondents gave for preferring face-to-face to virtual meetings and vice versa.

51. As stated under Finding 14, the great majority of people who responded to the FE online survey would likely benefit from the project workshop or workshops they attended. Also, the project exceeded the expected quota (70 per cent) of participants coming from developing countries and countries in transition. However, the private sector would appear to be under-represented (just 13 per cent), compared to government (48 per cent) and academia (21 per cent).

EQ1.4 How relevant is the project to supporting gender equality and women's empowerment and meeting the needs of other groups made vulnerable, including countries in special situations?

Finding 6 on the project's support for gender equality and women's empowerment

The MTE classified the project's third phase as gender-blind and recommended several actions to improve the rating. Most of these actions were marked as planned, implemented, or under implementation in the PMG's formal response to the MTE recommendations. Only one was actually implemented. Gender is incorporated as a new component in Phase IV of the project, but the project agreement reviewed does not specify how this will be integrated. The absence of information on the participants' gender makes it difficult to confirm whether gender balance was achieved during the workshops.

52. The MTE of the project's third phase found that gender was not considered in the Phase III project document, nor in implementation. This was despite IOMC participating organisations having guidance on how to incorporate gender in the project cycle and a growing awareness of the importance of gender mainstreaming. Accordingly, the MTE made a number of recommendations to improve the project's relevance to supporting gender equality and women's empowerment. The recommendations were accepted by the PMG and most of the suggested actions were marked as planned, implemented or under implementation in the MTE management response.[38] The recommendations are listed out in Table 2, together with the ET's assessment of degree of implementation.

[38] https://unitar.org/sites/default/files/media/file/IOMC%20Toolbox_MTE%20management-response_Final%2015%20Jul.pdf

Table 2: **Proposed actions related to GEEW from the MTE and implementation status**

Proposed action	Status by March 2023 as assessed by the evaluator	Status identified by the evaluator	Observation
Ensure regular agenda item on gender and chemicals at remaining face-to-face and/or follow-up workshops and webinars	Not implemented	No points related to gender were found in the agendas and materials of the seventeen events reviewed.	Event's agenda was not received from all POs and not always included in the project's narrative reports. One exception was that UNIDO's chemical leasing book, listed as a training material for one of the workshops, contains a chapter on GEEW and inclusiveness.
Conduct webinars specifically addressing gender and chemicals issues	Not implemented	No webinar focusing on gender and chemicals was found.	From events identified in narrative reports and shared by POs.
Ensure gender balance of participants at workshops	Partially implemented	From the seven participants list with complete information reviewed, two of them achieved gender parity.	Gender balance was considered for any proportion between 45:55 to 50:50. Not all participants lists contain information about gender (based only on seven participants list). Gender information is not collected systematically.
Consider entry point on chemicals and gender	Not implemented	An entry point on chemicals and gender has not been added to the Toolbox.	

53. While the recommendation was accepted and the suggested actions were planned as part of the project undertakings, the desk review suggests that only one of the planned actions was implemented. This is the inclusion of gender-related tools into the toolkit, e.g., some tools on chemicals and health recognize that exposure to chemicals can have a significant impact on human health, and that women and men may be affected differently. It is worth noting that the revision of the tools from a gender perspective is an ongoing process and may require a larger period of time to materialize. Inputs from the KIIs reveal that gender inclusion into the Toolbox has had the attention of the IOMC Secretariat, but no plans to do such revisions were found in the progress reports. It was also noted by the POs representatives that inclusion of gender can be easier in some topics than in others, e.g., occupational health and pesticides vis-à-vis chemicals. This only reinforces the need for a strategy for incorporation of gender into the project. In fact, gender is incorporated as a new component in Phase IV of the project, but the project agreement and document reviewed does not specify how this will be integrated. At a higher level, the SAICM's gender working group has not been very active after 2021 and the topic has been covered through communities of practice.

54. A practice that persisted from the MTE is the absence of information on the participants' gender, which made it difficult to confirm whether gender balance was achieved during the workshops. The evaluator did not have access to the call for

nominations/registrations of the events organized, excluding webinars, which does not allow to know if gender balance for participants was attempted.

Finding 7 on how the project supports groups in vulnerable situations and countries in special situations.

The evaluation found that 73 per cent of workshop participants come from developing countries, with 12 per cent being from countries in special situations and 61 per cent from other developing countries as defined by the UN. 3.5 per cent of respondents reported having a disability. Only 13 per cent of respondents were young (18-30 years old). It is not clear if and how the project might have accommodated groups made vulnerable and participants coming from countries in special situations.

55. Most of the participants' lists received from POs do contain the participants' nationality. From those with this information, 12 per cent are nationals of "countries in special situations" and 61 per cent of "other developing" countries, as defined by the UN, adding up to 73 per cent of participants coming from "developing" countries. Most nationalities represented are Nigeria (23 per cent), the United States (7 per cent), and the Philippines (6 per cent). When disaggregating by regions, a large number of participants are nationals from African countries (35 per cent), Asia and Pacific (33 per cent) and Europe (18 per cent).

56. The survey results show that 3.5 per cent of respondents indicated having a disability. Since the Toolbox project targets professionals working in the area of chemicals and pesticides, it is not surprising that most survey respondents are between the age of 18 and 60 years old (13 per cent between 18-30 years old, 47 per cent between 31-45 years old, and 33 per cent between 46-60 years old).

EQ1.5 Are the causal links in the project's reconstructed theory of change valid? Does the theory of change require changes to better reflect the outcomes that are starting to emerge?

Finding 8 as to whether the project's reconstructed ToC remains valid and what changes to it are necessary

The project's reconstructed ToC, developed during the MTE, remains largely valid. Three relatively minor changes were made to the ToC based on PO representatives' suggestions.

Table 4 shows that modest progress has been made along its causal pathways. An important issue raised by several participants in the AAR was how to assess the Toolbox project's contribution to processes that were happening anyway, based on tools and toolkits, the development of which has been funded by the project. This is answered in part under Finding 26.

57. This question as to whether the project's reconstructed ToC remains valid was raised during an online after-action review attended by PO representatives. Through using Miro,[39] participants were able to indicate changes to better reflect the project's ToC. These suggestions are reflected in Figure 2 showing project outputs (unshaded) linked

[39] Miro is a digital collaboration platform designed to facilitate remote and distributed team communication and project management.

to outcomes (lightly shaded) to impacts (heavily shaded). The causal assumptions underpinning the diagram are written out in Table 3.

58. In general, participants thought the ToC was clear, well-articulated, simple and easy to understand. The main changes made to the project's ToC are as follows:

- Arrow *a* changed to bi-directional to indicate that experience from Toolbox project workshops and webinars informs the development and improvement of the Toolbox and its contents.
- Arrow *f* added between boxes 6 & 7 and box 5 to indicate that training events serve as a way to promote the Toolbox, guidance and toolkits.
- Box 8 is split into two to separate out the outcomes related to greater and better use of the Toolbox and its contents (Box 8), and the outcome related to participants having the capacity to develop chemical management systems and resolve issues (Box 10).

59. An important issue raised by several participants in the AAR was how to assess the Toolbox project's contribution to processes that were happening anyway, based on tools and toolkits, the development of which has been funded by the project.

Figure 2: Toolbox project (phase III) theory of change, adjusted on the basis of PO representatives' feedback in November 2022

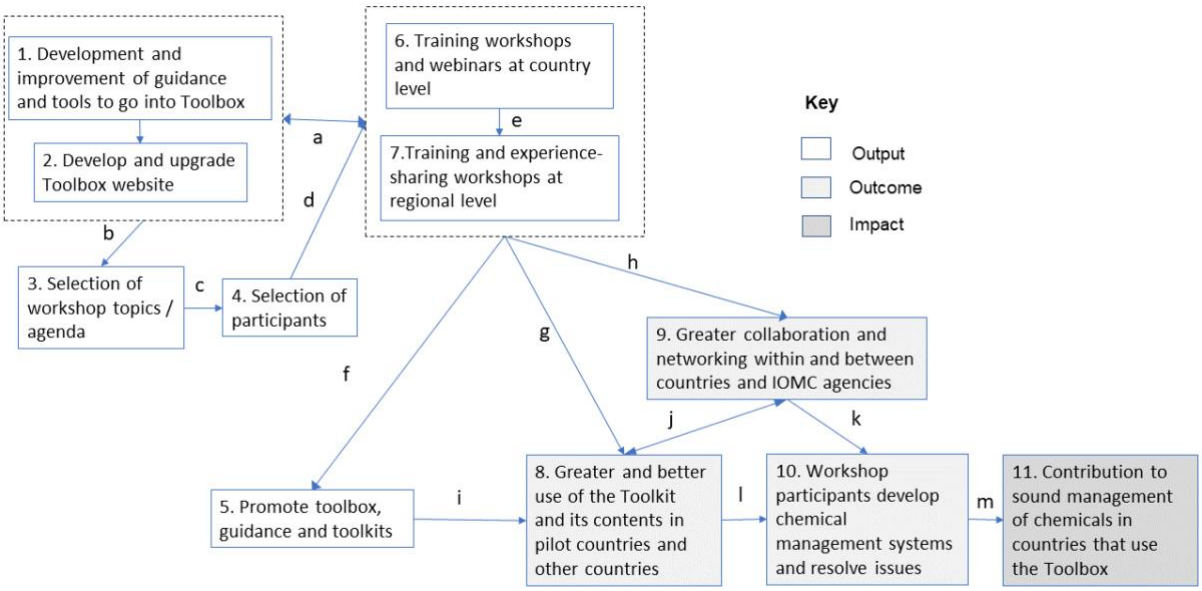


Table 3: Assumptions underpinning theory of change

Arrow	Causal assumption relating to the arrows
*	The Toolbox project funds PO organisations to develop and update chemical guidance and tools, adding resources to something that they have been doing anyway. The project also funds the development of a one-stop shop - the IOMC Toolbox - to help potential users to better access chemical guidance and tools (Box 2).
a	Training in the Toolbox and its contents is provided through country and regional-level workshops. The arrow goes in both directions reflecting that the response to training workshops, webinars at country and regional level feeds back into the development and improvement of guidance and tools to go into the Toolbox.
b	The development and upgrading of the Toolbox influence the selection of workshop topics and agendas.
c	Topics chosen by countries/regional offices are relevant to the country/region and motivate participants to attend. Participants who are responsible for developing and implementing chemical management systems are selected.
d	Improvements to the Toolbox, the addition of new tools and the upgraded training strategy[40] make it easier and more attractive for a broader set of participants to use the Toolbox and toolkits.
e	Outcomes and learning from country-level workshops inform the design of sub regional workshops.
f	Training events serve as a way to promote the Toolbox and its contents.
g	Workshops and webinars work to build capacity in a context in which there is sufficient opportunity and motivation to allow for greater use of Toolbox and contents.
h	Promotion at international events results in participants taking the Toolbox back to their respective countries and using it.
i	Workshops work as platforms that provide opportunities for collaboration and networking among participants.
j	Greater collaboration and networking leads to greater and better use of Toolbox and contents, and vice versa, (in part through a community of practice).
k	Greater collaboration between workshop participants and IOMC agencies contributes to development of chemical management systems.
l	Greater and better use of the Toolkit and its contents contributes to the development of new and improved chemical management systems and resolve issues
m	New and improved chemical management systems contribute to countries managing their chemicals better, helping SAICM achieve its goal, and more generally progress made against several SDGs (see Finding 2).

60. The FE found that the detailed analysis of the causal links carried out in the MTE remain valid.

[40] The ET did not receive the upgraded training strategy and was hence not able to review it.

Table 4: Progress made against the ToC in second half of the project

Arrow	Progress made by 2020	Progress since 2020
Context: The IOMC project funded tool development and workshops, things that POs were already doing. The project's unique contribution is the one-stop shop website.		
a	Workshop topics were chosen on the basis of linking up to on-going initiatives and addressing the national or regional priority issues. They were generally of interest to organisations and individuals invited to them. Embedding Toolbox project workshops as part of on-going initiatives makes sense as the project has few resources to support follow up actions.	Despite linking to on-going initiatives, the ET struggled to find lasting outcomes resulting from Toolbox project workshops and webinars, see Finding 25 on difficulties in finding good outcome case studies, in part as a result of little or no follow up after workshops took place.
b	Participants who are responsible for developing and implementing chemical management systems are selected to attend project workshops.	This largely continued after 2020 See Finding 14 on people selected for training workshops.
c	A broader set of participants attended project workshops than indicated under the upgraded training strategy recommended by the phase II evaluation.	The finding remains largely valid. See Finding 14 on who attended project workshops and Finding 31 on selection of trainers of trainers.
d	The assumption that significant learning about the use of the tools and the Toolbox would flow from national to regional workshops remains to be proven.	The assumption remained to be proven by the end of the project. No upgraded training strategy was made available to the FE
e	For the 48 per cent of respondents who answered the online survey of workshop participants, all said they used it for their jobs. Some who did not use the Toolbox said that the workshop was too short, and there was insufficient follow-up, to make significant changes to their work practice.	Similar usage rates reported by respondents to the FE online survey.
f	The project has not yet followed up on whether the current rather low-key promotion of the Toolbox is leading to uptake. The ET questions whether there should be any promotion before the new Toolbox platform is released.	Toolbox 2.0 went live in May 2020 but has not been officially launched. UNITAR managed social media outreach with 9 posts published. There was a total of 22 promotional events held during phase III, see Finding 23. OECD's strategy is to announce technical upgrades when they happen.
g	Workshops did allow participants to connect and learn from their counterparts.	Face-to-face workshops were replaced by virtual events in response to the COVID-19 pandemic. Participants were still able to connect and learn from counterparts, albeit at a lower level, see Finding 24.
h	It is too early to say if greater sharing of experience and networking is leading to greater and better use of the Toolbox. Evidence will only emerge sometime after the new Toolbox platform is up and running.	Testing this causal assumption has not been possible because of a lack of follow up of participants attending Toolbox project workshops and webinars. The new Toolbox platform has been up and running since May 2020 leading to increased web statistics, – see Finding 22.
i	While plausible, there is a significant attribution gap between the project's outcome and impact as laid out in the project's theory of change. The gap will make difficult any future impact assessment that attempts to attribute improvements in countries' management of chemicals to project interventions.	The attribution gap remains wide, hence the lesson from Phase III that Phase IV of the project should embed its activities more deeply in country processes, see Finding 26.

Coherence

EQ2: To what extent is the project coherent with relevant policies, complementing other programmes and projects and adhering to international norms and standards?

EQ2.1 How well do the project components complement each other?

Finding 9 on how well the project components complement each other.

The components of the Toolbox complement each other by collectively providing a wide range of information on the safe management of chemicals that can serve as a useful starting point for problem-solving at national level. However, the Toolbox is not a comprehensive 'one-stop-shop' as other reputable and more specific sources of information on chemical management exist, in particular on the POs' own websites.

Project workshops and webinars are nearly always on management schemes and toolkits developed by one PO, and therefore do not include the participation of other POs. More thought is needed as to how project activities, in particular webinars and workshops, can better mirror the multi-sectoral approach that is needed for the safe management of chemicals at national level. The way that topics for workshops and webinars are chosen is part of the problem.

61. The Toolbox is designed to be a problem-solving tool that enables countries to identify the most appropriate and efficient national actions to address specific national problems related to chemicals management. To this end, it provides access to eight management schemes and six toolkits. Together, the schemes, toolkits and guidance provide a wide range of information on the safe management of chemicals.

62. While the IOMC Toolbox website offers a wealth of information on chemical safety, it is not necessarily a one-stop-shop for all such information. There are many other reputable sources of information on chemical safety, in particular the PO's own websites, as well as government agencies, industry associations and academic institutions. These sites can provide additional or more specialized information. However, the IOMC Toolbox website can is a useful starting point for those seeking information on the safe management of chemicals.

63. Project workshops and webinars have all promoted the Toolbox website, although not as much as originally expected because of the delays in developing a working and stable version. Workshops and webinars have generally focused on particular schemes and toolkits, e.g., FAO's pesticide registration toolkit and UNIDO's chemicals leasing toolkit. Of the 32 training events held since the MTE, just one limited itself to a general introduction to the Toolbox. Additionally, 22 promotional events were held since 2020.

64. According to one respondent, confirmed by a desk review, most of the webinars held since the MTE were hosted by more than one PO. Hosting them together does however not necessarily lead to collaboration as sometimes POs are simply being invited to deliver a single presentation without collectively organizing the entire workshop. The practice is that POs tend to organize webinars by themselves, without

inviting others, and can do so because they each have their own budgets. This suggests that little thought was given to how the need for the necessary multi-sectoral approach to the safe management of chemicals could be reflected in webinar design. Another reason for the practice is that requests for webinars generally come from PO country offices, who spend their time working with the PO's own toolkits and/or management schemes. It is not surprising that the requests should come for training on these, and no other POs toolkits and/or management schemes.

Table 5: Number of training and promotional events organized by the project

	Up to 2020	After 2020
Training workshops	14	12
Training webinar	8	20
Promotional event	6	22

Table 6: Number of training and promotional events organized by POs

PO	Workshops	Webinars	Promotional events	Co-organized events
UNITAR	9	8	5	11
WHO	9	6	3	8
UNIDO	3	7	4	3
FAO	9	2	3	2
OECD	6	6	5	8
ILO	3	3	2	4
UNEP	3	1	1	3

65. Nearly 50 per cent of the respondents to the FE online survey agreed or strongly agreed with the statement that the workshop(s) they attended were standalone events rather than part of an ongoing process.

EQ2.2 How well does the project complement and foster synergies between IOMC partner and other capacity building programmes (e.g., other chemical-related portals and platforms) in the area of the sound management of chemicals funded by other donors?

Finding 10 on how well the project complements and fosters synergies between IOMC partner and other capacity building programmes

The IOMC provides technical and scientific support to help countries implement the SAICM framework and coordinates efforts to avoid duplication and find synergies. The IOMC Toolbox project creates a unique opportunity for IOMC POs to identify and work on complementarities. However, bureaucratic hurdles, the way workshop topics are chosen, and the way budget is allocated separately to each organisation limit this opportunity. SAICM has its own one-stop-shop, SAICM Knowledge, which complements the IOMC Toolbox. SAICM has offered to host the IOMC Toolbox on its website. One respondent noted that the Toolbox is in demand in OECD country accession processes, which could be an opportunity for phase IV. Current candidate countries are Argentina, Brazil, Bulgaria, Croatia, Peru, and Romania, and recent joiners include Colombia, Costa Rica, Lithuania, and Latvia.

66. The IOMC is closely related to SAICM, as it provides technical and scientific support to assist countries in implementing the SAICM framework. In doing so, IOMC creates a framework for coordinating, avoiding duplication and looking for synergies. From this perspective, the IOMC Toolbox project is institutionally well situated. As the only joint initiative of the IOMC, the project creates, through the Toolbox, workshops and webinars, a unique opportunity for IOMC POs to identify and work on complementarities. Finding 27 suggests that bureaucratic hurdles, the way workshop topics are chosen and the way budget is allocated separately to each organisation, are challenging the opportunity.

67. Since 2020, SAICM has established its own one-stop-shop – SAICM Knowledge -[41] relating to the safe management of chemicals. The two portals are complementary, see Finding 28, and provide links to each other's outputs. SAICM Knowledge has offered to host the Toolbox on its own website. A SAICM respondent said that it made sense to explore stronger connection between the two 'one-stop-shops.' Both sites currently reference each other.

68. One respondent pointed out that the OECD country accession process creates a demand for the Toolbox and its contents because candidate countries want to be seen to be improving their chemical management systems to help them qualify. This is an opportunity that was passed up in phase III and should be considered in phase IV. Current candidate countries are Argentina, Brazil, Bulgaria, Croatia, Peru, and Romania. Countries that joined the OECD recently include Colombia (2022), Costa Rica (2022), Lithuania (2021), and Latvia (2018). No Toolbox workshops took place in these countries.

[41] Homepage | SAICM Knowledge

EQ2.3 How well do the project training activities complement further national and international training?

Finding 11 on how well project training activities complemented other training

The project provided funding for training activities that otherwise would not have happened, or happened on a smaller scale. In at least a third of workshop participants, training complemented and added to existing knowledge.

69. The MTE found that the project provided resources that allowed more ambitious training to be given than would otherwise have been the case. For example, in 2019 and 2020, FAO carried out 11 training workshops on the FAO pesticide toolkit, six of which were funded by the project. In Indonesia, the project funded a workshop and webinars on establishing a PRTR, something that otherwise would not have happened.

70. The project supported 32 workshops and webinars since the start of 2020, on a number of topics including on chemical leasing, chemical safety, industrial chemicals management, on pesticides registration and on the Toolbox itself. More than 50 per cent of the respondents to the FE online survey saw the workshops as being part of a broader ongoing process, for example a funded project, which at least in some instances can be assumed to include other training. Over a third of respondents reported that over half of their utilization of the tools, knowledge and skills taught in the workshop originated from their previous learning experiences, indicating that the workshop provided a supplementary training to what they had already received.

71. Training on chemical management is provided by a number of organisations. SAICM is the global-level policy framework that was developed to promote the sound management of chemicals throughout their lifecycle, from production to disposal, in order to protect human health and the environment – see Finding 2. As such, SAICM engages in some capacity-building initiatives on e.g., for all MEAs, and runs the SAICM Knowledge platform. The EC also carries out some training for MEAs. The training provided by the Toolbox project is complementary according to one respondent, by providing participants with the tools to solve problems, rather than directly solving the problem, using a tool.

Effectiveness

EQ3: How effective has the project been in delivering results and in strengthening the capacities of countries/sub-regions?

EQ3.1 To what extent did the project achieve planned outputs and reached intended users in a timely manner?

Finding 12 on the extent the project achieved planned outputs and reached intended users

The project reached and exceeded six of its output targets, and came close to achieving the seventh.

