Evaluation of FAO’s Asia Regional Integrated Pest Management (IPM) and Pesticide Risk Reduction (PRR) Programme in the Greater Mekong Subregion

Annex 1. Terms of Reference
FAO Asia Regional Integrated Pest Management (IPM) and Pesticide Risk Reduction (PRR) Programme in the Greater Mekong Subregion

GCP/RAS/229/SWE

In support of Keml Programme
“Towards a Non-Toxic Southeast Asia” phase II

Annex 1. Terms of Reference

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2019
## Acronyms and abbreviations

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<thead>
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<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>BH</td>
<td>Budget Holder</td>
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<tr>
<td>ET</td>
<td>Evaluation Team</td>
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<td>FFS</td>
<td>Farmer Field School</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>IPM</td>
<td>Integrated Pest Management</td>
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<td>KemI</td>
<td>Swedish Chemicals Agency</td>
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<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<tr>
<td>NGO</td>
<td>non-governmental organisation</td>
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<td>OED</td>
<td>Office of Evaluation</td>
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<td>PRR</td>
<td>Pesticide Risk Reduction</td>
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<td>PTF</td>
<td>Project Task Force</td>
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<td>RAP</td>
<td>FAO Regional Office for Asia and the Pacific</td>
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1. General Background and Context

1. Chemicals production, use and disposal will continue to increase worldwide; assessments and forecasts predict that global chemical sales will grow by about 3% per year until 2050 and the major part of that increase will take place in Asia\(^1\). Chemical manufacturing and processing activities are steadily expanding into developing countries and countries with economies in transition.

2. Countries in Southeast Asia enjoyed exponential industrial growth in the agriculture sector during the last couple of decades, but face many challenges in the area of chemicals management. The intensive, and often insufficiently controlled, use of pesticides in the large agriculture sector is a big part of the issue. The most readily available pesticides in Southeast Asia are often the older broad-spectrum and high risk products. Many industrial and consumer chemicals are still not regulated in the region. The effects on public health and the environment can be devastating. Institutions, legislation, enforcement and general awareness need to be enhanced.

3. Application of chemical pesticides is one of the effective and efficient practices which have contributed to increased crop yields during the last three decades. However, widespread use of these pesticides has resulted in significant increases in insect resistance as well as ecological, public health, and worker safety concerns. Thus, integrated pest management (IPM) approach was developed to protect the agro-ecosystems.

4. Indiscriminate use of chemical inputs, both fertilizer and pesticides, puts sustainable agricultural production at risk. In particular, overuse of pesticides is known to harm vitally important ecosystem services such as natural biological pest control, pollination and nutrient recycling systems. Furthermore, excessive use of insecticides can result in secondary pest outbreaks. Intensive use of hazardous chemicals causes frequent farmer poisonings and chronic health problems, particularly among poor small-holder farmers with no access to and/or use of Personal Protective Equipment (PPE). Women and small children in rural communities are also often directly or indirectly exposed to toxic pesticides. Farmers’ income is negatively affected by unnecessary spending on pesticides. In addition, pesticide residues on fresh produce regularly exceed Maximum Residue Levels, raising food safety concerns and jeopardizing export potential.

2. Towards a Non-Toxic Southeast Asia phase II

5. “Towards a Non-toxic South-East Asia” is an initiative coordinated by the Swedish Chemicals Agency (Kemi) and implemented in association with the FAO Regional Office for Asia and the Pacific (RAP); Pesticides Action Network in Asia and the Pacific (PAN AP); and; The Field Alliance (TFA) that aims to reduce health and environmental risks by monitoring, regulating and managing agricultural, industrial and consumer chemicals. The programme covers the Mekong Region countries: Cambodia, Lao PDR, Myanmar, Thailand and Vietnam as well as the Yunnan, Guangxi and Hainan provinces in China.

6. The programme was initiated in 2007, a second phase started in 2013, the programme comprises five different components with regards to pesticides, industrial and consumer chemicals in the Mekong Region through multiple pathways with a focus on awareness raising, pro-poor, gender mainstreaming, communication and capacity development. The second phase, running from 2013 to 2019 had a total funding from Swedish International Development Cooperation Agency (SIDA) of SEK 99.3 million (USD 14.19 million) out of which SEK 47.25 million (USD 6.75 million) went to FAO with SEK 38.5 million allocated for the IPM component and SEK 8.75 for the policy component.

\(^{1}\text{https://www.kemi.se/global/broschyrer/towards-a-non-toxic-south-east-asia.pdf}\)
7. The programme’s overall aim is to contribute to reduced health and environmental risks from chemicals through better management of agricultural, industrial and consumer chemicals and sustainable intensification of agricultural production. The programme was implemented through a multi-pronged approach that combines advocacy and grass roots mobilisation (PAN-AP, TFA) with direct technical and policy assistance to governments (FAO, KemI).

