



## 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 in Pests Monitoring Using Traps and Pheromones

Contract Reference No: KE-ICPAC-2024-ICS-10

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 Support ICPAC in **Training IGAD Member States Plant Protection Experts in Pests Monitoring Using Traps and Pheromones**. The assignment is expected to take Sixty (60) calendar days from the date of commencement
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. The Services Contracts are expected to be for periods indicated in respective TORs.
5. 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

## I- Education:

A minimum of a Master's Degree in Entomology, Agronomy, or a related field

## 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 pest monitoring and observation. They should also have demonstrated experience in conducting training programs, workshops, or capacity-building initiatives related to pest control and management.

**Training Experience:** Proven experience in conducting training programs, a track record in designing and conducting training programs on pests monitoring and control.

**Expertise in Traps and Pheromones:** Specialized knowledge and hands-on experience in utilizing traps and pheromones for effective pest management.

**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 Consultants 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. An Individual Consultant will be selected in accordance with the Individual Consultant Selection method set out in the Procurement Regulations.
7. 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.
8. Expressions of interest must be sent via email to [Procurement@icpac.net](mailto:Procurement@icpac.net) by **13 May 2024 at 1100 hours EAT**, quote the Assignment title and Contract 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](mailto:Procurement@icpac.net)



## IGAD Climate Prediction and Applications 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 Services for Pests monitoring using traps  
and pheromones**

#### Client

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

## 1. Introduction

In the ever-evolving field of plant protection, it is crucial to implement effective pest monitoring and surveillance mechanisms. The delicate balance between agricultural productivity and ecosystem conservation relies on innovative and sustainable approaches. Among these approaches, the use of traps and pheromones has emerged as a sophisticated and environmentally friendly strategy with great potential for monitoring and managing pest populations. These tools are crucial elements of integrated pest management (IPM) strategies, designed to mitigate the negative impacts of pest outbreaks on agriculture, ecosystems, and economies.

One critical function of traps and pheromones is their contribution to early detection and monitoring. By incorporating synthetic pheromones into traps, entomologists are able to effectively detect and capture pests, taking advantage of the chemicals insects use for communication. Early detection is vital as it allows for timely implementation of control measures before pest populations reach levels that can cause significant damage to crops and vegetation.

The specificity of pheromones is another important aspect. These chemicals are typically species-specific, meaning they attract only the targeted pest species. This specificity helps in accurately identifying and monitoring the population dynamics of the specific pest, minimizing the risk of unintentional harm to non-target organisms. Additionally, strategically placed traps contribute to mapping the spatial distribution of transboundary pests, providing valuable information about their spread patterns. This knowledge enables targeted interventions in high-risk areas, enhancing the effectiveness of pest control efforts. Traps and pheromones are integral components of a holistic approach within the broader framework of IPM, combining various methods while minimizing environmental impact.

Employing traps and pheromones offers a noteworthy advantage in reducing reliance on broad-spectrum chemical pesticides. The targeted monitoring facilitated by these mechanisms allows for more precise application of control measures, potentially mitigating the negative impacts of chemical pesticides on non-target organisms, ecosystem disruption, and the development of pesticide resistance. Furthermore, the use of traps and pheromones provides a cost-effective surveillance alternative compared to large-scale chemical applications or manual monitoring efforts. This is particularly important in regions with limited resources, where efficient pest management is crucial for ensuring food security and economic stability.

The project also places a strong emphasis on advocating for ecologically sustainable transboundary pest control methods, with the specific goal of reducing the region's dependence on synthetic pesticides. In pursuit of this objective, the IGAD aims to capitalize on financial assistance from the Emergency Locust Response Project (ELRP) supported by the World Bank. Therefore, IGAD is seeking for a qualified trainer who can contribute to strengthening the technical expertise of member states. The focus is on equipping plant protection technical experts with skills related to the utilization of traps and pheromones for monitoring desert locusts and other transboundary pests. This strategic approach aligns with

the broader mission of promoting environmentally friendly practices and building resilience against pest-related challenges.

