



REQUEST FOR EXPRESSIONS OF INTEREST (TRAINING SERVICES- INDIVIDUAL SELECTION)

Country: Kenya

Name of project: Emergency Locust Response Project (ELRP)

Project No.: P174546

Assignment Title: Training on Assessing Health and Environmental Implications of Pesticides, Using Test-Mate System

Contract Reference No: KE-ICPAC-2024-ICS-11

1. IGAD Climate Prediction and Applications Centre (ICPAC) has received financing from the World Bank towards the cost of the **Emergency Locust Response Project (ELRP)** and intends to apply part of the proceeds for consulting services.
2. The training services (“the Services”) include Supporting ICPAC in **Training IGAD Member States Plant Protection Experts on Assessing Health and Environmental Implications of Pesticides, Using Test-Mate System**. The assignment is expected to take Ninety (60) calendar days.
3. The detailed Terms of Reference (TOR) for the assignment *can be found at the following website: <https://www.icpac.net/tenders/>, or can be obtained at the address given below*
4. IGAD Climate Prediction and Applications Centre (the “Client”) through the **Project Implementation Unit (PIU) of Emergency Locust Response Project (ELRP)** now invites eligible consulting individuals (“Consultants”) to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. Experience in similar assignments: experience in similar environment and professional qualification to perform the tasks. Interested individuals must provide information indicating that they are qualified to perform the services (**attach detailed curriculum vitae (CV), copies of documentary evidence of academic qualifications, professional qualifications, and registration/licensing with professional bodies (as applicable)**). The shortlisting criteria

The shortlisting criteria are:

I- Educational Background

A minimum of Master's degree in a relevant field such as environmental science, pest management, agriculture, or a related discipline.

II- General Skills

Knowledge of Regulatory Frameworks: Comprehensive knowledge extends to both local and international regulations governing pesticide application, environmental conservation, and safeguarding human health. Proficiency extends to understanding the directives set forth by regulatory bodies, including but not limited to the Environmental Protection Agency (EPA) and the European Food Safety Authority (EFSA).

Training and Communication Skills: Possesses adept communication skills capable of articulating intricate scientific ideas to audiences with varying levels of expertise. Demonstrated experience encompasses the design and execution of training initiatives, workshops, and seminars. The ability to tailor communication to effectively convey complex scientific concepts is a notable strength.

Ethical Considerations: Demonstrates a keen understanding of ethical considerations integral to pesticide testing and assessment. This awareness extends to the ethical implications surrounding the use of pesticides and the impact on ecosystems and human well-being.

Collaboration and Networking Skills: Collaboration with stakeholders, research institutions, and government agencies; adeptness at building networks and partnerships for knowledge exchange in pest management.

Problem-Solving and Adaptability: Problem-solving skills and adaptability. Addressing emerging pest issues, recommending solutions, and adjusting training programs accordingly.

Language Proficiency: Fluency in English language is essential for effective communication.

III- Specific Selection Criteria

Professional Experience: The ideal candidate should have a minimum of 10 years of professional experience in pest management, specifically in environmental assessments and pesticide management. They should also have demonstrated experience in conducting training programs, workshops, or capacity-building initiatives related to pest control and environmental assessments using Test-mate systems.

Expertise in Test-Mate System: Specific experience with the Test-Mate system is required, including prior usage, understanding of the system's capabilities, knowledge of limitations, and troubleshooting skills.

Laboratory Skills: Proficiency in laboratory techniques and procedures relevant to pesticide analysis is essential, along with hands-on experience using commonly employed analytical instruments in pesticide analysis.

Data Interpretation and Reporting: Skills in interpreting and analyzing data generated by the Test-Mate system, as well as translating findings into actionable insights, are crucial. Additionally, the ability to prepare comprehensive and accurate reports summarizing the health and environmental implications of chemical pesticides is required.

Training Experience: Proven experience in conducting training programs, a track record in designing and conducting training programs, specifically focused on assessing the health and environmental impacts of pesticides.

Agricultural Context and Pest Challenges: Profound understanding of agricultural context within IGAD region, including knowledge of specific pest challenges, climate, crops cultivated, and prevalent pest species.

Research and Innovation in Pest Management: Demonstrated proactive approach to integrating cutting-edge knowledge into practical training sessions.