72. Delays in developing Toolbox 2.0 (see Case Study 1) resulted in project workshops focusing on individual tools and toolkits instead of the new Toolbox design, at least until May 2020 when the Toolbox 2.0 version was first published online.

73. According to the logical framework in the project document, the project was expected to produce three outputs: 1) a new IOMC Toolbox design; 2) target audience aware of the Toolbox; and 3) target audience trained in the use of selected tools.[42] Table 7 shows the output portion of the logical framework (see Annex B. Logical Framework).

Table 7: Achievement of project targets

Outputs	Indicators	Baselines and targets	Level of achievement as per FE
New Toolbox design	Level of user satisfaction (on a scale from 1 to 5)	Original target: 75% of users report a satisfaction level at level 4 and above, as measured in an online survey. Target used: 75% of workshop attendees in second half of the project used the Toolbox about once a week after attending the workshop	67% of FE survey respondents indicating they used the Toolbox to some extent after the workshop they attended. --> Target was close to being achieved
Target audience is aware of the Toolbox	# of visits to Toolbox	10-15% increase per year from the baseline of 178 visits at the beginning of Phase III (Jan 2018) = a target of 321 visits in October 2022[43]	912 visits in October 2022 = 2.8 times target. → Target exceeded by a large amount. The increase in visits from Jan 2018 to October 2022 was 512%[44]
	Background of online visitors	At least 50% of visitors replying to online questionnaire within target audience	More than 70% of FE survey respondents within target audience. →Target exceeded About 75% from developing countries or from countries in transition in second half of Phase III. → Target exceeded
	# of persons to whom the Toolbox is promoted and trained	2,000 by October 2022 in addition to 4,000 reached by 2017	500 trained in first half of Phase III, 1,460 in second half = 1,940 by October 2022. Target achieved
	Background of persons to whom the Toolbox is promoted and trained	More than 70% of persons from within the target audience	72 per cent

[42] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". p.25

[43] The baseline month has been changed from October 2017 to the first month of Phase III (January 2018) because of availability of web statistics.

[44] https://docs.google.com/spreadsheets/d/1KRUsJEluwm53Otdvpa9UTJkKK7ZfPvJne0mi3rQNbmU/edit?usp=sharing

Target audience is trained on the use of selected tools	# of capacity building events (face-to-face)	20	25 Face-to-face Target exceeded
	# of capacity building events (webinars)	20	25 online events[45] Target exceeded
	# of participants attending capacity building events (face-to-face)	300 by 2022	See above – at least 1989 people attended capacity building events (face-to-face and webinars) during phase III[46]
	# of participants attending webinars	300 by 2022	Ditto
	Level of preparedness to implement identified tools following training events	Original target: 75% at level 4 or above Target used: 75% of respondents are able to confidently use knowledge, skills or tools acquired during the workshop(s) they attended	72 FE survey respondents agreed or strongly agreed out of 97 total respondents = 74% Target reached

Finding 13 on whether users were satisfied with the Toolbox

The ET interpreted use of the Toolbox as a measure of satisfaction with it. Accordingly, the target was modified from '75 per cent of users satisfied or very satisfied with the Toolbox' to 75 per cent of respondents to the FE online survey indicating they used the Toolbox to some degree after they attended a Toolbox project workshop.'

The finding from the FE survey was that 67 per cent of those who answered (n=98) agreed that they had used the Toolbox to some degree after the workshop they attended, while 37 percent said they used it up to and exceeding once a week. This target was nearly met.

74. The ET deployed an online survey Toolbox project workshop or webinar attendees in the second half of the project (the FE online survey) that asked about Toolbox use as a proxy for level of satisfaction. Toolbox 2.0 discontinued a pop-up survey tool that asked this question in previous versions.

75. According to the phase III project document, the project's target groups were: technical professionals with a role in the assessment and management of chemicals; and policy and decision makers in environmental, health and safety domains from developing countries and countries with economies in transition.[47] This was despite the final phase II evaluation recommending a much tighter focus on policy-makers. The phase III MTE found that over 500 participants had attended Toolbox project workshops from January 2018 to December 2019, and nearly all fell within the project's more inclusive

[45] Note that one training event was considered unclassified.
[46] Number extracted from participants lists made available from the POs for the purpose of the evaluation. The evaluator recognized that more participants may have attended the events organized under the project framework.
[47] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to Action". 21.020701/2017/767540/SUB/ENV.B2

definition of target users, well above the 70 per cent target in the project logical framework.

76. Between January 2018 and December 2022, the Toolbox received 18,993 visitors; with 13 per cent of them being returning visitors. The latter can be read as a proxy for visitors' satisfaction and use. Returning visitors reviewed, on average, 3.84 pages of the Toolbox per session and had an average session duration of about five minutes.

Finding 14 on whether the target audience is aware of the Toolbox

According to the logical framework, whether the target audience is aware of the Toolbox is to be measured using three indicators: the number of visitors to the Toolbox website; the professional background of the visitors; and the number of people to whom the Toolbox has been promoted. Table 7 shows that the first and third targets were met. The second relating to users coming from the target audience was difficult to assess and not particularly useful. What can be said is that the great majority of people who responded to the FE online survey would likely benefit from the workshop or workshops they attended. Also, as mentioned above, the project exceeded the expected quota of participants (70 per cent) coming from developing countries and countries in transition. However, the private sector would appear to be under-represented (just 13 per cent), compared to government (48 per cent) and academia (21 per cent).

77. The first indicator of whether the target audience is aware of the Toolbox is that the number of visitors to the Toolbox website should exceed 321 hits per month by the end of the project (October 2022 after several NCEs). The actual number was 912 or 284 per cent of the target. Finding 22 provides more web statistics for the Toolbox.

78. The target is low compared to some other portals that provide information on chemicals.[48] The MTE did not receive a specific answer to the question as to what represents a reasonable number of monthly visits to the Toolbox. The answer received was that it will be low because visitors will use it to find a document, and then access that document directly without going back to the Toolbox. The Phase IV proposal says that the target is still to be decided, and so does not address the question either.

79. The second indicator of target audience awareness of the Toolbox is the background of online visitors, namely that at least 50 per cent of visitors come from the target audience. The project dropped the collection of this information from the new design Toolbox. Instead, we looked at the reasons attendees gave for participating in workshops to assess whether they were likely to benefit from the workshop. ChatGPT was used to categorize their answers, which was later corroborated by the evaluator.

    1. **Relevance to work area:** Many participants attended the workshops because they were related to their work area, such as working with chemicals, conducting registration and inspection of chemical dealers, or advising coffee and Macadamia farmers who use pesticides.

[48] http://sdg.iisd.org/commentary/guest-articles/iomc-reflects-on-its-first-20-years-and-highlights-20-achievements/

2. **Interest in the field:** Some participants attended the workshops out of curiosity and interest in the topic, while others wanted to gain extra knowledge or to learn about new tools and approaches in chemical management.
3. **Professional development:** Participants also attended workshops to upgrade their skills, enhance their knowledge, and improve their productivity as chemical managers, regulators, or consultants.
4. **Chemical management and regulation:** Many participants attended the workshops to learn about the latest updates and best practices in chemical management and regulation. Some also wanted to gain knowledge on pesticide registration, GHS classification and labelling, and legislative frameworks around pesticides.
5. **Invitation and nomination:** Some participants were invited or nominated to the workshop.
6. **Other**: Other reasons that do not fall under these categories, including participation in the UNIDO's "global chemical leasing award 2021" or to learn best practices on circular economy.

80. The categorization suggests that the workshops and webinars were attended by people who would benefit from what they learned by applying the knowledge in their current jobs and future careers, the great majority of whom were working on chemical management in one way or another. It is hard to say whether 70 per cent of attendees qualify as either technical professionals or policy decision-makers. From the survey responses, 72 per cent can be classified either as technical professionals in government organisations, NGOs, private sector and UN officers (58 per cent) or policy decision-makers from government organisations (14 per cent) and other 20 per cent are researchers or faculty members coming from academia.

81. Country status i.e., coming from a developing country or country in transition was the second criterion for belonging to the target audience. FE survey respondents were asked this question. In Table 8 these answers have been collated by geographical region. It shows that 69 per cent came from Africa, Asia and the Pacific or Latin America and the Caribbean, where mostly developing countries or countries in transition are located.

Table 8: The regions that workshop and webinar participants who responded to the FE survey came from

Geographic region	Count	Percentage
Asia and the Pacific	60	35.0%
Africa	59	34.0%
Europe	29	17.0%
Middle East	13	7.5%
Latin America and the Caribbean	11	6.4%

North America	1	0.6%
Total	173	100%

82. Answers to questions about people's field of work suggest that the private sector was under-represented in Toolbox workshops at just 13 per cent, compared to government at 48 per cent and academia at 21 per cent. In terms of job descriptions, the largest categories were Lecturer/Teacher/Associate Professor/Professor at 20 per cent and CEO/Chief/Director at 12 per cent.

83. The third indicator of target audience awareness of the Toolbox is the number of people to whom the Toolbox is workshop or webinar will have been introduced to the Toolbox. Records show that the target of 2,000 was 97 per cent completed by October 2022.

Finding 15 on the number of people trained in the use of selected tools

All five targets relating to number of people trained in the use of selected tools were met or exceeded. More face-to-face meetings were held before COVID-19 than after and conversely more virtual meetings were held after COVID-19 than before.

84. The output that the target audience is trained on the use of selected tools is assessed using five indicators. The first is the number of face-to-face capacity building events, and the second was the number of virtual meetings. The timeline shows that 13 capacity building events were carried out face-to-face before February 2020 (COVID-19 travel restrictions). Since February 2020, there have been 12 face-to-face meetings. In contrast, just five virtual meetings were held before COVID-19 lockdown and 20 after, including at least three hybrid meetings.

85. The third and fourth indicators relate to the number of people attending face-to-face workshops and webinars. This is the same number as "# of persons to whom the Toolbox is promoted and trained," namely, at least 1989. These two targets are therefore met.

86. Table 9 shows that the number of training workshops, webinars and promotional events almost doubled in the second half of the project, likely made possible by greater use of virtual events made necessary by the COVID-19 pandemic.

Table 9: Numbers of workshops, webinars and promotional events carried out in Phase III

Type of training or promotional event	Up to 2020	After 2020	Totals
Training workshops	14	12	26
Training webinars	8	20	28
Promotional events	6	22	28

Totals	28	54	82

87. The fifth indicator is the level of preparedness to implement identified tools following training events. The target we used was that 75 per cent of respondents to the FE online survey declared themselves able to confidently use knowledge, skills or tools acquired during the workshop(s) they attended. The result was 74 per cent, which is close enough to declare that the target was reached.

EQ3.2 What are the factors affecting project performance?

88. The FE found that four factors in particular have affected project performance, namely: lack of a coherent capacity building strategy; COVID-19; delays in launching the new design Toolbox (see Case Study 1) administrative and bureaucratic impediments; and phase fatigue after 12 years and three phases developing the same output. COVID-19 travel restrictions lead to a much greater acceptance of and capacity to carry out virtual webinars and workshops, which brings a number of benefits.

Finding 16 on capacity building strategy

The project should have done more to improve its training design and carrying out needs assessments before organizing workshops to tailor the training content to the specific needs of the participants. However, there were examples of good practices, such as the ToT workshop in Sri Lanka organized by UNIDO, and the effective strategy implemented by UNIDO in Indonesia to encourage workshop participants to apply and disseminate knowledge and skills learned. The project should have also done better at following up after workshops to reinforce workshop learning and induce changes. Phase IV of the project will benefit from developing a capacity development strategy that includes both the Kirkpatrick framework and the individual, organisational and enabling environment dimensions of capacity development.

89. Given the project's focus on capacity development, the project should have done more to improve its training design by aligning with industry standards, following quality standards, and developing joint approaches for training planning, evaluation and follow-up. The project had developed training guidelines earlier,[49] but changes in personnel resulted in no further use of the guidelines and a lack of coherence in training. As a result, the FE did not receive full documentation on the trainings organized and only received partial documents due to the discontinuation of a central drive or matrix for collecting monitoring and self-evaluation data and other training-related material.

90. It is important to carry out needs assessments before organizing workshops to tailor the training content to the specific needs of the participants. This is particularly important when, as often the case, the counterpart is a Ministry and not representative of all stakeholders and sectors or a training organisation, used to undertake such assessments. Examples of good practices, such as the ToT workshop in Sri Lanka organized by UNIDO, are given where information was collected through interviews with former participants of online training sessions, industry representatives, and sector experts. The needs assessment was used to develop training learning objectives and materials, and a training satisfaction survey was conducted after the training completion. The results were included in the training report, disaggregated by region.

[49] Training Guidelines. IOMC Toolbox for decision making in chemicals management.

91. One of the manifestations of the lack of a capacity building strategy is that little or no follow-up was carried out after Toolbox project workshops. Follow-up can reinforce workshop learning and make changes based on this learning and use of the Toolbox more likely.

92. Nearly 50 per cent of the respondents to the FE online survey agreed or strongly agreed with the statement that the workshop(s) they attended were standalone events rather than part of an ongoing process, suggesting that follow up of these would have helped induce or have found little real change as a single workshop by itself cannot reasonably be expected to bring about significant outcomes.

93. UNIDO in Indonesia, through ToT workshops, has implemented an effective strategy to encourage workshop participants to apply and disseminate knowledge and skills learned. The strategy utilizes the Kirkpatrick framework for training evaluation's three first levels (out of five): 1) reaction: feedback questionnaires,[50] 2) learning: pre-post subjective assessments of knowledge and an objective measure; and, 3) application: writing out an intent to apply. The latter involved six participants from industry elaborating case studies related to Chemical Leasing or Green Chemistry, instead of the distribution of training packages. Participants from thirty-eight universities and twenty-one from other sectors said they intended to share the training materials with their students and colleagues, respectively.

94. Furthermore, a one-hour training package was provided to participants to share in their professional environment, and certificates were awarded only to those who share the training materials or completed case studies. Additionally, feedback on the materials was collected from audiences who received the training package and reported back to the UNIDO project team. Overall, this strategy serves as a good example of incentivizing participants and reinforcing workshop learning.

95. UNITAR, the training arm of the UN, has a role to collaborate with UN and other multilateral agencies in delivering training programmes to build capacity for sustainable development, including better management of chemicals. Accordingly, UNITAR developed training guidelines that provides a training approach covering workshops, webinars, IOMC Toolbox/toolkits application and linkages between national and regional workshops. The guidelines are only five pages in length and while they include some useful elements, they do not discuss the individual, organisational and enabling environment dimensions of capacity development, nor, for that matter, discuss capacity development at all. It is not clear the extent that UNITAR promoted the guidelines to other POs on one hand, and the extent to which the guidelines have been followed.

96. The MTE recommended the project "enhance the training guidelines so that training workshops are based on identified needs of learners and incorporate learning and application objectives, in accordance with international standards. Ensure that evaluations of specific training workshops are reviewed regularly to inform future workshops, with adjustments made as deemed necessary." This does not appear to have happened.

97. Basic training elements, such as formulation of learning objectives were not often included in the training reports. Nevertheless, there was some good practices in formulation of learning objectives for workshops delivered the ToT workshops organized by UNIDO.

[50] Evidence of application of Level 1 surveys in the narrative reports is available for the national training in Viet Nam and FAO workshop in Zimbabwe (February 2022, pesticide registration toolkit).

98. The FE survey received responses from 28 participants who attended one of the training of trainer (ToT) events, and 5 follow-up interviews were conducted with ToT participants and organizers. Of the survey respondents, fifteen reported that they had delivered further training after the ToT, targeting industry, government, trainers, academia, including undergraduates and colleagues while 12 did not. Eight respondents indicated that they had organized follow-up trainings more than once. 17 respondents or 61 per cent agreed or strongly agreed that they were able to confidently use the knowledge, skills or tools they acquired in the workshop in their work. The main reasons for not providing training after the workshops were lack of funding and lack of time.

Finding 17 on the effect of the COVID-19 pandemic

The Toolbox project had to cancel or hold virtual meetings and workshops due to the pandemic.

Implementation was delayed. Project partners received three no-cost extensions (NCEs) and reallocated the budget for web-based training. Despite challenges, some activities were continued remotely. The IOMC received a grant for joint promotional work during COVID-19.

99. According to respondents and Toolbox project's 3rd Progress Report, most of the Project's activities involving domestic or international travel were cancelled or were organized as hybrid or virtual meetings. Project partners requested and the EC approved an NCE of the project by 12 months up to 31 December 2021.

100. When the request for the project extension was being discussed in early summer 2020, project partners thought that the pandemic would be under control by mid-2021 and decided to postpone face-to-face events until the second half of 2021. However, by May 2021, it was clear that the pandemic was not under control. Accordingly, the PMG requested a further extension of six months, until 30 June 2022, and proposed a reallocation of the budget away from face-to-face training to the development of web-based training courses and the organisation of virtual training events.

101. The third progress report stated that despite the COVID-19 situation, partners were able to continue with some of their activities working from home, including: (i) the development of the new Toolbox platform; (ii) the identification and description of tools to be included in the Toolbox; (iii) the development of entry points for the Toolbox; and (iv) the preparation of new tools.

102. A further NCE was requested until October 2022. At about the same time, the decision was made to delay the start of the final evaluation until October 2022. The approval of a proposal for a fourth phase of the Toolbox project was developed.

103. IOMC received a modest grant to do some joint promotional work during COVID-19 in 2021. This included the production of a video and infographic, as well as a series of webinars[51] coordinated by UNITAR. Some of the webinars were recorded.

[51] https://www.globalwebinars.org/sessions

The activity is the only example, other than the Toolbox project itself, of IOMC partners working together on an initiative.

Finding 18 on participants' perceptions of virtual meetings replacing face-to-face ones as a result of COVID-19 travel restrictions

COVID-19 travel restrictions led to an increase in virtual meetings that is set to continue in Phase IV of the Toolbox project. A survey of participants found that while 57 per cent wanted more face-to-face workshops, 29 per cent wanted more webinars due to convenience, cost, and the ability to record and make them available after the event. Reasons for wanting more face-to-face meetings included interactivity, networking, focus, language, technical issues with online sessions, and time zone differences during webinars.

104. A benefit of COVID-19 travel restrictions is that they forced people to carry out many more virtual meetings, a trend that is set to continue in Phase IV of the project. Participants that had attended workshops in the second half of the project, when nearly all were carried out virtually, were asked "Should the Toolbox project focus on giving online webinars or should there be more face-to-face workshops." Of the 100 responses received, 57 per cent said they wanted to see more face-to-face workshops, 29 per cent wanted more webinars and 14 per cent were indifferent. The main reason given for holding more webinars was that they are cheaper and more convenient, especially for participants who are unable to travel due to budget constraints, time limitations, or other reasons. Webinars also provide the opportunity for participation from other countries without the need for travel. Webinars are cheaper so more can take place, reaching more people. Online webinars lend themselves to being recorded, and so can be made available after the event.

105. The reasons for carrying out more face-to-face meetings were more varied. Chatbot GPT identified six categories, which were later triangulated with own data categorization:

1. **Interactivity and engagement:** Many answers mentioned that face-to-face workshops allow for more interaction, discussion, and engagement between trainers and participants, which leads to better understanding and collaboration.
2. **Networking and connections:** Some answers highlighted the importance of face-to-face workshops for networking, building connections, and active participation.
3. **Focus and attention:** A few answers mentioned that face-to-face workshops allow participants to focus better without distractions and interruptions, leading to more effective learning.
4. **Language and cultural considerations:** Some answers mentioned the advantage of face-to-face workshops conducted in the local language, which can improve understanding and participation.
5. **Technical issues with online sessions:** Several answers mentioned challenges with internet connectivity and technical issues during online sessions, which can affect the quality of training and interaction among participants.
6. **Time zone differences:** A few answers mentioned challenges with time zone differences during webinars, which can affect participation and interaction.

Finding 19 on the effects of delays in developing the Toolbox 2.0

The completion of the new Toolbox design was delayed several times in Phase III. Delays made planning difficult. Despite hiring private companies, a significant workload fell on OECD staff, leading to delays in the Toolbox updates.

The plan to officially launch and promote the finished version was dropped in favour of announcing significant IT upgrades, the last of which was when the Toolbox first went live in May 2020. Many of the reasons for delay stem from the decision to sub-contract the work to a software company, rather than work on it using OECD in-house capacity. Continuous work is required to keep the Toolbox updated and relevant, to add new content, and to train PO staff in how to make their own modifications without relying on OECD personnel to do it for them. Two of the six expected results of Phase IV of the project relate to updating and broadening the Toolbox.

106. The first case study in the Annexes describes the development of the Toolbox 2.0. The delays in updating it had a number of effects. The first is that workshops have had to focus on individual tools within the Toolbox rather than on training on the Toolbox itself. The second is that it was hard to plan when deadlines kept being put back. Thirdly, despite hiring two private companies to design and build Toolbox 2.0, a very large workload fell on OECD staff, causing delays.

Finding 20 on administrative and bureaucratic requirements impeding project delivery

The MTE found that administrative and bureaucratic requirements were impeding project delivery and recommended that the final project evaluation should look at them. The FE did not include a specific evaluation question related to this but explored the issue in interviews. Some bureaucratic hurdles from Phase III will continue into Phase IV, but some lessons have been learned and applied. One of the main administrative issues in the second half of Phase III was the departure of key staff, causing communication problems, in particular related to the close of Phase III and the proposal for Phase IV.

107. The MTE identified an issue of administrative and bureaucratic requirements impeding project delivery and made the recommendation that "the PMG should request that the final project evaluation look explicitly at the range of bureaucratic and administrative issues faced by the project, and the ways that the project has surmounted them, or not, as lessons for other multi-agency projects in the future." The TOR of the FE (see Annex C. Terms of reference) did not include a specific evaluation question on this, but one question indirectly referred to the issue: "Have the project's structure and partnerships been effective, including the performance of implementing partners?". Nevertheless, this issue was explored in the interviews and the AAR for the FE.

