Summary report on the

Regional workshop on the Global Laboratory Leadership Programme

Muscat, Oman
8–11 July 2024

World Health Organization

Eastern Mediterranean Region

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Contents

1. Introduction

The Global Laboratory Leadership Programme (GLLP) is a specialized competency-based learning programme in leadership and management skills for laboratory leaders to support effective national laboratory systems and therefore a country's ability to respond to outbreaks and health emergencies. It is a unique collaboration between the Association of Public Health Laboratories (APHL), Centers for Disease Control and Prevention (CDC), European Centre for Disease Prevention and Control (ECDC), Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO) and World Organisation for Animal Health (WOAH).

The six GLLP partner organizations have defined three essential core values for GLLP implementation:

- One Health: multisectoral representation and involvement in the governance of GLLP planning, development, implementation and evaluation, with participation from the human, animal, and environmental health sectors.
- Ownership: commitment to workforce capacity development by incorporating GLLP-based programmes at national level through equivalence with national continuing education policies and/or integration into the national curriculum.
- Sustainability: development of the capacity, including availability of resources, to maintain or improve delivery of the GLLP.

As part of the strategy to introduce the GLLP in the WHO Eastern Mediterranean Region, a series of introductory advocacy webinars and regional workshops were held to facilitate ownership and sustainability of the programme at country level. The introductory webinars were conducted between February and April 2024 for participants from 19 countries of the Eastern Mediterranean Region and four from other WHO

regions. The webinars gathered 164 attendees from the human health, animal health and environmental health sectors, as well as academia.

Following these introductory webinars, a four-day regional workshop was held by the WHO Regional Office for the Eastern Mediterranean on 8–11 July 2024 in Muscat, Oman, in coordination with other GLLP partners. The workshop aimed to provide sensitization on GLLP concepts and tools for national focal points from countries that had expressed an interest in implementing the GLLP. Participation from all sectors (human health, animal health, environmental health) was ensured in coordination with the relevant agencies.

The specific objectives of the workshop were to:

- orient country laboratory leaders/managers on the GLLP competencies required for strong and efficient laboratory leadership;
- acquaint laboratory leaders/managers with, and build their capacity in, the use of available tools for the planning and implementation of national GLLP initiatives; and
- support the development of national GLLP implementation plans, including adaptation of the GLLP terms of reference.

The expected outcomes of the workshop were that laboratory decision-makers would be empowered to champion the GLLP in their countries, GLLP national focal points briefed on its implementation steps, and draft country work plans developed for GLLP implementation.

The workshop brought together a diverse group of attendees from nine countries of the Eastern Mediterranean Region, five countries from other WHO regions, GLLP partners and a range of international organizations. Participants representing national institutions from the different countries were nominated by the relevant national authorities.

The nine countries of the Eastern Mediterranean Region represented were Bahrain, Egypt, Jordan, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia and the United Arabic Emirates. All participating countries had previously expressed interest in implementing the GLLP. Countries from other WHO regions invited to share their experience in GLLP implementation were Burkina Faso and Uganda from the WHO African Region and Kazakhstan, Tajikistan and Ukraine from the WHO European Region. GLLP partners represented included APHL, CDC, WHO and WOAH.

The workshop was also attended by participants affiliated with various other regional/international organizations, including CDC's Middle East/North Africa Regional Office, the Eastern Mediterranean Public Health Network (EMPHNET), the Gulf Center for Disease Prevention and Control (Gulf CDC), The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), and the WHO Regional Office for Europe. A team of facilitators/moderators was composed of staff from APHL, CDC, the Ministry of Health of Oman and WHO. Workshop participants represented different health sectors: 46% from the human health sector; 19% from the environmental health sector; 13% from the animal health sector; and 22% from other sectors.

The workshop agenda included information-sharing sessions, experience-sharing and panel discussion sessions, competency- and tool-based activities, and country team presentations. All tool-related and competency-related activities were designed in a sequential order, so that the results obtained in one activity could be used to develop the next. The goal was to enable country teams to build, step by step, a strategy to begin planning GLLP implementation in their countries.