6. The attention of interested Trainers is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" First Published July 2016 and revised Fifth Edition September 2023, ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.
7. An Individual Consultant (Trainer) will be selected in accordance with the Individual Consultant Selection method set out in the Procurement Regulations.
8. Further information can be obtained at the address below from 0900 to 1400 hours East African Time (EAT) from Monday to Friday excluding public holidays.
9. Expressions of interest must be sent via email to Procurement@icpac.net by **15 May 2024 at 1100 hours EAT**, quote the Assignment title and Contract Reference No. in the subject row.

IGAD Climate Prediction and Applications Centre
Attn: Procurement Unit
IGAD Climate Prediction and Applications Centre- **ICPAC**
Ngong Town Kibiko A Road, Near KIHBT
T +254 - 020-3514426/ 0704470615
E-mail: Procurement@icpac.net



IGAD Climate Prediction and Application Centre (ICPAC)

Emergency Locust Response Project (ELRP)

Project ID Number: P174546

Project Implementation Unit: IGAD Food Security, Nutrition and Resilience
Analysis Hub (IFRAH)

Terms of References

for

Terms of References: Training on Assessing Health and Environmental Implications of Pesticides, Using Test-Mate System

Client

IGAD Climate Prediction and Applications Centre (ICPAC)
Ngong Town Kibiko A Road, Near KIHBT
P.O.Box 10304-00100,
Nairobi, Kenya

1. Introduction

The Horn of Africa region is facing significant challenges associated with climate change, which directly affect the occurrence of transboundary pest outbreaks. Changes in temperature and precipitation patterns disrupt ecosystems, creating favorable conditions for pests to multiply. The increased frequency and intensity of weather events, such as droughts and floods, stress plants and make them more susceptible to pest infestations, leading to more frequent and severe outbreaks. As a result, agriculture and food security in the region are greatly impacted.

To protect agricultural output in the region, plant protection measures, including the use of pesticides, are crucial. These measures play a vital role in safeguarding crops and ensuring a stable food supply. Given that agriculture is a primary source of livelihood for many in the region, effective plant protection promotes the resilience of agricultural systems and supports economic stability. Moreover, the significance of plant protection extends beyond economic concerns and includes biodiversity conservation. Implementing sustainable plant protection practices helps prevent the uncontrolled spread of invasive pests, thereby maintaining ecosystem health and resilience.

However, the use of pesticides presents its own set of challenges. Improper pesticide use can pose health risks to farmers, farmworkers, and consumers through crop residues. Additionally, pesticides can have harmful effects on the environment, contaminating soil and water and negatively impacting non-target species.

Achieving a balance between the need for pest protection and health and environmental concerns is paramount. Integrated Pest Management (IPM) strategies provide a holistic approach that combines biological, cultural, and chemical control methods. By reducing reliance on chemical pesticides and mitigating their environmental and health impacts, IPM strategies offer a comprehensive solution.

Regulatory measures are crucial in striking this balance. Enforcing and strengthening regulations on pesticide use, providing proper training for farmers, monitoring residue levels, and promoting the use of less harmful alternatives are important steps. Furthermore, investing in research for sustainable and environmentally friendly pest control methods can lead to the development of effective alternatives, thereby reducing the overall environmental and health impact associated with traditional pesticides. The interdependence of pest management and ecological balance highlights the need for a comprehensive approach that considers the impact on both crop health and the environment. To implement effective pest control strategies, a thorough examination of the potential health risks to crops, ecosystems, and human populations is necessary, emphasizing the importance of a holistic Health and Environmental Assessment.

At the heart of such assessment is the Test-mate System, which is important in ensuring the effectiveness of pest control measures. The Test-mate is a convenient and efficient tool for rapidly assessing cholinesterase (ChE) inhibition, which could indicate potential poisoning from organophosphate (OP) pesticides. This portable and user-friendly device specifically measures the activity of red blood cell (RBC) cholinesterase. Organophosphate pesticides

impede the function of ChE, which is an essential enzyme for the proper functioning of the nervous system. Inhibited ChE can result in the accumulation of acetylcholine, a neurotransmitter, in the body, leading to excessive stimulation of the nervous system.

Therefore, when considering the significance of the Test-mate System, it becomes clear that integrating it into pest control frameworks greatly contributes to achieving a harmonious balance between agricultural productivity and environmental preservation.