108. Several bureaucratic hurdles identified in Phase III will continue into Phase IV. These include:

- Some of the POs can only start work when money has been transferred to their bank accounts. Others allow expenditure once funds have been committed. This cannot be changed at project level.

- The EC will only provide the next tranche of funding when 70 per cent of the previous tranche has been spent on average across all POs. This means that delays suffered by individual POs can delay the work of others.
- Agencies have differences in how they account for co-financing, and deal with a Euro - Dollar exchange rate that was fixed at the start of the project, both of which can make project financial reporting difficult.

109. Some lessons have been learned and applied to phase IV. These include:

- Including finance people in the contract negotiation.
- Keep the budget submitted to the EC very simple, including in it just the main line items against which the POs need to report.
- That POs should sign on time, although this lesson was not necessarily implemented.
- Providing training on financial reporting is key and can smoothen the process.

110. One of the main administrative issues faced in the second half of phase III was that a number of key staff left the project. Of particular significance was the retirement of the project coordinator from WHO. After he left it became clear as to the large amount of work required to coordinate the project. Communication between POs suffered. Some interviewees spoke of a reversal from multilateral to bilateral discussions between POs, in particular with respect to developing and signing off on the proposal to the EC for a fourth phase of the project. Another indicator of a reversal was that the FE team found it much harder to retrieve information from POs for the FE compared to the MTE. The information being requested was no more than the POs will need to write their own final reports, such as the number of workshops and webinars they had held in the last year, and the contact details for participants. Other key staff who left include the FAO and UNITAR leads. UNITAR has had three changes in their project lead in phase III. One respondent said that PO leads were finding it difficult to write their final reports because of limited information being retained about webinars and workshops which were convened. Staff departures have also affected the final reporting of the project.

Finding 21 on phase fatigue

The idea for the Toolbox project was born out of a group of enthusiastic colleagues, but enthusiasm waned due to criticism of Toolbox 1.0 design, difficulties in developing Toolbox 2.0, and bureaucratic impediments. The project has been developing the same output for 12 years, leading to some degree of fatigue. However, enthusiasm has begun to return for the fourth phase.

111. One interviewee in particular told a story of the idea for the Toolbox project being born out of an idea championed by a group of enthusiastic friends. The enthusiasm continued during Phase I and Phase II. The enthusiasm waned with the criticism by the Phase II FE of the Toolbox 1.0 design and the difficulties and delays in developing a completely new Toolbox 2.0 design in phase III. Enthusiasm also drained away as a result of the bureaucratic difficulties in running a project with seven partners as just discussed. It is perhaps not surprising to find some degree of fatigue

for a project that has been developing the same output for 12 years. One respondent expressed the view that enthusiasm has begun to return for the fourth phase.

EQ3.2 What outcomes did the project achieve, and how?

112. The project outcomes and impact are shown in the shaded boxes in the project ToC (Table 1), namely:

- Greater and better use of the Toolbox and its contents in pilot countries and other countries;
- Greater collaboration and networking with and between countries and IOMC agencies;
- Workshop participants develop chemical management systems and resolve issues;
- Contribution to sound management of chemicals in countries that use the Toolbox. Each is taken in turn.

Finding 22 related to increasing use of the Toolbox and its contents

Web statistics suggest that the number of visitors to the Toolbox has increased 6.9 times since the release of version 2.0 in May 2020, from 133 visitors per month to 912 visitors in October 2022. By the end of the project in October 2022, visits to the portal increased to 19,000, with 13 per cent being returning visitors. Potentially more people would have visited the Toolbox portal if version 2.0 had been formally launched with a social media campaign, as originally planned.

113. The FE online survey found that 49 per cent have often accessed and used the Toolbox. Attendance at workshops/webinars increased over time, with 17 webinars or workshops held up until December 2019, and 34 webinars or workshops held after.

114. The people most likely to use the Toolbox and its contents are those who have attended a project workshop or webinar or promotion event. The FE online survey of workshop participants found that 34 per cent had used the Toolbox up to and exceeding once a week after they attended a workshop, with 67 per cent using the Toolbox to some extent (see Finding 13). This question was not asked during the MTE because the Toolbox 2.0 portal was not available, so it is not possible to say if usage has increased.

115. Project records show that the number of people who attended workshops or webinars increased from a total of 538 by the end of 2019 (according to the MTE) to at least 1989 by the end of the project in October 2022. Another indicator of use are visits to the Toolbox portal. This increased from 4,033 by the end of 2019 to 19,000 by the end of the project in October 2022; with 13 per cent of them being returning visitors. Returning visitors reviewed, on average, 3.84 pages of the Toolbox per session and had an average session duration of about five minutes (see Finding 13).

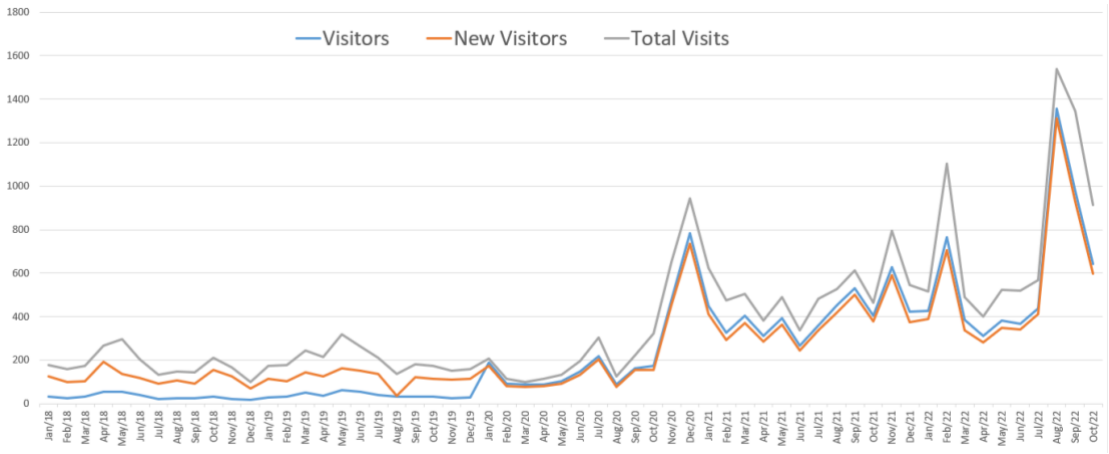
116. Visitors to the Toolbox portal are also likely to use it as an entry point to problem-solving, particularly return visitors and those that stay on the site longer.

117. Figure 3 shows that there was no significant upturn in visitors to the Toolbox 2.0 went it first went live in May 2020 via the URL www.IOMCToolbox.org – see Case Study 1. A large increase in visitors did occur between November 2020 and February 2021. Possible causes include the Toolbox being presented to the OECD Global Forum on the Environment in November 2020, the holding of several global webinars by UNIDO, UNITAR and WHO, the launch of a chemicals leasing book by UNIDO, and the launch of a toolkit, also by UNIDO.

118. Figure 3 also shows that the monthly number of visitors to the Toolbox portal were more than double the number that visited in 2018 and 2019, indicating that the new design was more useful than its predecessor.

119. Potentially more people would have visited the Toolbox portal if version 2.0 had been formally launched supported by a social media campaign, as was originally planned. This plan was discussed in PMG meetings up to the 10th Joint PMG meeting on 15 August 2021 after which not further mention was made, see Case Study 1.

Figure 3: Visitors to the Toolbox portal from the start of phase III of the project



Finding 23 on the usefulness of project workshops and webinars

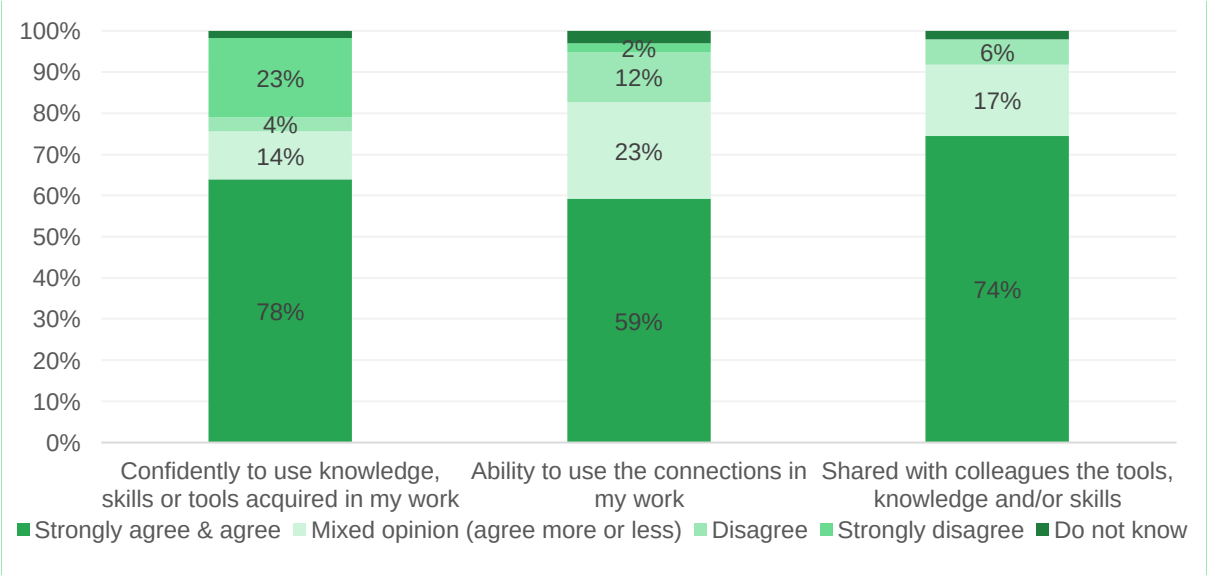
The 2023 FE online questionnaire asked workshop participants what they found most useful, and their answers were categorized into themes such as chemical management, health and safety, networking, technical content and updates, presentation and organisation, resources and toolkits, and miscellaneous. Participants were also asked if there were any sustained changes in how they do their job or career that can be attributed to the workshop, and their answers were categorized into themes such as application in job/industry, career/job performance improvement, knowledge acquisition/extension, teaching/training, legislation/regulation development, and no change.

120. Respondents to the FE online questionnaire were asked what they found most useful and appreciated most from the workshop or workshops that they had attended

(see Figure 3). ChatGPT categorized their answers into seven themes, which were later triangulated by own's categorization:

- **Chemical management**: Participants found the workshop useful in expanding their knowledge and skills in chemical management decision-making, chemical leasing, GHS implementation, and green chemistry. They also gained insight into how other countries are dealing with chemicals and were provided with updates on the latest information and available online databases.
- **Health and safety**: The workshop provided information on the effects of chemicals on health and safety, and how to avoid risk substances.
- **Networking**: Participants appreciated the opportunity to connect and network with other professionals in the region, and to share experiences with the audience.
- **Training methods and content**: Participants appreciated the technical content and updates provided by the speakers, including practical examples, case studies, and the use of the latest evaluation methods.
- **Presentation and organisation**: Participants found the workshop informative, interesting, and easy to understand. They appreciated the way the workshop was organized and the schedule was followed, as well as the good communication skills of the facilitators.

Figure 4: Usefulness of the workshop



121. Participants were also asked what they had used to what effect, e.g., if there have been any sustained changes in how they do their job or changes to their career that can be attributed to the workshop. ChatGPT categorized their answers into six themes, later corroborated by the evaluator:

- **Day-to-day application in job/industry**
  - "It has improved how I regulate pesticides"
  - "I applied it in my job when evaluating pesticides"
  - "I apply safety precautions when handling chemicals as part of my work"

- “Helping my colleagues using GHS system on our proposal preparations related to pesticides and chemicals management project”
- **Career/job performance improvement**
- “Improved my advisory services”
- “Consulting approach changed”
- “Improved service delivery”
- **Knowledge dissemination**
- “The participation in the workshops over two years has allowed me to present ideas and suggestions regarding the regulation that we are developing in Colombia”.
- Share my understanding to our workers where they will be able to practice during chemical handling.
- Started a program to educate my workmates using the materials a got from the workshop.
- I have brought the people together and shared the information with other community groups and alliances.
- **Teaching and research**
- “I can put the workshop material to my ppt file for the student in my campus”
- “Toolbox resources available to prepare teaching aids”
- “I use the knowledge in conducting research on particular topics in the industry”
- **Legislation/regulation development**
- “The workshop paved the way to proceed with the development of GHS regulations for its domestication and implementation in Tanzania”
- “The registration process for pesticides in Zimbabwe is now faster”
- “In general, the participation in the workshops, throughout the last two years, has allowed me to present ideas and suggestions regarding the regulation that we are developing in Colombia, related to the management of chemicals, taking into account issues that we had contemplated before participating in the workshops”.
- “Montage du document pour l'adhésion aux Conventions de Bale, Rotterdam, Stockholm et Minamata”.

Finding 24 related to greater collaboration and networking with and between countries and IOMC agencies

Enabling greater collaboration and networking is an important project outcome. Comparing the MTE and FE online survey results shows that the project’s ability to do so fell as a result of the project moving to virtual webinars, as a response to COVID-19. The fall was not as big as might have been expected: three-quarters of attendees at webinars said that the event had given them opportunities to connect, with 60 per cent saying they were able to use these connections.

Interviewees said that collaboration between POs reduced in 2022, in particular after the project coordinator left WHO.

122. According to the MTE, one of the Toolbox project’s most important outcomes has been to encourage greater inter- and intra-organisational collaboration at different scales. It is generally accepted that collaboration is important because the sound management of chemicals is a cross-cutting issue. Evidence that the project encouraged collaboration between workshop participants comes from similar online surveys conducted for the MTE in early 2020 and repeated for the FE three years

later. In 2020, when workshops had nearly all been face-to-face, over 90 per cent of respondents agreed that the workshop they attended provided them with the opportunity to make connections to other participants, 67 per cent indicated that they have been able to use the connections made and over 40 per cent said that meeting and learning from each other was the most useful aspect of the workshop. These percentages fell to 74 per cent, 59 per cent and 23 per cent respectively, for respondents to the FE survey, indicating that the move to virtual workshops and webinars had reduced participants' ability to establish good connections.

123. Descriptions of the benefits of connection given by respondents included:

- "Connections with UNITAR experts which have been a driving tool towards GHS implementation in Tanzania."
- "I have been able to interact with colleagues from other organisation and also obtained meaningful information and ideas from them that informed better performance on my job and enhanced my career progression"
- "The FAO Trainers are now resource persons for our National Registration Office as we can now consult them when we have challenges."
- "Connections with OECD which led to specific seminars for the Philippine national agencies."

124. Regarding collaboration between the POs, interviewees said that collaboration reduced in 2022, in particular after the project coordinator left his post in WHO. They noted that communication became more bilateral – see Finding 20.

Finding 25 related to workshop participants developing chemical management systems and resolve issues.

The ET was unable to find any cases in which the project had made a significant contribution to developing chemical management systems, despite asking PO focal persons this question. This is not surprising given that workshops do not engage participants for more than a few days, and what happened after the project workshops was not captured. Follow up of the three case studies constructed for the MTE also found no significant change could be attributed to them.

125. The original plan was that the ET would construct three studies of cases where workshop participants had developed chemical management systems, resolved issues and/or influenced chemical legislation or polices. Despite asking almost every interviewee to identify such cases, the ET found none. This is not to say that visitors to the Toolbox portal, or participants in project workshops and webinars did not use the Toolbox to solve problems, or use what they had learned in workshops and webinars to contribute in a meaningful and recognizable ways. What we can say is that the project was not able to track how its outputs were being put to use. This is not surprising, given that there was no systematic follow up after workshops had been completed.

126. The ET followed up upon the three case studies constructed as part of the MTE. The first case involved project support to a WHO project called "Establishment of key elements of national systems for a sound management of chemicals in selected

countries," funded by the German government (EURO project), that worked in three countries - Georgia, Belarus and Kazakhstan.[52] The project funded two participants from eight other countries in the region. At the time, the following outcomes were attributed to the workshop, which ran for five days:

- Ukraine and Kazakhstan invited Belarus experts to work with them on GHS;
- Some participants have maintained contact with others since the workshop;
- A demand was created to hold regularly hold similar meetings to strengthen connections and learning between the people involved in public health management of chemicals across the region; and
- WHO received requests for Toolbox workshops in a number of countries in the region.

127. The FE followed up about three years after the regional workshop. The respondent did not remember the workshop well enough to say if the project's contribution had amounted to anything. Her view was that any outcomes achieved primarily came from the EURO project which engaged for much longer than a single workshop.

128. The second case was the project supporting a workshop and accompanying webinars on the subject of pollutant registration and transfer registers in Indonesia, with the support of OECD. Also involved was the Basel and Stockholm Convention Regional Centre (BSCRC) for Southeast Asia in Indonesia, even though their reported view was that while important PRTRs are not of the highest priority for the government, and likely would not be funded.

129. Follow up by the ET found that the Indonesian government has not yet established a PRTR. Evidence for this comes from the OECD-Indonesia Joint Work Programme 2022-2025 that recommends setting up the PRTR in the medium-term, starting with pilot activities.[53]

130. The third case was a five-day FAO-led training workshop on FAO's pesticide registration toolkit, held in Trinidad and Tobago in February 2019. Together with a similar workshop held two years previously, which was not co-funded by the project, FAO trained a total of forty-one registrars and technicians from fifteen countries in the use of the FAO Pesticide Registration Toolkit.[54] Other than this, the main outcome was the establishment during the workshop of a WhatsApp group to remain in contact. Members used the group to ask colleagues for information on new pesticides they are being asked to approve for sale, as well as pesticide-related incidents and issues being written about in the media that might affect their own work.

[52] https://www.umweltbundesamt.de/sites/default/files/medien/3662/beratungshilfe/info_51-80_en.pdf

[53] https://www.oecd.org/southeast-asia/countries/indonesia/OECD-Indonesia%20Joint%20Work%20Programme%202022-2025.pdf

[54] http://lvv.gov.sr/media/1434/carib-pesticides-management-news-oct2019.pdf

Finding 26 relating to the project's contribution to sound management of chemicals in countries that use the Toolbox

In principle, the main mechanism by which the project contributes to the sound management of chemicals in countries is through SAICM. The project is relevant to three of the five SAICM beyond 2020 strategic objectives. The Toolbox provided practical guidance and tools to build capacity in governments, industry, and civil society. However, it has been difficult to establish how the project has contributed to achieving the objectives at the national level. To better contribute, the project should embed itself more deeply in ongoing country processes and ensure its relevance to the indicators being developed to track progress towards SAICM's objectives.

131. An important mechanism by which the project contributes to the sound management of chemicals in countries is through SAICM beyond 2020, as discussed under Finding 2. The project is directly relevant to three of the five SAICM strategic objectives. Establishing if and how the project has contributed to these objectives at national level has proven difficult, see Finding 25.

132. What can be demonstrated is that the project is producing results that can be expected to help SAICM reach its objectives. By providing practical guidance and tools, the Toolbox has helped to build the capacity of individuals in governments, industry, and civil society to better manage chemicals.

133. Ways in which the project can better contribute to sound management of chemicals at national levels came up in KIIs. One was that the project should embed itself more deeply in ongoing country processes, for example, in support of countries' efforts to qualify for OECD accession or bringing different ministries and other relevant actors to develop a cross-sectoral and integrated approach to ensuring the sound management of chemicals. By embedding more deeply, the project is more likely to be able to show contribution to SAICM objectives on the ground.

134. The project needs to ensure that it is relevant to the indicators being developed to track progress towards SAICM's objectives, see Finding 2.

EQ3.3 Have the project's structure and partnerships been effective?

Finding 27 on the project's structure and partnerships

The Toolbox project is a rare example of six UN agencies working together on a project related to chemicals management. The donor is satisfied with the project management and structure. However, administrative and bureaucratic requirements are impeding project delivery. The project needed a motivating goal beyond developing and promoting the Toolbox. The project is coordinated rather than led, with little incentive for participating organisations to work together. To contribute to SAICM objectives, the project needs to demonstrate its POs work in partnerships, networks, and with collaborative mechanisms to share information and promote coordinated action at the national and regional level. This may require a restructuring of the project, including giving the PMG more decision-making power and control over budget allocation.

135. As noted by the MTE, the Toolbox project is the only ongoing example of IOMC agencies working together on an IOMC project. Normally, UN agencies work on their own chemicals management projects: it is unusual to have six UN agencies working together on the same project in this area.

136. The donor, i.e., the EC, is satisfied with the project management and structure. The structure has been simplified to be covered by a single contract: for phase III OECD operated under a separate contract.

137. Part of this question is answered under Finding 20. In summary, the MTE found that administrative and bureaucratic requirements were impeding project delivery and recommended that the final project evaluation should look at progress made against them. The FE found that most of the bureaucratic hurdles from phase III will continue into phase IV, because removing them can only be done at the highest levels in the UN and EC. Nevertheless, some lessons have been learned and applied. One of the main administrative issues in the second half of phase III was the departure of key staff, causing communication problems, in particular related to the close of phase III and the proposal for phase IV. Workload, an indirect result of project structure, was a factor in the departure of some staff.

138. An important consideration, not covered by Finding 20, is the sense that the project needed a motivating goal beyond developing and promoting the Toolbox, for example developing a coherent pollution management policy at national level. In this scenario, the Toolbox would be used as a way to bring together key stakeholders including ministries – agriculture, health, environment, labour and industry – to tackle the challenge. In this regard, the Toolbox project can be thought of as a work package of a larger endeavour. At present, the Toolbox project provides little or no funding after a national-level workshop or webinar has been held.