8. The long-term objective is to **strengthened capacity and regional collaboration for efficient pesticide risk reduction and chemicals management within and among partner countries.** The immediate objectives are:

   - **Immediate objective 1**: Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools and institutions and among consumers in partner counties.
   - **Immediate objective 2**: Enhanced international, national, and local advocacy on sustainable pest management/agriculture.
   - **Immediate objective 3**: Strengthened capacity to innovate and scale-up Integrated Pest Management (IPM) and pesticide risk reduction training for sustainable intensification of crop production in partner countries.
   - **Immediate objective 4**: Strengthened regulatory framework for the control of pesticides in selected partner countries.
   - **Immediate objective 5**: Strengthened capacity for chemicals management within authorities, industries and among relevant CSOs in the partners countries.

9. The FAO was the implementing partner responsible for the immediate objective 3 (the IPM component) and immediate objective 4, along with KemI (the policy component). The FAO key outputs were:

   **IPM component:**
   - Functional networks of programme partners established;
   - Farmers participated in Farmer Field School (FFS) and Pesticide Risk Reduction Farmer Training using specialized curricula and training materials;
   - Capacity of national programmes to train farmers in IPM and pesticide risk reduction developed/strengthened;
   - FFS quality standards set at national and regional level and staff trained for internal monitoring and evaluation;
   - Regional, national and/or local government providing policy and funding support for FFS.

   **Policy component:**
   - Pesticide legislation strengthened in Cambodia, Lao PDR, Myanmar and Vietnam;
   - Registration of pesticides strengthened through introduction of the toolkit.
   - Inspection of pesticide distributors and retailers developed, piloted and scaled up to national level in Cambodia and Lao;
   - Private sector engaged in enhancing availability of biological control agents and bio-pesticides.

10. The envisaged main role of the FAO policy component include (i) support reform of the regulatory framework for the control of pesticides in the project countries; (ii) development, piloting, roll-out and consolidation (e.g. in legislation) of nation-wide inspection schemes in Cambodia and Lao PDR (iii) Regional collaboration with the Asia and Pacific Plant Protection Commission (APPPC) for harmonization of regulations and establishment of schemes for the exchange of information on registration decisions and monitoring of illegal pesticides.

11. The envisaged main role of the FAO IPM component include (i) enhancing reform of government policy on pest management towards integrated and more eco-friendly and sustainable approaches, (ii) developing capacity in national and decentralized governments to implement such reform and achieve a broad and
sustainable impact on poor smallholder farmers through IPM training, (iii) enabling innovations, concept and curriculum development and training quality assurance, (iv) coordinating and facilitating regional exchange. Further the FAO IPM field programme was expected to provide the mechanisms for overall coordination of/administrative support for programme components related to pesticide risk reduction, both at the regional and national level.

3. Evaluation purpose

12. The main purpose of the final evaluation is to provide accountability to the donor and partners by assessing FAO contribution to (i) the reform of the regulatory frameworks and policies for the control of pesticides in the project countries and the enforcement capacity/tools of pesticide legislation and registration. (ii) strengthening of extension services capacity, greater farmer awareness and community action towards higher quality farm produce with reduced or no pesticide residues in project countries. The evaluation aims to draw lessons from the implementation processes that could inform future decisions by the donor and FAO on the formulation of follow-up interventions. Box 1 highlights the purposes established and the intended users according to the purposes.

Box 1. Main purposes and intended users of the evaluation

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Intended user</th>
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<tbody>
<tr>
<td>Accountability: to respond to the information needs and interests of policy makers and other actors with decision making.</td>
<td>Inform decision making</td>
</tr>
<tr>
<td>Improvement: Program improvement and organizational development provides valuable information for managers or others responsible for the regular program operations.</td>
<td>Improve program</td>
</tr>
<tr>
<td>Enlightenment: In-depth understanding and contextualized the program and its practices normally caters to the information needs and interests of program staff and sometimes participants</td>
<td>Contribute to knowledge</td>
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4. Evaluation scope

13. The final evaluation will assess the FAO activities undertaken within the phase II of the joint programme “Towards a Non-toxic South-East Asia”, focusing on outcome level results (i) strengthened regulatory framework for the control and registration of pesticides; and (ii) adoption and economic benefits of the community level FFS activities in all partner countries. The evaluation will cover the total period of implementation of the second phase, which spans from 2013 to 2019. While, this evaluation is dedicated to FAO activities, relevant activities undertaken by the other implementing partners will be integrated, when possible, within the analysis of this evaluation.