## 2. Objective

The primary objective of this training is to enhance the technical skills of plant protection professionals, particularly those from the IGAD member states, with the expertise needed to monitor and control pests using advanced techniques involving traps and pheromones. The focus is on enhancing participants' understanding of pest behavior, trap deployment strategies, and the strategic use of pheromones for optimal pest control.

## 3. Scope of Work

The selected consultant (trainer) will be responsible for

**Curriculum Development:** The trainer will develop a thorough and customized training curriculum focused on the monitoring of pests through the utilization of traps and pheromones. This curriculum should cover both advanced and fundamental concepts in pest monitoring techniques. Create a well-organized plan that includes clearly defined learning objectives, significant milestones, and a structured timeline for the entire training program. This comprehensive approach ensures that participants gain a deep understanding of the subject matter and progress systematically through the training, facilitating effective skill acquisition and knowledge retention.

**Training Materials Creation:** In the creation of training materials, it is essential to develop captivating and educational content aligned with the curriculum. This involves integrating detailed case studies that illustrate real-world scenarios, enhancing participants' understanding. In addition, interactive and visually appealing demonstrations should be generated to further augment comprehension in the application of traps and pheromones. To facilitate hands-on learning experiences, practical exercises should be designed, allowing participants to apply traps and pheromones in simulated scenarios.

**Training Program Execution:** To facilitate program execution, a series of training sessions will be arranged for approximately 28 – 35 plant protection experts from the IGAD member states. These sessions will incorporate various formats such as workshops, webinars, and interactive sessions, aiming to promote effective learning and enhance knowledge retention among participants. The training program will be tailored to accommodate the diverse needs and expertise levels of the attendees, ensuring that the content is both relevant and accessible to all involved. Through this comprehensive approach, the program seeks to create an inclusive and adaptive learning environment for plant protection professionals within the IGAD community.

**Guidance on Trap and Pheromone Management:** The comprehensive Guidance on Trap and Pheromone Management encompasses key aspects crucial for effective pest control. It emphasizes the meticulous selection of traps and pheromones tailored to specific pests and environmental conditions, requiring a deep understanding of both the targeted pests and the surrounding ecosystem. The guidance also underscores the importance of strategic

deployment and proper placement of traps, with an emphasis on expert knowledge to determine optimal locations for maximum efficacy. Routine maintenance protocols are established, outlining necessary steps and intervals for inspections, cleanings, and potential replacements to address wear and tear. This proactive approach aims to prevent lapses in pest control, ensuring the prolonged functionality of traps and pheromones over time.

**Integrated Pest Management (IPM) Insights:** To enhance understanding and application of Integrated Pest Management (IPM) principles among trainees, a key task is to seamlessly integrate comprehensive modules into the existing training curriculum. Emphasis should be placed on practical application, specifically promoting sustainable and environmentally friendly practices. Additionally, enriching the learning experience can be achieved by incorporating practical examples and case studies showcasing successful IPM implementations in various agricultural settings. This approach aims to provide valuable insights into the effectiveness and adaptability of IPM strategies across diverse contexts.

**Documentation and Reporting:** In the domain of Documentation and Reporting within the context of a training program, it is crucial to develop comprehensive documentation that encompasses various elements like utilized training materials, participant feedback, and any session modifications. The primary goal is to create a thorough record that captures the entire training process. Additionally, a significant component involves generating detailed reports that offer an extensive overview of the training's influence on participants' skills. These reports go further by emphasizing the potential benefits these skills might bring to the IGAD member states. By examining impact and potential advantages, these reports contribute to a holistic understanding of the training program's effectiveness and its broader implications for the participating entities.

**Evaluation and Certification:** The process involves establishing a comprehensive evaluation system aimed at assessing participants' understanding and practical application of the training material. This system should be robust, ensuring a thorough evaluation of participants' comprehension and application skills. Upon successful completion of the training and meeting the predefined criteria, participants will be awarded certificates of completion. The certification serves as a formal acknowledgment of their achievement, providing tangible evidence of their proficiency in the training content.

#### 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 one illustrates the deliverables of the initiative, together with the estimated timeline and reporting procedures.