139. As found in the MTE, the Toolbox project is coordinated rather than led, in other words, POs have a high degree of autonomy with little or no incentive to work together. The reality of POs organizing their own workshops and webinars, without inviting other POs, became worse during COVID-19, when face-to-face PMG meetings were dropped in favour of virtual meetings.[55]

140. If the Toolbox project is to contribute to SAICM objectives, it will need to demonstrate that its POs works through “intra and inter-sectoral partnerships, networks and collaborative mechanisms to share information, experiences and lessons learned, and to promote coordinated action at the regional and international level.”[56] This may require a reworking of how the project is structured, including giving the PMG more decision-making power and control over budget allocation.

[55] Ibid
[56] Ibid

Finding 28 on the possibility of bringing the IOMC Toolbox and the SAICM Knowledge portals under the same umbrella

SAICM received funding from GEF for a project which included the development of a knowledge management platform called SAICM Knowledge. This platform is similar to the IOMC Toolbox portal, but with a broader focus on information related to SAICM. While both portals provide free online resources for managing chemicals and hazardous substances, the IOMC Toolbox is more technical and focused on tools for chemical risk assessment and management. SAICM staff have approached the IOMC Toolbox project about integrating the two portals, but nothing has yet come of this. SAICM plans to continue supporting the Knowledge portal after the Global Environmental Facility (GEF) funding ends, while the EC has expressed interest in continuing to fund the Toolbox project for another phase.

141. SAICM successfully approached GEF to fund a project called "Global Best Practices on Emerging Chemical Policy Issues of Concern under SAICM" which was funded from 2020 to 2022. One of the three work packages is on knowledge management and stakeholder engagement, which has the development of a knowledge management platform as an output, available online as SAICM Knowledge.

142. According to ChatGPT, SAICM Knowledge is similar to the IOMC Toolbox portal in that both provide information related to the management of chemicals and hazardous substances; both are free online resources available to the general public; and provide information to stakeholders, policymakers, and the public. Both portals are described by their creators as 'one-stop-shops' for information.

143. The difference between the portals include:

- The IOMC Toolbox portal is primarily focused on providing access to tools and guidance documents for chemical risk assessment and management, while the SAICM Knowledge portal is more of a knowledge sharing platform for information related to SAICM.
- The IOMC Toolbox portal is maintained by the IOMC, which is a collaboration between several international organisations, while the SAICM Knowledge portal is maintained by the SAICM Secretariat, which is part of UNEP.
- The IOMC Toolbox portal is more technical in nature, with a focus on providing practical tools for chemical management, while the SAICM Knowledge portal provides a broader range of information related to chemicals and their management, including news, events, and publications.

144. SAICM staff have approached the Toolbox project to discuss an integration between the two portals, something that has not yet happened. SAICM will continue to support the Knowledge portal after the GEF funding stops. In the same way, the EC has verbally expressed the wish to continue to fund the Toolbox after the end of phase IV.

EQ3.4: To what extent are a human rights-based approach and a gender mainstreaming and inclusiveness strategy incorporated in the design and implementation of the project's Toolbox and toolkits? To what extent is the project's gender strategy in line with Women and Gender @ SAICM group recommendations? (GEEW) and EQ3.7

Finding 29 on the project's human rights-based approach and its gender mainstreaming and inclusiveness strategy

The project document lacks a human-rights approach and gender mainstreaming and inclusiveness strategy. The MTE made recommendations to improve the project's relevance to supporting gender equality and women's empowerment. Only one recommendation was implemented. A search of the Toolbox using the word "gender", "women", and "inclusion/inclusivity" brought back sixteen tools added during Phase III of the project highlighting the importance of promoting gender equality, addressing social and gender inequalities, and addressing gender-related implications in policies and practices related to chemical and waste management. The respondents to the FE online survey considered the events they attended to be inclusive, with a wide range of stakeholders participating being the most common reason. However, "inclusivity" can be a subjective concept, and few participants made reference to gender balance in the group.

145. The project document does not explicitly employ a human-rights approach, nor a gender mainstreaming and inclusiveness strategy. The MTE recommended a number of steps to be taken to improve the project's relevance to supporting gender equality and women's empowerment. Despite being accepted by the PMG, only one was implemented, see Finding 6.

146. The Toolbox allows for the search of Toolbox content for resources relating to gender, inclusiveness and human rights-based approaches.

147. A search of the Toolbox using the word 'gender', "women", "inclusion/inclusivity" brought back 16 tools added during phase III. The common themes cutting across the tools are the linkages between gender, environment, and chemicals management, and the need to address gender issues in policies and practices related to chemical and waste management. Specifically, the tools highlight the following themes:

- The importance of promoting gender equality and mainstreaming gender perspectives in policies and practices related to chemicals and waste management.
- The disproportionate impact of environmental health risks on women and other marginalized groups, and the need to address social and gender inequalities in environmental policies and practices.
- The role of women in handling hazardous chemicals and pesticides in agriculture and the health-related implications they face, emphasizing the need to address gender-related implications in pesticide management.
- The impact of mercury exposure on women of childbearing age, and the need for effective solutions to address this problem.
- The potential of Chemical Leasing to bring improvements to various fields, including gender and inclusiveness.

148. Overall, the common themes in these sources emphasize the need for more gender-responsive and inclusive policies and practices related to chemicals and waste management.

149. A search for the term “human rights-based approach” was less useful, bringing back 289 tools and management schemes. None of the first twenty appear to mention the term in the description provided by the portal.

150. Respondents to the FE online survey were asked if they thought the workshop they had attended, was inclusive. 82 per cent of the survey respondents (132), considered that the events they attended were inclusive. This response, however, should be read carefully since the interpretation of “inclusivity” can be subjective and not all respondents provided an explanation on the “why” of their selection. The most common reason for which the events were considered inclusive was the wide range of stakeholders participating in such events covering multiple sectors at different levels, e.g., local governments, academia, etc., which is in line with the project’s objective of building the capacity of national governments, industry, and civil society organisations to manage chemicals in an environmentally sound manner. Only a few participants made reference to having (or not having) gender balance in the group.

Finding 30 relating to whether the project has implemented any Women and Gender @ SAICM group recommendations?

The MTE suggested that the project respond to a position paper published by Women and Gender @ SAICM, entitled "Gender and the Sound Management of Chemicals beyond 2020," by adopting four measures for mainstreaming gender in the sound management of chemicals. These measures include increasing the availability of gender-disaggregated data, developing gender-specific indicators, making gender assessment tools available and ensuring their application, and supporting the establishment of an online platform for exchange on activities and information on gender and chemicals. However, the FE found that none of these measures were implemented.

151. The MTE made four suggestions as to how the project could respond to a position paper entitled “Gender and the Sound Management of Chemicals beyond 2020,” published by the group called Women and Gender @ SAICM. The FE found that none were implemented.

Suggested measures	How Toolbox project can respond	How it was incorporated in Phase III
Increase availability of gender-disaggregated data	Collect gender-disaggregated data for project activities. Ensure gender-disaggregated data is collected where relevant when using the toolkits. Develop gender specific indicators	Collection of sex or gender in workshops participants’ lists was not systematic.
Make gender assessment tools available and ensure their application at the national and international level	Develop and include gender assessment toolkits in the Toolbox	None gender assessment toolkits found from the word search.
Support regional and national focal points with capacity building and	Include regional and national gender focal points in the people targeted to attend project training workshops and then train them in the gender assessment tools (see above)	No evidence found for the workshops implemented during the second half of Phase III.

tools for including women and gender issues in their work		
Develop an online platform for exchange on activities and information on gender and chemicals	Support the establishment of online regional communities of practice that include information sharing on gender	No Communities of Practice identified as a result of the Toolbox project.

EQ3.5 Looking back, what lessons can be drawn to make future chemicals management guidance and training more effective?

Finding 31 on lessons to make future chemical management guidance and training more effective

Several lessons learned from Phase III the project that can be applied to Phase IV. Firstly, there is a need to follow up with participants after workshops and use the Kirkpatrick framework for evaluating training during and after the workshop to provide clearer examples of outcomes. The project should also develop and use a capacity building strategy, drawing on UNITAR's expertise. Secondly, a case study on UNIDO's experience with training of trainers highlighted the importance of including a module on the trainer's skillset and selecting trainers likely to train afterwards. Private sector participants were less available and less involved than government and academia, and therefore should be targeted in future events. Thirdly, the project should embed itself more deeply in ongoing country processes and set a better example of inter- and intra-sectoral partnerships. Fourthly, bureaucratic impediments can make collaboration difficult, and budgetary incentives for working together should be considered. Fifthly, the project was found to be gender blind, and a realistic gender strategy should be developed for Phase IV. Lastly, virtual meetings can increase the project's reach without significantly damaging participants' ability to establish professional contacts.

152. There are several lessons and suggested actions that can be drawn from Phase III of the Project, that can be applied to Phase IV:

- The project would likely have clearer examples of outcomes resulting from its workshops and webinars if it had followed up on participants after the workshops and had used the Kirkpatrick framework during and after the workshop, see Finding 16. The EC is looking for such accounts to justify their long-term support to the project. Phase IV of the project should develop and use a capacity building strategy, drawing on UNITAR's expertise in the area. There was good practice in Phase III to build upon – see Finding 16.
- A case study on UNIDO's experience with training of trainers – see Annex A. Case studies – identified a number of lessons, including:
  - ToT is a way to reach more people at national level and create national ownership.
  - Outreach can be further increased when there is a strategy for having participants share material with other stakeholders after the workshop participation.

- A regional ToT cannot easily be reproduced on a national or subnational level due to differences in language, training time, etc.
- ToTs need to include at least one module on the trainer's skillset and training methods and frameworks, such as the ADDIE[57] model.
- Trainer selection needs to be made in a way that they are likely to train afterwards.
- Private sector participants were less available and not as actively involved in training delivery compared to government and academia, though it is key to engage them.

- A single workshop, whether or not the Kirkpatrick framework is used, and whether or not there is follow up after the workshop, will always be a small part of any outcome trajectory.[58] To make more of a difference, the project should embed itself more deeply in ongoing country processes, for example, in support of countries' efforts to qualify for OECD accession or bringing different ministries and other relevant actors to develop a cross-sectoral and integrated approach to ensuring the sound management of chemicals, see Finding 26. A small budget allocation to push for integration would likely help.
- Linked to the previous lesson, the project should set a better example of showing its POs working together to establish inter- and intra-sectoral partnerships, networks and collaborative mechanisms to share information, experiences and lessons learned, and to promote coordinated action at the regional and international level – see Finding 2. This is one of the most important roles the project plays in IOMC's support to SAICM Beyond 2020.
- While individuals may very much wish to work collaboratively with likeminded people in other agencies, bureaucratic impediments can make the transaction cost to do so too high. Time and resources need to be budgeted for dealing with transaction costs given many impediments cannot be removed at the project level. Budgetary incentives for POs to work together on workshops were largely missing in Phase III and should be considered for Phase IV.
- Include finance officers in the negotiations for new proposals to avoid problems with accounting once the project is funded. Linked to this, provide training during the entry workshop to POs on how the budgeting of a project with multiple partners will work.
- Phase III of the project was found to be gender blind by the MTE. Measures to improve the project's gender awareness were recommended, but largely not acted on - see Finding 29. Phase IV would do well to develop a realistic gender strategy and use it. The strategy should be clear what the project can and cannot commit to. For example, the project usually does not select participants who attend its workshops, so cannot undertake to ensure gender balance. What it can do is to provide gender guidance as to inclusion among those invited to a workshop, of for the tools, toolkits and management schemes that go into the Toolbox.
- Using funding for face-to-face workshops to hold virtual workshops and webinars proved a way of increasing the project's reach, without doing too much

[57] ADDIE model is the generic process traditionally used by instructional designers and training developers. ADDIE stands for: Analysis, Design, Development, Implementation, and Evaluation.
[58] An outcome trajectory is the evolving pattern of interactions between actors, knowledge and institutions from which significant outcomes emerge (Douthwaite et al, 2022)

damage to participants' ability to establish professional contacts. Phase IV should develop guidelines as to when to carry out in-person meetings and when cheaper virtual meetings will suffice.

EQ3.6 To what extent have midterm evaluation recommendations been implemented?

153. In early 2020, the MTE made seven recommendations, all of which were accepted by the PMG.

The recommendations include finishing the new Toolbox platform and case study development, reviewing the project's theory of change and monitoring, enhancing future workshops, increasing project reach and impact, implementing a strategy for women's empowerment in the Toolbox, reducing administrative burden, and requesting a project extension with a plan to sustain the Toolbox after the project finishes. The FE finds that only a few recommendations were fully completed.

154. Table 10 summarizes the recommendations and the ET's assessment of progress made.

Finding 32 on progress made implementing MTE recommendations

The recommendations include finishing the new Toolbox platform and case study development, reviewing the project's theory of change and monitoring, enhancing future workshops, increasing project reach and impact, implementing a strategy for women's empowerment in the Toolbox, reducing administrative burden, and requesting a project extension with a plan to sustain the Toolbox after the project finishes. The FE finds that only a few recommendations were fully completed.

Table 10: MTE recommendations and the FE's assessment of progress made

MTE recommendation	FE assessment of progress made
On finishing the new Toolbox platform and case study development	
The PMG to: **a) Finish the new Toolbox platform** **b) Prioritize the development of case studies that include country examples of using PO's guidance material in tackling chemical management challenges**	a) Partially completed - The Toolbox 2.0 went live in May 2020 but was never finalized or officially launched – see Case Study 1. b) Case studies were constructed[59]
On the project's theory of change and monitoring	
Based on the ToC, the PMG should: **a) Review and, if necessary, change indicators and targets** **b) Include any missing assumptions in the ToC** **c) Use revisited ToC and logframe for planning activities for the rest of the project**	a) PMG indicated that the three points were either implemented or under implementation.[60] b) The FE could find no evidence that any changes were made to indicators, targets, assumptions or to planning. c) Not applicable.
Support regional and national focal points with capacity building and tools for including women and gender issues in their work	Include regional and national gender focal points in the people targeted to attend project training workshops and then train them in the gender assessment tools (see above)

[59] https://iamc-toolkit.org/index.php/case-studies/
[60] Management response. Mid-term evaluation of the IOMC toolbox for decision making in chemicals management Phase III.

On future workshops	
The PMG should: **a) Enhance guidelines to ensure future workshops are needs based, etc.** **b) Encourage participants to set up a WhatsApp group** **c) Hold at least one follow-up webinar after each workshop** **d) Analyze and follow up on subsequent use of technical capacity and connections resulting from workshops** **e) Identify co-financing opportunities to ensure workshops are relevant to ongoing initiatives**	a) The project's training guidelines were little used since the MTE, see Finding 16. b) FE did not find any development on this action. c) It was planned to do so. Few F2F workshops happened due to COVID-19. d) PMG response was for it to be done as part of Recommendation 2. Follow-up happened of ToT workshops, but not others, see Finding 16. e) PMG response was that this carried on as before. i.e., no change.
On increasing project reach and impact	
a) Establish reciprocal agreements with other portals to point users to the Toolbox **b) POs and DG Environment of the EC Proactively encourage that future chemical-management-related projects include a Toolbox component**	a) The PMG reported that this recommendation was being implemented in 2021. The FE found references to the Toolbox on several platforms, including SAICM's Knowledge portal. b) The ET found no evidence of the Toolbox being consistently included in POs' chemical-related projects.
To implement a strategy to address women's empowerment in the Toolbox	
a) The strategy should consider measures recommended by the Women and Gender @ SAICM group **b) Share cases of how gender has been mainstreamed into sound management of waste**	a) No action taken relating to SAICM group– see Finding 30. b) ET could find no cases developed.
On reducing administrative burden on the project	
a) Find a way to drop the EC's 70 per cent expenditure rule **b) The FE should look at the range of bureaucratic hurdles that faced the project**	a) Changing the 70 per cent rule cannot be done at the project level, see Finding 20 b) This was not included as a dedicated evaluation question in the ToR for the FE approved by the PMG. Nevertheless, the evaluator considered it during the AAR and interviews.
On project extension	
The PMG should request: **a) a NCE of one year;** **b) a fourth phase;** **c) both dependent on developing an exit strategy such that the Toolbox will be maintained after the project finishes**	a) Three NCEs were requested and agreed. b) The EC has agreed to fund a fourth phase for two years. c) A plan to sustain the Toolbox after the end the project was developed, see Finding 38.

Efficiency

EQ4: To what extent has the project delivered its results in a cost-effective manner and optimized partnerships?

EQ4.1 To what extent has the project been able to link to other initiatives and collaborated with other actors?

Finding 33 on the extent to which the project has been able to link to other initiatives and collaborated with other actors

The project creates an opportunity for IOMC POs to identify complementarities, but bureaucratic hurdles have limited this. The project's ability to enable greater collaboration and networking fell due to COVID-19, but attendees still found the webinars useful. Collaboration between POs reduced in 2022 when the project coordinator left. The project is relevant to three of SAICM's objectives, but it's difficult to establish its contribution to achieving them at the national level. Toolbox activities should embed them more deeply in ongoing country processes.

155. The answer to this question is provided by previous findings. Finding 10 examines how well the project complements and fosters synergies between IOMC partner and other capacity building programs. The IOMC provides technical and scientific support to help countries implement the SAICM framework, and the Toolbox project creates an opportunity for IOMC POs to identify and work on complementarities. However, bureaucratic hurdles and the way workshop topics are chosen to limit this opportunity. Finding 24 looks at the project's ability to enable greater collaboration and networking with and between countries and IOMC agencies. The project's ability to do so fell as a result of the project moving to virtual webinars due to COVID-19, but three-quarters of attendees still said the events gave them opportunities to connect. Interviewees noted that collaboration between POs reduced in 2022 when the project coordinator left.

156. Finally, Finding 26 discusses the project's contribution to sound management of chemicals in countries that use the Toolbox. The project is relevant to three of the five SAICM beyond 2020 strategic objectives, but it has been difficult to establish how it has contributed to achieving these objectives at the national level. The project should embed itself more deeply in ongoing country processes and ensure its relevance to the indicators being developed to track progress towards SAICM's objectives. The project should also explore greater collaboration with SAICM Knowledge, see Finding 28.

EQ4.2 To what extent has the project produced outputs in a timely and cost-efficient manner?

Finding 34 on the extent that the project produced outputs in a timely and cost-efficient manner

The project was timely and cost-effective insofar as largely achieving its targets. Nevertheless, two important lessons have been learned. The first is that the Toolbox will always need new content developed, updating of existing content, funding to host the website and regular upgrading of site security to prevent hacking. Given this, it makes more sense to announce important technical upgrades rather than holding a launch of a finished product, as was the expectation in the first half of the Phase III of the project. The second lesson is not to subcontract a task that is not well defined.

One potential weakness of the project is the rather low expected number of visits to the Toolbox portal – the project's main output – to low hundreds rather than thousands of visits per month – which might affect levels of future funding. Low expected numbers come from the focus of the Toolbox on the requirements of government staff engaged in sound chemical management, and the expectation that users will not revisit the site. The online survey suggests the Toolbox is of interest to academia and the private sector. Phase IV of the project could usefully explore expanding the relevance of the Toolbox and making it a site to which users return.

The fact that the EC has funded the project from the start of phase I and will continue int a fourth phase is testimony to its importance the EC places on the work.

157. Since phase I, the main project output has been the Toolbox portal. At the time of the FE, the Toolbox project has been through three phases of development, with Phase I creating a proof-of-concept website launched in 2012 and Phase II adding more content – see Case Study 1 – with an upgraded version launched in 2015. The external evaluation in Phase II found the portal design and structure to be a barrier to website use. Phase III was funded to continue improving the website's functionalities and broadening its scope.

158. In Phase III, a new portal was developed by the OECD, subcontracted to a private sector company, but there was a miscalculation in the amount of work required. The company eventually delivered Toolbox 2.0 in April 2020. Toolbox 2.0 went live in May 2020. The official launch of the Toolbox was initially envisaged for September 2020.[61] The launch was subsequently pushed back to November / December 2020 because work on the back office had not been completed.[62] The version that the company delivered turned out to be full of bugs, and it was necessary to hire a second company to clean it up.

159. The updated Toolbox 2.0 was presented at the OECD Environment Global Forum Meeting dedicated to chemicals management, 03-05 November 2020.[63] In December 2020, it was announced that the back office was working and that partners' changes to the Toolbox would be saved on a preview site (preview.iomctoolbox.org). The launch was further delayed until after January 2021.[64] The Toolbox had still not been launched by August 2021. At the 10th Joint Programme Management Group

[61] Final notes of the 6th Joint Programme Management Group (PMG) Meeting by Teleconference
[62] Final notes of the 7th Joint Programme Management Group (PMG) Meeting by Teleconference
[63] Description of the Action. IOMC Toolbox in decision making in chemicals management - Phase IV: Towards achieving the SDGs.
[64] Final notes of the 8th Joint Programme Management Group (PMG) Meeting by Teleconference

(PMG) meeting on 15 August 2021, UNITAR presented ideas for the official launch including ideas for a social media campaign.[65]

160. Subsequent PMG meetings made no mention of whether and when the official launch of the Toolbox had happened. One respondent clarified that the strategy is to promote significant IT improvements on an ongoing basis. This is reflected in the funding by the EC of Phase IV of the Toolbox project, much of which involves further development of the Toolbox.

161. The project has been timely and cost effective on the basis of largely achieving its objectives, see Finding 12. This is despite the project overcoming a number of difficulties, including the COVID-19 pandemic and complications with a sub-contractor hired to develop the Toolbox 2.0. Nevertheless, a potential criticism is that the target of increasing the number of visits to the Toolbox portal by 10 to 15 per cent per year from a Phase II baseline was set too low at just 178 visits per month. The counter to this criticism is that the Toolbox targets a relatively small amount of people so the order of magnitude of hundreds of visits per month rather than thousands per month.

EQ4.3 To what extent has the project adjusted to the COVID-19 related context, particularly for the originally planned face-to-face training events, and how efficient have webinars and virtual meetings been?