In her opening remarks, Dr Fausta Shakiwa Mosha, Regional Advisor for Public Health Laboratories, WHO Regional Office for the Eastern

Mediterranean, outlined the key components of the Strategic framework for strengthening health laboratory services in the WHO Eastern Mediterranean Region, 2024–2029.

2. Summary of discussions

GLLP components

The GLLP was introduced to participants. The GLLP has four components: a didactic component, mentorship, project-based learning (small and capstone projects), and a community of practice.

The didactic component consists of 43 interactive modules on nine competencies: laboratory system; leadership; management; communication; quality management system; biosafety and biosecurity; disease surveillance and outbreak investigation; emergency preparedness, response and recovery; and research.

The mentorship component supports participants' learning and professional development at regular intervals throughout the programme's duration.

The project-based learning component includes small, mentored laboratory projects between didactic sessions to support learning and a capstone project to reinforce learning and support national laboratory system building supported by mentors.

The community of practice component involves the creation of a platform for a group of individuals who share a common profession, interest or passion and who learn from each other and improve themselves through interaction with their community of practice.

Didactic component

The workshop included several competency exercises to:

- acquaint laboratory leaders/managers with, and build their capacity in, the use of available tools to enable planning and implementation of national GLLP initiatives;
- provide examples of how competencies are built into the curriculum through content examples;
- provide exercises to support GLLP planning and provide samples of content; and
- promote a One Health approach to implementation.

Participants engaged in a stakeholder mapping and strategic planning activity. The development of the materials for this activity was based on the GLLP modules that cover strategic planning, and partnerships and coalition building. The activity involved the identification, prioritization and understanding of stakeholders.

All country teams identified ministries of health/public health and laboratory directors as highly critical to the success of GLLP implementation, given their large degree of influence and noted that, in most cases, they are supportive of implementation of the programme.

The ministries of agriculture and environment, national institutes of health and regulatory bodies were also identified as critical to the success of GLLP implementation. Ministries of finance were, in most countries, identified as less (medium) critical to success, but neutral in terms of supporting implementation of the programme.

The results from country teams during this activity were reflected in the first exercise of the subsequent activity in which the implementation

roadmap was introduced (identification of collaborators, convening collaborators and establishment of the programme management structure).

Participants also engaged in a discussion on creating a single overarching communication outcome (SOCO) in support of the GLLP. The discussion addressed general communication skills and strategies for GLLP messaging. The activity was based on the GLLP communication modules.

The following goals were given as examples for which a SOCO could be created during programme planning:

to engage stakeholders in support of GLLP implementation;
- to engage individual sectors in support of a multisectoral programme;
- to engage academic or training institution to engage in GLLP implementation;
- to engage stakeholders in a long-term sustainable programme model.

Mentorship

The purpose of this session was to: explain the importance of the mentorship component of GLLP, develop criteria for mentors based on country context and necessary skills and experience, and identify tools for mentorship support.

Mentorship is a partnership where a more experienced or knowledgeable person helps to guide someone less experienced. The benefits of mentorship include personal and professional growth for both the mentor and mentee. A GLLP mentor is an active partner in an ongoing relationship, providing support to a mentee, in reaching his/her professional goals. Mentees are encouraged to be proactive, seek feedback and take responsibility for their learning.

The activities of a GLLP mentorship relationship typically include leadership competency self-assessment, development of a learning plan, support for project development, support to ensure learning content is understood, and networking. The GLLP Learning Package includes specific mentorship resources and tools to support the mentorship relationship throughout the delivery of the programme. These include the GLLP Mentorship Guide and associated resources as well as mentor induction materials (under development).

The mentorship component of the GLLP can be beneficial for organizations as it fosters intersectoral networking and relationship building, enhances skills development at all levels of the system and helps develop an experienced pool of national personnel for GLLP sustainability (instructors and mentors).

The selection criteria for GLLP mentors should include education level, practical experience skills in leadership and management, mentorship experience, personal motivation and language. Ultimately, selection criteria must be determined by the GLLP implementer.

Projects

A session was held to explain the importance of the project-based learning component of GLLP, describe the project selection, development and implementation processes, identify tools for project support, and give examples of projects.