2. Training Objectives

The main goal of this initiative is to provide comprehensive training to approximately 28-35 professionals from IGAD Member States. The training will focus on the execution of Health and Environmental Assessments within the realm of Pest Control, specifically utilizing the Test-mate System. The aim is to enhance their expertise and hands-on capabilities in this area. In addition, the initiative seeks to create a collaborative learning atmosphere that encourages knowledge sharing and facilitates networking among the participants. It not only aims to equip individuals with technical know-how, but also to establish a platform for mutual learning and professional connections.

3. Scope of Work

The selected consultant (trainer) will be responsible for

The trainer is tasked with leading a training session on Evaluating the Health and Environmental Effects of Pesticides, Utilizing the Test-Mate System, throughout the member countries of the Intergovernmental Authority on Development (IGAD). The duties encompass various essential tasks, namely:

- a. Analyzing the current policies, regulatory frameworks, and operational practices governing pesticide use within IGAD nations. This involves evaluating existing guidelines, practices, and procedures to identify gaps, inefficiencies, or areas requiring updates to meet international standards and best practices.
- b. **Training Program Development:** Develop a comprehensive training program outlining the objectives, content, and methodologies for educating participants on assessing health and environmental implications of pesticides using the Test-Mate System. The curriculum based on the insights and data collected from the needs assessment. The curriculum should address the identified needs of plant protection professionals within IGAD member states and cover essential topics related to modern, safe, and effective pesticide management and disposal techniques.
- c. **Customization for Member States:** Tailor the training materials to suit the specific needs, contexts, and regulatory frameworks of the IGAD member states.
- d. Developing and delivering comprehensive training modules on Health and Environmental Assessment within the context of Pest Control. These modules will cover various essential aspects, including the ecological impact of pest control

measures, the assessment of potential health risks associated with pest management strategies, and the integration of sustainable and environmentally friendly practices

- e. Introducing participants to the Test-mate System, providing a detailed exploration of its functionalities and features. Through hands-on training sessions, participants will gain practical experience in utilizing the Test-mate System, fostering a deeper understanding and proficiency in its application within the field of Pest Control. This approach ensures that participants are not only familiar with the theoretical aspects but also equipped with the practical skills necessary for effective implementation.
- f. Enhancing the training program by seamlessly incorporating case studies and real-life scenarios that specifically relate to the unique challenges and contexts of IGAD Member States. This tailored approach ensures that participants are exposed to situations they are likely to encounter in their respective regions, promoting a more profound and applicable learning experience. By addressing the realities of the IGAD Member States, the training becomes more than a theoretical exercise, transforming into a dynamic and contextualized educational opportunity.
- g. Maintaining detailed records of training activities, participant attendance, evaluations, and any issues encountered during implementation. Prepare comprehensive reports summarizing the outcomes and recommendations for future improvements.

4. Duration

The training program is expected to be conducted over a period of sixty (60) calendar days, commencing from the date the contract is signed. This estimated timeframe should be considered an indication only and that consultants shall be free to propose their own estimates.

5. Deliverables

Table 1 outlines the deliverables of the initiative, including their anticipated schedule and the reporting format.

Table 1: Deliverables of the Training Initiative

Deliverables/Report	Timeline for submission of report after contract commencement (day)	Number and format of reports presentation
Inception Report: The report offers an overview of the training initiative, commencing with with a brief introduction and outlining the training objectives, scope, participants, approach, module details, target audience, prerequisites, resources, logistical aspects, schedule, monitoring procedures, assessment methods, and risk analysis. Moreover, the report encompasses	10	Electronic copies of the report to IFRAH Coordinator and ICPAC director.