Finding 35 on how the project adjusted to COVID-19

The COVID-19 pandemic caused project-led face-to-face workshops to be carried out online. POs reallocated the budget to web-based training courses and virtual events. POs continued with some activities remotely, including developing the Toolbox platform and preparing new tools. Participants generally preferred face-to-face meetings but saw the advantage of virtual ones.

162. As a result of the COVID-19 pandemic, the project's face-to-face workshops were all carried out online, and there was only a partial return to face-to-face meetings after travel restrictions were lifted (Finding 18). Despite the challenges, the partners continued with some activities remotely, including the development of the new Toolbox platform, identification, description, and preparation of tools to be included in the Toolbox, and development of entry points for the Toolbox. The project partners requested and received three NCEs and the budget was reallocated from face-to-face training to the development of web-based training courses and virtual training events (Finding 17). The pandemic also led to an increase in virtual meetings. Surveyed participants preferred face-to-face meetings but saw the advantage of virtual ones. Participants ability to form links with others fell in virtual meetings, but not as much as might have been expected. IOMC received a modest grant to do joint promotional work during the pandemic, including the production of a video and infographic and a series of webinars coordinated by UNITAR.

[65] Final notes of the 10th Joint Programme Management Group (PMG) Meeting by Teleconference.

Likelihood of impact and early indication of impact

EQ5: What are the potential cumulative and/or long-term effects expected from the project, including contribution towards the intended impact, positive or negative impacts, or intended or unintended changes?

EQ5.1 To what extent has the project contributed to improvement of the sound management of chemicals in countries worldwide, especially in developing countries and countries with economies in transition?

Finding 36 on the extent that the project has contributed to improvement of the sound management of chemicals worldwide

This question is answered by findings aimed at answering EQ3.2 What outcomes did the project achieve, and how?

At the national level, Finding 25 states that the ET was unable to identify any significant project contribution to the development of chemical management systems. Finding 26 highlights the project's relevance to SAICM's strategic objectives, but it suggests that Phase IV of the project should better embed itself in ongoing country processes to contribute more effectively to achieving these objectives at national level.

At the level of workshop participants and visitors to the Toolbox portal, Finding 22 indicates a significant increase in the number of visitors to the project's online Toolbox. Finding 23 reports that project workshops and webinars were generally found to be useful, but a social media campaign could have increased the number of visitors to the Toolbox. Finding 24 suggests that virtual webinars provided some opportunities for collaboration and networking, but the departure of the project coordinator negatively impacted collaboration between participating organisations. Finally, the case study on training of trainers carried out by UNIDO suggests that this is a promising way of reaching more people at national level.

EQ5.2 To what extent are Toolbox and the toolkits users sharing their experience with other stakeholders in their region and as such multiply impact beyond single users or countries?

Finding 37 on the extent that the users of the Toolbox and its contents are sharing their experience with other stakeholders in their region

Sharing of experiences by the users of the Toolbox and its content has been observed happening most often during and after workshops and webinars, see Finding 24. In-depth interviews of workshop participants suggest the existence of ‘Toolbox Champions.’

163. Interviews with workshop and webinar participants gave a sense of how Toolbox and toolkit users are using the knowledge and contacts they gain in workshops and webinars. One interview in particular stood out as an example of what individuals can do – see Box 2. It suggests the existence of ‘champions’ who, with suitable support, can greatly scale up the use of the Toolbox and its content.

BOX 2. Matthew Daniel – a Toolbox "champion" in Nigeria

Matthew Daniel, an environmental health officer for the National government of Nigeria, working in a local council, participated in a UNITAR-organized online webinar in 2022 that focused on Nigerian nationals and the IOMC Toolbox for decision making in chemicals management – Strengthening health sector involvement in the sound management of chemicals. Matthew has spent almost two decades working with local governments in an oil-rich region, as well as organizing talks for communities and schools to raise awareness about environmental and public health. He is also a prosecutor in Nigeria's environmental and sanitation court, where he brings to trial possible environmental and sanitation law offenders.

During the webinar, Matthew found the practical examples given to illustrate the Toolbox particularly useful, such as the fumigation of aircraft to protect both individuals and the environment. This knowledge is crucial for his work, as he believes that to convince others to change their lifestyles and ban toxic chemicals, one must first understand why these chemicals are hazardous. Although he learned a lot from the online webinar, Matthew believes that a face-to-face meeting would have been more beneficial, as he faces challenges such as poor internet connectivity, distractions, and the inability to take time off when attending online webinars.

Matthew thinks it is essential to continue learning and acquiring knowledge in the rapidly evolving field of environmental health. S**ince the webinar, he has been using the IOMC Toolbox almost every day, linking chemicals such as arsenic, lead, and cadmium to public health.** He also en**courages his colleagues to use the Toolbox** in their prosecution work, referring to the materials in meetings or giving brief introductions. During their meetings, they discuss specific topics related to chemicals, using the Toolbox to identify problems, suggest solutions, and prevent harm.

However, convincing his colleagues to use the IOMC Toolbox was not easy, as the material presented new insights that they were not trained in. Matthew had to **train his colleagues in using and discussing the Toolbox extensively, but they now use it on a day-to-day basis to research, explain, and convince legal practitioners of the harm caused by improper chemicals management.**

Apart from his prosecution work, Matthew also started an Environmental Health Club at a secondary school, where he teaches and organizes talks and training for students on environmental issues and how they can become agents of change in their community. He believes in the importance of impacting knowledge and learning as one shares knowledge with others.

Matthew has also shared a proposal for a workshop under Phase IV with the ET which was shared with the PMG representative for consideration.

Likelihood of sustainability and early indication of sustainability

EQ6: To what extent are the project's results likely to be sustained in the long term?

EQ6.1 To what extent are the project and its results likely to be sustained in the mid- to long-term?

Finding 38 on plan to sustain the Toolbox after the project finishes

The Toolbox website requires ongoing funding for maintenance, updates, and security to prevent it from becoming outdated and vulnerable to hacking. To ensure sustainability, a plan has been developed in which the IOMC POs and Secretariat will bear the costs of maintaining current content, hosting the website, and adding new tools. The costs of further development and upgrading the IT platform will require additional funding. The promotion and training of the Toolbox will be integrated into relevant IOMC activities, with additional targeted training or promotion requiring separate funding. A PMG will oversee and coordinate Toolbox developments, with costs borne by participating POs and the IOMC Secretariat. The EC has funded a fourth phase of the project and expressed an intent to continue funding at a lower level after that phase ends. For funding to continue, from the EC or elsewhere, the project needs to maintain its relevance to IOMC, SAICM, the MEAs, and the EC, demonstrate its contribution to better chemical management at the national level, and embed project outputs in ongoing national processes.

164. There will always need to be funding to maintain the Toolbox website, to update and upload new tools created by the IOMC members, as well as maintaining website security. Without this happening, the Toolbox will quickly become out of date and become an increasingly easy target for hackers.

165. Following the MTE recommendation (see, Finding 32), the PMG developed a sustainability plan for the Toolbox in April 2021. In summary, the document states that ongoing sustainability will be ensured by the IOMC POs and the IOMC Secretariat after the external funding ceases. The costs to maintain the current content, hosting the website, and adding new tools developed by POs will be addressed by either the individual POs or through the IOMC mechanism. Additional funding would be needed for further development and upgrading the IT platform. Promotion and training of the Toolbox will be mainstreamed into all relevant activities of the IOMC POs, and any additional targeted training or promotion would require separate funding. A Project Management Group would be needed to oversee and coordinate Toolbox developments, and the costs would be borne by the participating POs and the IOMC Secretariat.

166. The EC has funded a fourth phase of the project and has expressed an intent to continue to fund the Toolbox at a lower level after the fourth phase finishes, see Finding 28. This is a tacit recognition that there will always be the need for a project of some sort to sustain project results.

167. The findings so far suggest for funding to continue, the project needs to do the following:

- Maintain and communicate about its relevance to IOMC, SAICM, the MEAs and the EC. As part of this, engage strategically in processes led by these institutions, and in reflections on where the Toolbox best fits between IOMC and SAICM.
- Demonstrate and communicate about contribution to better chemical management at national level, by:
  - Training of trainers to scale the number of people able to work on better chemical management;
  - Following up on the use of project outputs, as part of a capacity development strategy; and
  - Embed project outputs in on-going national processes.

168. Respondents stressed that the Toolbox is particularly useful in providing a mechanism in which an intent to better manage chemicals can be transformed into a concrete, multi-sectoral implementation plan, the costs and benefits of which can be calculated. This will help countries secure funding for such plans.

EQ6.2 What can we learn to inform the future design of similar programming?

Finding 39 on what can be learned to inform future design of similar programming

Lessons from Phase III that apply to Phase IV are identified under Finding 31. In summary, the lessons include the need to follow up with participants after workshops and use the Kirkpatrick framework. A capacity-building strategy should be developed, and the project should target private sector participants more effectively. The project should also embed itself more deeply in ongoing country processes, address bureaucratic impediments to collaboration, and develop a realistic gender strategy. Lastly, virtual meetings can increase the project's reach without doing much damage to participants' ability to establish professional contacts.

The online survey asked participants to make recommendations for improving the Toolbox project workshops. These recommendations can be considered for Phase IV. The responses were categorized into seven themes, including requests for more time, practical sessions, face-to-face sessions, language accommodation, wider coverage and inclusivity, better preparation and delivery, and better logistics and provisions. Additionally, respondents made suggestions for improvements beyond workshops, including specific changes to the Toolbox project, training and education, policy and regulation, and collaboration and engagement. Overall, the responses suggest a need for a multi-faceted approach to improving chemical management.

169. The online survey asked participants to make recommendations for improving Toolbox project workshops. These can be considered for Phase IV. ChatGPT categorized the answers into seven themes, and as confirmed by the evaluator into eight categories:

- **Extend workshop duration**
  - “Time for the training should be about one week”
  - “Extend the time of training as it was much limited with time”.

- “Extend the workshop for a longer time to enable more interaction and learning of participants”

- **More practical sessions, including real-life case studies and field work**
  - “More practice and supervision”
  - “I believe that training webinars focused on the practice of using the Toolbox tools should be promoted, with case studies and practical or applied exercises”.
  - “Include some group work and mini-projects”
  - “Hands on training is highly important”
  - “Use a real case or project, like specific industry as a partner for fieldwork or case study”
  - “Conduct more training programs with real practical exposures”
- **Face-to-face sessions**
  - “Arrange for face-to-face interactions.”
  - “Face-to-face seminars”.
- **Language accommodation**
  - “Take into consideration the languages of instruction. Maybe the use of French or Spanish will facilitate the interaction between participants”
- **Wider coverage and inclusivity**
  - “Plan for more inclusive workshops”
  - “Impliquer plus de secteurs (santé, environnement, commerce et industrie, agriculture etc.). [Involve more sectors (health, environment, industry, agriculture, etc.)]”
- **Better preparation and delivery**
  - “More experienced speakers, better preparation to achieve workshop goals, and more focused discussion”
  - “Establish your very focused learning objectives and put your energy in communicating this with all participants”
  - “More speakers needed”
- **Logistics and provisions**
  - “Provide notes before the event”
  - “Provide adequate data, funds, refreshments”
  - “Webinars to be conducted at a hotel with strong internet connectivity”.
- **Periodic training and follow up with participants**
  - “Lecturer must do more follow up with participants”
  - “Similar workshop should be done periodically and should be more of face-to-face to avoid distraction.”
  - “Regular workshop is needed as well as better systems and enablers.
  - “Participer à d'autres ateliers ou sessions de formation [Participate in other workshops or training sessions]”

170. The survey also asked respondents to make suggestions for improvements beyond workshops. Chatbot GPT and the evaluator categorized the responses as follows:

- **Specific changes** as to how Toolbox project’s workshops could be improved, such as offering more practical workshops and case studies, adapt

the training content to the country realities making reference to the legal framework and regulations; or including recorded webinars in the Toolbox.

- **Training and education**: Many answers focus on the need for more training and education in chemical management, especially to decision makers and board members, such as providing training for chemical company personnel or offering workshops to decision makers and board members.
- **Policy and regulation**: Some answers suggest that policy and regulation need to be supported, such as providing funding for the development of legislation on chemical management, more support in the formulation of policies and regulations and in conducting pilot projects.
- **Collaboration and engagement**: Several answers suggest that collaboration and engagement are important, such as providing more opportunities for (in-country) participation.

171. Overall, these answers suggest that there is a need for a multi-faceted approach to improving chemical management, which includes training and education, policy and regulation, collaboration and engagement, and other approaches as well.

Conclusions

Relevance

Conclusion 1: The project is broadly relevant.

172. The IOMC Toolbox project is relevant to global processes and institutions, including the donor's own objectives and the target group's needs. The project aligns with five SDGs, particularly SDG 12 and its target 12.4, by providing guidance and tools to improve the management of chemicals and reduce risks to human health and the environment. The project is closely aligned with SAICM's strategic objectives but had less influence on its Quick Start Programme than expected. The project is aligned with several MEAs, providing guidance and tools for their implementation at the national level. The project is consistent with achieving the EC's objectives for sustainable chemicals which is reflected in EC funding the project for four phases. Finally, the project's Toolbox portal and its contents remain relevant and useful, as evidenced by a FE online survey of workshop participants, although the private sector is under-represented compared to government and academia.

Conclusion 2: The project can do better with respect to gender equality and women's empowerment and social inclusion.

173. The third phase of the project was found to be gender-blind by the MTE, and several actions were recommended to improve the rating, but only one was implemented. Gender was incorporated as a new component in the fourth phase, which would benefit from having an explicit strategy to lay out how gender equity and social inclusion will be integrated into project activities. On the positive side, the Toolbox contains at least sixteen tools that highlight the importance of promoting gender equality, addressing social and gender inequalities, and addressing gender-related implications in policies and practices related to chemical and waste

management. Participants in an online survey considered the events they attended to be inclusive, but few made reference to gender balance in their answers.

Conclusion 3: The project's ToC developed by the MTE remains valid for Phase IV.

174. The ToC developed by the MTE was reviewed by the PO representatives and adjusted so as to remain valid for phase IV. Since January 2020 only modest progress has been made on delivering the outcomes identified in the ToC. Several key causal assumptions remain unproven, largely because of a lack of follow-up of what workshop and webinar participants did with what they had learned. The project suffers from the fact that a big part of its activities – the holding of workshops and webinars - are too small to make any real contribution to better chemical management at national scale.

Coherence

Conclusion 4: The project is largely coherent with policies, programmes and projects at different scales, but greater coherence is possible.

175. The IOMC Toolbox components complement each other, but other reputable and specific sources of information on chemical management exist. Project workshops and webinars need to better mirror the multi-sectoral approach for chemical management called for by SAICM. Exploring and exploiting complementarities between IOMC POs is constrained by bureaucratic hurdles, the way workshop topics are chosen, and budget allocation to individual POs. The SAICM Knowledge website complements the IOMC Toolbox and could host it. The project funded training activities that would not have otherwise happened and at least a third of workshop participants found the training to complement their existing knowledge. The Toolbox is particularly relevant in OECD country accession processes, which could be an opportunity for phase IV.

Effectiveness

Conclusion 5: The project achieved and surpassed six of its output targets, and came close to achieving the seventh.

176. Project outputs identified in the project logical framework were new Toolbox designed, target audience aware of the Toolbox, and target audience trained on the use of selected tools. The project exceeded in particular the target number of visitors per month. However, the baseline and percentage increase per year were set at too low a level for this achievement to signify much.

Conclusion 6: Project capacity development should be improved in Phase IV, building on good practices in Phase III.

177. Despite some good practices, the project should have done more to improve its training design and follow up after workshops to reinforce learning and induce changes. A capacity development strategy that includes the Kirkpatrick framework for evaluating training and individual, organisational, and enabling environment

dimensions of capacity development should be developed for Phase IV. Suggestions for improving the Toolbox project workshops and webinars include: providing more time in the workshops and webinars, having more practical and face-to-face sessions, language accommodation and wider coverage.

Efficiency

Conclusion 7: A number of factors adversely affected project delivery. These should be taken into account in Phase IV.

178. Impediments to project include the COVID-19 travel restrictions, delays in developing the Toolbox 2.0, administrative and bureaucratic delays and the departure of key staff. The latter should also be anticipated in Phase IV, and the Phase IV timeline should be set accordingly.

Likelihood of impact

Conclusion 8: The project needs to embed itself more deeply into ongoing processes at the national level to achieve greater outcomes and impact.

179. Linked to Conclusion 3 on the ToC, the project needs to embed itself more deeply in national chemical management processes by undertaking to contribute to carefully selected ones, such as contributing to build a cross-sectoral and integrated approach to ensure the sound management of chemicals.

Conclusion 9: The project only completed a few of the MTE recommendations by the end of Phase III.

180. Learning from this, the recommendations of this evaluation that are applicable to Phase IV should be specified in a way as to increase the phase IV's commitment to implementing them.

Likelihood of sustainability

Conclusion 10: The project has developed a plan to sustain the Toolbox after external funding finishes, which will not necessarily be fully funded.

181. One option worth exploring is building the complementarity between the Toolbox and SAICM's Knowledge portal such that SAICM helps support the Toolbox.

Recommendations

The following recommendations are all proposed to the Toolbox project phase IV PMG.

On gender:

1. Improve the way that the Phase IV of the project deals with GEEW by developing and using an explicit GEEW strategy for the project that builds upon the work of Women and Gender @ SAICM. Also, a GEEW entry-point for the Toolbox should be developed in Phase IV.

On the theory of change and targets:

2. Reflect on the ongoing validity of the Phase III project theory of change at the Phase IV MTE, by filling out a third column added to Table 4.
3. Review and adjust the baseline and percentage increase per year for targets in the project logical framework to ensure they are set at a realistic level.

On capacity development:

4. Improve project capacity development in Phase IV by developing and using a capacity development strategy that includes the Kirkpatrick framework and individual, organisational, and enabling environment dimensions of capacity development, as well as guidelines for when to hold in-person meetings and when cheaper virtual meetings will suffice. Build national networks of Toolbox trainers of trainers. Build on UNITAR's experience with capacity development.
5. Informed by this strategy, Phase IV of the project should do a better job of following up on how Toolbox users and workshop and webinar participants are using project outputs. Success cases should be developed for communication purposes. The success cases should show how the Toolbox has contributed to specific outcome trajectories relating to better chemical management at country level.

On the administrative and financial collaboration:

6. Allow for staff time and budget to deal with the administrative and bureaucratic impediments identified in Phase III that happen when running a multi-partner project, and which cannot be changed at project level.

On linkages:

7. Phase IV of the project should set a better example of showing its POs working together to establish inter- and intra-sectoral partnerships, networks and collaborative mechanisms to share information, experiences, and lessons learned. This could include organizing capacity building workshops jointly, i.e., in a ToT format, where other organisations are not simply invited but co-organizers.

On impact:

8. Embed the project more deeply in national chemical management processes by contributing to carefully selected ones, such as building a cross-sectoral and integrated approach to ensure the sound management of chemicals. In this context, identify and support a network of 'Toolbox' champions to increase the number of project beneficiaries at national level.

On sustainability:

9. Phase IV of the project should explore building complementarity between the Toolbox and SAICM's Knowledge portal to sustain the Toolbox after external funding finishes.
10. Phase IV should endeavour to make the Toolbox relevant to a broader audience, and find ways of making it useful on an on-going basis so users return to the site. Phase IV should set itself the target of increasing visits to the web site by an order of magnitude to make it more likely to sustain funding to keep it going.

Lessons Learned

Lessons from the evaluation exercise and the discussion during the presentation of findings are:

1. It is important for training of trainers to include at least one module on trainers' skillset and training methods such as the ADDIE model and making trainer selection in a way that they are likely to train afterwards.

2. It is important to include finance officers in negotiations for new proposals to avoid accounting problems and training on budgeting for projects with multiple partners is key for the successful financial management of a project.

3. Budgetary incentives may be needed to induce partner organisations to work together.

4. COVID-19 has led to implementation challenges and it is key to acknowledge these. The strategic selection of country partners is always informed by country context, country priorities and influenced by global pandemics.

5. Long-term monitoring is a key challenge for many projects. Multiple phases do not necessarily simplify the task in comparison to longer-term projects that are implemented continuously.

6. Coordination requires leadership and is a key ingredient for future collaboration.

Annexes

A. Case studies

Case study 1: History of the development of the IOMC Toolbox

Phase I of the project developed and tested a proof-of-concept one-stop-shop website. Phase II added more content. However, the phase II external evaluation found the portal design and structure was a barrier to the use of the website. Accordingly, Phase III was funded to "continue improving the functionalities and broadening the scope and application of the Toolbox."[66]

Such was the criticism of the Toolbox portal by the phase II evaluation, the project developed a new portal. OECD took responsibility for the work and subcontracted it to a private sector company. There was a miscalculation in the amount of work involved. The MTE found that by January 2020, planned-for redesign had not been completed sufficiently to go live, despite a PMG meting commitment to do so by April 2019. At some point the company stopped replying to OECD requests for updates and legal steps were needed to compel the company to deliver what they had been contracted to do. The new website was finally delivered by the company in April 2020.

The new IOMC Toolbox 2.0 went live in May 2020[67] via the URL www.IOMCToolbox.org. The official launch of the Toolbox was initially envisaged for September 2020.[68] The launch was subsequently pushed back to November / December 2020 because work on the back office had not been completed.[69] The version that the company delivered turned out to be full of bugs, and it was necessary to hire a second company to clean it up.