Project-based learning is an integral part of learning in the GLLP. The development of GLLP projects should reinforce learning and follow from the programme content and meet laboratory system needs. There are two types of projects in the GLLP: small projects and capstone (final) projects. Small projects (two minimum) should be developed and implemented

between learning sessions. These projects are meant to support the laboratory of the mentee. The capstone project is undertaken after completion of learning sessions. A duration of at least 6 months is suggested. These projects should support the building/strengthening of a laboratory system.

The GLLP learning package includes the GLLP Project Guide that provides examples of project topics and the GLLP Laboratory Sector Questionnaire that can be used as the source of themes for capstone projects. Areas of interest of capstone projects must be identified as early as possible to meet ministry of health, ministry of agriculture and ministry of environment priorities and laboratory system needs.

Community of practice

The next session aimed to define a community of practice, explain its benefits and discuss best practices for its development in the existing environment.

A community of practice is defined as a group of people who share a common interest or profession and come together to share knowledge, learn from each other and develop their skills. Communities of practice are often informal and self-organizing, with members collaborating to solve problems, develop best practices and support each other in their professional growth.

Communities of practice can also introduce collaborative processes, which is instrumental for a One Health-inspired programme like the GLLP. Most national or regional GLLP communities of practice are constituted on WhatsApp groups for information-sharing, support and networking. The GLLP partners are currently developing terms of reference for a global community of practice. The goal is to build a platform to connect all GLLP implementing countries for networking and community building.

GLLP tools

During the workshop, several GLLP implementation tools were introduced to participants. These tools aim to enhance preparation for the pre-planning and planning phases of GLLP implementation. The key tools included the GLLP Readiness Assessment Guide, Implementation Roadmap, Laboratory Sector Questionnaire, and a template terms of reference.

For each tool, a specific hands-on activity was created, allowing attendees to gain knowledge of the tool's usage. All activities included learning and awareness exercises. The results obtained from completion of these activities were not seen as being final or definitive. Country teams agreed to debrief their One Health counterparts as well as national authorities on the GLLP workshop content and the provisional results obtained during workshop activities.

GLLP readiness self-assessment

The first step in planning GLLP implementation in a country or region is assessing readiness. The GLLP Readiness Assessment Guide was developed to assist countries interested in implementing the GLLP in assessing their readiness and ability to conduct the programme.

Readiness can be assessed using four criteria:

- collaborator commitment
- availability of funding
- availability of personnel and supporting infrastructure
- risks and assumptions.

An overview of the Readiness Assessment Guide was provided and instructions for the group activity explained. The activity included: 1) identifying team members for the assessment team and 2) filling in the

Readiness Assessment Checklist, included in the Readiness Assessment Guide. In the checklist, country teams had to rate critical elements associated to the four criteria listed above and, based on the final score obtained, provisionally determine the level of country readiness to implement the GLLP. After the completion of the activity, country teams debriefed the remaining groups on their results and shared reflections on the assessment process.

As expected, most countries identified ministries of health, agriculture, environment, public health and higher education as necessary members of the assessment team (expert authorities with responsibility for public health issues). Concerning the entity that could be responsible for GLLP implementation, all country teams were able to identify one national entity/organization. As for a sponsor, five country teams denoted that funding of the GLLP could be supported by a national institution (totally or partially), while two teams identified an international agency as a potential sponsor of GLLP implementation.

Even though the GLLP partners were referred to as supporting agencies several times, the results strongly suggest that the teams recognized the value of their countries owning the implementation of the GLLP.

Two out of nine teams considered their country had a "high" readiness level. The remaining seven teams rated their level of readiness as "moderate". Remarkably, no team rated their country readiness level as "low". The critical elements that were most frequently rated with lower scores were "Funding sources are identified for the programme duration" and "General agreement on how to proceed".

The teams identified a variety of strategies to overcome these lower scores, including:

- joining GLLP training workshops
- allocating a budget or getting a sponsor
- securing funds for capstone projects
- advocacy for dedicated funding
- collaboration with different sectors
- communication with other sectors
- conducting advocacy sessions to enhance collaborator commitment
- creating written agreement on the programme's purpose, outcomes and how to proceed
- deciding how to proceed effectively.