Deliverables/Report	Timeline for submission of report after contract commencement (day)	Number and format of reports presentation
<p><b>Inception Report:</b> The report outlines a training program with a brief introduction, and objectives. It specifies training goals, tasks, coverage, participants, methodology, module breakdowns, audience, prerequisites, materials, logistics, timeline, monitoring, evaluation, and risk assessment. The report also includes stakeholder engagement and communication plans, concluding with a commitment to achieving program objectives.</p>	10	Electronic copies of the report to IFRAH Coordinator and ICPAC director.
<p><b>Comprehensive Training Curriculum with Detailed Session Plans:</b> The trainer will create a comprehensive manual aligning with program objectives, covering key topics and skills. It includes detailed session plans with content, activities, and time allocations, serving as a roadmap for the entire training program.</p>	30	Presentation in a meeting and electronic copies to IFRAH Coordinator and ICPAC director.
<p><b>Training Materials, Including Presentations, Handouts, and Practical Exercises:</b> The trainer will develop engaging and informative materials, such as well-designed presentations, visually appealing handouts, and practical exercises. These support each session, allowing participants to apply knowledge in real-world scenarios and catering to diverse learning styles for an enhanced learning experience.</p>	35	Electronic copy of the training materials to the ICPAC director and IFRAH Coordinator.
<p><b>Potential Trainees:</b> The trainer collaborates with IGAD member states to identify potential trainees, ensuring selection of individuals best suited for pest monitoring training. This strategic engagement enhances countries' technical capabilities in utilizing traps and pheromones for effective pest management.</p>	40	Electronic copy of the list of trainees to the ICPAC director and IFRAH Coordinator.
<p><b>Pre and Post-Training Assessments to Measure Participants' Knowledge and Skills:</b> The trainer will develop pre- and post-training assessments, encompassing quizzes, exercises, and self-assessment tools, to gauge participants' baseline knowledge and advancement. These results will inform the assessment of individual and collective learning achievements, offering deeper understanding of the training program's efficacy.</p>	Pre-training assessment(45), post-training assessment (60)	Presentation in a meeting and electronic copy (report) to the ICPAC director and IFRAH Coordinator
<p><b>Training Workshop:</b> The trainer will work closely with the IFRAH team to coordinate a training workshop with the objective of delivering hands-on practical sessions on pest monitoring utilizing traps and pheromones</p>	50	Conducting training sessions
<p><b>Training Report:</b> After completing the training program, a comprehensive report will be compiled, summarizing the curriculum, materials, and delivery. It will encompass participant feedback, highlighting successes and areas for improvement. The trainer will offer valuable recommendations for future initiatives,</p>	55	Presentation in a meeting and 1 electronic copy (report) to the supervisor, and additional copies to the ICPAC director and IFRAH Coordinator



contributing to ongoing training program enhancement.		
<b>Final Report:</b> The consultant will provide an overview of the entire assessment, highlighting key findings, recommendations, and the importance of quelea management within the IGAD region.	60	One electronic copy to the supervisor, and additional copies to the ICPAC director and IFRAH Coordinator.

## 6. Payment Schedule

The payment schedules suggested for a successful contract performance will be discussed and negotiated with the chosen trainer, and the details can be found in the table presented as Table 2 below.

**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. 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 consultancy activities comply with relevant IGAD policies, procedures, and ethical standards.

## 8. 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.

## 9. 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](mailto:abdi.fidar@igad.int)), providing regular updates on progress and seeking clarification on requirements when necessary.

## 10. 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.

## 11. Application Process

Expressions of interest must be sent by **13 May 2024 at 1100hours EAT**. Send application by email to: [Procurement@icpac.net](mailto:Procurement@icpac.net) (Hard copies will not be accepted) **The bid should have the Assignment title and Contract Reference No. in the subject row.**

### Address:

IGAD Climate Prediction and Applications Centre  
Attn: Procurement Unit  
IGAD Climate Prediction and Applications Centre- **ICPAC**  
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T +254 0203514426/ 0704470615  
E-mail: [Procurement@icpac.net](mailto:Procurement@icpac.net)