The updated Toolbox 2.0 was presented at the OECD Environment Global Forum Meeting dedicated to chemicals management, 3-5 November 2020.[70] In December 2020, it was announced that the back office was working and that partners' changes to the Toolbox would be saved on a preview site (preview.iomctoolbox.org). The launch was further delayed until after January 2021.[71] The Toolbox had still not been launched by August 2021. At the 10th Joint Programme Management Group (PMG) meeting on 15 August 2021, UNITAR presented ideas for the official launch including ideas for a social media campaign.[72]

[66] Delegation Agreement. "IOMC Toolbox for decision making in chemicals management – Phase III: From design to action". 21.020701/2017/767540/SUB/ENV.B2

[67] https://issuu.com/oecd.publishing/docs/progress-report-on-chemical-safety-and-biosafety-n/s/11260257#:~:text=The%20new%20platform%20was%20live,the%20beginning%20of%20November%202020.

[68] Final notes of the 6th Joint Programme Management Group (PMG) Meeting by Teleconference

[69] Final notes of the 7th Joint Programme Management Group (PMG) Meeting by Teleconference

[70] Description of the Action. IOMC Toolbox for decision making in chemicals management - Phase IV: Towards Achieving the SDGs.

[71] Final notes of the 8th Joint Programme Management Group (PMG) Meeting by Teleconference

[72] Final notes of the 10th Joint Programme Management Group (PMG) Meeting by Teleconference

Subsequent PMG meetings made no mention of if and when the official launch of the Toolbox had happened. One respondent clarified that the strategy is to promote significant IT improvements on an ongoing basis. This is reflected in the funding by the EC of Phase IV of the Toolbox project, much of which involves further development of the Toolbox. The two expected results from Phase IV are:

- Updated Toolbox, i.e., existing management schemes and tools reviewed and revised when needed, including to improve the integration of human rights and gender equality aspects and the protection of vulnerable populations.
- Broadened Toolbox, i.e., new or broadened chemical management schemes and related tools added, thereby increasing scope and applicability. [73]

Phase IV will run for three years with a budget of EUR 2 million.

Case Study 2: Training of Trainers (ToT) model

Introduction and rationale

As part of Phase III of the project, UNIDO organized a series of ToT activities on chemical leasing after conducting a needs assessment. These included one regional ToT training (conducted online), three national ToT trainings (also conducted online), and local (sub-regional) training workshops (held in person) in Indonesia, Sri Lanka, and Vietnam from 2021-2022. In 2022, a ToT training was also conducted online in Bosnia-Herzegovina.

The ToT model involves integrating a training programme for trainers within a project, allowing individuals and institutions to take ownership of the training programme and empowering them to multiply its impact across different contexts without external support in the long-term. Developing the professional skills of trainers ensures local ownership and the long-term sustainability of the project. ToT enables individuals and institutions to become qualified trainers, thereby empowering them to disseminate knowledge to a wider audience with greater impact. ToT also equips trainers to be more effective and engaging, enhancing and transforming the knowledge, skills, and attitudes of those they work with.

The objective of the ToT was to build a pool of competent professionals in the field of sound chemicals management who could act as instructors to further disseminate the information and skills, ensuring ownership and sustainability of the project. Trainers from the regional ToT were tasked with delivering the national ToT workshops and local follow-up workshops.

Regional ToT

UNIDO organized a regional ToT, consisting of eight online webinars from 30 August 2021 to 5 October 2021, with participation from other organisations such as WHO, UNEP, ILO, and UNITAR. The training content focused on toolkits e.g., the Chemical Leasing Toolkit and the Green Chemistry Toolkit, but did not include any sessions related to training organisation or trainer skills. The training had 12 participants from Sri Lanka, 14 from

[73] Description of the Action. IOMC Toolbox for decision making in chemicals management - Phase IV: Towards Achieving the SDGs.

Vietnam, and 11 from Indonesia, all of whom passed the final test with a minimum score of 80 per cent. The most active participants were invited to be trainers at national workshops, but Vietnam opted to invite trainers from VINACHEMIA instead.

Additionally, a two-day training on the Chemical Leasing toolkit was conducted in May 2022 for 90 participants in collaboration with the Faculty of Technology from Banja Luka and CENER 21 from Sarajevo, Bosnia and Herzegovina, which was not originally planned but was implemented with unused funds. However, it is unclear if this led to any further training being organized. Guidelines were shared with selected participants for organizing national workshops, and agendas were reviewed and approved prior to delivery. Due to the use of local languages, course material could not be reviewed, and post-training assessments were conducted by UNIDO to determine the interventions' potential impacts and lessons learned for the next phase.

National ToTs

In December 2021 - January 2022, joint national webinars were conducted for Indonesia and Vietnam, and a webinar series was organized for Sri Lanka between November and December 2021. The national trainings were conducted in local languages. Following the completion of the training, a national-level test was administered to participants, and those who attended more than 75 per cent (85 per cent for Indonesia) of the training and answered correctly to more than 50 per cent of the questions on the test were eligible to receive a certificate. However, the National Cleaner Production Centre (NCPC) Vietnam did not conduct testing, and the only criterion for certificate issuance was participation in the workshops (more than 75 per cent). The certification rates[74] were as follows: Indonesia – 25 per cent (37 certificates out of 150), Sri Lanka – 32 per cent (28 certificates out of 87), and Vietnam – 12 per cent (15 certificates out of 127).

Most of the learning objectives for the national training were not formulated according to training industry standards such as Bloom's taxonomy, which categorizes learning objectives into 6 cognitive levels. Instead, the objectives were more of an enumeration of topics covered during the training, such as the presentation of toolkits from the IOMC Toolbox, OSH and Workplace Risk Assessment from ILO, and EPR from OECD, among others. However, a few other learning objectives were well-formulated and measurable, such as assessing the impacts of solvent usage and identifying green chemistry alternative solvent systems, discussing ways to process waste, prevent waste and innovation, and identifying different metrics in green chemistry for implementing best practices.

Local-level training in Indonesia

Training sessions were conducted in Bandung and Jakarta in August and September 2022, along with an online session to accommodate participants unable to attend the in-person training. Participants from a variety of sectors, including lecturers, researchers, consultants, chemical suppliers, and industries (textile) and NGOs attended the training.

[74] Certification rates calculated by the evaluation according to participant and certificate numbers from reports. Given that certification award relied on different criteria, the rates cannot be compared, however.

The online participants were from different parts of Indonesia, including Sumatra, Java, Bali, Sulawesi, and Kalimantan, and from various sectors such as textile, resin, construction planning, small and medium business groups, research centres, and environmental agencies. A total of 150 participants attended, of which 78 were from universities, 56 from industries, 12 from government institutions, and 4 from other categories. The training had a relatively balanced gender ratio, with 81 men and 69 women.

The training aimed to provide a deeper technical understanding of green chemistry and chemical leasing in the context of Indonesia, and to enable participants to use the Green Chemistry and Chemical Leasing toolkits in their daily lives and workplaces. Trainers from the Cleaner Production Centre in Serbia were also involved in the training.

Prior to the training, pre-tests were conducted to assess the participants' prior knowledge, followed by a post-test after the training. The results showed that online participants had a higher error rate (21 per cent) compared to face-to-face participants (13 per cent).

After the training, participants were asked to share information related to the IOMC Toolbox, Chemical Leasing, and Green Chemistry with colleagues at their workplace or students in their respective places. Thirty-eight university participants distributed training materials to their students, while 961 students received training materials from their respective lecturers. From the training participants, 21 distributed training materials to co-workers, and six attempted to implement one of the training materials as a case study of Chemical Leasing or Green Chemistry in their industry. On average, every person trained directly by the project shared the training material with 6 to 7 more people. Participants who completed assignments by sharing training materials were entitled to an IOMC Toolbox training certificate.

Feedback questionnaires administered after the training showed that 26 per cent of participants were aware of the IOMC Toolbox before the training, 27 per cent were aware of Chemical Leasing, and 43 per cent were aware of Green Chemistry. Interviews with lecturers revealed that the training material was widely shared, and supervisors encouraged the participation of lecturers and PhD students. However, it was noted that external trainers have been included despite having trained Indonesian trainers in the regional ToT.

Good practices from the training included inviting participants from a variety of sectors and offering an online session to accommodate high demand, deploying pre- and post-tests to assess knowledge, and organizing the dissemination of training materials. Areas for improvement include continuing training national trainers to that reliance on external trainers in future training sessions is reduced.

Local level training in Sri Lanka

In October 2022, Sri Lanka organized two training events in each of its three regions - Colombo, Galle, and Kandy. Prior to the events, a needs assessment was conducted by interviewing 62 stakeholders, including participants from previous training sessions, relevant industry representatives, and sector experts from government, universities, and

industries. In total, 87 participants attended all three training events, which also included a study tour to a factory. Feedback from participants was extremely positive, as confirmed by a feedback questionnaire.

One interviewee who attended the training was the head of the department of the chemical and process engineering faculty in a university. He has been teaching subject matters related to chemical safety, health and safety management, and environmental management at the undergraduate and postgraduate level for the past 30 years. Additionally, he also does consultancy work for the Ministry of Environment in the areas of chemicals and waste management and environmental removal. The interviewee mentioned that one of the goals of the workshop was to help participants learn how to teach or pass on the content to students, colleagues, etc. He was able to use the content of the workshop in the courses he teaches, as well as encourage students to use the IOMC Toolbox when writing assignments. He also followed some additional global webinars on other toolkits and management schemes from the Toolbox.

Due to his full-time job, he suggested that all recordings of the online webinars be saved on the Toolbox website so that he can watch or revisit them at his convenience. In addition to updating his teaching material, the interviewee used the knowledge he gained during the thematic workshops to create policy guidelines for mercury management in various sectors, such as health, industry, and education. This work was done as part of a contract for the Ministry of Environment. He discovered that there are gaps in the management system of the healthcare sector in Sri Lanka and filed a project proposal to the GEF to get project funding to improve the management system.

The interviewee also noted that the IOMC Toolbox website is particularly useful for some thematic areas, such as mercury, but for other topics, such as the impact of chemicals on healthcare, the website of the responsible agency is more resourceful in finding the necessary information to write guidelines.

Conducting a needs assessment prior to developing the training and interviewing a large number of stakeholders are considered good practices in the training industry. Including a study tour in the training agenda is also important as it combines theoretical knowledge with practical examples, in line with adult learning principles.

Local level training in Vietnam

In August 2022, training courses were held in three regions of Vietnam, focusing on Green Chemistry, Chemical Leasing, and study tours to production facilities that use green chemical technology or cleaner production in the North, Central, and South regions of the country. During an interview, one participant from Vietnam mentioned that they contracted consultants who were teaching professionals to develop training materials and deliver training on chemical leasing and green chemistry since the participant was not a professional trainer, and the training had a different duration and language than the regional ToT he attended.

The interviewee also reported that they were unable to fully utilize the Toolbox, although they saw future opportunities to apply it when the law on chemical management from 2007

was reviewed between 2023-2025 and plans to integrate green chemistry were made. The Toolbox needs to be translated into more languages, and the interviewee suggested that the project should collaborate with universities to integrate the Toolbox into the curriculum for related studies.

Good practices include organizing study tours as part of the training agenda to combine theoretical knowledge with practical examples, which is particularly important as per adult learning principles. However, improvements are needed, such as overcoming the need to contract external trainers despite having trained trainers from Vietnam in the regional ToT due to language, duration, and lack of training skills development included in the regional ToT. Also, a ToT should always include teaching and training skills development and not only be focused on thematic training.

Feedback from training participants

The FE survey received responses from 28 participants who attended one of the ToT events, and 5 follow-up interviews were conducted with ToT participants and organizers. Of the survey respondents, fifteen reported that they had delivered further training after the ToT, targeting industry, government, trainers, academia, including undergraduates and colleagues while 12 did not. Eight respondents indicated that they had organized follow-up trainings more than once. 17 respondents or 61 per cent agreed or strongly agreed that they were able to confidently use the knowledge, skills or tools they acquired in the workshop in their work. The main reasons for not providing training after the workshops were lack of funding and lack of time. Reported changes attributed to attending the workshop included increased work speed, more linkages to industry, increased knowledge useful in research, better understanding of chemical management and cleaner production, conducting research related to industry, including workshop materials in university teaching and teaching aids, applying a method to reduce waste/use of chemicals leading to reducing environmental pollution and extending the consulting scope to chemical leasing and green chemistry.

Respondents recommended improving the training event by including more practice and supervision per participant, more experimental learning and use of real case studies, and more interaction between trainers and participants. Recommendations for improving the IOMC Toolbox include using it to resolve real cases and practical examples and policies from governments, including recorded webinars on the site, and providing funding for the development of legislation on chemical management.

Achievements

The ToT format reached a higher number of people and led to national ownership of the process by including only light supervision. The training brought together multiple sectors, including industry, academia, government, NGOs, and others, and both senior and junior level participants. Dissemination of training material was organized professionally, and a follow-up mechanism was included to obtain evidence of the dissemination, leading to great monitoring data. University personnel included in the training led to the Toolbox material being used for teaching in universities.

Lessons Learned

A regional ToT cannot easily be reproduced on a national or subnational level due to differences in language, training time, etc. ToTs need to include at least one module, if not more, on trainer's skillset, and cannot have a thematic focus only. ToT trainer selection needs to be made in a way that they are likely to train afterwards. Private sector participants were less available and not as actively involved in training delivery on national or local levels as government and academia. Despite UNIDO's requirements for trainer's qualifications, which included technical and functional experience as well as English language criteria, no reference was made to training experience or responsibility.

B. Logical Framework

	Intervention logic	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of information	Assumptions
Overall objective: Impact	*Improvement of the sound management of chemicals in countries worldwide that use the IOMC Toolbox and its content, thereby contributing to the achievement and implementation of nearly all Sustainable Development Goals (SDGs), multi-lateral environmental and other international agreements.*	*# of new countries using the Toolbox and its content to draft and adopt policies for the sound management of chemicals.*	8% average increase of stakeholders in countries using selected IOMC tools during 2011-2013 (see ICCM4, Doc. SAICM/ICCM.4/3)	10-15% average increase of stakeholders in countries using selected IOMC tools during 2018-2022.	End-of-project country survey and follow-up, including country case studies.	The use of the Toolbox allows countries to identify the best guidelines. Guidelines and tools are implmented by countries contributing to the sound managmnet of chemicals.
Specific objective: Outcome	Toolbox provides an effective mechanism for accessing guidance	# of downloads from the IOMC Toolbox web site	# of downloads at the end of Phase II (Oct 2017)	10-15% increase per year until 2022	Web statistics	Countries have immediate, tangible, policy-related objectives or problems to address.
	Countries use and implement guidance provided through the Toolbox	# of countries having implemented or are in the process implementing IOMC Tools	# of countries at the end of Phase II (Oct 2017)	20 countries	Meeting reports	
	Countries are able to initiate process to resolve chemicals management issues using Toolbox materials	Level of being able to manage chemicals in countries by using IOMC Tools (at a scale from 1 to 5)	NA	75% at level 4 and above	Survey and case studies	
Outputs	New IOMC Toolbox design	Level of user satisfaction (on a scale from 1 to 5).	NA	75% at level 4 and above.	Online evaluation questionnaire	Design of Toolbox will change.
	Target audience is aware of Toolbox	# of visits to IOMC Toolbox	# of visits at the end of Phase II of the Project (Oct 2017)	10-15% increase per year in 2018 to 2022	Web statistics	Toolbox visitors reply to evaluation questionnaire.
		Background of online visitors	NA	At least 50% of visitors replying to online questionnaire from within target audience	Online evaluation questionnaire	
		# of persons to whom the Toolbox is promoted and trained.	4000 (Oct 2017)	6000 (i.e. 4000 (2017) plus 2000) (2022)	Meeting reports	
		Background of persons to whom the Toolbox is promoted and trained.	NA	More than 70% of persons from within the target audience	Meeting reports/1	
	Target audience is trained on the use of selected tools	# of capacity building events (face-to-face)	0	20	Reports	Participants in capacity building events have an active role in their countries concerning the management of chemicals. Participation in the event prepares them to implement the necessary tools to strengthen the management systems.
		# of capacity building events (webinars)	0	20	Reports	
		# of participants attending capacity building events (face-to-face)	0	300 (by 2022)	Reports	
		# of participants attending capacity building events (webinars)	0	300 (by 2022)	Webinar statistics	
		Level of preparedness to implement identified tools following training events (on a scale from 1 to 5).	NA	75% at level 4 and above	Evaluation questionnaire	

C. Terms of reference

Draft Terms of Reference

Final evaluation of the IOMC Toolbox for decision making in chemicals management – Phase III: From design to action

04.03.2022

Background

1. The IOMC Toolbox project (the "project") for Decision Making in Chemicals Management was designed to assist countries and (sub) regions in developing countries and countries with economies in transition worldwide with identifying the most relevant, efficient and appropriate national actions to respond to chemicals management problems. The intended impact is to strengthen the sound management of chemicals in many developing countries and countries with economies in transition.

2. The project has completed two phases already. Phase I focused on the development of a proof-of-concept version of the Toolbox itself. During Phase II the Toolbox was pilot-tested, further developed and its functionalities were improved. At the end of Phase II, the Toolbox was promoted to over 3,000 policy makers worldwide but focusing on developing countries and countries with economies in transition. The objective of Phase III, from design to action, is to continue improving functionalities and broadening the scope and application of the Toolbox. In addition, Phase III includes a strong capacity building component to broaden awareness of the Toolbox and enable countries to implement the tools available in the Toolbox. This will be achieved by conducting a series of webinars and face-to-face capacity building workshops for relevant policy makers and professionals. As a consequence of the ongoing COVID-19 pandemic and associated measures, the Project Management Group (PMG) has requested two extensions of the timeframe of Phase III until 30 June 2022 as well as a reallocation of travel budget to the development of web-based training courses and virtual training events.

3. All activities of the project are truly targeted at developing countries and countries with economies in transition. Today, much of the scientific know-how, technical insights and practical experience regarding the development and implementation of chemical management systems lie with developed countries especially the OECD member states. The Toolbox wants to provide a way to transfer this knowledge while addressing the needs and capacities of the recipient countries.

4. For the development and implementation of the Toolbox, the IOMC brought together nine intergovernmental organisations actively involved in chemical safety: WHO, FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, the World Bank and OECD. As such the IOMC aims to strengthen international cooperation in the field of chemicals management.

Purpose of the evaluation

5. Phase III of the project calls for an independent, external evaluation to be undertaken at the phase's **end**. The purpose of the final evaluation is to assess the achievement of the project's planned results. The final evaluation will assess the Actions' relevance, coherence, effectiveness, efficiency, likelihood of impact, and likelihood of sustainability, and identify lessons from Action implementation with a view to contributing to learning and informed decision-making. In addition, the evaluation will also aim to include case studies that will provide in-depth analysis of the effectiveness of the Action at the country and regional levels.[75] Finally, the final evaluation will assess the implementation of recommendations from the mid-term evaluation and focus on progress since then taking into account impact of COVID-19 on the project.

Scope of the evaluation

[75] The terms of reference of the final evaluation will take into consideration whether a subsequent phase of the project is being planned.

6. The final evaluation will cover the period from the start of Phase III of the project, 1 January 2018 to 30 October 2022, with focus on progress made after the mid-term evaluation. The evaluation will cover both country and (sub)regional project outputs and progress towards the expected outcomes, as indicated in the project logical framework (see Annex A). Progress of actions will be assessed against the Indicative Action Plan (see Annex B).

Evaluation criteria

7. The evaluation will assess project performance using the following criteria: relevance, coherence, effectiveness, efficiency, and likelihood of impact and likelihood of sustainability.

- ***Relevance:*** *Is the project reaching its intended individual and institutional users and are activities relevant to the beneficiaries' needs and priorities, and designed with quality?*
- ***Coherence:*** *To what extent is the project coherent with relevant policies, complementing other programmes and projects and adhering to international norms and standards?*
- ***Effectiveness:*** *How effective has the project been in delivering results and in strengthening the capacities of countries/sub-regions?*
- ***Efficiency:*** *To what extent has the project delivered its results in a cost-effective manner and optimized partnerships?*
- ***Likelihood of Impact:*** *What are the potential cumulative and/or long-term effects expected from the project, including contribution towards the intended impact, positive or negative impacts, or intended or unintended changes?*
- ***Likelihood of Sustainability:*** *To what extent are the project's results likely to be sustained in the long term?*

Principal evaluation questions

8. The following questions are suggested to guide the design of the evaluation, although the criteria applied to the outcomes and the final questions selected/identified will be confirmed by the evaluator following the initial document review and engagement with project management with a view to ensuring that the evaluation is as useful as possible with regard to the project's future orientation.