5. Evaluation objective and key questions

14. The objectives of the evaluation will be to:
- Assess the strategic relevance of the geographical thematic scope of the programme;
- Assess the complementarity and synergy between the implementing partners;
- Assess the role and contribution of the FAO’s work on:
- The strengthening of regulatory framework for the control and registration of pesticides;
- Greater farmer awareness and community action towards higher quality farm produce with lower pesticide residues and mitigating pesticide risk to environment and human health in Mekong Region countries;
- Adoption of IPM and other lower risk measures, such as biological control as pesticide alternatives.

- Assess the FAO work on pro-poor, gender mainstreaming and communication;
- Assess the FAO uptake and follow up actions taken in response to the 2016 mid-term evaluation;
- Identify success areas, gaps and lessons, and make the appropriate recommendations to the project team, the donor and other stakeholders to guide decision-making and planning for subsequent phases or similar projects.

5.1 Evaluation questions

a. How relevant were the FAO components to the overall needs of the targeted communities/governments to strengthened capacity for efficient pesticide risk reduction?

b. How effective were the FAO partnerships across the programme in fostering collaborative actions and complementarity and synergy between the implementing partners?

c. How effective was the FAO policy support to strengthen pest and pesticide regulatory management capacity? Did the policy changes translate into improved legislation, better registration procedures, actual inspection of retailers, and concrete financial support and mechanisms to sustain the improvements to registration and inspection?

d. How effective was the implementation, monitoring and follow-up of the FFS (including the IPM/PRR curricula and training materials) in raising awareness and achieving and institutionalizing the results of the programme? Did it translate into concrete financial or other institutional support and mechanisms to sustain the results?

e. What was the actual and potential impacts of women’s participation in FAO’s work?

f. How FAO followed up on the 2016 mid-term evaluation recommendations?

6. Methodology

The evaluation should adhere to the UNEG Norms & Standards and be in line with OED Manual and methodological guidelines and practices. This evaluation will use a mix of quantitative and qualitative methods, using a bottom-up case study approach. The methodology that the evaluation will draw on is Beneficiary Assessment methods. In addition, the evaluation will draw upon the quantitative evidence collected from the projects M&E and impact studies verified by the observations of the ET.

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2 The policy support was led by FAO HQ-Pesticide Risk Reduction Group in the first phase, continued in the second phase and then Responsibility for management of the policy component was transferred to RAP mid 2016.
3 https://www.kemi.se/files/96b8222b5b7d43eb3439fa289238/mid-term-review-2016.pdf
   https://www.kemi.se/files/96b8222b5b7d43eb3439fa289238/management-response-to-review-2016.pdf
4 http://www.uneval.org/document/detail/21
5 Swiss Agency for Development Cooperation (contributors Cathy Shutt, IDS and Laurent Ruedin, SDC, SDC How-to-Note: Beneficiary Assessment, May 2013 (available at: https://www.shareweb.ch/site/Poverty-Wellbeing/Documents/SDC%20How-to-Note%20Beneficiary%20Assessment%20May%202013.pdf)
6 http://www.vegetableipmasia.org/documents/type/3
16. In order to answer the key evaluation questions, the evaluation questions will be broken down into sub-
questions that will be presented in an evaluation matrix. The evaluation will make use of the following tools to 
collect primary data and evidence that answer the evaluation questions:

a. Desk-review of existing project documents, reports and studies conducted by FAO and other 
partners in addition to the 2016 mid-term review and IPM impact assessments;

b. Semi-structured interviews with key informants, stakeholders, including project partners and 
beneficiaries at the national, district and local level;

c. Direct observation during field visits to the project sites selected with the project teams and set 
in the evaluation mission schedule in three partner countries (Laos, Myanmar & Vietnam);

17. The evaluation team will start by researching whether the project was relevant to the evolving needs of 
different stakeholders: e.g. Government, rural communities, and NGOs. It will then research what these needs 
were, and whether the project responded to them.

18. To gather information related to the questions the team will visit countries selected in consultation with 
the national project coordinators and the project team in RAP and will conduct semi-structured interviews and 
review relevant documents. Through stakeholder mapping carried out with the support from the country office 
and the project team, the team will identify who is best able to respond to each question.

19. As for the FAO IPM component, the evaluation team will synthesis the secondary quantitative data that 
will be used to inform the evaluation findings, particularly with respect to the relevance and effectiveness/signs 
of impact on farming practices and livelihoods and any differential impact on women. In addition, the 
evaluation team will investigate the institutionalization of the IPM/PRR curricula and training materials and the 
consolidation of learning.