Overall, country teams recognized identification of funding, agreement and communication between sectors, and organization of advocacy training/sessions as key steps to overcoming lower scores and defining how to proceed. Interestingly, some teams identified commitment of human resources (collaborators, staff, faculty and mentors) as being among the strongest critical elements in the assessment checklist.

GLLP Implementation Roadmap

The GLLP Implementation Roadmap was developed to guide countries towards implementation of the programme at national levels. The roadmap is based on GLLP guidance documents and best practices developed during the first years of implementation and gives an at-a-glance view of the implementation phases and steps. It provides a description of 23 implementation steps organized in four implementation phases: pre-planning; planning and development; implementation; and post-implementation; with monitoring and evaluation input collected throughout the programme.

Participants were introduced to the overall process for implementing the GLLP, key documents that support GLLP implementation and the key actors in GLLP implementation and their roles. More specifically, the Implementation Roadmap activity was designed to introduce countries to the first steps of the planning and development phase: convening collaborators and establishment of the programme management structure; and development of the module delivery schedule and pre-identification of capstone project topics.

Implementing the GLLP in a country or region is a considerable undertaking and requires commitment by many in-country entities. Using an organizational chart template, country teams were asked to provisionally identify national, regional and international collaborators for GLLP implementation.

The results obtained from the readiness assessment and stakeholder analysis complemented this activity. The outcomes of the activity were included in the GLLP terms of reference section 5 (Organizational arrangements) and in the country plan presentations.

The second roadmap activity addressed the identification of areas of interest for the capstone project. At the conclusion of the didactic portion of the programme, GLLP participants will start a capstone project.

The capstone project is supported by the mentorship component and aims to put into practice the concepts learned during the didactic sessions. It is intended to serve two primary purposes: to further provide an experiential learning opportunity for each GLLP participant to learn how national laboratory systems can be created, supported and sustained; and to generate useful and practical plans that can be implemented to strengthen the specific national laboratory system in which the GLLP participants are engaged.

It is recommended to pre-identify capstone projects topics during the planning and development phase of implementation. The topics should be aligned with national plans and priorities and address weaknesses in the national laboratory system. Gaps in the national laboratory systems can be identified using the Laboratory Sector Questionnaire.

Participants were asked to review the Laboratory Sector Questionnaire, perform a gap analysis and pre-identify pertinent topics for the capstone projects that might be developed in their countries. The country teams identified a variety of capstone projects areas, including laboratory biosafety and biosecurity, management (waste, data), transportation of specimens, and development of national guidelines.

GLLP terms of reference

It is highly recommended by the GLLP partners that the operational components of the programme are clearly delineated and agreed upon by all involved parties during pre-planning and the early steps in the planning and development of a GLLP-based programme. The terms of reference document these early discussions and any consensus or decisions.

The GLLP terms of reference is a key document that:

- provides a description of what must be dealt with and considered during pre-planning, planning, implementing, monitoring, evaluating, and improving a GLLP-based programme;
- outlines the roles and responsibilities of the involved parties;
- serves as a contractual arrangement between country partners; and
- can be used to check progress and compliance with the original intentions.

Having clear and agreed terms of reference highlights the role of the national entity in overseeing the programme, provides a sense of ownership, facilitates good planning and understanding of what is coming for all involved parties, and helps avoid unfocused work and wasted effort. The GLLP partners have therefore created a template of the terms of reference to guide countries through this process. The template contains nine sections and has a pre-filled text to guide countries in planning their implementation. It must be adapted to meet the specific needs of an implementing country. However, the terms of reference document is like a country implementation plan and remains live and sensitive to any changes in the situation, meaning it can be reviewed and revised or updated as required at any time.

It is recommended to include the following members from all One Health sectors (human, animal, environmental) in the discussion and drafting of the terms of reference:

- national entity/organization(s) responsible for hosting the programme;
- the implementer (organization responsible for delivery of the content of the programme, if different from the national entity);
- a national monitoring and evaluation focal point (person or persons responsible for monitoring and evaluation of the programme, collecting monitoring and evaluation data, analysing and presenting data to the technical working group, national entity and other stakeholders for improvement of the programme); and
- national collaborators (any national organizations that will potentially be involved in the planning, implementation, monitoring, evaluation and improvement of the programme, apart from the national entity).