strategies for engaging stakeholders and communication plans. In conclusion, a firm dedication to accomplishing the program's objectives is emphasized.		
Needs Assessment Report: This report provides a detailed analysis of the specific requirements and difficulties associated with Health and Environmental Assessment in Pest Control. The focus is on the implementation of the Test-mate System in the IGAD member states.	30	Presentation in a meeting and electronic copies to IFRAH Coordinator and ICPAC director.
Comprehensive Training Program: This entails developing a meticulously designed curriculum that is customized to fulfill the established criteria. This curriculum should encompass training modules, presentations, handouts, and reference materials.	40	Electronic copy of the training materials to the ICPAC director and IFRAH Coordinator.
Prospective Trainees: The instructor works in collaboration with member states of IGAD to identify potential participants, thereby ensuring the selection of the most suitable individuals for this capacity development initiative. This intentional collaboration aims to enhance the technical capabilities of countries in utilizing traps and pheromones for effective pest management.	40	Electronic copy of the list of trainees to the ICPAC director and IFRAH Coordinator.
Pre- and Post-Training Assessment Tools and Report: This activity involves creating assessment tools to evaluate participant knowledge and learning outcomes before and after training.	Pre-training assessment (45), post-training assessment (60)	Electronic copy of the list of trainees to the ICPAC director and IFRAH Coordinator.
Training Sessions: These will take place either through virtual means or in a physical setting, following the program's framework. Furthermore, recorded renditions of the training sessions will be supplied for future consultation and application by member states of IGAD.	50	Presentation in a meeting and electronic copy (report) to the ICPAC director and IFRAH Coordinator
Training Sessions Reports: Upon completion of a training session, a comprehensive report of the program will be generated. This report will incorporate feedback and suggest improvements for future iterations.	55	Providing training sessions
Guidance Document: This document outlines standardized procedures for the Health and Environmental Implications of Pesticides, offering best practices that can be adapted to meet the specific needs of each member state within the IGAD.	55	Presentation in a meeting and 1 electronic copy (report) to the supervisor, and additional copies to the ICPAC director and IFRAH Coordinator
Final Comprehensive Report: A detailed report summarizing the needs assessment findings, training delivery process, participant feedback, and measurable learning outcomes. Recommendations for ongoing capacity building, policy development, and implementation strategies for sustainable pesticide management practices.	60	One electronic copy to the supervisor, and additional copies to the ICPAC director and IFRAH Coordinator.

5. Payment Schedule

Table 2 outlines the proposed payment schedules, based on satisfactory performance of the contract which will be negotiated with the successful trainer.

Table 2: Proposed payment schedule

S/No.	Deliverables	Timelines after contract commencement	Percentage of the contract amount
1.	Submission and Acceptance of Training Materials, Including Presentations, Handouts, and Practical Exercises	20 days	15 percent
2.	Conducting Training Workshop	50 days	50 percent
3.	Submission and Acceptance of final report	60 Days	35 percent

7. Application Process

All applications must be received in email (Hard copies will not be accepted) with subject line “Individual consultancy - Training on Health and Environmental Assessment, Using Test-Mate System Applications should be received by **13 May 2024 at 1100 hours EAT**, Include Technical proposal (clearly outline your approach, methodology and timeline) to the following Address: procurement@icpac.net .

8. Obligations of IGAD

Providing Access to Information: The IGAD is obligated to provide the trainer with access to all relevant information.

Facilitating Stakeholder Engagement: The IGAD should facilitate communication and collaboration between the consultant and relevant stakeholders, including regulatory bodies, government agencies, research institutions, and industry representatives in IGAD member countries.

Facilitating Field Visit: The IGAD should facilitate the consultant to visit areas deemed necessary for tasks outlined in this document.

Ensuring Timely Responses: The IGAD is responsible for responding to queries and requests for clarification from the consultant in a timely manner to ensure the smooth progress of the consultancy.

The Collaborative Decision-Making: The IGAD should actively participate in collaborative decision-making processes, especially concerning the development of tailored capacity-enhancing materials and the implementation of recommendations. This involves providing input, feedback, and approvals as needed.

Allocating Resources: The IGAD is responsible for allocating necessary resources, including personnel and budgetary support, to facilitate the successful execution of the training, as outlined in the negotiated budget.

Supporting Organizing Workshops: The IGAD should support the organization of training workshops, including logistical arrangements, participant invitations, and any other requirements to ensure the effective conduct of the workshops.

Reviewing and Approving Deliverables: The IGAD is tasked with reviewing and approving key deliverables, such as the inception report, detailed assessment report, training materials,

workshop reports, and the final training report, ensuring they align with the organization's goals and standards.

Ensuring Compliance: The IGAD should ensure that the training activities comply with relevant IGAD policies, procedures, and ethical standards.

9. Obligations of the Trainer

Conducting Thorough Assessment: The trainer is responsible for conducting an objective examination of drone regulatory frameworks, administrative processes, and capacities within each IGAD country, identifying strengths, weaknesses, gaps, and areas for improvement.