Relevance

a. *To what extent is the project aligned with the Development community's efforts to helping Member States implement the 2030 Agenda for Sustainable Development, and particularly SDG 12 and target 12.4. on the sound management of chemicals?*
b. *To what extent is the project aligned with SAICM beyond 2020, major multilateral environmental and other international agreements as well as the EU's strategic objectives?*
c. *How relevant are the objectives, content and the design of the Toolbox (and enhanced functionality), Toolkits and trainings to the identified and new capacity needs, priorities and the performance improvement of beneficiaries, including those arising from the COVID-19 pandemic, to resolve chemicals management issues?*
d. *How relevant is the project to supporting gender equality and women's empowerment and meeting the needs of other groups made vulnerable, including countries in special situations?* ***(GEEW)***

Coherence

e. *How well do the project components complement each other, e.g., toolkits and webinars content, scope and timing?*
f. *How well does the project complement other Project Management Group partner programming in the area of the sound management of chemicals funded by other donors?*
g. *How well does the project complement and foster synergies with other existing capacity building programmes and projects by other actors, such as other chemical-related portals and platforms?*
h. *How well do the project training activities complement further national and international training?*

Effectiveness

i. *To what extent did the project achieve planned outputs and outcomes? What are the factors affecting the projects and the individual's performance?*
j. *Have the project's structure and partnerships been effective, including the performance of implementing partners?*
k. *To what extent have targeted users accessed, used and implemented guidance provided through the Toolbox?*
l. *To what extent is the Toolbox considered an effective mechanism for accessing guidance by targeted users?*
m. *To what extent and how is the project contributing to changed behaviour and improved management to resolve chemicals management issues using Toolbox materials and delivering capacity building activities (workshops)?*
n. *To what extent did the new Toolbox platform, enhanced functionality of the Toolbox and the extra entry points and availability of new tools succeed in broadening reach and use of the Toolbox amongst intended users?*
o. *To what extent have the Toolbox and the toolkits promotion events* (and strategy, e.g., tutorials, promotional videos, etc.) *been successful to broaden reach and use of the Toolbox?*
p. *To what extent are a human rights-based approach and a gender mainstreaming and inclusiveness strategy incorporated in the design and implementation of the project's toolbox and toolkits* in line with *Women and Gender @ SAICM group recommendations and more specifically in the design and delivery of training events?* ***(GEEW)***
q. *Looking back, what lessons can be drawn to make future chemicals management guidance and training more effective?*
r. *To what extent have midterm evaluation recommendations been implemented?*

Efficiency

s. *To what extent has the project been able to link to other initiatives and collaborated with other actors?*
t. *To what extent has the project produced outputs in a timely and cost-efficient manner, including through partnership arrangements (e.g., in comparison with alternative approaches) or is likely to?*
u. *How environment-friendly (natural resources) has the project been?*
v. *To what extent has the project adjusted to the COVID-19 related context, particularly for the originally planned face-to-face training events, and how efficient have webinars and virtual meetings been?*

Likelihood of impact and early indication of impact

w. *To what extent has the project contributed to improvement of the sound management of chemicals in countries worldwide, especially in developing countries and countries with economies in transition?*
x. *To what extent are Toolbox and the toolkits users sharing their experience with other stakeholders in their region and as such multiply impact beyond single users or countries?*
y. *What real difference does the project make to countries using the Toolbox and its content?*
z. *What other observable end-results or organisational changes* (*positive or negative, intended or unintended) have occurred or are likely to occur related to the project implementation?*

Likelihood of sustainability and early indication of sustainability

aa. *To what extent are the project's results likely to endure beyond the implementation of the activities in the mid- to long-term?*
bb. *What are the major factors which influence the achievement or non-achievement of sustainability of the project?*
cc. *To what extent are the current design and exit strategies such as the sustainability plan likely to contribute to continued use and relevance of the Toolbox?*
dd. *What can we learn to inform the future design of similar programming?*

Gender equality and women empowerment (GEEW)

The evaluation questions with gender equality and women empowerment dimensions are marked with ***"GEEW"*** *in the above.*

9. The final evaluation will also review project performance against the indicators and measures of the logframe, the implementation of the recommendations issued from the mid-term evaluation and address partnership modalities of the project, including the effectiveness and efficiency of implementing partners, if any.

Evaluation Approach and Methods

The evaluation is to be undertaken in accordance with the UNITAR Evaluation Policy and the United Nations norms and standards for evaluation, and the UNEG Ethical Guidelines The evaluation will be undertaken by a supplier or an international consultant (the "evaluator") under the supervision of the UNITAR Planning, Performance Monitoring and Evaluation Unit (PPME).

1. In order to maximize utilization of the evaluation, the evaluation shall follow a participatory approach and engage a range of project stakeholders in the process, including the project partners, the UN Country Teams, the participants, the donor and other stakeholders. Data collection should be triangulated to the extent possible to ensure validity and reliability of findings and draw on the following methods: comprehensive desk review, including a stakeholder analysis; surveys; review of the log frame (reconstructed) baseline data and the theory of change; key informant interviews; focus groups; and, if possible, field visits. These data collection tools are discussed below.

2. It is recommended to look at the different dimensions of capacity development, including:

- **Individual dimension** relates to the people involved in terms of knowledge, skill levels, competencies, attitudes, behaviours and values that can be addressed through facilitation, training and competency development.
- **Organisational dimension** relates to public and private organisations, civil society organisations, and networks of organisations. The change in learning that occurs at individual level affects, from a results chain perspective, the changes at organisational level.
- **Enabling environment dimension** refers to the context in which individuals and organisations work, including the political commitment and vision; policy, legal and economic frameworks and institutional set-up in the country; national public sector budget allocations and processes; governance and power structures; incentives and social norms; power structures and dynamics.

Table 11: Capacity areas within the three dimensions

Individual	Skills levels (technical and managerial skills) Competencies	Essential knowledge, Cognitive skills, Interpersonal skills, Self-control, Attitude towards behaviour, Self-confidence, Professional identity, Norms, Values, Intentions, Emotions, Environmental barriers and enablers (among others)
Organizations	Mandates Horizontal and vertical coordination mechanisms Motivation and incentive systems Strategic leadership Inter/intra institutional linkages Programme management Multi-stakeholder processes	Organizational priorities Processes, systems and procedures Human and financial resources Knowledge and information sharing Infrastructure
Enabling environment	Policy and legal framework Political commitment and accountability framework Governance	Economic framework and national public budget allocations and power Legal, policy and political environment

3. The evaluation shall develop 3-4 **case studies**, focusing on specific countries/regions and/or crosscutting themes such as how gender has been mainstreamed into the sound management of chemicals and waste. In the mid-term evaluation Indonesia, Kazakhstan, Trinidad and Tobago were selected as case studies. The evaluation shall use a combination of quantitative and qualitative data. Case studies can be particularly useful for understanding how different elements fit together and how different elements (implementation, context and other factors) have produced the observed impacts. Different types[76] of case studies shall be explored:

- Illustrative: This is descriptive in character and intended to add realism and in-depth examples to other information about a program or policy. (These are often used to complement quantitative data by providing examples of the overall findings).
- Exploratory: This is also descriptive but is aimed at generating hypotheses for later investigation rather than simply providing illustration.
- Critical instance: This examines a single instance of unique interest, or serves as a critical test of an assertion about a program, problem or strategy.
- Program implementation. This investigates operations, often at several sites, and often with reference to a set of norms or standards about implementation processes.
- Program effects. This examines the causal links between the program and observed effects (outputs, outcomes or impacts, depending on the timing of the evaluation) and usually involves multisite, multimethod evaluations.
- Cumulative. This brings together findings from many case studies to answer evaluative questions.

4. The evaluator should engage in quantitative and qualitative analysis in responding to the principal evaluation questions and present the findings qualitatively or quantitatively as most appropriate.

[76] Source: Case Study | Better Evaluation

Data collection methods:

Comprehensive desk review

The evaluator will compile, review and analyse background documents and secondary data/information related to the project, including a results framework indicator tracking review. A list of background documentation for the desk review is included in Annex C.
If baseline data available allows for it, the evaluator should consider using quantitative approaches to assess the impact assessment related evaluation questions.
The evaluator should also consider whether Outcome mapping / Outcome harvesting / outcome evidencing / lessons learned workshop are suitable tools for answering the evaluation questions.

Stakeholder analysis

The evaluator will identify the different stakeholders involved in the project. Key stakeholders at the global and national level include, but are not limited, to:

- The Project partners and particularly Project Management Group Members;
- The donor (European Commission: DG Environment);
- Other partners such as the IOMC secretariat, the SAICM secretariat etc.;
- Beneficiaries/participants;
- trainers/facilitators;
- Host (national) government focal points;
- Toolbox users;
- Etc.

Survey(s)

With a view to maximizing feedback from the widest possible range of project stakeholders, the consultant will develop and deploy a survey(s) following the comprehensive desk study to provide an initial set of findings and allow the evaluator to easily probe during the key informant interviews.

Key informant interviews

Based on stakeholder identification, the evaluator will identify and interview key informants. The list of contacts is available in Annex A. In preparation for the interviews with key informants, the consultant will define interview protocols to determine the questions and modalities with flexibility to adapt to the particularities of the different informants, either at the global, at the national or local level.

Focus groups

Focus groups should be organized with selected project stakeholders at the national levels to complement/triangulate findings from other collection tools.

Field visit

A visit for interviews and focus groups with project stakeholders shall be organised in case an international conference is being organised that regroups stakeholders in one place. Otherwise interviews and focus groups shall take place remotely.

Gender and human rights

10. The evaluator should incorporate human rights, gender[77] and equity perspectives in the evaluation process and findings, particularly by involving women and other disadvantaged groups subject to discrimination. All key data collected shall be disaggregated by sex, age grouping and disability and be included in the draft and final evaluation report.[78] This could involve developing dedicated evaluation questions addressing these issues, including gender consideration in data collection and analysis.

11. The guiding principles for the evaluation should respect transparency, engage stakeholders and beneficiaries; ensure confidentiality of data and anonymity of responses; and follow ethical and professional standards (UNEG Ethical Guidelines).

Timeframe, work plan, deliverables and review

12. The proposed timeframe for the evaluation spans from October 2022 (initial desk review and data collection) to April 2023 (submission of final evaluation report). An indicative work plan is provided in the table below.

13. The consultant shall submit a brief evaluation design/question matrix following the comprehensive desk study, stakeholder analysis and initial key informant interviews. The evaluation design/question matrix should include a discussion on the evaluation objectives, methods and, if required, revisions to the suggested evaluation questions or data collection methods. The Evaluation design/question matrix should indicate any foreseen difficulties or challenges in collecting data and confirm the final timeframe for the completion of the evaluation exercise.

14. Following data collection and analysis, the consultant shall submit a zero draft of the evaluation report to the evaluation manager and revise the draft based on comments made by the evaluation manager.

15. The draft evaluation report should follow the structure presented under Annex D. The report should state the purpose of the evaluation and the methods used and include a discussion on the limitations to the evaluation. The report should present evidence-based and balanced findings, including strengths and weaknesses, consequent conclusions and recommendations, and lessons to be learned. The length of the report should be approximately 20-30 pages, excluding annexes.

16. Following the submission of the zero draft, a draft report will then be submitted to the Project's management team to review and comment on the draft report and provide any additional information using the form provided under Annex D by 03 April 2023. Within one week of receiving feedback, the evaluator shall submit the final evaluation report. The target date for this submission is 24 April 2023.

[77] In 2012, the United Nations Chiefs Executive Board for Coordination (CEB) endorsed the UN System-wide Action Plan (UN-SWAP) on Gender Equality and the Empowerment of Women as the UN's accountability framework to accelerate gender equality and the empowerment of women. UN-SWAP includes 15 unified performance indicators against which UN entities report. The SWAP 2.0 now includes 17 performance indicators.

[78] The UN Evaluation Group Norms and Standards indicate that "The evaluation design should include considerations of the extent to which the United Nations system's commitment to the human-rights based approach and gender mainstreaming strategy was incorporated in the design of the evaluation subject." (Standard 4.7 http://www.unevaluation.org/document/detail/1914)

Indicative timeframe: October 2022– April 2023

Activity	October	November	December	January	February	March	April
Evaluator selected and recruited							
Initial data collection, including desk review, stakeholder analysis							
Evaluation design/question matrix							
Data collection and analysis, including survey(s), interviews and focus groups (remotely)							
Zero draft report submitted to UNITAR							
Draft evaluation report consulted with UNITAR evaluation manager and submitted to the Project management group							
Project management team reviews draft evaluation report and shares comments and recommendations							
Evaluation report finalized and validated by the Project Management group							
Presentation of the evaluation findings and lessons learned							

Summary of evaluatiDDeliverables and indicative schedule

Deliverable	From	To	Deadline
Evaluation design/question matrix	Evaluator	Evaluation manager	31 October 2022
Comments on evaluation design/question matrix	Evaluation manager/ Project management Group	Evaluator	14 November 2022
Zero draft report	Evaluator	Evaluation manager	13 March 2023
Comments on zero draft	Evaluation manager	Evaluator	27 March 2023
Draft report	Evaluator	Evaluation manager/ Project Management Group	03 April 2023
Comments on draft report	Project management Group	Evaluation manager	17 April 2023
Final report	Evaluator	Evaluation manager/ Project Management Group	24 April 2023
Presentation of the evaluation findings and lessons learned	Evaluator	Evaluation manager/ Project Management Group	24 April 2023

Note: The above timeframe is indicative and pending confirmation by the Project Management Group.

Communication/dissemination of results

17. The final evaluation report shall be written in English. The final report will be shared with all partners, the European Union and the WHO evaluation Office. The report will furthermore be posted on an online repository of evaluation reports open to the public.

Evaluation management arrangements

5. The evaluator will be contracted by UNITAR and will report directly to the Director of the Strategic Planning and Performance Division and Manager of Planning, Performance Monitoring, and Evaluation Unit (PPME) ('evaluation manager').

6. The evaluation manager reports directly to the Executive Director of UNITAR and is independent from all programming related management functions at UNITAR. According to UNITAR's Monitoring and Evaluation Policy, in due consultation with the Executive Director/programme management, PPME issues and discloses final evaluation reports without prior clearance from other UNITAR Management or functions. This builds the foundations of UNITAR's evaluation function's independence and ability to better support learning and accountability.

7. The evaluator should consult with the evaluation manager on any procedural or methodological matter requiring attention. The evaluator is responsible for planning any meetings, organizing online surveys and undertaking administrative arrangements for any travel that may be required (e.g., accommodation, visas, etc.). The travel arrangements, if any, will be in accordance with the UN rules and regulations for consultants.

Evaluator Ethics

8. The evaluator selected should not have participated in the project's design or implementation or have a conflict of interest with project activities. The selected consultant shall sign and return a copy of the code of conduct under Annex F prior to initiating the assignment and comply with UNEG Ethical Guidelines.

Professional requirements

The evaluator should have the following qualifications and experience:

- MA degree or equivalent in international relations, evaluation, development studies, agriculture, environment studies or a related discipline. Training and/or experience in the area of chemical management would be a clear advantage.
- At least 7 years of professional experience conducting evaluation in the field of capacity building.
- Technical knowledge of the focal area including the evaluation of learning.
- Field work experience in developing countries.
- Excellent research and analytical skills, including experience in a variety of evaluation methods and approaches.
- Excellent writing skills.
- Strong communication and presentation skills.
- Cross-cultural awareness and flexibility.
- Availability to travel.
- Fluency in English. Other languages are an advantage.

D. Survey/questionnaires deployed

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

Introduction

Dear former participant,

Thank you for agreeing to fill out the questionnaire on IOMC Toolbox Project workshop that you attended.

Your answers are critical for us to improve the training that the Project provides. We want to know what you thought of the workshop you attended and if and how it has been useful to you.

All responses, including any personal information you provide, are anonymous and will be kept strictly confidential. Your input will only be used in combination with the responses of others participating in the survey.

The survey takes about 15 minutes. You can answer the open questions of the survey in the language you prefer to use.

If you have any questions on the evaluation or difficulties with the survey, please contact us at evaluation@unitar.org

Thank you so much for your time and contribution!

Please choose your language (French, Spanish or English) on the top right. When you are ready to begin, just click on the "Next" button below.

Boru Douthwaite
Evaluation Consultant

Katinka Koke, Roxana Gomez Valle, Jelinke Wijnen
UNITAR Evaluation Office

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

About you

* 1. What is your professional affiliation?

2. Could you please indicate your current position? (e.g., team leader, programme officer, etc.)

* 3. In which field do you work?

* 4. What is your age?

- ◯ Under 17
- ◯ 18-30
- ◯ 31-45
- ◯ 46-60
- ◯ 61+
- ◯ Do not wish to tell

* 5. What is your gender?

* 6. Do you have a disability?

UNTAR defines persons with a disability as those "*who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.*" (Convention on the Rights of Persons with Disabilities, art. 1).

* 7. In which country are you currently based?

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

The workshop

* 8. Please indicate the training workshop(s) you attended.

- [ ] Webinar: Chemicals control contributing to national progress and safety
- [ ] Regional Training for South America, Peru - IOMC toolbox
- [ ] Webinar: Chemical safety in the World of work - 2020
- [ ] Webinar Nigeria: Strengthening health sector involvement in sound management of chemicals (Nigeria)
- [ ] Webinar: Human health risk assessment toolkit - 2020
- [ ] Webinar: Chemical leasing toolkit - 2020
- [ ] Webinar: General introduction on the IOMC Toolbox
- [ ] Webinar: IOMC Toolbox on industrial chemicals management
- [ ] Webinar: Chemicals and health network on capacity-building in the health sector
- [ ] Webinar: Chemical safety in the World of Work - 2021
- [ ] Webinar: Strengthen health sector involvement in the sound management of chemicals
- [ ] Webinar: Training of trainers: Chemical leasing toolkit - 2021
- [ ] Webinar: Help is here!
- [ ] WHO chemicals Road map - Oman
- [ ] Webinar: Human health risk assessment - 2022
- [ ] Chemicals safety and IOMC toolbox - Kenya and The Philippines
- [ ] Industrial chemicals - Haïti
- [ ] Industrial chemicals - Georgia
- [ ] Workshop with phytosanitary inspectors - Cote d'Ivoire
- [ ] Industrial chemicals - Nigeria
- [ ] WHO chemicals road map - Jordan
- [ ] Industrial chemicals - Serbia
- [ ] GHS and IOMC toolbox - Tanzania
- [ ] Webinar chemicals management UNIDO - Bosnia
- [ ] Webinar ENACTUS UNIDO
- [ ] Webinar RAN WHO
- [ ] Webinar SAICM UNIDO
- [ ] Webinar Training of Trainers Indonesia 2021 - UNIDO
- [ ] Webinar Training of Trainers Sri Lanka 2021 - UNIDO
- [ ] Webinar Training of Trainers Viet Nam 2021 - UNIDO
- [ ] Workshop Pesticides Registration Toolkit Zimbabwe 2022 - FAO
- [ ] Workshop Pesticides Registration Toolkit Bangladesh 2022 - FAO
- [ ] Other (please specify)

9. Why did you attend to the workshop?

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

Training of Trainers

* 10. Have you taken part in a Training of Trainer event as part of the IOMC Toolbox project?

- ◯ Yes
- ◯ No
- ◯ I am not sure

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

Training of Trainers

* 11. Have you delivered any training since you followed the Training of Trainers event?

- ◯ Yes
- ◯ No
- ◯ I do not remember

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

Training of Trainers

12. If yes, please explain to what audiences you have delivered training and when and how many times did you deliver the trainings?

To what audiences?	
When?	
How many times?	

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

Training of Trainers

13. If you did not, what were the main reasons? Tick all that apply.

- [ ] Lack of funding
- [ ] I was too busy
- [ ] I changed position/responsibilities
- [ ] I do not have enough confidence to perform trainings
- [ ] Other (please specify)

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

* 14. To what extent do you agree with the following statements about the workshop you attended (if you attended more than one, please respond to the questions for the most recent one)?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I do not know
Participation in the workshop made me more familiar with the United Nations guidance material on chemical management.	○	○	○	○	○	○
The workshop was a standalone event, rather than an integral part of an ongoing process.	○	○	○	○	○	○
It provided me with the opportunity to share my knowledge and skills with other participants.	○	○	○	○	○	○
It provided me with the opportunity to make connections to other participants.	○	○	○	○	○	○
I have often accessed and used the IOMC ToolBox since the workshop.	○	○	○	○	○	○
Overall, I was satisfied with the workshop.	○	○	○	○	○	○

Other comments (please specify)

15. Do you consider that the "right speakers" attended the workshop?

- ◯ Yes
- ◯ No

Who else, if anyone, should have been invited to the workshop?

* 16. Do you feel that the workshop you attended was inclusive?

- ◯ Yes
- ◯ No

Why or why not?

* 17. What was most useful to you from the workshop? What did you most appreciate?

Final Evaluation of the "IOMC Toolbox for Decision Making in Chemicals Management" project

* 18. To what extent do you agree with the following statements about the workshop you attended?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Do not know
I have been able to confidently use the knowledge, skills or tools I acquired in the workshop in my work.	○	○	○	○	○	○
I have been able to use the connections I made at the workshop in my work.	○	○	○	○	○	○
I have shared with colleagues the tools, knowledge and/or skills I acquired during the workshop.	○	○	○	○	○	○
I have often (at least once a week) accessed and used the IOMC ToolBox since the workshop.	○	○	○	○	○	○

19. Please describe what you used to what effect, e.g., have there been any sustained changes in how you do your job or changes to your career that can be attributed to the workshop?

20. Please describe which connections you have used, how and to what effect.

21. Please describe what you shared from the workshop and to whom. Did they use it?

* 22. What enabled or constrained you from using the tools, skills and/or knowledge after the workshop?

	This factor enabled me to use tools, skills and knowledge	This factor constrained me from using tools, skills and knowledge	Not applicable
Opportunity to apply knowledge/skills	○	○	○
Importance of knowledge/skills to my job success	○	○	○
Time available	○	○	○
The ease of the use of the Toolbox	○	○	○
Funds available	○	○	○
Language of the Toolbox	○	○	○
Knowledge/skills applicable to my context	○	○	○
Stable internet connection	○	○	○
The legislation in my country/organisation	○	○	○
Confidence to apply knowledge/skills	○	○	○
Support received from my supervisor at work	○	○	○
Support received from colleagues/peers at work	○	○	○
Action planning in the training facilitated transfer and application of knowledge/skills	○	○	○
Training design and methodologies	○	○	○
Systems and processes supported the use of knowledge/skills	○	○	○

Other (please specify)

* 23. How much of your use of the tools, knowledge and/or skills covered by the workshop can you attribute directly to the workshop?

- ◯ 76-100 per cent
- ◯ 51-75 per cent
- ◯ 26-50 per cent
- ◯ 1-25 per cent
- ◯ 0

24. Should the IOMC ToolBox Project focus on giving online webinars or should there be more face-to-face workshops?

- ◯ More webinars
- ◯ More face-to-face workshops
- ◯ I am indifferent to the format

Why?

25. What are your suggestions for improving the workshop you attended?

26. Beyond workshops, do you have any suggestions on what the IOMC Toolbox Project could do differently to improve chemical management in your country and region?

27. Do you have any other comments, questions, or concerns?

* 28. Would you like to be interviewed to tell us more about how the workshop and the Project has been of benefit to you and/or to share your suggestions on how the workshops and Project can be more relevant and useful in the future?