During the workshop, the terms of reference template was presented to the country teams, who were asked to review it, fill in the blanks with potential suggestions and adapt the proposed text to their national context and needs. They were asked to focus on certain sections

selected specifically for the workshop concerning matters that could be discussed during the workshop.

Over the course of two sessions, the country teams completed all or parts of sections of the template in the following order:

- Section 5: Organizational arrangements (collaborators, commitment, language of the programme, funding source);
- Section 6: Participants, instructors and mentors (prerequisites and nomination/selection process for each role);
- Section 7 (7.2.4): Projects (focusing on capstone projects);
- Section 8 (8.1.2; 8.1.3): Graduation criteria, certificate;
- Section 4: Programme-specific objectives;
- Section 9: Implementation (roles and responsibilities of national entity, implementer, technical working group, instructors and mentors); and
- Having worked through the terms of reference, update organizational arrangements in Section 5, if needed.

Country experience-sharing

The first session of day 3 focused on planning and sustainability, with presentations from Oman and Pakistan (WHO Eastern Mediterranean Region), and Ukraine and Kazakhstan (WHO European Region). The presenters highlighted key features of GLLP implementation, including programme inception/pre-planning, planning, implementation and sustainability.

A session was held on academic perspectives on GLLP integration into national programmes towards internal recognition/credentials. Experiences from Burkina Faso and Oman were highlighted.

In addition to opportunities for discussion after experience-sharing sessions, a panel discussion focusing on sustainability and programme continuity was held.

The panellists included laboratory focal points, GLLP partners (CDC, WHO, WOAH) and country participants. Key messages from the panel discussion were that:

- the goal of the GLLP is to strengthen laboratory systems by providing laboratory professionals with the tools to develop leadership competencies using a One Health approach;
- the GLLP core values of One Health, ownership and sustainability should be essential considerations in programme planning and implementation;
- engagement across the One Health sectors during all GLLP phases can facilitate strong linkages and coordination, with development of strong communities of practice; and
- some ongoing GLLP programmes are ensuring sustainability by creating career pathways for participants through integration with academic institutions.

Costing considerations

Important considerations for estimating GLLP costs to facilitate budget planning were presented, using the four phases of the implementation roadmap as guidance. Country-specific costs can be highly variable and are linked to many factors, such as whether face-to-face, virtual or hybrid modality(ies) are selected, whether implementation by country or by an implementing partner, use of dedicated staff versus non-dedicated/part time staff, expected time investment by participants, mentors and instructors, and costs related to the closing ceremony and graduation, and programme registration with academic credits (if applicable).

Information was shared on GLLP funding options available from the Global Fund. Under the Global Fund modular framework for laboratory system strengthening, the GLLP has been identified under "national laboratory governance and management structures" as a potential funding option. The costs of GLLP implementation in six countries funded during the previous Grant Cycle 6 (GC6), implemented in collaboration with APHL and Foundation Merieux, were shared. Moreover, nine countries in the WHO African Region have included the GLLP in their GC7/COVID-19 Response Mechanism applications, with an estimated cost of US$ 1.6 million, either fully or co-funded by the Global Fund. Some of the proposed activities include rolling out the GLLP and embedding the curriculum in higher education training, with individual capstone projects and scholarships across participants from One Health sectors.

GLLP synergies

The objective of this session was to highlight other workforce development initiatives already running in many countries and how the GLLP has been and can be integrated or linked to ensure sustainability and continuity.

Presentations were given on the Uganda National Institute of Public Health programme, the work of the Eastern Mediterranean Public Health Network (EMPHNET) in supporting field epidemiology training programmes, and the Gulf CDC's support to countries for preventing, preparing for, responding to and recovering from public health emergencies.

The Regional Curriculum Framework for One Health Professional Training in the Eastern Mediterranean Region was described, highlighting that capacity-building is an integral component of the One Health approach as it is an opportunity to build trust and develop synergies among experts from the different sectors. It is not just the value of the training and technical competencies that matters most, but the value of creating a strong

community of practice among stakeholder participants from the human, animal and environmental health sectors, as well as policy-makers, logistics managers, social scientists and communication specialists.