Developing Tailored Materials: The trainer is obligated to develop comprehensive and tailored capacity-enhancing materials, including training modules, presentations, handouts, case studies, and practical exercises, addressing the specific needs and challenges of IGAD countries.

Organizing Training Workshops: The trainer is responsible for organizing and conducting training workshops, facilitating dynamic discussions, group exercises, and experience-sharing sessions to enhance the skills and knowledge of relevant stakeholders.

Producing Timely Report: The trainer is required to produce detailed and comprehensive reports, including an inception report, assessment report, training materials, workshop reports, and a final training report. These reports should present findings, insights, and actionable recommendations.

Engaging with Stakeholders: The trainer should actively engage with IGAD member countries' regulatory bodies and other stakeholders, seeking input, feedback, and collaboration to ensure the effectiveness and relevance of capacity-building initiatives.

Adhering to Timeline and methodology: Adhering to the agreed-upon timeline and methodology, the trainer is responsible for managing the consultancy activities efficiently and effectively, keeping the IGAD informed of progress and seeking clarification when necessary.

Maintaining Confidentiality: The trainer must treat all information obtained during the consultancy as confidential, seeking written consent from IGAD before disclosing any sensitive information.

Ensuring Compliance and Quality: The trainer is responsible for ensuring that all training activities comply with relevant international, regional, and national regulations and standards. The trainer should also maintain high-quality standards in the development of materials and the execution of the training workshop.

10. Management and accountability of the assignment

The trainer will report to the IGAD Food security, Nutrition, and Resilience analysis Hub (IFRAH) coordinator (abdi.fidar@igad.int), providing regular updates on progress and seeking clarification on requirements when necessary.

11. Monitoring and Evaluation Framework

The monitoring and evaluation (M&E) framework for the training initiative is designed to ensure effective implementation, measure outcomes, and provide insights for continuous

improvement. The framework is intended to (a) facilitate assessing the effectiveness of the training in enhancing the technical skills of plant protection professionals, (b) evaluate the impact of the training, and (c) measure the degree of alignment with ecologically sustainable transboundary pest control methods.

Key Indicators

- I- **Skill Enhancement:** This will be measured by (a) evaluating the percentage of increase in participants' knowledge of pest behavior, trap deployment, and pheromone usage, and (b) the number of participants demonstrating proficiency in practical exercises.
- II- **Adoption of techniques:** This will be assessed through (a) the percentage of participants incorporating traps and pheromones in their pest control strategies post-training, and (b) the number of successful case studies shared by participants post-training.
- III- **Alignment with Sustainable Practices:** The indicator will be assessed by (a) the degree of reduction in the use of broad-spectrum chemical pesticides post-training, (b) number of participants implementing IPM strategies in their work, and (c) number of monitoring operations in which traps and pheromones are applied.

Data Sources

- Pre and post-training assessments.
- Participant feedback during and after the training.
- Post-training reports and case studies from participants.
- Monitoring reports from IGAD member countries on pest control practices.

Evaluation Methodology

- I- **Baseline Assessment:** A pre-training assessment will be conducted to establish the baseline knowledge and practices of participants. Similarly, data collection will be undertaken on current pest control methods employed in IGAD member countries.
- II- **Formative Evaluation:** Continuous monitoring will be undertaken during the training program to identify challenges and areas for improvement. In addition, regular feedback sessions will be conducted with participants to address immediate concerns and adapt training delivery.
- III- **Summative Evaluation:** Post-training assessment will be conducted to measure the knowledge gain and skill development of participants, analyzing post-training reports, seeking feedback from relevant stakeholders (on the impact of the training on pest control practices, and case studies submitted by participants).

Reporting and Documentation

- I- Regular Updates: In addition to the milestone reports, progress reports will be submitted to the IFRAH Coordinator on a regular basis, preferably monthly. However, if any unexpected challenges arise during the training, an immediate report will be provided for prompt resolution.
- II- Final Reports
- Inception Report (Day 10): Overview of the training program with detailed plans and objectives.
 - Training Workshop Report (Day 55): Comprehensive summary of the entire training program, including participant feedback and recommendations.
 - Final Report (Day 60): A consolidated report highlighting key findings, recommendations, and the overall impact of the training.