- ◯ Yes
- ◯ No

If yes, please indicate your email address here:

E. List of persons interviewed

Representatives of Participant Organisations

Ms. Gabriela Eigenmann, Industrial Development Expert, Department of Environment, United Nations Industrial Development Organisation (UNIDO).

Ms. Izïa Vallaeys, Chemicals and Waste Management Programme Unit, Division for Planet, United Nations Institute for Training and Research (UNITAR).

Ms. Lacye Groening, Occupational Safety and Health Officer, International Labour Organisation (ILO).

Mr. Milan Ivic, International Phytosanitary Specialist, Plan Production and Protection Division, Food and Agriculture Organisation of the United Nations, (FAO)

Mr. Pierre Quiblier, Programme Officer, Chemicals and Health Branch, Economy Division, United Nations Environment (UNEP)

Mr. Richard Brown, Chemical Safety and Health Unit, Department of Environment, Climate Change and Health, World Health Organisation (WHO).

Ms. Sandra Molenkamp, Chemicals and Waste Management Programme Unit, Division for Planet, United Nations Institute for Training and Research (UNITAR).

Ms. Valérie Frison, Organisation for Economic Co-operation and Development (OECD).

Mr. Jorge Ocana, Manager of UNITAR's Chemical and Waste Management Programme Unit

SAICM

Mr. Jose de Mesa Alcalde, SAICM Secretariat.

Mr. Eduardo Caldera Petit, Programme Officer, SAICM Secretariat.

IOMC secretariat

Mr. Jonathan Krueger, IOMC Secretariat.

European Commission

Jürgen Helbig, International Chemical Policy Coordinator, European Commission.

Participants

Mr. Matthew Daniel Odiong, Environmental Health Officer, local government of Nigeria.

Ms. Noviani Istiqomah, PhD. student at Bandung Institute of Technology.

Mr. Parakrama Karunaratne, Professor of Chemical and Process Engineering, Department of Chemical and Process Engineering, University of Peradeniya.

Mr. Peter Ssekajja, Senior Technical Officer, Uganda Cleaner Production Centre.

Ms. Rety Setyawaty, Lecturer, Institut Teknologi Bandung.

Ms. Ruth Spencer, Chair of Marine Ecosystems Protected Areas (MEPA) Trust.

Mr. Le Viet Thang, Principal Officials, Division of Chemicals Management, Vietnam Chemicals Agency (VINACHEMIA), Ministry of Industry and Trade (MOIT).

Mr. Branko Dunjić, Director, Cleaner Production Centre, Faculty of Technology and Metallurgy, University of Belgrade.

F. List of documents reviewed

1. Final notes of the 3rd Joint Programme Management Group (PMG) Meeting. 12 March 2019, WHO, Geneva. Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).
2. (IOMC)UNITAR. Terms of Reference “Final evaluation of the IOMC toolbox for decision making in chemicals management - Phase III: From design to action.
3. Independent mid-term evaluation of the IOMC toolbox for decision making in chemicals management - Phase III: From design to action. https://unitar.org/results-evidence-learning/evaluation/independent-mid-term-evaluation-inter-organisation-programme-sound-management-chemicals-iomc-toolbox the Evaluation Terms of Reference
4. Beyond 2020: why SAICM is important. IPEN and Pesticide Action Network. January 2017. https://ipen.org/sites/default/files/documents/Beyond%202020%20Why%20SAICM%20is%20important%2024%20Jan%202017.pdf
5. Transforming our World: The 2030 Agenda for Sustainable Development. 2015. https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981
6. Transforming our World: The 2030 Agenda for Sustainable Development. A/RES/70/1. https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
7. SAICM website. Overview. https://www.saicm.org/About/Overview/tabid/5522/language/en-US/Default.aspx
8. Intersessional Process to develop recommendations on SAICM and the sound management of chemicals and waste beyond 2020. Co-chairs’ Paper – Draft for consideration of the ICCM5 Bureau. http://www.saicm.org/Portals/12/Documents/meetings/Bureau/ICCM5B6/SAICM-ICCM-5-Bureau-6-3-Co-Chairs-paper.pdf
9. The road to ICCM5... and beyond 2020. http://www.saicm.org/Portals/12/Documents/meetings/TGW/Session1.pdf
10. Indicators of progress in implementing SAICM. IOMC. https://partnership.who.int/iomc/iomc-indicators-of-progress-in-implementing-saicmctaors SAICM
11. Tool: UNEP/Stockholm Convention - Stockholm Convention Training Tool on the Technical Guidelines for the Environmentally Sound Management (ESM) of Persistent Organic Pollutants (POPs) wastes [accessed 2020]. https://iomctoolbox.org/unepstockholm-convention-stockholm-convention-training-tool-technical-guidelines-environmentallymanagement of chemicals and waste beyond 2020
12. Tool: UNITAR - Plastic Waste and the Basel Convention online course [accessed 2022]. https://iomctoolbox.org/unitar-plastic-waste-and-basel-convention-online-course-accessed-2022
13. Tool: Rotterdam Convention - E-learning tool on the operation of the Rotterdam Convention [accessed 2022]. https://iomctoolbox.org/rotterdam-convention-e-learning-tool-operation-rotterdam-convention-accessed-2022-0
14. Chemicals Strategy for Sustainability. https://echa.europa.eu/hot-topics/chemicals-strategy-for-sustainability.
15. Toolbox statistics.
16. Chemicals safety and biosafety progress report - Issue No. 40. Section III: Support for Capacity Building. (November 2020). https://issuu.com/oecd.publishing/docs/progress-report-on-chemical-safety-and-biosafety-n/s/11260257#:~:text=The%20new%20platform%20was%20live,the%20beginning%20of%20November%202020.
17. Final notes of the 6th Joint Programme Management Group (PMG) Meeting by Teleconference. IOMC Toolbox for decision making in chemical management – Phase III: From design to action. Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).
18. Final notes of the 7th Joint Programme Management Group (PMG) Meeting by Teleconference. IOMC Toolbox for decision making in chemical management – Phase III: From design to action. Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).
19. Final notes of the 8th Joint Programme Management Group (PMG) Meeting by Teleconference. IOMC Toolbox for decision making in chemical management – Phase III: From design to action. Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).
20. Draft notes of the 10th Joint Programme Management Group (PMG) Meeting by Teleconference. IOMC Toolbox for decision making in chemical management – Phase III: From design to action. Inter-Organisation Programme for the Sound Management of Chemicals (IOMC).

21. Website entry: IOMC Reflects on its First 20 Years and Highlights 20 Achievements. SDG Knowledge Hub. http://sdg.iisd.org/commentary/guest-articles/iomc-reflects-on-its-first-20-years-and-highlights-20-achievements/
22. IOMC Toolbox for Decision Making in Chemicals Management. Training Guidelines. https://www.dropbox.com/scl/fi/609x8kqh8ztopi4vdq4ce/Training-strategy_IOMC-Toolbox-P3-PMG03.12-Draft-training-guidelines-11-March-2019.docx?dl=0&rlkey=cedlpiwrq1cufnzu83kqnwr70
23. UNITAR - IOMC webinar series website. https://www.globalwebinars.org/sessions
24. Delegation Agreement. “IOMC Toolbox for decision making in chemicals management – Phase III: From design to action”. 21.020701/2017/767540/SUB/ENV.B2
25. Final evaluation of the IOMC Toolbox for decision making in chemicals management – Phase II. https://unitar.org/sites/default/files/uploads/pprs/iomc-evaluation-finalreport_rc2.pdfAction Document for IOMC Toolbox for decision making in chemicals management – Phase IV: Towards achieving the SDGs.
26. Douthwaite, B., Proietti, C., Polar. V., & Thiele, G. (2022). Outcome trajectory evaluation (OTE): An approach to tackle research-for-development’s long-causal-chain problem. *American Evaluation Association*. https://doi.org/10.1177/10982140221122771
27. Management response. Mid-term evaluation of the IOMC Toolbox for decision making for chemicals management Phase III. https://unitar.org/sites/default/files/media/file/IOMC%20Toolbox_MTE%20management-response_Final%2015%20Jul.pdf
28. Description of the Action. IOMC Toolbox for decision making in chemicals management – Phase IV: Towards achieving the SDGs.

G. Evaluation question matrix

Questions	Judgement criteria / indicators	Sources of data and methods of analysis
Relevance		
EQ1: Is the project reaching its intended individual and institutional users and are activities relevant to the beneficiaries' needs and priorities, and designed with quality?		
1.1. To what extent is the project aligned with the Development community's efforts to helping Member States implement the 2030 Agenda for Sustainable Development, and particularly SDG 12 and target 12.4. on the sound management of chemicals?	- The degree to which project outcomes align with SDG 12 and target SDG12.4 on the sound management of chemicals	- Review of relevant documents describing stated project outcomes and goals on the one hand, and the SDGs on the other - MTE Finding 1 on relevance is updated[5]
1.2. To what extent is the project aligned with SAICM beyond 2020, major multilateral environmental and other international agreements as well as the EU's strategic objectives?	- Expected and achieved project outcomes are relevant to one or more of the SAICM core activity areas - Recognition by SAICM of the project's relevance to SAICM objectives - The degree to which the project outcomes and goal align with EU strategic objectives - The extent to which the project supports the implementation of SAICM	- Cross-checking of SAICM Analysis of on-line survey, project monitoring data on use of IOMC tools and collated expert opinion - Revisiting of MTE Finding 16[6] on SAICM monitoring of use of IOMC tools - Review of progress reports on the implementation of SAICM; - Comparison of relevant documents describing stated project outcomes and goals on one hand, and the EU strategic objectives on the other - Revisiting of MTE Findings 3[7], 4[8], 6[9] & 7[10]
1.3 How relevant are the objectives, content and the design of the Toolbox (and enhanced	- Evidence that the new management schemes and updated toolkits are	Analysis of the changes made and

functionality), Toolkits and trainings (including workshops) to the identified and new capacity needs, priorities and the performance improvement of beneficiaries, including those arising from the COVID-19 pandemic, to resolve chemicals management issues?	increasing the reach and usefulness of the Toolbox - Workshop participants indicate relevance through answers to on-line survey questions on relevance, use and connections made - Trained participants indicate relevance and use in interviews - Evidence of changes to the toolbox and content to make them more relevant, as recommended by the Phase II final evaluation [and/or Phase III MTE]	the rationale for them, based on interviews and written descriptions of the changes made. - Analysis of on-line survey of relevance, adoption and reach. - Analysis of interviews with trainers and workshop participants - Analysis of changes being made as recorded in interviews and project documentation (e.g., PMG meetings / progress report) against recommendations made by the Phase II final evaluation - Revisiting of MTE Finding 9[11] that workshops proved relevant to participants' needs - Revisiting of MTE Finding 10[12] that the new Toolbox platform was likely to make the Toolbox more relevant is revisited -Web stats
1.4 How relevant is the project to supporting gender equality and women's empowerment and meeting the needs of other groups made vulnerable, including countries in special situations? (GEEW)	Some suggestions (to be discussed): -Target group includes countries in special situations, countries with economies in transition. -Project activities, as designed, affect specific target groups differently, e.g., country status, gender, by either improving or harming certain relevant conditions.	-Document review: Workshop participant lists. Gender mainstreaming | SAICM Knowledge eight priority areas gender considerations

	-Workshop participants groups are gender balanced. -Workshop and toolkit content includes gender-related content in the eight emerging policy issues and other issues of concern since the inception of the Strategic Approach in 2006.	comparison with corresponding toolkits/workshop content.
1.5 Are the causal links in the project's reconstructed theory of change valid? Does the theory of change require changes to better reflect the outcomes that are starting to emerge?	Against the expectation that the theory of change is largely valid, and some changes will be necessary to reflect what is starting to happen.	- Making the ToC causal assumptions (the arrows) explicit and evaluating whether they are valid and happening - Identification of new causal links / assumptions based on analysis of progress since the mid-term evaluation
EQ 2: Coherence: To what extent is the project coherent with relevant policies, complementing other programmes and projects and adhering to international norms and standards?		
2.1 How well do the project components complement each other, e.g., toolkits and webinars content, scope and timing?	Suggestions (to be discussed): -Capacity building activities updated with toolkit improvements. Are new toolkits included systematically in workshops on related subject?~~.~~	-Document review: Workshop agendas and toolkit publication
2.2 How well does the project complement and foster synergies between IOMC partner and other capacity building programmes (e.g., other chemical-related portals and platforms) in the area of the sound management of chemicals funded by other donors?	- The extent to which partner and non-partner programming reference the IOMC Toolbox - The perception of PMG interviewees on degree of complementarity and synergy that the project has helped create with respect to the sound management of chemicals	- Literature review - KIIs - Cross referencing with EQ 3.5 on partnership. -Mapping other capacity building programmes in the area of the sound management of chemicals
2.3 How well do the project training activities complement further national and international training?	The extent to which the project does (not) duplicate but rather complements existing national or international training, is applicable.	-Desk review (mapping)
Effectiveness		
EQ3: How effective has the project been in delivering results and in strengthening the capacities of countries/sub-regions?		

3.1 To what extent did the project achieve planned outputs and reached intended users in a timely manner? [13]	The project has achieved its capacity development and promotion targets on time[14] - Users attended F2F CD national or regional events (target is 300) - Users attended Webinars (target is 300) - Overall target for promotion and training reached (target is 2,000 more) - Target for promotion at international events reached (target is ??) - Workshop participants have become involved in a community of practice that is working to reach other people	- Analysis of community of practice reports, observation (e.g., webinars and COP3), event reports and attendance lists, on-line survey data, interviews with key informants involved in COP, F2F CD events and webinars - Logframe data review (to the extent possible) - Analysis of the views of key informants - Revisiting of MTE Finding 8[15] on end users reached - Check output indicators in project extension request project doc
3.2 What outcomes did the project achieve, both expected and unexpected?	- From the ToC: the project achieved greater collaboration and networking within and between countries and IOMC agencies; and the Toolbox and its contents increasingly used at national level to build implementation capacity and develop chemical management strategies - The project contributed to changed behaviour and improved management to resolve chemicals management issues using Toolbox materials and delivering capacity building activities (workshops) -Toolbox provides an effective mechanism for accessing. Guidance -Countries use and implement guidance provided through the Toolbox	- Revisiting of MTE Finding 9[16] on an emerging impact pathway relating to workshops - Revisiting of MTE Finding 12[17] on inter-agency collaboration outcome - Analysis of on-line survey data - Findings from case studies using OTE -workshop/KII to learn about unintended outcomes

	-Countries are able to initiate process to resolve chemicals. management issues using Toolbox materials.	
3.3 How did the project achieve its outcomes, both expected and unexpected (i.e., from ToC)?	- The linkages identified in the project's theory of change at MTE proved valid - The new Toolbox platform, enhanced functionality of the Toolbox and the extra entry points and availability of new tools succeeded in broadening reach and use of the Toolbox; - the Toolbox is considered an effective mechanism for accessing guidance by targeted users; - the Toolbox and the toolkits promotion events (and strategy, e.g., tutorials, promotional videos, etc.) successfully broadened reach and use of the Toolbox; - Other reasons that emerge from the case studies. - The concept of a boundary object remains valid since the MTE, see Finding 5.[18]	- Identification of causal mechanisms at work in the case studies - Review of evidence supporting the plausibility of the causal links in the project ToC - Revisiting of Finding 13[19] based on analysis of ToC - Revisiting of Finding 14[20] on benefits to intended users - Revisiting of Finding 15[21] on the use of the ToolBox in the development of national systems of chemical regulation and the registration of pesticides
3.4 Have the project's structure and partnerships been effective, including the performance of implementing partners?	- The extent to which the project coordination / financial management and the organisational structure supported or hindered the timely delivery of project results - The extent to which partnerships with organisations other than the implementing partners have affected project outcomes - That progress has been made on IOMC members working together better (update on Finding 2)	- Analysis of project documents (proposal and PMG minutes) - Analysis of the response of PMG members to this question - Reference to the answer to EQ2.2 on coherent partnerships

		Revisiting Finding 2[22] on partnership
3.5 To what extent are a human rights-based approach and a gender mainstreaming and inclusiveness strategy incorporated in the design and implementation of the project's toolbox and toolkits? To what extent is the project's gender strategy in line with Women and Gender @ SAICM group recommendations? (GEEW)	-The project has done what it committed to do in the ProDoc and in its response to MTE recommendations. - The project proactively kept abreast of evolving expectations of how gender mainstreaming and consideration of human rights should be taken into account. - Within the toolbox there is guidance to help users address gender and social inclusion issues relating to the management of chemicals - Gender is considered in the design and implementation of training workshops - The project's gender strategy is consistent with the Women and Gender @ SAICM group recommendations.	- Review of project documents, in particular response to MTE recommendations and progress reports - Review of toolbox and tool kit contents for guidance to help users address gender and social inclusion issues - Review of training workshop design and implementation for consideration of gender - Revisiting of Finding 20[23] on consideration of gender in phase III of the project
3.5 Looking back, what lessons can be drawn to make future chemicals management guidance and training more effective?	- Lessons drawn are acknowledged as able to make chemicals management guidance and training more effective by the reviewers of the evaluation report	- Analysis of the answers to this question given by selected users and developers of the Toolbox - Analysis of results of an After Action Review
3.6 To what extent have midterm evaluation recommendations been implemented?	- Expectation that all recommendations have been acknowledged in writing implemented in practice	- Scrutiny and following up the written response to the recommendations
4. Efficiency: To what extent has the project delivered its results in a cost-effective manner and optimized partnerships?		
4.1 To what extent has the project been able to link to other initiatives and collaborated with other actors?	Extent to which the project saves any costs by piggy bagging on other initiatives.	- Answer to be derived from answers to EQ 2.2 & 3.4.
4.2 To what extent has the project produced outputs in a timely and cost-efficient manner, including through partnership arrangements	- On-line usage of the Toolbox is comparable or better than other comparable portals	- Answer to be derived from EQ 3.1

(e.g., in comparison with alternative approaches) or is likely to?	- The development time of the Toolbox is similar or shorter than for other comparable portals - The project is on target or ahead of target on key performance indicators	- Revisiting of MTE Finding 17[24] on Toolbox usage compared to other chemical portals - Revisiting of MTE Finding 18[25] on accomplishment of logical framework targets
4.3 To what extent has the project adjusted to the COVID-19 related context, particularly for the originally planned face-to-face training events, and how efficient have webinars and virtual meetings been?	- Participants in on-line training events find them useful -Participants learn as much online as face-to-face -No participants have connectivity issues that prevent them from participating to online workshops/webinars -Delays in project implementation result from time required to adjust delivery mode - On-line events were designed to use the functionality of the conferencing programme chosen, e.g., virtual breakout rooms - Numbers and diversity of targeted beneficiaries comparable or better than face-to-face meetings -Changes in toolbox development/plan derived from COVID-19.	- Analysis of on-line survey and individual interviews of workshop and meeting participants -compare survey data from f2f to online delivery to the extent possible (by asking similar questions)
5. Likelihood of impact and early indication of impact: What are the potential cumulative and/or long-term effects expected from the project, including contribution towards the intended impact, positive or negative impacts, or intended or unintended changes?		
5.1 To what extent has the project contributed to improvement of the sound management of chemicals in countries worldwide, especially in developing countries and countries with economies in transition?	- That there will be some plausible early indication of policy-related outcomes and impact	- Asking key informants of examples of early impact and selecting a sub-set as case studies - Individual and cross-case analysis
5.2 To what extent are Toolbox and the toolkits users sharing their experience with other stakeholders in their region and as such multiply impact beyond single users or countries?	- That Toolbox and toolkit users are sharing their experience with other stakeholders in their region	- A question to pursue when constructing the case studies

	- That case study outcomes were achieved in part by this mechanism	- Revisiting of MTE Finding 19[26] on beneficiaries sharing their experience with other stakeholders
5.3 What real difference does the project make to countries using the Toolbox and its content?	- The case studies show how the Toolbox and its contents made a real difference in the countries that used them	- A question to pursue when constructing the case studies and carrying out cross-case analysis
5.4 What other observable outcomes (positive or negative, intended or unintended) have occurred or are likely to occur related to the project implementation?	- The case studies show Toolkit project contribution to concrete outcomes - That the 'modus operandi' that generated these outcomes is evident in other outcome claims	- A question to pursue when constructing the case studies and carrying out cross-case analysis
6. Likelihood of sustainability and early indications of sustainability: To what extent are the project's results likely to be sustained in the long term?		
6.1 To what extent are the project's results likely to endure beyond the implementation of the activities in the mid- to long-term?	- The case study outcome trajectories indicate an internally driven dynamic that can be expected to continue in the mid- to long-term	- Use of the 'theory of the cases' to help identify and describe dynamics at work within the case outcome trajectories
6.2 What are the major factors which influence the achievement or non-achievement of sustainability of the project?	- Identifiable factors exist that both drive and impede the case outcome trajectories	- Cross-case analysis to identify factors influencing trajectory dynamics
6.3 To what extent are the current design and exit strategies such as the sustainability plan likely to contribute to continued use and relevance of the Toolbox?	- Current design and exit strategies are relevant to the factors identified in EQ 6.1	- Analysis of likely effects of sustainability plan on factors identified in EQ 6.2
6.4 What can we learn to inform the future design of similar programming?		- Analysis of the results of an After-Action Review, cross-checked with answers to other answers to EQ 5 & 6

H. Evaluation consultant agreement form

Annex: Evaluation Consultant Code of Conduct and Agreement Form

The evaluator:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Is responsible for his/her performance and his/her product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[1]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Boru Douthwaite

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation and I declare that any past experience, of myself, my immediate family or close friends or associates, does not give rise to a potential conflict of interest.

Signed at *place* on *date* Westport, Ireland on 16/11/2019

Signature: 

[1] www.unevaluation.org/unegcodeofconduct