A presentation on public health workforce development frameworks noted that the health workforce and decision-makers face uncertainty during emergencies, such as the challenges faced across the One Health, social and economic sectors during the recent COVID-19 pandemic. There is therefore a need for health workforce training programmes, with clearly defined competencies that can enable the health workforce to deliver key public health functions, including emergency preparedness and response.

The European Centre for Disease Prevention and Control conducts the field epidemiology (EPIET) or public health microbiology (EUPHEM) fellowship programme, which is a joint laboratory and epidemiology training programme for field epidemiologists and public health microbiologists. The programme's success supports conducting GLLP and field epidemiology training programmes at the same time.

The Competencies for One Health Field Epidemiology Framework, developed under the One Health Quadripartite, focuses on field epidemiology training across the animal, environment and human health sectors.

Every country has its own context and the focus of public health workforce training should be to protect the health of their populations as well as global health.

There was a panel discussion on other workforce development initiatives and potential synergies with GLLP. Panellists included representatives from EMPHNET, Gulf CDC, the Uganda National Institute of Public Health, and the Field Epidemiology Capacity

Strengthening Unit at WHO headquarters. The key messages from the discussion were as follows:

- there are many public health workforce development initiatives, including those focusing on joint training for epidemiologists and laboratory specialists;
- there are regional agencies such as Gulf CDC that can provide a platform to strengthen public health workforce capacities, including the GLLP;
- joint implementation of the GLLP together with a field epidemiology training programme has been undertaken in some countries, resulting in the development of close linkages across disciplines and One Health sectors.

Monitoring and evaluation framework

Monitoring and evaluation provides stakeholders with information on the progress of any intervention (outputs) and achievement of an outcome. It supports evidence-based decision-making and is an integral part of any project and training programme. In the context of the GLLP, countries may choose to develop their own monitoring and evaluation framework or use the framework that is being developed by the GLLP partners, presented during the workshop.

The GLLP monitoring and evaluation framework is based on the three GLLP core values (One Health, ownership and sustainability) and four components (didactic component, small and capstone projects, mentorship, and community of practice). It takes into account the Kirkpatrick model, a method of evaluating the results of training and learning programmes based on four levels: reaction, learning, transfer/behaviour and results.

The objectives of the GLLP monitoring and evaluation framework are to:

- monitor and report on GLLP implementation progress and performance;
- evaluate the outcomes of GLLP implementation;

- support improvement of GLLP content and implementation modalities; and
- inform the affiliation mechanism.

The framework is built on the use of evaluation forms for participants, instructors and mentors, as well as reporting forms for the implementer/national entity, which feed into a list of indicators on implementation progress and performance, implementation outcomes, and continuous development and improvement.

The data is expected to have three users:

- country programmes: country data for monitoring progress, assessing programme impact, and improvement of the programme;
- GLLP partners: de-identified country data and aggregate data for all countries to be used for concept/design/content improvement, global impact and the affiliation process;
- the general public: aggregated and de-identified data for communication purposes.

Given the amount of data to be collected, analysed and used to improve the programme, it is recommended to have a designated monitoring and evaluation focal point.

Following the session, a Slido survey was launched to gather the participants' opinions on monitoring and evaluation in general and on the GLLP monitoring and evaluation framework in particular: 100% of respondents to the question (26 participants) highlighted the importance of having a monitoring and evaluation system in place for a GLLP-based programme; 14% (four participants) reported that they would build their own monitoring and evaluation system, while 82% (23 participants) reported that they would use the GLLP monitoring and evaluation framework; and 4% (one participant) selected N/A. The two comments provided on monitoring and

evaluation were that participants would potentially adapt and use the GLLP framework and that it must be based on a theory of change.

Affiliation mechanism

Given the increase in the number of GLLP programmes being implemented and the diverse models being used, the GLLP partners recognize the need to maintain uniform quality across programmes and to encourage sustainable integration of the programme into national curricula and workforce development initiatives. Accordingly, the GLLP affiliation mechanism has been developed to recognize, through a formal process, national GLLP-based programmes implemented with adherence to core values and quality delivery, resulting in strengthened national laboratory systems.