20. As for the FAO policy component, the evaluation team will map and analyze the improvements made 
during the project to relevant pesticide management regulations, laws, policies and capacity in the project 
countries to assess the quality of the frameworks, as well as the processes followed by the project to help 
achieve these improvements. The evaluation team will examine the commitment, institutional arrangements, 
instruments and capacities needed to enforce these frameworks. The team will meet policy makers, 
government authorities and communities to assess changes brought by the intervention to reform the 
regulatory frameworks and policies for the control of pesticides. The issue of sustainability will also be looked 
into, and what lessons can be learned from the intervention.

21. The evaluation will adopt a consultative and transparent approach with internal and external 
stakeholders throughout the evaluation process including FAO and national partners. Triangulation of evidence 
and information gathered will underpin its validation and analysis and will support conclusions and 
recommendations. The evaluation is also expected to contribute to the KemI/SIDA programme evaluation 
(Towards a Non-toxic South-East Asia).

7. Roles and responsibilities

22. The Office of Evaluation (OED) in consultations with the Budget Holder (BH) and the Project Managers 
will finalize the ToR, identify and recruit the consultants and organize the team's work; it is responsible for the 
finalization of the ToR and the team composition7; it shall brief the evaluation team on the evaluation 
methodology and process and will review the final draft report for Quality Assurance purposes in terms of 
presentation, compliance with the ToR and timely delivery, quality, clarity and soundness of evidence provided

7 The responsibility for the administrative procedures for recruitment of the team, will be handled by OED.
and of the analysis supporting conclusions and recommendations. OED also has a responsibility in following up with the BH for the timely preparation of the Management Response (MR) and the Follow-up to the MR.

23. The **Project Teams**, which include the FAO BH, the Lead Technical Officer (LTO) and the Project Task Force (PTF) of the project to be evaluated, are responsible for initiating the evaluation process, providing inputs to the first version of the Terms of Reference, and supporting the evaluation team during its work. They are required to participate in meetings with the evaluation team, make available information and documentation as necessary, and comment on the draft final terms of reference and report. Involvement of different members of the project Task Force will depend on respective roles and participation in the project. The BH is also responsible for leading and coordinating the preparation of the FAO Management Response and the Follow-up Report to the evaluation, fully supported in this task by the LTO and PTF.

24. The **Evaluation Team** (ET) is responsible for conducting the evaluation, applying the methodology as appropriate and for producing the evaluation report. All team members, including the Team Leader, will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the evaluation with written inputs for the final draft and final report. The evaluation team will agree on the outline of the report early in the evaluation process, based on the template provided by OED. The ET will also be free to expand the scope, questions and issues listed above, as well as develop its own evaluation tools and framework, within time and resources available. An evaluation report is not subject to technical clearance by FAO although OED is responsible for Quality Assurance of all evaluation reports.

8. Evaluation team composition and profile

25. The ET will comprise of two international/regional experts with a minimum of 15 years of multidisciplinary range of expertise:
   - Development and socioeconomics;
   - Monitoring and evaluation of complex programmes;
   - Sustainable Intensification of Agriculture, rural livelihoods development;
   - Pesticide management regulatory frameworks;
   - Development and deployment of Farmer Field Schools (FFS);
   - Quantitative data analysis; including social and economic cost-benefit analysis;
   - Strong understanding of and experience in the Greater Mekong Subregion.

9. Evaluation products (deliverables)

   - **Draft evaluation report**: the project teams and key stakeholders should review the draft evaluation report to ensure that the evaluation meets the required quality criteria.
   - **Final evaluation report**: should include an executive summary and illustrate the evidence found that responds to the evaluation issues and/or questions listed in the ToR. The report will be prepared following OED template for report writing.

10. Evaluation timeframe

26. The evaluation will take place from in the period from Nov 2018 to May 2019.

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<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>ToR finalization</td>
<td>October 2018</td>
<td>OED in consultation with FAO (RAP)</td>
</tr>
<tr>
<td>Team identification and recruitment</td>
<td>October 2018</td>
<td>OED in consultation with FAO (RAP)</td>
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<tr>
<td>Mission organization</td>
<td></td>
<td></td>
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<tr>
<td>Review of background documentation</td>
<td>Nov 2018</td>
<td>ET</td>
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<tr>
<td>Mission to Bangkok for briefing</td>
<td>Last week of Nov</td>
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<tr>
<td>Missions to Laos, Myanmar &amp; Vietnam</td>
<td>March-April 2019</td>
<td>OED, ET and FAO COs</td>
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<tr>
<td>First draft for circulation</td>
<td>May 2019</td>
<td>OED</td>
</tr>
<tr>
<td>Final report</td>
<td>May 2019</td>
<td>OED</td>
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Web address: www.fao.org/evaluation

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