GLLP programmes that are currently being implemented are expected to have a monitoring and evaluation framework in place to maintain oversight of their performance, and it is a mandatory requirement for affiliation. Currently, guidance is being developed for the monitoring and evaluation framework and affiliation mechanism.

3. Summary of country plans presented by country teams

On day 4, country teams presented their work and received feedback from other participating countries and partners to improve their terms of reference/country plans.

At the end of the workshop, terms of reference/country plans had been drafted for further discussion within each country. These plans had the following characteristics, arranged by section.

Section 4: Programme-specific objectives

- Some countries agreed to the pre-filled objectives and several countries adapted them.

Section 5: Organizational arrangements (collaborators, commitment, language of the programme, funding source)

- Potential national entity: most teams stated ministry of health, institute of public health and other relevant ministries and agencies.
- Potential implementer: most teams stated national entities or technical working groups.
- Potential national collaborators: most teams said relevant ministries and academia.
- Potential regional collaborators: most teams included GLLP partners, regional organizations and potential funders.
- Commitment: most teams mentioned relevant ministries, academia, financial and legal departments as the stakeholders to be involved in discussions for political buy-in; the way of getting buy-in included meetings and presentations, high-level meetings, endorsement by the NLWG, and showcasing the positive impact of the GLLP.
- Language: most teams mentioned English as the language of delivery, with French mentioned in one country.
- Funding source: most teams mentioned both internal and external (partners and donors); one country mentioned an academic institution hosting the programme.

Section 6: Participants, instructors and mentors (prerequisites and nomination/selection process for each role)

- Prerequisites for participants: teams generally agreed to the pre-filled prerequisites; some teams adjusted degree names/specialties and/or included the private sector.
- Nomination/selection process: countries generally used the pre-filled process and adjusted it to their needs.

Section 7 (7.2.4): Projects (focusing on capstone projects)

- Capstone project topics: mainly included quality management systems, biosafety and biosecurity, sample referral and transportation, capacity-building and capacity injection, and the regulatory framework; also mentioned were sustainability, capacity-building, laboratory informatics, innovation in diagnostics, laboratory preparedness, regulatory compliance, ethics, and laboratory system assessment.

Section 8 (8.1.2; 8.1.3)

- Graduation criteria: this included attendance, post-tests and final exams, on-the-job projects, capstone project written reports and oral presentations, participation in mentoring sessions, project proposals, participation/interaction, and mentor's evaluation.
- Certificate: possible certificates varied, including a GLLP certificate, advance training certificate counting towards continuous education, joint GLLP and national public health school certificate, post-graduate diploma or master's degree, and fellowship completion certificate.

4. Recommendations for GLLP partners

1. Review the Readiness Assessment Guide to make it more understandable and usable by Member States.
2. Develop a training of trainers package to facilitate ownership and implementation by countries.
3. Continue to provide technical support for programme implementation to interested Member States.
4. Continue to facilitate access to the GLLP Learning Package and associated tools for all Member States.
5. Promote GLLP alignment with existing complementary global and regional workforce development initiatives.
6. Promote and disseminate best practices, challenges and solutions to improve programme implementation in the Eastern Mediterranean Region.

5. Next steps for countries

The participating countries agreed on the following next steps and tentative timelines.

August to September 2024

WHO issues report on GLLP workshop;
Countries share names and contacts of GLLP focal points with WHO Regional Office through WHO country offices;
Conduct advocacy for GLLP implementation at country level;
- Plan inception workshop(s).

September to October 2024

- Establish GLLP technical working group at country level.

January to March 2025

- Prepare GLLP proposal for approval at country level;
- Make results of country readiness assessment available;
- Develop implementation roadmap;
- Produce GLLP terms of reference;
- Develop GLLP workplan;
- Develop GLLP budget;
- Undertake resource mobilization at country level.

March to June 2025

- Adopt curriculum and implementation modalities.

April to July 2025

- Formal launch of the programme(s).